Apartheid and Health

WORLD HEALTH ORGANIZATION
GENEVA

The World Health Organization is a specialized agency of the United Nations with primary responsibility for international health matters and public health. Through this organization, which was created in 1948, the health professions of some 160 countries exchange their knowledge and experience with the aim of making possible the attainment by all citizens of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life.

By means of direct technical cooperation with its Member States, and by simulating such cooperation among them. WHO promotes the development of comprehensive health services, the prevention and control of diseases, the improvement of environmental conditions, the development of health manpower, the coordination and development of biomedical and health services research, and the planning and implementation of health programmes.

These broad fields of endeavour encompass a wide variety of activities, such as developing systems of primary health care that reach the whole population of Member countries; promoting the health of mothers and children: combating malnutrition: controlling malaria and other communicable diseases including tuberculosis and leprosy; having achieved the eradication of smallpox, promoting mass immunization campaigns against a number of other preventable diseases; improving mental health; providing safe water supplies; and training health personnel of all categories.

Progress towards better health throughout the world also demands international cooperation in such matters as establishing international standards for biological substances, pesticides and pharmaceuticals; formulating environmental health criteria; recommending international nonproprietary names for drugs; administering the International Health Regulations; revising the International Classification of Diseases, Injuries, and Causes of Death; and collecting and disseminating health statistical information.

Further information on many aspects of WHO's work is presented in the Organization's publications.

APARTHEID AND HEALTH

Part I. Report of an International Conference held at Brazzaville, People's Republic of the Congo, 16–20 November 1981

Part II. The Health Implications of Racial Discrimination and Social Inequality: An Analytical Report to the Conference

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PART I. REPORT OF AN INTERNATIONAL CONFERENCE HELD AT BRAZZAVILLE, PEOPLE'S REPUBLIC OF THE CONGO, 16–20 NOVEMBER 1981

1. Introduction

The International Conference on Apartheid and Health was held at Brazzaville, People's Republic of the Congo, from 16 to 20 November 1981. Dr Comlan A. A. Quenum, WHO Regional Director for Africa, was in the chair at the opening ceremony, which was attended by the Minister of Health of the People's Republic of the Congo, representing the Government, and by the Director-General of WHO, Dr Halfdan Mahler. Also present were representatives of the National Liberation Movements recognized by the Organization of African Unity (OAU), representatives of the front-line States, representatives of the United Nations and organizations of the United Nations system, the representative of the OAU Coordinating Committee for the Liberation of Africa, representatives of the Associations and Support Movements invited by the National Liberation Movements, and other eminent persons.

1.1 Election of officers

The Conference elected the following officers:

Chairman:	Hon. L. Makgekgenene, Minister of Health of Botswana
Vice-Chairman:	Dr Manto Tshabalala (African National Congress)
Rapporteurs:	Mrs Mngaza (Pan Africanist Congress of Azania) Dr Iyambo Nickey (South West Africa People's Organisation).

The Chairman thanked participants for the confidence placed in him, by electing him to preside at such an important conference, and expressed his gratitude to the Director-General of WHO and the WHO Regional Director for Africa for having organized the meeting.

1.2 Method of work

The annotated programme of work was adopted (see Annex 2, page 55). Participants were distributed into three groups.

1.3 Participants

The list of participants is given in Annex 1, page 50.

2. Opening statements

2.1 Address by Comlan A. A. Quenum, Regional Director for Africa, World Health Organization

THE DIALECTICS OF APARTHEID AND HEALTH

Tribute to the dignity of man

Allow me first of all to discharge the pleasant duty of thanking you for attending the opening of this international conference on the subject of apartheid and health. I am sure that in responding to this invitation you have been concerned first of all to pay tribute to the human dignity of those who remain victims of an iniquitous system which is no less than the negation of world civilization.

The Regional Committee at its thirtieth session, which was held here at Brazzaville in September 1980, asked the Regional Director to organize a forum on an appropriate scale with a view to increasing awareness of what apartheid really is and of its implications for health, and to preparing a plan of action for promoting and protecting the health of the millions of people who are victims of apartheid.

The implementation of such a directive is directly in line with the Lagos Declaration prepared by the World Conference for Action Against Apartheid. This was organized in August 1979 by the United Nations in cooperation with the Organization of African Unity and the Government of the Federal Republic of Nigeria to launch a poignant appeal to the international community to deploy all possible efforts for the total eradication of apartheid. If we are to improve our action, we must clarify our understanding. Before considering the possible interrelationships between apartheid and health we must understand what these two concepts mean.

Health as a fundamental right of every human being

The Constitution of the World Health Organization states clearly that health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Enjoyment of the highest attainable standard of health is one of the fundamental human rights of every human being without distinction of race, religion, political belief, economic or social condition.

Given these fundamental principles, which are the foundation of the happiness of peoples, their harmonious relationships and their security as well as of world peace, what is the nature of apartheid?

Apartheid as a negation of the right to health

In her excellent work on apartheid[1] Marianne Cornevin notes that the word "apartheid", meaning *"separateness, setting apart"* in Afrikaans, has been popularized in South African political language and translated as "separate development of *each race* in the geographical zone assigned to it".

The French dictionary *Le petit Robert*[2] defines apartheid as the separation or segregation of populations of different races in South Africa. In fact what is involved is the strengthening and perfecting of a system of racial discrimination which has been entrenched in the mores since the beginning of the 18th century. Between 1910 and 1934 a comprehensive body of laws was produced which determined, on the basis of racial groupings, rights to land ownership, working conditions, salaries, place and nature of residence, freedom of movement, political rights, quality of education, health care and much else besides. "Separation in inequality based on skin colour alone" is what appears according to Ms Cornevin the best translation of the word "apartheid", which has been officially replaced nowadays by the expression multinational development. This is a cynical imposture. It is well known that the characteristic inequality of apartheid is applied from the cradle to the grave and in all walks of life, whether economic, political or social. We have shown abundantly in recent years that health action is above all a social action. But it is also political and economic. Apartheid has shown itself to be a veritable racist ideology and its two key elements are the absolute superiority of the white race and the need to safeguard its political and economic supremacy. And it is this racist ideology which guides all health action in South Africa. Throughout the world South Africa is the only country where racism is written into the Constitution, the only country where skin colour entirely and definitively determines the place of one category of national citizens within the social hierarchy. More than four-fifths of the South African national community are victims of apartheid, which for them leads to the negation of human rights. Health for all cannot be achieved in South Africa without the negation of apartheid, which is itself a negation of health. This dialectic is clear.

Incompatibility of these two concepts

It is therefore obvious that apartheid is by definition a denial of health as a fundamental right for every human being. What does separate health devel-

[1] CORNEVIN, M. *Apartheid, power and historical falsification.* Paris, UNESCO, 1980.

[2] ROBERT, P. *Dictionnaire alphabétique et analogique de la langue française.* Paris, Société du nouveau Littré, 1979.

opment mean for communities of one and the same national community? It is a nonsense, an absurdity. Apartheid and health are not only antithetic but are mutually exclusive. The two concepts are incompatible. Apartheid may be regarded as a murky obstacle which makes a minimum of health care for all inaccessible and unavailable.

In the various documents which you will be asked to consider during this conference, you will see clearly how, through apartheid, health becomes the privilege not only of the privileged, but of one race, the white race. Unfortunately, we know today that the idea of race is the product of a psychobiological syncretic philosophy. In this regard we may refer to a work by A. Jacquard on human genetics.[1] Races are not species. Humans form one species. The "races" as more or less homogeneous groups of men are simply superficial variants of one fundamental unit. I know that this single, monophyletic thesis is opposed by the polyphyletic one. At the end of this 20th century, no criterion worth the name can justify discrimination in the delivery of health care. The variations in skin colour result essentially from the density in the epidermis of a single pigment, melanine, which exists in the white just as it exists in the yellow and the black races, in very varying doses. The differences found are therefore quantitative and not qualitative. Apartheid, in essence, violates one of the principles which serves as the basis of WHO. Apartheid has no future in a world in evolution, in change and in revolution.

Countless data demonstrate how apartheid has a harmful effect on the physical, mental and social health of the peoples. Exploitation and oppression in the South African socioeconomic framework induce in the oppressors the complacent, sado-masochistic idea that the oppressed are physically, mentally and socially inferior. The theses concerning "congenital inferiority of the black race" and "disabilities of negro-Africans in the field of mathematics due to under-development of the frontal lobes" are well known to us. Neither genetics nor comparative psychology are overlooked in the attempt to find an explanation in heredity for the "disabilities of the black race", seen as causes of its "lagging behind on the path of civilization". The case of apartheid is a splendid illustration of the impact of politics on health development. The iniquitous system of racism set up as an ideology and a dogma in an empire where the palaeocortex secretes laws is incompatible with an equitable distribution of health care. To practise contraception in such a context is to commit genocide. Apartheid runs counter to the social objective of health for all by the year 2000 and to the Alma-Ata Declaration. Many people might be tempted to think that many of the health and social inequalities which we denounce in South Africa are not specific to that country. By thinking calmly, you should resist such a defeatist temptation. There is an enormous difference

[1] JACQUARD, A. *Eloge de la différence — La génétique et les hommes.* Paris, Seuil, 1978.

of context. South Africa is not a poor country. It is the policy of apartheid which oppresses 72% of its people. The enjoyment of independence and the management, whether bad or good, of one's own health programme, is in accordance with the right of peoples to shape their own destiny. This can in no way be compared with a master and slave situation. That is why at this stage of world health action we want to go beyond the stages of denouncing and protesting. It is time to take concrete action to build another future. What are we to do?

Plan of health action

What we are hoping for, at this international conference, is an international plan for health action against apartheid. Such a broad outline for effective action will be tantamount to making praiseworthy efforts to promote human rights, including health. We are sure that the international community will continue to give support to the effort to rid humanity of one of its greatest afflictions in this final part of the 20th century—apartheid, which is incompatible with the health of the peoples, without which there can be neither security nor peace in the world. On this note of certainty I would like to conclude.

Continuing the struggle

A forward-looking approach will lead us to consider, in arbitrary fashion, three possible results of the fight against apartheid. Defeat must be ruled out because it would mean regression for all humanity. Another alternative could be a compromise. As such, compromise would be as regressive as the first possibility. We are therefore left with only one possible outcome—to continue the struggle unremittingly until apartheid and its harmful effects on health have been totally eradicated. It will be a long struggle and the price paid will be enormous. But we also know that human dignity has no price. No effort can be spared to continue the struggle against apartheid, for it is a crime against human conscience and dignity.

I wish you the greatest possible success in your labours and thank you for your kind attention.

2.2 Address by Alfred Nzo, Secretary-General of the African National Congress*

It is my pleasant duty on behalf of the African National Congress (ANC) and indeed in the name of all the people of South Africa to greet you all. We are indeed grateful to the Government and the people of the People's Republic of the Congo for having consented to host this very important conference.

* Mr Nzo's statement was read out to the Conference as he was unable to attend in person.

We congratulate WHO, its Director-General Dr Mahler, and Dr Quenum, the WHO Regional Director for Africa, for bringing together this great assembly. The African National Congress notes with great appreciation that this meeting is taking place on the eve of its 70th anniversary, which will mark, from January 1982, the glorious and relentless revolutionary struggle of our people against racism, oppression and exploitation. This meeting can therefore in a way be considered as one of the ANC 70th anniversary committees. It is our hope that this "Committee" will stretch its activities over the whole of 1982 as a practical contribution towards the eradication of the last vestiges of colonialism on our continent. The seven decades of our unremitting struggle for national liberation and independence is a fundamental justification for this august assembly of the representatives of all those who are concerned about the health of mankind.

At the very outset of my contribution, I wish to acknowledge with gratitude the support and assistance the ANC and the fighting people of South Africa continue to receive from you, who are gathered here, representing a cross-section of the world. In the same spirit we extend our solidarity to all the people fighting against colonialism, racism, Zionism, fascism, neocolonialism and imperialism for national liberation and peace, which are in themselves the prerequisites for social progress and health development geared towards the improvement of the health status of mankind to ensure its maximum productivity.

You are convened here to examine the harmful effects of apartheid on health, so that you can individually and collectively understand the misery and human suffering the people of South Africa and Namibia go through. Out of that understanding it should therefore be possible, from this historic and first conference of the World Health Organization on the subject of apartheid and health, to get positive responses as to what each and every one of you intends to do to eliminate the unacceptable injustices that are perpetrated by the racist Pretoria regime.

The decisive cooperation of the WHO Regional Committee for Africa, the National Liberation Movements recognized by the Organization of African Unity (OAU), the front-line States and the OAU Coordinating Committee for the Liberation of Africa in organizing this conference, we believe, had in view the urgency of the operational strategies to be taken by the governments and organizations in support of the oppressed but struggling peoples of South Africa and Namibia.

The decision must have been reached on the basis of the repeated denunciations and condemnations of the apartheid policy and the determination of the United Nations Assembly, and the whole of the United Nations system continually to underscore that, within the meaning of the United Nations Charter, apartheid constitutes a crime against humanity and that the

very maintenance of this system constitutes a threat to international peace and security.

You are to discuss, therefore, a regime that stubbornly stands in breach of the Universal Declaration of Human Rights and the International Court of Justice's decisions concerning the illegal occupation of Namibia, a regime that also stands in breach of the United Nations Charter by its repeated and barbarous acts of aggression and sabotage against our neighbours.

These positions are in accord with our view on the realities in South Africa. This conference, we hope, will not end in vague statements of good intent but will be followed by loud and concrete reiterations of support for the urgency and determination with which the people of South Africa and Namibia demand and fight for their political independence, a precondition for health development, that will improve the health status of their populations and result in the reduction of human suffering. It will be the responsibility of this conference to discuss and agree on pragmatic strategies that the world community must adopt in order to mitigate the harmful effects of apartheid on the health of our people.

We are gratified to see that the World Health Organization still upholds its declaration of being a full participant in the Action Programme of the Decade for Action to Combat Racism and Racial Discrimination (1973-1983). That decade is coming to an end. You may wish to take stock of your contributions and measure these against the magnitude of the suffering of the people of South Africa and Namibia.

South Africa's official health delivery service is based on the Health Act No. 63 of 1977 declared by the racist Pretoria regime to be both comprehensive and community-based. We unapologetically denounce this Act as having absolutely nothing to do with the comprehensive and adequate delivery of health care, that must invariably include promotional, preventive, curative and rehabilitative activities. Apartheid is a flagrant violation of the fundamental rights of man, one of which is the right to health.

The South African regime operates simultaneously a system in which the hardships of underdevelopment and the sophistication of an industrialized society exist side by side. This applies in health care as well as in education and work opportunities.

The health services for the blacks in South Africa are grossly inadequate and those that are provided show no concern for the emotional and psychological suffering of the blacks. Apartheid deprives the black man of the opportunity for a continual search for an equilibrium with his environment in its total physical and social content, for the benefit of mankind.

Racist South Africa operates by regarding the blacks as subhuman. They are denied the human feelings that arise from broken families as a result of

migrant labour, separation and loneliness in a single-sex hostel, grief and social stress as a direct consequence of the forced removals of settled communities, the insecurities caused by the pass laws and all the indignities of racial discrimination and the exploitative system of apartheid. All these oppressive measures contribute to the psychological hardships and misery that are a function of apartheid and as such are distinct from psychiatric illness.

Emphasis must be laid on the close relationship between the criminal legal system of the Pretoria regime and the mental health facilities for the blacks. It was the colonialists of the 17th century that first used Robben Island to detain mental patients; today the inmates of Robben Island are black political prisoners. We hope you will give special thought to all the South African and Namibian political prisoners who are languishing behind the racist bars.

Racism in South Africa denies the fact of mental anguish and misery among the victims of racist oppression. Yet it is obvious that these intolerable conditions must affect the psychological function and generate psychopathology in a large proportion of the black population.

Soon you will hear of the most shocking indicators of ill health in South Africa. These will range from the politico-socio-economic indicators of dispossession, dehumanization, poverty, hunger and death, and will also include disparities in indicators of health policy, and in health care delivery among the whites and the blacks in South Africa. At the end of this conference, we have no doubt, you will unanimously agree with us when we indict the Pretoria regime for genocide.

We have, with great interest, been following the health revolution analysis and development in our continent and globally. In all your gatherings you have not failed to adopt appropriate resolutions in support of our struggle. You have launched the absolute—now for work. The indisputable progress in the health revolution in Africa has become a reality since the epoch of Africa's political independence.

We should like in this context to emphasize the special place of health in the process of overall socioeconomic development. Promoting people's health is essentially a political task. This is why we are convinced that health development cannot be left in the hands of apolitical technocrats alone. Health personnel must of necessity be politicians, for health has become both a political and a social concern.

Realistic health development policies and plans must respond to the basic needs of the broad sections of those populations that have for a long time been underserved. Health development policies must seek truly to identify the real causes of ill health, which are in most cases both complex and multidimensional. They cannot be solved for the underprivileged majority by a privileged minority which has no practical knowledge of the health needs drawn from

the daily experiences of those for whom they are planned. Health services can only reach these communities through their popular participation, involvement and commitment. The underserved and least favoured populations have a right and a duty to participate both individually and collectively in the planning and implementation of their health care if you are to achieve your objective of the attainment by all people of good health by the year 2000.

The Declaration of Alma-Ata in 1978 confirmed these positions. It was further confirmed in your decisive meeting in Maputo in 1979 in which our Comrade President Samora Machel unequivocally identified health care not as a mere collection of knowledge, techniques and resources but as a political attitude which determines the utilization of that knowledge, those techniques and those resources for the benefit of the underprivileged and, we would add, not as a humanitarian gesture but, as our Regional Director, Dr Quenum, has put it, as a determination to "discard the old colonial patterns that hinder health development".

The people of South Africa under the guidance of the ANC were mindful of these positions when, in 1955, 3000 delegates adopted the Freedom Charter, declaring, among other things, that: "a preventive health scheme shall be run by the State; free medical care and hospitalization shall be provided for all, with special care for mothers and young children; the aged, the orphans, the disabled and sick shall be cared for by the State".

Thus our health revolution in the service of our people is clearly expressed in the Freedom Charter, whose various clauses express a determination to satisfy the fundamental needs of all the people of South Africa, without discrimination of colour, race, sex, beliefs and social status.

Our oppressed people are part of the family of nations and, despite the difficult constraints imposed upon us by the oppressive system of apartheid, they have been in the mainstream of the history of the health revolution. We can see the answer to our health problem only through trust in national liberation and then through the reorientation of the existing health services based on the primary health care approach. We therefore look forward to the occasion when it will be possible for us to be signatories to the Charter for Health Development for the African Region. Already we are signatories to some of the protocols of the Geneva Convention.

We should be failing in our duty, if we were to omit the other emerging ugly face of the apartheid system expressed in the spilling of the war over the borders of South Africa. The Pretoria regime threatens and continually attacks the independent countries of the subcontinent. We have witnessed the repercussions of those incursions into the sovereign States of Angola, Mozambique, Zambia, Zimbabwe, Botswana, Lesotho and Swaziland. There is every reason to believe that these incursions will increase in number as the

peoples' revolution escalates, and all the front-line States will inevitably be the victims.

There is continued destruction of human life and property as well as the destabilization and disorientation of health development plans of these countries. This is undeniably the antithesis of health for all by the year 2000. The enormous efforts of the African Region of WHO are in this respect threatened. The health profession thus has an obligation to call for the weapon of sanctions against apartheid. Of course, this should not be understood as an alternative to the struggle by our people but as a complement to limit the scope, scale and duration of human destruction in southern Africa. You may therefore want to discuss how best to assist these countries as well. If the 2000 deadline is therefore to be reached, the subject of apartheid and health has indeed been justified as a topic for this conference.

In spite of the multiple constraints and the difficult conditions of war, lack of resources and having to plan for scattered communities, we have established functional health teams. We hope to use our WHO effectively.

In the meantime, the people of South Africa and Namibia will liberate themselves from ill health and achieve health for all by the year 2000 only on condition that they liberate themselves politically, economically, socially and culturally. Ideological political options will then be realized in the development of programmes that will lead to improved nutrition, housing, water supply, environmental hygiene, education and expanded programmes of immunization to conform with the multidimensional and multidisciplinary approach to health problems.

We pledge ourselves to rid humanity of the scourge of racism and apartheid-colonial domination in South Africa and Namibia. Equally the world community has the duty to take firm positions against the system of apartheid, so that peace and social progress can be realized. We shall then move in unity of purpose to the attainment of health for all by the year 2000.

AMANDLA! MAATLA!

2.3 Address by John Nyati Pokela, Chairman of the Pan Africanist Congress of Azania*

In 1909, under the South Africa Act, Britain handed over our country to a minority settler community of British and Dutch origin. The majority of blacks were bypassed and relegated to a second-degree citizenship. Azanians who understand the historical setting still regard South Africa as a colony. And it is the crucial question of land deprivation that is at the heart of the

* Mr Pokela's statement was read out to the Conference as he was unable to attend in person.

present revolution. Until the whole of Azania (South Africa) is repossessed there can never be any peace in that country. The land question therefore is decisive in all matters affecting Azanians.

In a discussion of apartheid and health the roots of the problem must be with the colonists' seizure of black land.

In terms of the Land Acts of 1913 and 1936, 87% of the land is owned and controlled by whites and only 13% is assigned for occupation by Africans.

With regard to the present distribution of the population, the position is as follows:

Africans	20 084 319	72%
Whites	4 453 273	16%
So-called coloureds	2 554 039	9%
Indians	794 639	3%

Blacks have been forced out of areas erroneously called white areas. Between 1948 and 1976, a total of 2 108 000 blacks were removed by force from such areas. These removals have far-reaching consequences and the psychological effect on people so removed is shattering.

Historically speaking, it is true to say that the peoples of Azania were healthy and well fed, despite the fact that epidemics of diseases such as malaria occurred from time to time. As a matter of truth, it was with the arrival of white settlers that our people fell prey to a host of diseases. It can be said with authority that not only did the people lose the land but they also lost their health at the same time. Not only were they given the Bible and beads for their precious land but they were to become the victims of new diseases brought in in the name of civilization. Two of the worst burdens of the Azanian people today are tuberculosis and kwashiorkor. These diseases were completely unknown until the arrival of the white settlers. This story is well documented by early travellers. Tuberculosis was introduced into our country by tuberculosis sufferers from Europe who came to Azania to enjoy the healing powers of the abundant sunshine. Kwashiorkor and other diseases of malnutrition were a direct result of land deprivation and dire poverty from the intensive persistent exploitation by settlers from Europe.

In an article entitled "High priced medics are making the country sick", Dr Hoosen Coovadia, a senior lecturer in paediatrics at the University of Natal, makes revealing comments. He reports that the establishment of the Cape sea route by European settlers introduced a wave of new diseases into Africa; that in fact it was the introduction of smallpox with its 50% mortality rate that brought the greatest devastation. He further argues that sailors recovering from smallpox en route to Holland from the Far East stopped for fresh food and vegetables at the Cape; and that these sailors sent their clothes to slave women for washing. As a result, disease spread like wildfire among the slaves, resulting in 20% mortality. Among the Khoi-Khois entire tribes

perished. Hospitals were built not only to meet the needs of hygiene and cleanliness; they also served as agents of colonialism.

As Dr Coovadia puts it, "The major disabilities of health endured by South African blacks today are rooted in a lack of political control, inadequate land, poor housing, inappropriate or absent education and unrealistic earning power".

It must be further emphasized that the system of apartheid, or settler colonialism and imperialist backers, is the real source of the health problems and difficulties experienced in Azania.

The population in Azania

The basic difficulty in calculations about the frequency of disease among Azanian people arises from the fact that the registration of births and deaths of Africans is incomplete. It is therefore difficult to make comparisons.

The other trick used by the apartheid settler regime is to count the population of the Bantustans separately from that of so-called white South Africa. In this way they try to make diseases suffered by Azanians in the so-called white areas seem not as bad as they really are. However, historically and otherwise, it is well known that people in the rural dumping grounds suffer more ill health than the people in many urban areas.

The paper entitled "Populations of South Africa—Survey of Race Relations in South Africa"—covers yet another facet of racial discrimination. It is revealed that there are only 300 qualified African doctors in Azania out of a total of 18 000 doctors.

Occupational health

The Erasmus Commission of Enquiry on Occupational Health gives a lot of details about the industrial health of workers and about the number of workers killed and maimed in accidents and affected by exposure to harmful substances. It reveals that the worst abuses occur in the goldmines, where in 1977 there were 508 deaths, and provides a clear indictment of how the settler government and the industrialists criminally ignore the well-being of black workers.

It is known today that in South Africa asbestos ranks among the important foreign exchange earners. It is in the mining of asbestos that many hundreds of workers contract and die from cancer (mesothelioma) as a result of inhaling asbestos dust. Compensation and prevention in these instances are all but nonexistent for the workers affected.

In our country we observe also the callousness of some "top" visiting doctors who come excited by the opportunities for research offered by the huge diversity of standards of life. A certain Dr Mann remarks: "I can think of

no other place in the world where the opportunities for studying chronic disease are so great". Such an observation reflects an absence of all human feeling for the suffering of our people who are exploited and robbed when companies extract huge profits that do not benefit our black workers. We know that in 1978 export sales of asbestos were valued at R107.48 million. This constituted 95% of total sales. Yet, in spite of all these sales, workers' compensation and preventive measures are all but nonexistent.

Revealing another aspect of the condition of our people, we are told that racial discrimination in the medical sphere, especially among doctors, has been eliminated; that all doctors are now paid on the same scale. This type of cosmetic tactic cannot deceive us, for it does nothing to improve the health of the black people as a whole. All it succeeds in doing is to prove that the mere fact of equal pay for doctors or of removing race discrimination is not the real issue. The real issue is the economic status of the black man and the re-possession of his land.

In an article on malnutrition in the *Cape Times* (10 July 1981) it is pointed out that three children die every hour from malnutrition and that 25% of rural preschool children are underweight by international criteria. In Grahamstown, one-third of all babies die in the first year of life.

Further, black children between the ages of 1 and 4 years have 13 times the death rate of white children in the same age group. This is due to malnutrition and other, related diseases. This ironically happens despite the fact that South Africa produces 112% of the optimum food requirement of the whole population. The main nutrition problems of the white people are obesity and coronary heart disease.

Maternal deaths

Here we cite some information from a report that appeared in the *Rand Daily Mail* of 10 July 1981, which states that in the 10 years between 1970 and 1979, 87 white women and 2700 black women (including so-called coloureds and Asians) died during pregnancy. But it must be realized that the figures given here are grossly understated, especially those for the black women. First of all, these figures are too low because they refer only to deaths in hospital. The women who die in their homes—and there are many black women who have their babies at home—are not included.

Number of doctors

In the *Star* of 25 July 1981, it is further disclosed that there is one doctor for every 600 people in the big cities (Johannesburg, Durban, Cape Town) and one doctor for every 20 000 people in the homelands. In the 1979 census, the numbers of medical practitioners were given as follows:

Whites	10 975
So-called coloureds	230
Asians	1 266
Africans	167

In another report the *Rand Daily Mail* (7 January 1981) estimated the infant mortality rate as: whites 12/1000 live births; urban blacks 69/1000 live births; and rural blacks 240/1000 live births.

In 1979 the following facts were disclosed:

	Number of medical students	*% of total students*	*% of total population*
Africans	306	5.1	70.4
Indians	494	8.3	2.9
Coloureds	107	1.8	9.4
Whites	5 061	84.8	17.3

In the ten years up to 1977 there was one white doctor for every 400 whites and one African doctor for every 40 000 Africans.

Tuberculosis and kwashiorkor

According to statistics, in our country, Azania, 10 people die every day from tuberculosis and 46 000 new cases are notified each year.

From what has been said, it is clearly not difficult to show how apartheid colonialism damages the people's health and takes away their lives. Any comparison between whites and blacks shows up the inequalities quite starkly. But the reality is much starker than any of the figures given above. The figures issued by the Government of the settler regime only show the minimum suffering of the Azanian people. These figures cover up too much of what really exists. One good example is the fact that kwashiorkor was made a notifiable disease in 1962, but that by 1965 it was no longer notifiable despite the fact that every year more and more infants were affected. The number of cases increased from 12 000 to over 15 000. The reason, or one of the reasons, why the disease was made no longer notifiable was that the figures had become an embarrassment to the settler regime. So the figures were suppressed.

Psychiatric disorders

A paper by Gijana & Louw[1] shows up the criminal deficiency of mental health facilities in the rural areas. It is well disguised as a study of patients in

[1] GIJANA, E.W.M. & LOUW, J. Psychiatric disorders in a developing community as reflected by archival material. *South African medical journal*, **59** (27): 988 (1981).

the Transkei and pretends that the Transkei is an independent country. The paper is very misleading also because it does not say a word about the migration of people from the Transkei to the urban centres outside the Transkei. The authors admit that psychiatric disorders are highest among migrants, but they then discuss migration within the Transkei (a figure of 464 689 Transkeian men working outside the Transkei is mentioned under schizophrenia).

Now it is clear in our minds that apartheid colonialism certainly causes psychiatric diseases among the oppressed people. Further, that apartheid colonialism fails to provide the means to treat the illness generated by it. This then is the hidden burden the people have to bear as long as apartheid colonialism lasts.

Meningococcal disease at Tygerberg Hospital

In the second paragraph of a paper on this subject by Donald et al.,[1] the authors report Cape Town municipal figures, which show that during epidemics the incidence among blacks is 10 times higher than that among whites, and that during non-epidemic periods this difference is less and is only 6 times higher. Again, of course, we can be sure that the difference is far greater than the figures indicate. On page 274 the authors admit that this disease is caused by poverty and overcrowding.

We of the Pan Africanist Congress of Azania call upon this conference:

- to persuade all governments to refuse to recognize the South African medical registration where such acts are in collusion with the settler regime; the Steve Bantu Biko murder has revealed beyond reasonable doubt that the doctors registered by the South African Medical and Dental Council are of uncertain ethical standing; none of the three Biko doctors has been disciplined despite clear evidence of grossly unethical behaviour;
- to stop health personnel migrating to South Africa;
- to request WHO to provide medical services for refugees and to offer places at African medical schools and nursing colleges for Azanian refugees;
- to call on WHO to provide an information bulletin on health in Azania on a quarterly basis; and
- to deplore all contacts with South African medical and nursing bodies, unless these are clearly and unequivocally opposed to the apartheid regime.

And, finally, we demand the unconditional release of Comrade Zephania Mothopeng and others from the notorious Robben Island prison.

[1] DONALD, P.R. ET AL. *South African medical journal*, **60** (7): 271 (1981).

2.4 Address by Iyambo Indongo, Secretary of Health, South West Africa People's Organisation

On behalf of the Central Committee of SWAPO, the Namibian people and, indeed, Comrade Sam Nujoma, President of SWAPO, who wished to be here with us today but who, owing to other preoccupations, was unable to attend, I salute you. From the bottom of my heart, I should like to extend my warm congratulations to you, Mr Chairman, for your election to lead us during our deliberations.

Furthermore, I wish to thank the Director-General and the Secretariat of WHO for inviting our delegation to this important conference. Our thanks go to the Congolese people, the Government, and the Congolese Labour Party under the leadership of Comrade Denis Sassou Nguesso for the hospitality they have extended to us since we arrived in this beautiful city.

The Democratic Turnhalle Alliance (DTA) (a puppet group created and funded by South Africa) daily boasts that it has done away with discrimination in Namibia by passing an "Anti-Discrimination Bill", which it totally failed to enforce. At present even the members of the so-called Ministers Council are still discriminated against. Some of them have left their ghettos in Bantustans in order to live in towns where their children cannot attend the neighbourhood schools, because they are for whites only. The "honourable ministers" cannot even use the public swimming-pools and other social amenities or vote in the suburb of the capital of the country they claim to rule, except in Bantustans.

Despite all efforts by the racist regime in Pretoria to bolster its created and funded puppet group of DTA in Namibia, the tribal clique's political support is not gaining ground, while SWAPO's popular support is increasing all the time.

Against this background the racist regime is using delaying tactics by preventing the implementation of United Nations Security Council resolution 435 (1978) which, among its other provisions, calls for the holding of a free and fair election in Namibia under the control and supervision of the United Nations. Armed to the teeth with the assistance of its supporters, the racist army has UZI submachine guns from Israel, Centurion and Ferret armoured vehicles from Britain, French-made Mirage jets, transport planes manufactured by the Lockheed Company in the USA and Italian jets with American engines, while many Western companies have built armament assembly factories in South Africa.

Faced with isolation and pressure by the international community, suffering heavy losses at the hands of the People's Liberation Army of Namibia (PLAN) and further frustrated by the people's political maturity, the Pretoria regime embarked on a campaign of terror in the form of arrests, detentions, murder, rape, robbery, burnings of villages and kidnapping of people some of

whom were taken to the overcrowded neo-Nazi concentration camps euphemistically called protected villages.

The failure of the neocolonial solution of the problem of the independence of Namibia based on tribal or other ethnic divisions of the Namibian population has further frustrated the racist regime, and as a result it has turned Namibia into a war zone with more than 100 000 South African troops deployed there.

Equipped with sophisticated NATO armaments, these troops cross the borders into neighbouring countries, especially the People's Republic of Angola, attacking innocent civilians, killing, maiming, burning and displacing many people, also bombing hospitals and schools. Their main targets are the economic infrastructures of front-line countries and their destabilization in order to pressure those countries to abandon their support of liberation movements.

We are fighting a just war for justice, freedom and equal rights for all Namibians irrespective of the colour of their skin. We reject and shall reject any attempt by the South African regime and its mentors to impose neocolonial constitutions or regimes on us. We are not racists, so we do not need constitutional guarantees for minority whites because the right of every Namibian will definitely be guaranteed in the Constitution of independent Namibia.

The illegal occupation of Namibia must be brought to an end. This regime has to be compelled to abandon its military aggressions against the People's Republic of Angola and other front-line States. To this end we appeal to the international community to increase its material, political and diplomatic support to the National Liberation Movements and front-line States in order the to enable us to resist the aggression of South Africa and her allies.

In conclusion, Mr Chairman, I should like to thank the Government of the front-line States, the socialist countries, States of the non-aligned movements, the Nordic countries, OAU, nongovernmental organizations and supporting groups for their assistance to the Namibian people through their vanguard, the sole and authentic liberation movement, SWAPO of Namibia.

Furthermore I wish to extend our solidarity to ANC and its *Umkonto we Sizwe,* and to POLISARIO and PLO.

Independence or death—we shall win!

Thank you.

2.5 Address by Halfdan Mahler, Director-General, World Health Organization

Thirty-five years ago, the Constitution of the World Health Organization solemnly asserted nine universal principles, believed to be basic to "the

happiness, harmonious relations and security of all people". As a particularly relevant introduction to the thoughts I wish to share with you on this occasion, permit me to recall the second principle of the Constitution:

> "The enjoyment of the highest attainable level of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition."

It is a sad reflection on the moral and social state of the world in which we live that today, more than three decades after the principles of health as a basic human right were proclaimed, we continue to witness their deliberate, carefully planned, and ruthlessly executed violation in regard to more than 20 million of our brothers and sisters in the southern part of this continent. However, it is heartening that, on the initiative of the Regional Committee of WHO for Africa, our Organization decided to convene this conference of solidarity with the victims of apartheid which, I trust, will result in further practical action in support of their struggle for the basic human and social values that have been denied to them for decades.

For many years the system of apartheid, imposed on the people of South Africa, has been a major cause of concern to the international community because institutionalized racial discrimination, pervading every aspect of the life of many millions, is an affront to any conception of human rights and dignity. Few causes in our contemporary world mobilize such support of world public opinion as the condemnation of apartheid and the struggle for its elimination. The World Health Organization has to its moral credit the fact that it was among the first in the United Nations system to take decisive action in this regard. In 1964, the World Health Assembly adopted a historic resolution in which Member States condemned the practice of apartheid and its adverse repercussions in the health field, and decided to apply in relation to the government of the country concerned the sanction of Article 7 of the WHO Constitution, suspending its voting privileges. Subsequently, the World Health Assembly and the Executive Board of WHO have on many occasions reasserted their clear and uncompromising stand on the elimination of apartheid, and strengthened the mandate of our Organization to take action in support of international efforts and in cooperation with the National Liberation Movements recognized by the Organization of African Unity. This action has taken, essentially, two forms. On the one hand, WHO has initiated an ongoing study on the health and psychosocial implications of apartheid. As you are well aware, this study has produced a number of reports and publications which have had wide resonance and repercussions. By analysing and documenting the destructive effects of apartheid policies on the health conditions in South Africa, WHO has contributed to a heightened awareness in the international community of the plight of the majority of the population of that country. Moreover, these reports and publications have encouraged health workers, inside and outside South Africa, who in the face of tremendous odds are struggling for change and doing their utmost to deliver

health care to black communities, or to cushion some of the hazards resulting from apartheid, to the extent possible under the prevailing conditions. I sincerely hope that the efforts of our Organization have conveyed to those health workers the feelings of solidarity of the world health community, the message that they are not, and will not be, forgotten.

On the other hand, WHO has extended to the National Liberation Movements its technical support in the training of health workers, in the assessment of health needs, and in the organization of care for the victims of apartheid and racism who have been forced to seek refuge in other countries in the Region. This is a forward-looking policy, preparing step by step an infrastructure for health care which should be ready to assume functions and responsibilities in complex situations that are likely to follow, once a political change is achieved.

One of the main objectives of this conference is to review the health conditions resulting from apartheid policies. In spite of the obvious difficulties in collecting and evaluating health-relevant information concerning the population of South Africa, it has been possible, through systematic painstaking efforts, to put together a rather complete and, I believe, valid picture of the health conditions prevailing under the apartheid system. I wish to emphasize that this analysis, the results of which will be made available soon as part of these conference proceedings,[1] has been based entirely on reports, official documents and scientific publications emanating from South Africa itself. When placed in a single, systematic framework, the facts and data which have been published and have been accessible to anybody, assume an entirely new meaning. They speak a language of their own, which is powerful enough to dispel any illusions or deliberate misinformation and misinterpretation of the kind often propagated by the apologists of apartheid.

There are two myths cultivated by the managers and apologists of apartheid which, unfortunately, still have wide currency and are accepted uncritically even by some well-intentioned health professionals outside South Africa.

The first myth is that, regardless of everything else, the quality and quantity of health care and the level of health of the black population of South Africa are adequate, are improving further, and give no reason for concern. According to this myth, the health conditions of the South African black people are superior to those of the people in other African countries. Let me briefly summarize the evidence which will explode this myth.

Every 20 minutes a black child in the Republic of South Africa dies from malnutrition. Figures from different hospitals and data published by the Department of Statistics indicate that the officially registered death toll from malnutrition is between 15 000 and 30 000 children every year. Surveys in

[1] See Part II of this volume.

various regions of South Africa consistently indicate that no less than 30%, and in some rural areas as many as 75%, of all black children are malnourished. These figures are particularly alarming if we also consider the fact that, in so far as time trends can be plotted, the number of deaths due to malnutrition has increased since 1968 and this increase cannot be accounted for by population growth.

Tuberculosis, a disease virtually unknown in South Africa in the period preceding industrial development, is today a condition which dominates the disease pattern among blacks in both town and countryside. Never in history has the social stratification of tuberculosis been as marked as it is today in South Africa, where Africans are about 80 times more at risk from this disease than whites.

Enteritis and pneumonia account for 60-80% of deaths among black infants and children, while among white children they account for less than 10%. Infectious and parasitic diseases produce some 70 deaths per 1000 live births among coloured children within the first year of life, 28 times the mortality from the same cause suffered by white babies. In the first four years of life, 45 times the number of coloured children as white die of infectious diseases. Comprehensive infant mortality statistics for the African population do not exist, but individual surveys have revealed in certain rural areas infant mortality rates of the order of 200-300 per 1000, rates which are not only staggering in comparison to white rates in the same country, but are exceptionally high by any standard.

A whole range of preventable infectious and parasitic diseases, including meningitis, gastroenteritis, typhoid fever, cholera, diphtheria, schistosomiasis, malaria, and intestinal parasites, are prevalent among the black population, while their disappearance among the whites has been almost total. The risk of infectious disease is constantly maintained at high levels by the squalor and overcrowding in the official "townships" for Africans, or in the hundreds of squatter camps inhabited by migrants. The risk of contagious disease is further increased by the policy of forced removal of millions of Africans to grossly insanitary and ill-constructed "resettlement villages" in which neither sewage disposal nor piped water, let alone electricity, is available. In all these circumstances, the poor nutritional status of the inhabitants multiplies the risk of serious infection. This crucial connexion between malnutrition, infection and deliberate social policies which lead to overcrowding in conditions of extreme physical impoverishment lies behind the failure of South Africa's health services to eliminate such diseases as tuberculosis or typhoid fever as important public health problems.

The situation in the field of occupational health is extremely grave. In addition to racial harassment, family disruption through the migrant labour system, lack of tenure in employment, and the barely subsistence wages, the

black work-force is literally decimated by accidents and infections, particularly tuberculosis. Over the past decade, between 75% and 80% of black miners have suffered industrial accidents or disease causing loss of work time and, hence, income. The rate of those classified as permanently injured among African workers has increased from 13 per 1000 in 1971 to 100 per 1000 in 1979, and every year around 800 black workers die from accidents in the South African mines. These figures are incomparably higher than those in developed countries and higher than the figures for developing countries such as Kenya and Zambia.

In the field of mental health, the profile of pathology is characterized by a high incidence and prevalence of retarded psychomotor development in childhood due to preventable causes, including severe malnutrition, and a high incidence of organic brain damage associated with infectious and parasitic diseases or trauma. Alcohol-related problems and disabilities among Africans have soared. In the words of a South African journalist:

> "the liquor dens tell the sordid story of an oppressed people lulled into oblivion. To add insult to their dehumanisation, the liquor profits ... are used by the Government to finance the development of the Bantustan wastelands".

Suicide is a serious problem, with the highest rates among Africans, amounting, according to a survey in Durban, to 17.5 per 100 000 per year, which is probably the highest rate of suicide anywhere in Africa.

Some of the most destructive effects of the apartheid system concern the psychosocial environment in which people are born, grow up, live, and die. This is an environment characterized by immeasurable stress, insecurity and violence. Millions of people have been forcibly uprooted and separated from their families; millions are harassed or arrested in connexion with the infamous pass laws; floggings and hangings are common occurrences; prostitution, drug addiction, suicide and homicide are the tragic attributes of the psychosocial climate created by apartheid. South Africa is indeed a world leader in the number of death sentences passed and executions carried out each year.

Let me now turn to the second myth about the health conditions in South Africa which needs to be put to rest. The apologists of apartheid argue that, even if one admits that there is a gap between the levels of health of the white minority and the black majority, this gap is attributable to the "uneven pace of development" of the "different races" in the Republic. The greater part of South Africa (including the Bantustans), it is argued, is in fact a "developing country". The backwardness and the adverse health conditions prevailing there are similar to those present in other developing countries in Africa, and are not the result of apartheid policies.

We should not be deluded by this argument. Clearly not all disease is the result of social policies, but the characteristic pathology of South Africa is socially related. South Africa is one of the wealthiest countries in the world,

yet the disparities in income and living conditions there are probably greater than in any other industrial economy. There is abundant proof that the differential incidence of disease and mortality in South Africa is socially structured, and that it is, above all, the policies of apartheid which determine this. It is widely accepted that infant mortality rates are a useful indicator of health status and primary health care in a society. Compared to other developing and developed countries, South Africa is a striking exception from the general trend for an inverse relationship between gross domestic product and infant mortality rates. Having a very high GDP per capita (US$1340 in 1977), South Africa also has an infant mortality rate of 117 per 1000, i.e., considerably higher than Botswana (97 per 1000 at US$410 GDP per capita), Guyana (40 per 1000 at US$630 per capita) or Malaysia (75 per 1000 at US $860 per capita). There is no other explanation for this fact but the drastic, enforced inequalities in the apartheid society, amounting to a denial of access to adequate health care for the vast black majority, whose labour is the main source of wealth of the privileged minority.

The health care system created under apartheid is a faithful image and a particular case of the racial, social and economic inequalities that dominate that society. Some 65% of the medical professionals in the country practise in the metropolitan areas, where they are available to not more than 30% of the population, and largely to whites. In 1975, only six Africans graduated from medical school in South Africa, less than 1% of the total graduating that year, although Africans constitute 70% of the population of the country. The present situation is roughly that one out of every 350 whites and one out of every 45 000 blacks is a medical doctor—a discriminatory ratio of about 130 : 1. Medical aid benefits cover 73% of the white population and less than 10% of all other races. White people spend 40 times more on medical care than do Africans. All health facilities are segregated by race, and the services available to blacks are of incomparably inferior quality than those provided to the white minority.

Many aspects of the health care system now prevailing in South Africa will be discussed in the conference, and I should not dwell on the subject, which has been well documented in a number of publications. One thing is clear: a service system based on the concepts and practice of apartheid, a health care system in which access, level and quality of care are stratified according to skin colour, is an intolerable offence to the world health community. No cosmetic changes can remedy this situation, and it is an affront to hear, from time to time, the term "primary health care" being used in that context by apologists of apartheid, who have designed and reinforced the only system in the contemporary world where every aspect and item of health care is predicated on race.

There cannot be the slightest doubt that in the case of apartheid we are faced with one of the gravest insults to the health and psychosocial well-being of a

people. What makes the case of apartheid so tragic and unique is that this has been done, and continues to be done, by design and with a clear purpose.

Yet, in spite of the vast human misery which apartheid generates and sustains, it would be misleading to see black South Africans as simply helpless and hapless victims. Over the years, the black people of South Africa have developed both individual and group strategies to enable them to retain their sense of individual dignity and group identity in the face of poverty and exploitation, constant insecurity and humiliation. They are resisting subordination through political organization, workers' action, the uprisings of schoolchildren, and the struggle of the National Liberation Movements. The seemingly even keel of the South African social system has now begun to rock as new attitudes and a new consciousness emerge, which look beyond day-to-day coping and survival.

Change, therefore, is inevitable, if not imminent. The turning wheels of history cannot be arrested by those who wish to perpetuate suffering, in order to secure for themselves the privileges derived from exploitative inequality. By change I do not mean the halting steps occasionally taken to remove some of the superficially more obvious attributes, like the *"Slegs vir Blankes"* signs; or the modification of certain laws which are not structurally essential to the maintenance of apartheid. By change, I mean the radical dismantling of the system based on apartheid and racial discrimination. This is the kind of change which the great African patriot, Nelson Mandela, foresaw, when in his famous court statement of 1964 he outlined the new consciousness emerging among the oppressed people of South Africa:

> "Africans want to be paid a living wage. Africans want to perform work which they are capable of doing, and not work which the Government declares them to be capable of. Africans want to be allowed to live where they obtain work, and not to be endorsed out of an area because they were not born there. Africans want to be allowed to own land in places where they work, and not be obliged to live in rented houses which they can never call their own. Africans want to be part of the general population, and not confined to live in their own ghettos. African men want to have their wives and children to live with them where they work and not to be forced into an unnatural existence in men's hostels. African women want to be with their menfolk and not to be left permanently widowed in the Reserves. Africans want to be allowed out after eleven o'clock at night and not to be confined to their rooms like little children. Africans want to be allowed to travel in their own country and to seek work where they want to and not where the Labour Bureau tells them to. Africans want a just share in the whole of South Africa; they want security and a stake in society. Above all, they want equal political rights, because without them our disabilities will be permanent."

This is the spirit of social justice which is the only medium in which primary health care as a basically social concept can grow. Let us hope that, in expressing their solidarity with the people of South Africa, the health workers of the world, including those struggling for social justice within the apartheid system, will contribute, regardless of colour of skin or political creed, to the ultimate removal of the barriers preventing that people from joining the movement, and enjoying the fruits of health for all by the year 2000!

3. Main themes of the Conference

The main themes of discussion were the choice between health or apartheid, an analysis of the system of health care delivery in South Africa, and the interrelationships between apartheid and maternal and child health, workers' health and mental health.

3.1 Health or apartheid?

In response to resolutions WHA17.50 and WHA31.39, and as part of its contribution to the concerted action by a number of intergovernmental organizations and agencies within the United Nations system, the World Health Organization initiated, in 1975, an ongoing study of the implications of apartheid policies in the field of health and health care. The analysis and dissemination by WHO of objective information about the health conditions in racist South Africa, and the relevant social relations on which these are predicated, serve the dual purpose of: (*a*) informing Member States and the world health community of the plight of many millions of people suffering the destructive effects of apartheid on their health and psychosocial development; and (*b*) providing all those concerned with action aiming to change the prevailing adverse health conditions in South Africa, and especially the National Liberation Movements recognized by OAU, with a scientific analysis of problems and resources, and with methods and technologies, that might be employed in the reconstruction of the health care system in that country, once the political prerequisites for such a change become a reality.

In pursuance of the foregoing, the Director-General of WHO submitted to the Executive Board at its 55th session a report entitled "Health Implications of Apartheid". In 1977, the Secretariat of WHO prepared and submitted to the United Nations Special Committee Against Apartheid a review of the evidence concerning apartheid policies and racist practices in the field of mental health care in South Africa. That report, which was widely quoted and even reproduced in its entirety by the press in a number of countries, had important repercussions both within the Republic of South Africa and worldwide.

In continuation of this programme of information collection, analysis and dissemination, the Secretariat of WHO and a group of expert consultants have prepared an extensive analytical report entitled "The Health Implications of Racial Discrimination and Social Inequality" which appears as Part II of this publication.

Health care as provided at present in South Africa is incompatible with the following basic principles of the Constitution of WHO:

(i) *Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.* If one takes this definition as a reference one cannot reasonably claim that the black population of South Africa is "healthy". For the great majority of the population the figures for morbidity and mortality testify to a poor distribution of physical well-being, while the high rate of alcoholism, suicide and acts of violence are indicators of an absence of mental well-being.

(ii) *The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.* Black people of South Africa do not enjoy such fundamental rights, within the meaning of the Constitution, for the discrimination of which they are victims affects virtually all aspects of their daily life. Economic and social inequality, the stratification of which is correlated with skin colour, determines the distribution of morbidity and health care in South Africa.

(iii) *The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest cooperation of individuals and States.* For the majority of South African blacks "cooperation", or tacit support, consists simply in accepting their fate. This means working for a salary which is equivalent to minimum survival conditions, being separated from one's family during the greater part of the year, doing what one is told where and when one is told to do it, being deferential to a humiliating degree and suffering continually the insults of racial discrimination.

(iv) *The achievement of any State in the promotion and protection of health is of value to all.* Health promotion and protection offered to blacks by the State is often aimed at diseases from which whites are not protected by their better nutritional status. One example is poliomyelitis, whereas measles and tuberculosis, which ravage the black population, do not have a high place on the list of priorities. The vaunted progress in organ transplants which has catapulted South Africa into the forefront of the scientific world is of benefit mainly to the whites. Not only are the majority of donors blacks and virtually all the receivers whites, but furthermore the international prestige which derives therefrom enhances the reputation of the medical profession and of the State, both of which are controlled by whites.

(v) *Unequal development in different countries in the promotion of health and the control of disease, especially communicable disease, is a common danger.* A wide range of preventable infectious and parasitic diseases, including meningitis, gastroenteritis, typhoid fever, cholera, diphtheria, schistosomiasis, malaria and the intestinal parasitic diseases, are common among the black population whereas they have almost totally disappeared among whites. The risks of infectious diseases are continually high because of overpopulation and poverty in the townships, which are officially reserved for Africans, or in the hundreds of squatters' camps occupied by migrant workers.

(vi) *Health development of the child is of basic importance; the ability to live harmoniously in a changing total environment is essential to such development.* From the official South African statistics, which probably underestimate the situation, it is apparent that the population of black children is literally decimated by diseases such as gastroenteritis and pneumonia, though deaths due to these diseases are very often avoidable. The survivors frequently suffer the effects of exploitation of juvenile labour, inferior quality of schooling and upheavals in family life due to the system of migrant labour.

(vii) *The extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health.* The State of South Africa has made a considerable effort to broaden knowledge of the beneficial effects of medical science. The advantages deriving from health knowledge are among the concessions made to the whites to obtain their support for the élite.

(viii) *Informed opinion and active cooperation on the part of the public are of the utmost importance in the improvement of the health of the people.* Both informed opinion and active cooperation are part of the democratic process but in South Africa the democratic process does not extend to blacks. The latter do not even elect those who govern them and have no opportunity to develop an informed opinion or to offer their active cooperation.

(ix) *Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures.* Only the whites are considered as "people" by the racist Government of South Africa. If we consider the three-quarters of the population who are blacks, that responsibility has been sacrificed to the Government's explicit objective, which is to strengthen the economic domination of the whites, and more particularly of the Afrikaners. The racial "stratification" of disease and health care testify to the differences of economic and political power. So long as the situation concerning ownership and control of the means of production does not evolve significantly, the situation with respect to morbidity and mortality, which reflect living conditions, will remain unchanged.

Unless far-reaching changes take place in the social and economic conditions determining health, and in the orientation and functioning of the health care system, the oppressed people of South Africa will be denied the benefits which most peoples participating in the movement of health for all by the year 2000 are striving to achieve. The change which is necessary amounts to the total and radical elimination of apartheid and all that apartheid implies in the social and economic matrix of South African society.

3.2 Analysis of the health care delivery system in apartheid South Africa

By its nature, this system is at the antipodes of health. Although South Africa has the means and resources needed to set up comprehensive

health services by the year 2000, thus allowing all South Africans to achieve the standard of health required to lead a socially and economically productive life, the racist Government of Pretoria has deliberately chosen not to do so.

Racist South Africa has an economy which is in all respects developed and diversified and its gross national product (GNP) sets it among the first 50 countries of the world.

Black workers keep the wheels of South African industry turning but do not receive an income compatible with their productivity or with a decent standard of living. In rural areas, malnutrition is killing one child every two and a half minutes. The Pretoria Government allocates 18% of the GNP to its military budget and only 3% to the health budget.

In regard to the health infrastructure it was found that in 1975 the hospital bed/population ratio was 1:96 for less than 5 million whites as compared with 1:186 for more than 23 million blacks. Those having the greatest need for health care, in the Bantustans, received minimal resources.

Communicable diseases, including tuberculosis, measles and cholera, continue to decimate the black population. In a wealthy country where all the communicable diseases, which are the diseases of poverty, have high rates of prevalence and incidence, preventive medicine is underdeveloped and curative services for tuberculosis among black patients are a disgrace and getting worse. When the 1980 tuberculosis notifications from "White South Africa" and the "independent" and non-independent Bantustans were added together, one reached a figure of approximately 110 000 people. These cases are all the direct result of apartheid as South Africa has the capacity to eradicate tuberculosis if it had the political will to do so. Poverty and disease are the two scourges of the apartheid system, which keeps blacks in a state of abject poverty.

Low-quality education designed for blacks is part of the apartheid system, which aims to keep whites in power. While education is free and compulsory for white children, as from the first stages of that education it is neither free nor compulsory for black children. In a country where educational resources are, moreover, inequitably distributed to the advantage of whites, very few blacks had sufficient qualifications to gain access to university education. Sums spent on educating whites in 1978-1979 totalled R1009 million whereas only R253 million were spent on blacks.

The problem of maldistribution of health manpower is complicated by the massive drain of doctors out of the country.

The mainly white medical profession of racist South Africa should dissociate itself from its traditional conservatism and élitism. It should cease giving either tacit or deliberate support to the State. In a country dominated

by racial discrimination, oppression and exploitation, health personnel should join in the people's fight for total political independence and liberation, which are the prerequisites for tackling the real problems responsible for the unacceptable state of health of the populations of South Africa.

3.3 Apartheid and maternal and child health

The main health problems of blacks in South Africa, particularly of black mothers and black children are illustrated by the figures given below:

In black children:

(i) perinatal and neonatal mortality is high; the infant mortality rate in certain regions reached 378 per 1000 in 1976;

(ii) diarrhoeal diseases cause 50% of deaths before the age of 10 years;

(iii) malnutrition is responsible for 30% of deaths before the age of 10 years; 66.4% of children between the ages of 2 and 3 years suffer from malnutrition, 20.1% of them being severe cases; the same proportion of malnutrition is found among nursery-school children; it occurs in four major types: marasmus, kwashiorkor, pellagra and anaemias;

(iv) infectious diseases which can be prevented through immunization or easily treated if diagnosed early are still deadly: tuberculosis, measles, neonatal tetanus;

(v) rheumatic heart disease affects 6.9 per 1000 of schoolchildren.

In black women:

(i) abortion and septicaemia are widespread;

(ii) fistulae occur frequently.

The main causes of these problems are:

(i) lack of health infrastructures particularly in rural areas;

(ii) manpower shortage: one doctor for 44 000 black persons;

(iii) lack of health and social service deliveries; absence of preventive medicine; no immunization; only 6% of women have prenatal tests;

(iv) unfavourable social environment; disastrous social conditions for women who must look after children, care for the elderly and do agricultural work; poverty of the population and illiteracy.

3.4 Apartheid and workers' health

Blacks are the backbone of the labour force in South Africa, supplying 80% of the economically active work-force. That force is confronted with low pay and poor working and living conditions. It is exposed to occupational and

environmental hazards such as poisoning from lead, volatile solvents and pesticides, and to noise, radiation, asbestos and work accidents, which result in physical and mental disorders, permanent disability and death. There are no adequate standards or legislation to protect the workers. Unemployment insurance and compensation acts are discriminatory. There are virtually no prevention programmes in workers' health.

3.5 Apartheid and mental health

The consequences for human development in a black community within a socioeconomic system whose minority white population exploits and oppresses that community, following built-in beliefs that the black is mentally, psychologically and otherwise inferior, were examined. Some of the conditions that lead to mental health problems are:

- occupational skills in employment are not what is sought from the black people, but rather raw strength;
- mass uprooting without any identifiable family roots;
- migratory labour, as a result of which men are separated from their families and live in overcrowded compounds;
- daily harassment by use of the reference book—the "pass laws".

This list is by no means exhaustive, but it points to a systematic effort to deprive a people of their culture, national identity and national consciousness.

Evidence which points to the psychosocial stresses and deprivation includes statistics on the prevalence of preventable mental disorders such as brain sequelae of malnutrition, organic brain damage, alcohol-related disabilities, depression and suicide.

The people who flee the country and become refugees and exiled freedom-fighters face enormous psychosocial stresses which place burdens on the health systems of the front-line States that give them sanctuary.

Psychiatric services show a gross inequality in all areas, e.g., number of beds, outpatient services, ratio of health personnel to population at risk, and quality of the treatment. There are no rural mental health services. There are no programmes for the elderly.

South Africa is a rich country and could provide mental health care for all of its people. Yet the mental health services are grossly inadequate and discriminatory. There are no black psychiatrists in the Republic of South Africa, and no community-based mental health services for the black majority. In addition to the inadequacy of Government-provided services, there is a system of exploitation of the labour of involuntarily detained black mental patients in so-called "sanatoria" run by private companies and subsidized by the Government.

Several studies by WHO, the American Psychiatric Association and other specialists all come to the same conclusion that:

(i) apartheid is damaging the mental health of all South Africans;

(ii) malnutrition is extremely damaging to mental development and mental health;

(iii) apartheid is a psychologically malignant situation, not only for the blacks but also because it involves an attitude of the white population which affects mental life.

4. Recommendations

In the course of its discussions the Conference reached a consensus on the following:

4.1 Direction, coordination and management

(i) Intensification of action against apartheid through international forums.

(ii) Severance of trade links by the international community with the racist regime of South Africa.

(iii) Condemnation of the admission of the racist Medical Association of South Africa, and of the so-called Transkei Medical Association, to the World Medical Association.

(iv) Condemnation of:
- inhuman treatment of prisoners and false medical reports;
- indiscriminate use of contraceptive methods without supportive comprehensive maternal and child care measures;
- development by the racists of South Africa of nuclear weapons which pose a danger not only to black Africa but to all mankind.

(v) Expulsion of the South African racist regime from the membership of WHO.

(vi) Strengthening by the international community of the health infrastructure of the front-line States, and Lesotho and Swaziland.

(vii) Support from the international community for the front-line States.

(viii) Cooperation with National Liberation Movements

- strengthening of the existing infrastructure, especially maternity facilities;
- development of maternal and child health activities in the refugee camps; immunization, improved sanitation and housing conditions, water supply, environmental hygiene;
- regular supply of drugs and equipment;
- support of training programmes: scholarships for professional, technical and administrative manpower;
- facilitation of proper deployment of qualified personnel;
- simplification of procedures in procuring necessary funds.

(ix) Cooperation with the front-line States

- support for training institutions of the front-line countries recognized by the OAU;

- increased logistic, financial and moral support for front-line States which shelter refugees.

(x) Cooperation between the National Liberation Movements and the front-line States

- support of the recommendations on the matter made by the meetings on technical cooperation among developing countries;
- cooperation with National Liberation Movements and friendly countries in other regions;
- the international community is requested to refuse to collaborate in any way with the South African racist regime;
- the United Nations and organizations of the United Nations system should increase logistic, financial, material and moral support to the National Liberation Movements in southern Africa recognized by the OAU and the front-line States;
- the United Nations and organizations of the United Nations system should simplify administrative procedures for funding National Liberation Movements;
- special funds for National Liberation Movements should be increased;
- the WHO Regional Committee for Africa should set up a permanent commission to deal with the health and psychosocial problems of refugees in southern Africa, and particularly those who are victims of apartheid;
- the Conference requested the Director-General and the Regional Director to draw the attention of the governing bodies to the fact that the Medical Association of racist South Africa, which was notorious for its serious violations of medical ethics and its support to apartheid, had been readmitted to membership of the World Medical Association (WMA), a body which had the status of being in official relations with WHO; the Conference accordingly called on the governing bodies of WHO to take appropriate steps in the light of the global strategy of health for all by the year 2000.

4.2 Health systems infrastructure

Information: dissemination and research

The addresses delivered by the Director-General of WHO and the WHO Regional Director for Africa, the National Liberation Movements, and other information regarding the health situation in South Africa should be published in order to raise awareness worldwide. Information on the mental health status of migrant workers should be widely circulated to draw the attention of the leaders of the National Liberation Movements and the front-line States to the harmful effects of displacing populations. Research should

also be carried out using all available information in order to determine the nutritional status of children and rural populations.

WHO should continue its study of the health and psychosocial implications of apartheid, and disseminate to the world community relevant information about the harmful effects of apartheid on health. This effort should aim at increasing the awareness of world public opinion, and its capacity to exert international pressure on the apartheid regime.

The Conference endorses the comprehensive information document entitled "Apartheid and Health. The Health Implications of Racial Discrimination and Social Inequality" and recommends that the Director-General and the Regional Director should ensure, in the near future, its publication together with the report and other relevant documents of the present Conference.

WHO should continue to monitor the situation concerning workers' health in South Africa, and to disseminate information on the systematic violation of workers' rights, their exposure to extreme health hazards, including danger of death or permanent disablement, and their deprivation of adequate health care and social welfare provisions. In so doing, WHO should involve existing international conventions and collaborate with other organizations, particularly the International Labour Organisation (ILO).

Manpower

WHO should provide technical and other support (including fellowships) for the training of occupational health workers for the National Liberation Movements, as well as expert assistance in developing their plans for occupational health programmes after the liberation of the country from the oppression of apartheid.

WHO should provide the National Liberation Movements with:

(i) *in the short term:* two consultant psychiatrists, one psychiatric social worker and one psychiatric nurse-tutor, to develop a programme for psychosocial and mental health personnel, and to provide emergency care for victims of apartheid. The team should have the necessary logistic support, including essential drugs.

(ii) *in the long term:* continuing support for the mental health components of the health programmes developed by the National Liberation Movements, with special emphasis on the training of cadres.

4.3 Health science and technology

WHO should ensure the active participation of the health services of the National Liberation Movements in the activities of the African Mental

Health Action Group, and strengthen further the programme of this Group.

Support for National Liberation Movements recognized by OAU and WHO should be strengthened in the following fields:

(i) *Technical:* better use of technical cooperation among developing countries in and outside the Region;

(ii) *Material:* supply of drugs, vaccines, surgical instruments and equipment for health care centres in the liberated zones and at frontiers bordering on South Africa.

The United Nations system and the OAU have been collaborating by means of special programmes which took the unjust health system of apartheid into account. That collaboration should concentrate on strengthening the health infrastructure of the front-line States, enabling them to make the necessary provision of health services to the National Liberation Movements recognized by the OAU. Special attention should be paid to the following:

- strengthening the existing infrastructure, especially maternity facilities;
- development of maternal and child health activities: immunization, improved sanitation and housing conditions, water supply, environmental hygiene;
- regular supply of drugs and equipment;
- support of training programmes: scholarships for professional, technical and administrative manpower; and
- facilitation of proper deployment of qualified personnel.

5. Strategy for health for all by the year 2000 in the African Region: Action against apartheid and its harmful effects on health development

5.1 Preamble

When the WHO Member States of the African Region adopted in 1979 the Charter for the Health Development of the African Region by the year 2000, they took into account the serious problem of apartheid.

In the preamble to the Charter, paragraph 6 reads:

"REJECTING all ethnic, political, racial and religious discrimination as prejudicial to progress, development and health".

Concerning the struggle against apartheid, Objective 5 of the Charter is:

"To ELIMINATE apartheid and all forms of discrimination between men so as to pave the way for authentic, just and lasting health and social development".

The principles set forth in Objective 7 are:

"To PARTICIPATE in combating the movement from rural areas and the increasingly acute poverty of populations".

The Charter gives high priority to the struggle for social justice and includes in its strategic approaches:

"PRIORITY for the removal of social inequalities and for the satisfaction of basic needs, particularly in the least privileged rural and peri-urban communities;"

"DO ALL IN THEIR POWER to ensure that man's fundamental right to health becomes a reality;"

"REDUCE social inequalities in the health field."

The political commitment made individually and collectively by the Member States in ratifying the Charter gave a new dimension to Africa's continuous struggle against apartheid.[1]

The strategy for the struggle against apartheid is part of the group of major activities to be undertaken in all sectors to achieve a coherent health policy on the African and global levels.

[1] Resolutions AFR/RC29/R8, AFR/RC30/14, WHA33.33, WHA33.34, AFR/RC31/12.

5.2 Place of the struggle against apartheid in regional and global strategies

The analysis of health problems and trends led to the conclusion that:[1]

"The problem of apartheid in southern Africa remains an obstacle to health development."

The struggle against apartheid is part of global[2] and regional health and socioeconomic policy. Members of the international community should be continually reminded of the harm done by apartheid.

A permanent political commitment is necessary. The awareness of leaders must be continually aroused. Health itself is an important factor in the struggle. The political and technical authorities should therefore take appropriate steps to have racist South Africa expelled from all world health and medical associations. The United Nations and the OAU should support that struggle.

The development of health systems concerns the countries which give shelter to fighters in the National Liberation Movements recognized by the OAU and to their families, as well as the populations which are victims of apartheid and which have remained in their country. Such development requires international cooperation to be carried on in the countries which shelter refugees from the front-line countries and extended to the entire international community.

This involves *mobilizing and developing human, financial and material resources.* In this regard, technical cooperation among developing countries (TCDC) has an important part to play. The National Liberation Movements recognized by the OAU participate in all proceedings of the TCDC sub-regional groups.

The Plan of Action is based on the principles of the Charter and is an extension of the global and regional strategies for health for all by the year 2000. Its structure follows the main lines of WHO's general programmes of work for a specific period (see pages 41-46).

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[1] *Regional strategy to achieve the social target of health for all by the year 2000.* WHO Regional Office for Africa (document AFR/EXM/3).

[2] *Global strategy for health for all by the year 2000.* Geneva, World Health Organization, 1981 ("Health for All" Series, No. 3).

Plan of Action

Direction, coordination and management

Type of action	Action by: National Liberation Movements	Action by: WHO	Action by: International community	Comments
1. *Political commitment* to isolate the racist regime of Pretoria by implementing relevant resolutions	+	+	+	International pressure
2. *Attendance at constitutional meetings*; travel and living expenses		+	+	
3. *Attendance at educational meetings*; fellowships	+	+		
4. *Attendance at TCDC meetings*; travel and living expenses; managerial process for health development	+	+		
5. *Publication* every two years of a critical analysis of official information compiled and scientifically interpreted to show the harmful effects of apartheid	+	+		International pressure
6. Moral, technical, logistic, financial and other *support to National Liberation Movements, front-line States and countries sheltering refugees*; special action programmes		+	+	
7. Setting up immediately a joint National Liberation Movements/WHO *action group* to formulate: — detailed plans of action — programming for the post-apartheid period — monitoring of activities — search for extrabudgetary sources of finance — monitoring of the implementation of relevant WHO and UN resolutions	+	+		

Type of action	Action by: National Liberation Movements	WHO	International community	Comments
8. Setting up an Anti-apartheid Action/Support Committee in each country			+	
9. The governing bodies of WHO and the Member States are invited to break off immediately all relations with the World Medical Association, which has readmitted the racist Medical Association of South Africa to membership, as well as the Medical Association of the Transkei, established by racist South Africa		+	+	
Health systems infrastructure				
1. *Analysis of the situation,* trends and dissemination of information:				
— inside the country	+			
— outside the country	+	+	+	
2. Equitable *health legislation* for all through unremitting international political pressure			+	International pressure
3. *Training* of health manpower, NLM members and victims of apartheid:				
Fellowships	+	+	+	
4. *Health information and education* of the public:				
— training of experts through fellowships		+	+	
— Preparation of material	+	+		
— Dissemination through the mass media	+	+	+	

Type of action	Action by: National Liberation Movements	WHO	International community	Comments
Health science and technology: Promotion of health and medical care				
1. *Nutrition* with particular attention to protein-energy malnutrition and vitamin deficiency, including pellagra				
— inside the country: epidemiological surveillance of malnutrition and dissemination of information	+			International pressure
— in refugee camps and families of exiles: diet intake	+	+	+	
2. *Oral health*				
— inside the country: epidemiological surveillance and dissemination of information	+			International pressure
— in refugee camps and families of exiles:	+			
case-finding and treatment		+	+	
training of oral health experts and aides		+	+	
3. *Maternal and child health/ family planning*				
— inside the country: epidemiological surveillance and dissemination of information	+			International pressure
— in refugee camps and families of exiles:	+			
pre- and postnatal consultations				
consultations for infants				
health education				
health care services		+	+	
maternity clinics		+	+	
training of experts, midwives and nurses		+	+	

Type of action	Action by: National Liberation Movements	WHO	International community	Comments
4. *Workers' health*				
— inside the country: epidemiological surveillance and accident prevention with compensation for occupational diseases and accidents	+			International pressure
— in refugee camps and families of exiles:	+			
accident prevention		+	+	
employment policy		+	+	
training of cadres and experts		+	+	
5. *Mental health*				
— inside the country: epidemiological surveillance and dissemination of information with a view to action	+			International pressure
— outside the country in refugee camps and families of exiles: prevention, case-finding and treatment training of experts	+	+	+	
6. *Environmental health*				
— inside the country: monitoring and dissemination of information	+			International pressure
— outside the country in refugee camps and families of exiles:				
drinking-water supply and sanitation	+	+	+	
training of cadres		+	+	
health education		+	+	

Type of action	Action by: National Liberation Movements	WHO	International community	Comments
7. *Rehabilitation*				
— inside the country: monitoring and dissemination of information	+			International pressure
— outside the country in refugee camps and families of exiles:	+			
treatment and supply of equipment		+	+	
training of experts and technicians		+	+	

Health science and technology: Disease prevention and control

1. *Expanded programme on immunization*				
— inside the country: collection and dissemination of information	+			International pressure
— outside the country in refugee camps and families of exiles:				
immunization/vaccination, with supplies of vaccines, drugs, equipment, etc.	+	+	+	
training of cadres and health workers	+	+	+	
2. *Parasitic and diarrhoeal diseases*				
— inside the country: collection and dissemination of information	+			International pressure
— outside the country in refugee camps and families of exiles:				
prevention, case-finding and treatment	+	+	+	
training of cadres and health workers	+	+	+	

Type of action	Action by: National Liberation Movements	WHO	International community	Comments
3. *Acute respiratory diseases and tuberculosis*				
— inside the country: collection and dissemination of information	+			International pressure
— outside the country in refugee camps and families of exiles:				
prevention, case-finding and treatment	+	+		
training of experts, cadres and health workers		+	+	
health education	+	+		
4. *Sexually transmitted diseases*				
— inside the country: collection and dissemination of information	+			International pressure
— outside the country in refugee camps and families of exiles:				
prevention, case-finding and treatment	+	+		
health education	+	+		
training of experts, cadres and health workers		+	+	

6. Brazzaville Declaration

The International Conference on Apartheid and Health, which took place in the Regional Office for Africa of the World Health Organization at Brazzaville, People's Republic of the Congo, from 16 to 20 November 1981, on the initiative and in accordance with resolution AFR/RC30/R4 of the Regional Committee for Africa of the World Health Organization,

Having appraised extensively evidence on the health and psychosocial implications of apartheid;

Having examined the needs and priorities for action with regard to health care for the victims of apartheid; and

Having reviewed the activities of the World Health Organization in this respect,

Adopted the following Declaration:

1. Apartheid and health, as defined in the Constitution of WHO, are incompatible and mutually exclusive. Policies of apartheid are inimical to, and irreconcilable with, the social target of governments and of WHO of health for all by the year 2000 and the concept of primary health care, which is the key to attaining this target, according to the Alma-Ata Report and Declaration.

2. Apartheid means institutionalized and legally enforced racial discrimination and social inequality the purpose of which is to perpetuate the political, economic, and social privileges of a small white minority at the expense of the ruthless exploitation of the vast black majority through a system of migrant labour, forced resettlement and uprooting, repression and deprivation of this majority's basic political and human rights. Health for all means that as a minimum *all* people in *all* countries should have at least such a level of health that they are capable of working productively and participating actively in the social life of the community in which they live, and is therefore unattainable under the conditions now prevailing in South Africa. This fact should be the cause of grave concern for all nations and all governments.

3. The health conditions in South Africa and Namibia are characterized by an enormous gap between the status of the white minority, which is similar to that of the populations of most of the industrialized developed countries, and the status of the black majority, which is marked by high infant and child mortality, widespread malnutrition, excessive incidence and prevalence of preventable communicable diseases and an intolerable amount of avoidable premature deaths and disabilities, especially those related to industrial accidents and risks. In every group of diseases there is a marked social and racial stratification which exceeds anything so far known in the epidemiology of human disease. This stratification is directly and unequivocally related to the

policies of apartheid and, hence, is the product of design and purpose. Being one of the wealthiest countries in the world, South Africa has all the means and resources to reverse this situation; yet it chooses not to do so. This is incontrovertible evidence of the purposefully destructive effects of apartheid on health.

4. Apartheid is an assault on the whole person, on the family, and on the community. The psychological climate of violence, insecurity, dehumanization, and contempt for human life and dignity, which pervades every aspect of social life under the apartheid system, has extremely serious repercussions on the socialization of children, on interpersonal relations and on the values of society as a whole. The concept of community, as far as the blacks are concerned, is perpetually threatened in South Africa and Namibia; millions of people have been forcibly uprooted, and families permanently split or crippled, for the sake of maintaining a pool of cheap migrant labour and the related artificial Bantustanization of the country. All this has adverse effects on mental health, on the psychosocial development of the individual, and on the life of society. It breeds chronic stress, frustration, and social pathology as evidenced in the extremely high rates of alcohol-related and drug-related problems, crime, suicide, and other psychosocial disorders.

5. The health services designed and provided by the apartheid regime have only one purpose: the maintenance of the *status quo*. Every single aspect of health care is permeated by racial discrimination and all health facilities are segregated by race. Quantitatively and qualitatively, services for the black population are grossly inferior to those for the white minority. Black health workers do not have the same professional rights and status as white health workers. The increasing level of state intervention in the health services is only motivated by the objective of using health care as a means of social control, and every attempt of black voluntary organizations to initiate self-help and mutual aid projects is ruthlessly crushed and suppressed. The glossy pamphlets and the rhetoric about "primary health care" are deliberate attempts by the regime to deceive world public opinion and a mockery of the principles proclaimed by the Member States of WHO.

6. The single essential prerequisite for the establishment of a health care system in South Africa, which would meet the needs of all people and embody the principles of health for all and primary health care, is the radical and total dismantling of the policies and structures of apartheid. No genuine reform or improvement can be put into effect under the present system. It is impossible to speak of health in the absence of political rights, self-determination and acceptance of the principles of social justice as imperative for society as a whole.

7. The only just alternative to the present situation is the health programme for South Africa which is being developed by the National Liberation Move-

ments recognized by OAU. This is a programme based on the strategies that have been adopted by the Member States of WHO for the achievement of the target of health for all by the year 2000. This programme includes comprehensive measures for health promotion, disease prevention, treatment and rehabilitation, relying on community participation and making no distinction of race, economic position, or political creed. South Africa has all the resources and technology necessary to attain the goals of this programme in the foreseeable future provided that its people succeed in eliminating the obstacles and oppression of apartheid.

8. The facts about the health conditions prevailing under the apartheid system should be known to medical professionals and all health workers around the world. These workers must be made aware that their attitudes and behaviour can be influential in shaping the future of the South African people. If they wish to be true to the high humanistic standards of the medical and human services, professions and vocations, they must not, by commission or omission, contribute to the perpetuation of apartheid policies. Any act of direct or indirect collaboration with the apartheid regime is, by implication, a breach of the principles of medical ethics, established since Hippocratic times. Medical professionals and health workers, irrespective of nationality, race, political beliefs and social position, who have the courage and determination not only to avoid condoning the apartheid regime, but actively to oppose it, will earn the deep gratitude and appreciation of the oppressed people of South Africa and Namibia.

9. To the moral credit of the world health community is the fact that the World Health Organization has taken a resolute stand on the issue of apartheid and health. Through its ongoing studies on the health and psychosocial implications of apartheid, WHO is contributing to the objective information of world public opinion and thus doing an invaluable service to the cause of liberation of the South African people. It is vital that WHO should continue and intensify this activity.

10. The contribution of WHO to the action programmes of the National Liberation Movements in the area of health is equally, or even more, important. The provision of emergency and rehabilitation care for the many thousands of victims of apartheid scattered in different countries; the training of health workers; the formulation and development of components of the infrastructure of the future system of health care in South Africa; the provision of fellowships, essential supplies and technical expertise, are all ingredients and expression of the solidarity of the world health cooperative with the people of South Africa. This solidarity must grow and be further strengthened. The wind of change is blowing over the southern tip of the African continent and there is no force that can stop it. Health for all will ultimately prevail in South Africa and Namibia!

Annex 1

LIST OF PARTICIPANTS

1. National Liberation Movements (Resolution WHA27.37)

African National Congress (ANC)

Mr Alfred Nzo, Office of the Secretary-General, ANC, Lusaka, Zambia*

Dr Manto Tshabalala, ANC Health Department, Dar es Salaam, United Republic of Tanzania

Dr Peter Mfelang, Johns Hopkins University, Baltimore, MD, USA

Dr John Dommisse, Portsmouth, VA, USA

Pan Africanist Congress of Azania (PAC)

Mr N. Pokela, Chairman of PAC*

Com. Theophilus M. Bidi, c/o Mr Bisi Ogunniyi, Executive Office of the President, Political Division, Lagos, Nigeria*

Com. Fadi Merau, PAC, External Headquarters, Dar es Salaam, United Republic of Tanzania

Mrs H. Mngaza, Birmingham, England

South West Africa People's Organisation (SWAPO)

Dr I. Indongo, Secretary of Health for SWAPO, Luanda, Angola

Mrs M. Gebhardt, Luanda, Angola

Dr N. Iyambo, Medical Officer, Luanda, Angola

Mme Appolus, Alger, Algérie

2. Front-line States

Angola

S. G. Paim, Ministère de la Santé, Luanda

David Bernandino, Bureau technique, Ministère de la Santé, Luanda

Botswana

Hon. L. Makgekgenene, Minister of Health, Gaborone

Dr S. J. Moeti, Chief Medical Officer, Ministry of Health, Gaborone

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* Unable to attend.

Mozambique

Mr F. Honwana, Special Assistant to the President, Maputo

Dr Inusse Noormahomed, Deputy National Director of Training, Ministry of Health, Maputo

Mr Jorge Xhlone, Central Hospital, Maputo*

Zambia

Dr A. W. Inambao, Medical Superintendant, Ndola Central Hospital, Ndola

Mr V. Musowe, Provincial Health Inspector (Western Province), Provincial Medical Officer's Office, Mongu

Mr J. Mulekwa, Ministry of Health, Lusaka

Zimbabwe

Dr O. S. Chidele, Secretary for Health, Ministry of Health, Harare

Dr D. G. Makuto, Deputy Secretary for Health, Ministry of Health, Harare

Dr L. Hove, Medical Superintendent for Gwel General Hospital, Harare

3. Countries in process of being recognized as front-line States

Lesotho

H. E. Mr T. E. Ntlhakana, Lesotho High Commissioner, Nairobi, Kenya

Dr P. Ngakane, Director, Faculty of Health Services, Maseru

Mr E. L. Mathaba, Counsellor, Ministry of Foreign Affairs, Maseru

Miss Khoboso Marabe, Legal Officer, Ministry of Foreign Affairs, Maseru

Swaziland

Mr S. J. Magagula, Under-Secretary for Health, Ministry of Health, Mbabane

Dr Z. M. Dlamini, Director of Medical Services, Ministry of Health, Mbabane

Mr M. Dlamini, Permanent Secretary, Ministry of Health, Mbabane*

4. Chairmen, TCDC working groups

Sub-Region I

Mr M. F. Singateh, Ministry of Health, Labour and Social Welfare, Banjul, Gambia

Sub-Region II

M. Boussoukou Boumba, Ministre de la Santé, Ministère de la Santé et des Affaires sociales, Brazzaville, Congo

* Unable to attend.

M. E. Mbaloula, Directeur de la Planification et de la Statistique, Ministère de la Santé et des Affaires sociales, Brazzaville, Congo

Dr G. Ondaye, Coordonnateur national des programmes OMS, Brazzaville, Congo

M. J. Ouabari, Directeur, Département Afrique, Ministère des Affaires étrangères, Brazzaville, Congo

Sub-Region III

Dr Youssouf M'Dahoma Soilihi, Directeur général de la Santé, Moroni, Comores

5. AFRO Programme Sub-committee

Dr F. M. Mueke, Deputy Director of Medical Services, Ministry of Health, Nairobi, Kenya

6. Representatives of other WHO Regions

South-East Asia Region

Dr V. Singanayagan, Assistant Director of Health Services, Ministry of Health, Colombo, Sri Lanka

Dr M. Serajuddin, Project Director, Institute of Postgraduate Medicine and Research, Dhaka, Bangladesh

Mr V. Bhushan, Deputy Secretary, Ministry of Health and Family Welfare, New Delhi, India

European Region

Mr D. Bocarevic, Chief, Department for International Relations, Federal Committee for Labour, Health and Social Welfare, Belgrade, Yugoslavia

7. Representatives of the United Nations and organizations of the United Nations system

International Labour Organisation (ILO) *

United Nations Development Programme (UNDP)

Mr Mohamed Sakr, Officer in charge, Brazzaville, Congo

Mrs Sheela Embounou, UNFPA Programme Assistant, c/o UNDP, Brazzaville, Congo

Food and Agriculture Organization of the United Nations (FAO)

Dr E. Bojadzievski, Représentant, Brazzaville, Congo

* Unable to attend.

United Nations Childrens' Fund (UNICEF)

M. Santos, Représentant pour l'Afrique centrale, Brazzaville, Congo

United Nations Educational, Scientific and Cultural Organization (UNESCO)

M. H. Varlet, Représentant régional, Yaoundé, République-Unie du Cameroun*

M. M. Bourgeois, Conseiller technique principal de l'UNESCO, Brazzaville, Congo

Office of the High Commissioner for Refugees (UNHCR)

M. C. Kpenou, Représentant pour l'Afrique centrale, Kinshasa, Zaïre

*United Nations Conference on Trade and Development (UNCTAD)**

*UN Special Committee Against Apartheid**

*United Nations Industrial Development Organization (UNIDO)**

*Economic Commission for Africa (ECA)**

8. Representatives of other intergovernmental agencies

Organization of African Unity (OAU): Coordinating Committee for the Liberation of Africa

Dr J. P. Kasiga, Project Manager, OAU/UN Health Assistance to NLMs, Dar es Salaam, United Republic of Tanzania

9. Representatives of the associations and support movements invited by the National Liberation Movements

(*a*) *Invited by the African National Congress*

Dr Kerstin Sars, Africa Groups of Sweden Medical Committee, Stockholm, Sweden*

National Anti-Apartheid Movement in Solidarity with African Liberation, New York, NY, USA*

Netherlands Anti-Apartheid Movement, Amsterdam, Netherlands*

Comité contre l'Apartheid en Afrique australe, Paris, France*

Comité contre le Colonialisme et l'Apartheid, Bruxelles, Belgique*

International Committee Against Apartheid, Racism and Colonialism in Southern Africa, London, England*

Mouvement Suisse Anti-Apartheid, Genève, Suisse*

Mr A. W. Robinson, Anti-Apartheid Movement USA, Baltimore, MD, USA

Dr L. Pasternak, Naimsal, Brooklyn, NY, USA

* Unable to attend.

(*b*) *Invited by the Pan Africanist Congress of Azania*

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National Aboriginal Health Organization, Fitzroy, Victoria, Australia*

Kämpfendes Afrika, Zürich, Switzerland*

(*c*) *Invited by the South West Africa People's Organisation*

Africa Groups of Sweden, Stockholm, Sweden*

Afrika—Komitea, Finnish Africa Committee, Helsinki, Finland*

Dr S. Beckman, The Bread and Fishes, Västerås, Sweden

10. Observers

Mr Muyiwa Adetiba, Journalist, Lagos, Nigeria

M. Malick Cissé, Ministère de la Santé, Service de la Coopération internationale, Dakar, Sénégal

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M. M. Paraiso, Journaliste, Brazzaville, Congo

M. M. M'Boungou, Journaliste, Brazzaville, Congo

M. E. G. Gampaka, Journaliste, Cabinet du Chef de l'Etat, Brazzaville, Congo

M. J. Cayi-Boudouka, Association congolaise pour les Nations Unies, c/o PNUD, Brazzaville, Congo

M. M. Avelino, Journaliste, Agence angolaise de Presse (ANGOP), Luanda, Angola

11. WHO Secretariat

Dr H. Mahler	— Director-General
Dr Comlan A. A. Quenum	— Regional Director for Africa
Dr S. Siwale	— Director, Programme Management, African Region
Dr S. Diop	— Director, Programme Promotion, African Region
Dr A. Franklin	— Director, Development of Comprehensive Health Services, African Region
Dr A. H. Abou-Gareeb	— Director, Disease Prevention and Control, African Region
M. L. Roy	— Director, Environmental Health Promotion, African Region
Dr G. Comlan	— Director, Research and Health Manpower Development, African Region
M. M. Kassaye	— Director, Support Programme, African Region

* Unable to attend.

Dr A. Jablensky	— Division of Mental Health, WHO headquarters, Geneva
M. A. Merazka	— Technical Cooperation and Emergencies, African Region
Dr R. H. Doss	— Regional Officer, African Region
Miss Konde-Aena	— Regional Officer, African Region
Mr C. Ravaonjanahary	— Regional Officer, African Region
Dr C. Randriamanana	— Regional Officer, African Region
Dr P. R. Dausse	— Regional Officer, African Region

Annex 2

PROGRAMME OF WORK

1. Opening of the Conference
2. Election of officers: Chairman, Vice-Chairman and Rapporteurs
3. Adoption of the annotated provisional programme of work
4. Method of work
5. *Analysis of the health delivery system in Apartheid South Africa* (WP/02)—*Health or Apartheid* (WP/2.1)

   Ways and means of providing support to the efforts already being made by the National Liberation Movements recognized by OAU and the international organizations to improve health care delivery to populations that are victims of apartheid.
6. *Effects of apartheid on health*
   (i) *Maternal and child health* (WP/03)
   Measures suitable for improving the situation regarding: inequality in the face of death and disease; prenatal and postnatal care; maternal and child health; health care delivery; children's labour regulations; status of women.
   (ii) *Workers' health* (WP/04)
   Measures to be taken to cope with the situation, particularly in the following fields: development of places of work; workers' protection and accident prevention; legal measures (insurance, accident compensation, pensions, etc.).
   (iii) *Mental health* (WP/05)
   Concrete proposals for the improvement of the mental health of the populations that are victims of apartheid.
7. *Health action programme for victims of apartheid* (WP/06)

   Development of health action plan for victims of apartheid.
8. Adoption of the final report.
9. Closure of the Conference.

PART II. THE HEALTH IMPLICATIONS OF RACIAL DISCRIMINATION AND SOCIAL INEQUALITY: AN ANALYTICAL REPORT TO THE CONFERENCE

INTRODUCTION

Neither disease patterns nor health care services can be divorced from the social matrix in which they are embedded. Clearly not all disease is caused solely by social factors but much of it is socially related, and the way in which it is dealt with almost invariably reflects the major cleavages in society. There are few places where this is more evident than in the Republic of South Africa, a country which has become infamous for its apartheid system. South Africa is one of the wealthiest countries in the world, yet the disparities in income there are probably greater than in any other industrial economy (*1*). It provides a striking case study of the effects of inequality on health. The nature of South Africa's political economy is perhaps most starkly revealed by the racially differential incidence of disease and mortality. While white male adults suffer from an exceptionally high rate of cardiovascular disease and senile disorders—diseases of the industrialized world—every 20 minutes a black child in the Republic dies from malnutrition (*2*). For blacks, especially in the rural areas, the incidence of infectious and nutritional diseases is comparable to, or higher than, that in the poorest developing countries, or in mid-19th century Britain. Despite this, 65% of doctors in the Republic practise in the metropolitan areas, among 30% of the population, largely whites. In 1975, 6 Africans graduated from medical school in the Republic, less than 1% of the total graduating that year (*3*), although they constitute around 70% of the population. For blacks there is an unintended truth and unconscious irony in the claim of the South African Minister of Co-operation and Development, Dr the Honourable P. G. J. Koornhof, that "Apartheid ... is dying in South Africa" (*4*).

For many years the system of apartheid in South Africa has been a major cause of concern to the international community, largely because its racially discriminatory laws have been an affront to any conception of human dignity. The enjoyment of human rights as defined in the Universal Declaration of Human Rights of the United Nations is closely linked to the enjoyment of health as a state of complete physical, mental and social well-being, as enshrined in the WHO Constitution. This is largely denied to the majority of South Africa's inhabitants. In recognition of this and in accordance with resolution 3151 (XXVIII) of the General Assembly of the United Nations, the Executive Board of the World Health Organization requested the Director-General "to continue to collaborate with other organizations and institutions of the United Nations system to enhance concerted international action against the policy of apartheid" (resolution EB55.R58). Part II of this volume

is the outcome of a study on the effects of apartheid in the fields of health and health care which was carried out by the WHO Secretariat in implementing that resolution.

While it is not claimed that all ill health in the Republic of South Africa is the result of discriminatory policies, this study shows that the differential incidence of disease and mortality in South Africa is socially structured, and that it is above all the policies of apartheid which determine this. Apologists of apartheid frequently argue that the country's disease patterns are simply the outcome of processes of industrialization and urbanization, not dissimilar to those being experienced in other parts of the Third World. However, this study shows that South Africa's policies of apartheid and its development cannot be dissociated in this way. Apartheid has been the way in which the costs of these processes of "modernization" have been borne by the black population of South Africa, while its benefits have accrued largely to whites. Although it is true that disease patterns have been transformed by South Africa's industrial revolution, and have in large measure resulted from it, this is not unrelated to apartheid: apartheid is the specific form which capitalist development has taken in the Republic.

There are frequent references in this report to "race". Disease patterns and health care facilities in South Africa appear to be ordered by "racial" categories. This has little to do, however, with any genetic or biological difference between people. As the Declaration on Race and Race Prejudice adopted by the General Conference of UNESCO in 1978 makes clear:

> "The differences between the achievements of the different peoples are entirely attributable to geographical, historical, political, economic, social and cultural factors" (5).

The Declaration continues "The human problems arising from so-called 'race' relations are social in origin rather than biological". In South Africa, social, economic and political institutions are so structured by an all-pervasive racist ideology and practice that they have material effects on the incidence of disease and the provision of health care. It is therefore impossible to describe the daily reality for millions of South Africans in any other way and such terms as "racial stratification", "racial differences", "black", "white" and "coloured" cannot be avoided in this report. Their use, however, does not imply the legitimacy of racist terminology.

It should be made clear at the outset of this study that it is based entirely on published evidence and that morbidity and mortality statistics for the indigenous African population are either wholly lacking or grossly inadequate. Despite the sophistication of South African census data (the 1970 decennial census runs into a shelfful of volumes), there is, for example, no record of African infant mortality or age structures at the national level. In 1944 the South African National Health Service Commission pointed out that "the absence of reliable and complete health statistics makes rational, effective

planning of health services very difficult" (*6*). Yet in 1976 the same complaint was repeated in the glossy propaganda publication issued by the Bureau for Economic Research in Bantu Development, *Black Development in South Africa* (*7*). In the critical area of malnutrition, the State has stopped providing information which was made available in the 1960s, while more recently even the very limited material available from the annual reports of the Commissioner of Mental Health has ceased.

The problems are compounded by the often formidable and revealing gaps in the research undertaken within South Africa. In addition, there are particular difficulties at the present time, when South Africa's apartheid strategy is in a state of considerable flux and its propaganda campaign is in part directed to answering critics of its health and welfare policies. It is thus no simple matter to distinguish actual practice from stated intentions, reality from rhetoric. Nevertheless, reasonably valid conclusions can be drawn from the evidence available from and the partial statistics provided by the South African Department of Health; the evidence and reports of government commissions; studies published in the South African medical and other professional journals; press reports; and information published by such independent organizations as the South African Institute of Race Relations, the South African Labour Development Research Unit and the Black Community Programmes.

Before examining this material and turning to the actual health implications of apartheid, however, it is necessary to understand the nature and meaning of apartheid and to explore briefly the historical background of contempory South African society as well as of its medical institutions.

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CHAPTER 1

THE NATURE OF APARTHEID

South Africa is a racially stratified society, marked by extreme inequalities of power and wealth. Underlying the institutions of apartheid is the exclusion of blacks from any share in political power or economic control in the interest of the white minority. A complex network of laws sustains a hierarchical structure of discrimination, exploitation and deprivation, in which coloureds and Indians form oppressed minorities in relation to whites, but have considerable privileges in relation to Africans. Central to the functioning of apartheid is a migrant labour system based on the division of South Africa into two sectors: a so-called "common" or white area, and Bantustans, composing 13% of the land. These form impoverished labour reserves for the white economy. Despite frequent statements that apartheid is dying, the central institutions of exploitation remain intact.

To the casual outsider, South Africa is, in the words of the journalist Alan Drury, "a very strange society" (*1*), a society dominated by a Gobineau-like racial fantasy given practical effect. In the words of sociologists and economists, it is a racially stratified society, marked by inequalities of power and wealth more extreme than in almost any other country. In South Africa, some 70% of the population (African) receive about 20% of the total income, and 17% of the population (white) receives nearly 70% of the income. The division coincides directly with the racial classification of the population, and has remained remarkably constant both over the years and as between different estimators using slightly different procedures (*2*) (see Table 1).

Table 1. Distribution of population, land and disposable income

	White (%)	African, coloured and Asian (%)
Population	17	83
Land	82	18[a]
All disposable personal income	74	26

Sources: SAIRR. *Survey of race relations, 1980.* Johannesburg, 1981. Food and Agriculture Organization of the United Nations. *Ideas and action* No. 126 (1978). Brown, G. N. *Apartheid: A teacher's guide.* Paris, UNESCO, 1981.

[a] This includes 13% of land taken up by Bantustans.

The simple but unalterable fact of colour dominates every facet of life. Each individual in the Republic of South Africa must carry an identity card on which he or she is classified as "European" (i.e., Caucasian), "Bantu" (i.e., negroid, Bantu-speaking African), "Coloured" (i.e., of mixed descent), or "Asian" (usually Indian). And how he is classified determines where he lives; what education he receives and what work he is able to do; how much money he earns; whom he may marry, where his wife and children live; whether he has any political rights and where he may exercise them. The colour of his skin and racial classification may even determine which ambulance picks him up when he is ill, to which hospital he will be taken, and where he will be buried when he dies. This is the outward face of apartheid, a term which can be defined as the laws and customs which maintain a system of extreme socio-economic and political exploitation in the interests of a minority of just over 4 million whites over about 22 million blacks[1] (see Table 2). Inequality of this magnitude is only made possible through the operation of a highly authoritarian state which exercises massive control over the lives of the majority of its inhabitants.

Table 2. South Africa's population, 1980*

African	15 970 019
Asian	794 639
Coloured	2 554 039
White	4 453 273

* Excluding the Transkei, Venda, and Bophuthatswana, for which figures for mid-1980 were not available. In 1978 their combined population was 3 387 000.

Source: SAIRR. *Survey of race relations, 1980.* Johannesburg, 1981, p. 67.

For strangers to South Africa it is the symbolic notice, *"Slegs vir Blankes"* ("For Whites Only")—a manifestation of the overtly racist laws—which first catches the eye. Yet the critical constituents of apartheid lie elsewhere. Indeed, under foreign pressure and in the face of the rising tide of black militancy, together with the changing demands of the economy, there are numerous indications that the Government is prepared to jettison many of the features of what has been called "petty apartheid"—segregation in sport and public places—and perhaps even the Immorality Act, which makes sexual relations between people of different race illegal, may be abandoned. There is no suggestion, however, that the central institutions of the apartheid state should be dismantled.

[1] The term "blacks" is used to refer to the oppressed majority of South Africa whether they are of African, Asian or coloured descent.

Underlying these institutions is the exclusion of blacks from any share in political power or economic control. While the dominant white group, drawn over the past three centuries from every part of Europe[2] is defined as the South African "nation" and enjoys all the benefits of political and economic privilege, all blacks are automatically deprived of South African citizenship. Regardless of where they were born, live or work, indigenous Africans, whose ancestors have inhabited South Africa for nearly two millenia,[3] are willy-nilly given "citizenship" in tribally defined territories (*3*). Africans have had no say in the establishment of these areas, which are called "homelands" or "independent African states" in government parlance and which are referred to as "Bantustans" in this report. For the coloured and Asian population (*4*) the situation is little better. Although they are permitted to remain in segregated quarters in the so-called white or common areas, they do so virtually without political rights. Recent constitutional changes that would attempt to incorporate Asians and coloureds have been rejected by these communities.

A complex network of laws sustains a hierarchical structure of discrimination, exploitation and deprivation, in which coloureds and Asians form oppressed minorities in relation to whites. They have, however, considerable privileges in comparison to Africans. Crucially, they are not subject to the contract labour system with all that it means in terms of family destruction, police surveillance and constant harassment. The racial hierarchy is apparent on almost every social index: wages, education and disease patterns, with whites on top and Africans consistently at the bottom (see Tables 3 and 4). These gradations are generally explained as a result of culture and genetic differences. They are, however, largely a matter of legislative design which enables the Government to isolate and fragment the dominated groups. More recently the Government's strategy has been directed at further dividing the black population internally not only into "ethnic" groups, but also between town and countryside, skilled and unskilled, through a further manipulation

[2] The Dutch settlement at the Cape in the 17th and 18th centuries drew its immigrants from a wide area of northern Europe. By the beginning of the 19th century, when the British took over the Cape Colony, they formed a distinguishable community, speaking Dutch and of Calvinist religion. The British takeover and the mineral discoveries in the last third of the 19th century led to the growth of an almost equally large and economically dominant English-speaking population. At the beginning of this century, the "race" question in South Africa referred to the hostility between English-speaking and Afrikaans-speaking South Africans.

[3] Despite much South African propaganda to the contrary, there is no doubt that Iron Age cultivators were in South Africa by the 3rd-4th century A.D., and that they were probably the forbears of the contemporary Bantu-speaking population (*5*).

[4] The coloureds are of mixed descent, taking their origin from the Late Stone Age hunter-gatherer and herder populations whom the Dutch encountered at the Cape, the white settler population, slaves drawn from a wide arc around the Indian Ocean, and Bantu-speaking Africans. The Asian population is largely descended from indentured Indian labour that was brought to work on the sugar plantations of Natal between 1860 and 1911, and the merchants who followed in its wake.

of law and privilege in an attempt to create a collaborative middle class and labour aristocracy.[5]

Table 3. Wages

(*a*) Average earnings (Rand) for the year 1980 (non-agricultural sectors, excluding private services of legal practitioners and earnings in kind)

White	7 627
Coloured	2 468
Asian	3 280
African	1 831

(*b*) Monthly Wages (Rand)

(i) Mining (1979)		(ii) Retail and wholesale trade (July 1980)	
White	880	331	732
Coloured	384	158	262
Asian	432	227	367
African	146	112	201
(iii) Manufacturing (July 1980)		(iv) Construction (July 1980)	
White	979	937	
Coloured	273	289	
Asian	307	459	
African	237	192	
(v) Public authorities: central and provincial (July 1980)			
White	664	605	
Coloured	255	239	
Asian	592	487	
African	210	158	

Source: SAIRR. *Survey of race relations*, 1979. Johannesburg, 1980, p. 71.

[5] For the ethnic divisions see below; the further manipulation of internal African divisions would appear to be part of the objective of the reforms suggested by the Wiehahn and Riekert Commissions (*4*).

Table 4. Education

(*a*) Percentage of GNP allocated to education (1978) (Rand)

	Amount (in millions)	%
White	1 009.8	2.62
Coloured	196.7	0.51
Asian	95.2	0.25
African	253.6	0.66

(*b*) *Per capita* expenditure 1978-79 (Rand)

	Incl. capital expenditure	*Excl. capital expenditure*
White	724.00	640.00
Asian	357.15	297.31
Coloured	225.54	197.20
African	71.28	68.15

(*c*) Teacher: pupil ratio

White	1:18.6
Asian	1:25.6
Coloured	1:28.8
African	1:45.9

Source: SAIRR. *Survey of race relations*, 1980. Johannesburg, 1981, pp. 86, 123, 127, 131, 139, 149, 154, 459.

The system is buttressed by a racist ideology no less pervasive or dehumanizing for being couched today in terms of "pluralism" and separate "nations" and "national security". Whereas in the past whites justified their privileged position in terms of their allegedly superior racial characteristics, today white racism has adapted to the times and has found euphemisms for its underlying tenets and purposes. The erstwhile Minister of Native Affairs has been transformed successively into the Minister of Bantu Affairs, the Minister of Bantu Administration and Development, the Minister of Plural Affairs, and most recently the Minister of Co-operation and Development. Discrimination is justified by protagonists of apartheid in terms of the "developing" status of the black population (*5*), while the impoverished lands to which Africans are relegated are comfortingly termed "homelands". Thus language insidiously shapes political thought and masks from even well-meaning outsiders the extent to which the ideology is still being used to preserve and legitimate white domination and privilege (*6*). Despite the play on words, the structures of exploitation remain intact.

Central to the contemporary functioning of apartheid is a migrant labour system based on the division of South Africa into two sectors. These are the

so-called white areas, which comprise some 87% of the land and include all the major industrial and mining centres, and the so-called Bantu homelands or Bantustans, formerly known as native reserves, which comprise 13% of the land (see map). At one time the Bantustans had around 25% of the country's agricultural potential (*7*). While Asians and coloureds live in the white areas, the African population has been divided into ten distinct "ethnic" groups, each of which has been "granted" its own separate Bantustan, and each of which is at a different stage of constitutional development. The latest government terminology for them all is "independent nations"—an independence which has neither material reality nor international recognition (*8*).

In exchange for enforced "citizenship" in the Bantustans, Africans forgo any rights in the common areas of South Africa, even if they have lived and worked there all their lives. In these common areas, Africans are tolerated only as "units of labour", ministering to the needs of whites although, with the exception of Pretoria, there is no so-called white area which actually has a majority of white inhabitants (see Table 5). Indeed, quite apart from the numbers of Africans perpetually oscillating between the Bantustans and the common areas, half of the African population lives permanently either on white-owned land or in the urban areas. Most have known no other "homeland". In term of government philosophy, however, they are now defined as "foreigners" (*9*).

Table 5. Population, by area

(*a*) Urban areas with the largest populations, 1972[a]

	Total population	*White (%)*	*African (%)*	*Coloured/Indian (%)*
Johannesburg	1 432 643	35	56	9
Cape Town	1 096 597	34	10	56 (mainly coloured)
East Rand	895 527	36	61	3
Durban	843 327	30	27	43 (mainly Indian)
Pretoria	561 703	54	42	4
Port Elizabeth	468 577	32	43	25
Vaal Triangle	304 371	37	62	1
West Rand	421 018	36	61	3
Orange Free State goldfields	208 891	1	75	1
Bloemfontein	180 179	41	53	6
Pietermaritzburg	158 921	28	44	28
East London	123 294	45	42	13
Kimberley	103 789	28	47	25

Source: Baldwin, A. *Uprooting a nation.* London, Africa Publication Trust, 1974, pp. 20-21.

(*b*) Population in the "common areas" of South Africa in 1975 and the projected figures for 2000

	1975	2000
White	3 768 000	5 346 000
Asian	643 000	1 130 000
Coloured	1 850 000	4 185 000
African	6 240 000	15 000 000

Source: SAIRR. *Survey of race relations*, 1977. Johannesburg, 1978, p. 51.

* Despite massive population removals and population increase since these figures were compiled, this probably still represents the present situation in proportionate terms.

Notwithstanding the terminology of "separate development", in the years of Nationalist rule since 1948 the number of Africans migrating to the towns and white-owned farms from the Bantustans has increased enormously. Thus at any one time between 60% and 80% of the economically active adult male population of the Bantustans is away from home (*10*) (see Table 6). In Kwa-

Table 6. Bantustan populations (African only)

	1976 (*de facto*)	1980 (BENBO projections)
Bophuthatswana	1 154 200	[a]
Transkei	2 390 800	[a]
Ciskei	474 600	630 353
Gazankulu	333 000	476 694
KwaZulu	2 691 200	3 177 569
Lebowa	1 384 100	1 658 125
Qua Qua	90 200	232 226
South Ndebele	[a]	166 477
Swazi	208 000	159 882 (now known as KwaNgwane)
Venda	338 700	[a]
Total	9 064 800	–

Source: SAIRR. *Survey of race relations*, 1977, p. 311, and 1980, pp. 68-69.

[a] Not available.

NOTE: The following are the numbers of the *de facto* population that is either "migrant" or "commutes" in search of work in the white areas:

Bophuthatswana	550 035
Transkei	499 012
The remaining Bantustans	2 638 054

Source: SAIRR. *Survey of race relations, 1980*. Johannesburg, 1981, p. 69.

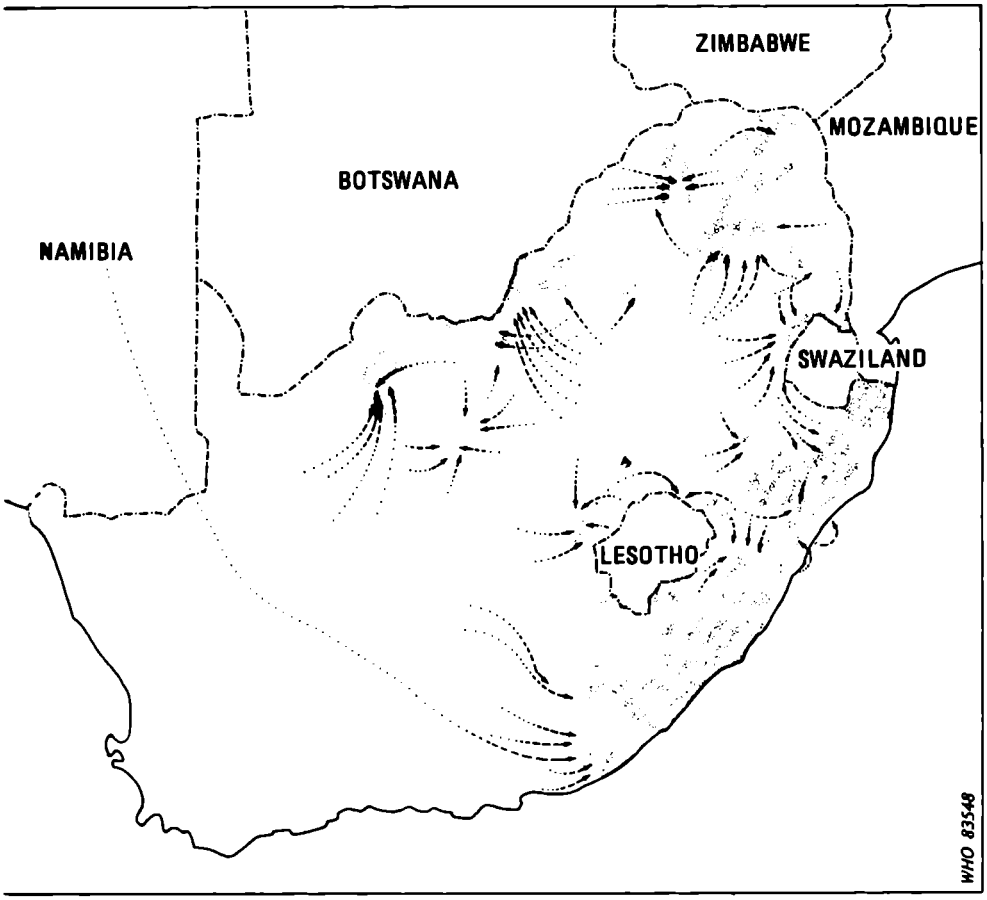
Zulu, for example, recent research shows that the number of migrants away from home on the census day increased most sharply between 1960 and 1970, just as the Bantustan policy was getting under way. By 1970 there were twice as many men aged 15-64 away from home as actually in the Bantustans. In certain regions as many as 8 out of 10 were away. Migrants from KwaZulu have been leaving at an increasingly early age, in larger numbers and for longer periods of time, and recently there has also been a steep rise in the number of women away. Whereas about 60% of the male labour force of KwaZulu is employed in white South Africa, the KwaZulu economy provides employment for about 12%; the rest are unemployed (*11*). The picture is no more encouraging elsewhere. The Transkei, which achieved its "independence" in 1976 probably has the best rainfall and agricultural land of any of the Bantustans. Nevertheless it only regularly provides enough food for less than 10% of its inhabitants. Two-thirds of its households are headed by women because the men are away (*12*). Despite unprecedented economic growth between 1960 and 1970, the *per capita* income of the Bantustans has declined even when the remittances of absent wage-earners are taken into account. Over the past decade, the situation seems to have deteriorated further (*12*, *13*).

Faced with these facts and figures, government spokesmen and apologists frequently agree that they are deplorable, but argue that they simply reflect the "backward" state of agriculture among Africans. Africans, they assert, should be grateful for the coming of the white man, who has provided employment in the white areas for the rapidly increasing rural black population.[6] What this fails to take into account is the intrinsic connexion between the development of the white areas and the impoverishment of the black areas. Many of the Bantustan areas which are the most impoverished today were producing agricultural surpluses in the past. From the late 19th century, African peasant production has been steadily undermined through the imposition of taxation to force Africans to work in the common areas and through state intervention in restricting African landholdings and implementing credit, railway and tariff policies which favoured white capitalist agriculture (*15*). Once the system of migrant labour was institutionalized, it became increasingly difficult to escape its consequences. The absence of males in the Bantustans reduces labour productivity and makes dependence on the earnings of the migrant even more important. A cycle of dependence is thus produced which ensures a cheap labour supply for the white areas (see, for example, reference *16*).

While most observers agree that the reserves offer no basis for subsistence and that people are literally starving to death in the Bantustans, some 3

[6] For example, the ex-Prime Minister, John Vorster stated in Parliament that Africans were in white areas "because they cannot provide employment for themselves... What would have become of them if one had not created these employment opportunities for them? Surely they would not have survived" (*14*).

The Republic of South Africa: Forced relocations to Bantustans*



* From: MOERDIJK, D. *Anti-development: South Africa and its Bantustans*, Paris, UNESCO Press, 1981, p. 187.

NOTE: Relocations in the Pretoria–Johannesburg, Cape Town and Durban–Pietermaritzburg industrial areas are not shown.

million Africans have been forcibly removed from the "common areas" under a variety of laws which render them rightless foreigners. Reports of vast population removals come from area after area. About a million people have been removed to eliminate "black spots" (land occupied by Africans in the scheduled white domain) and under plans to consolidate the Bantustans on ethnic lines (*17*, *18*). On top of this, the increased mechanization of farming has led to the accelerated eviction of African labour tenants, who are replaced by contract workers commuting from the overcrowded reserves (*18*). Until

the 1960s about a third of the African population lived on white farms (often the same land their ancestors had occupied from time immemorial). This proportion has now been reduced to less than a fifth (*19*). Wages may have risen for the skilled and semi-skilled who have been left, but this can be little consolation for the hundreds of thousands who have been shifted to resettlement camps in the Bantustans, which have become a byword for disease, squalor and despair (*17*, *18*).

The extent of the overcrowding can be appreciated through an example from the north-eastern Free State where the little Bantustan of Qua Qua has seen a staggering increase in its *de facto* population from 24 000 in 1970 to over 200 000 in 1980. As the total area of Qua Qua is 458 km^2, this gives a population density of well over 430 per km^2 (*20*). Although this is the most extreme example, there are similar pockets in the other Bantustans, such as Nqutu and Umsinga in KwaZulu and the Winterveld in Bophuthatswana, where overcrowding has reached a critical level. Yet the removals go on. Although official plans have constantly reiterated the need to provide more industrial development in the Bantustans and on their borders, real development by the Government-sponsored investment corporations has been dramatically below what is required to provide employment for the population (*21*). Unemployment in the Bantustans was conservatively estimated at about half a million at the end of 1976; yet by 1975 only some 11 000 jobs had been created in the Bantustans outside of the Ciskei and the Transkei (*22*). Wage levels and work conditions within the Bantustans and in the "border industries" established on their fringes are considerably worse than in the rest of the Republic (*23*). In particular, restrictions on minimum wage levels and work safety regulations are relaxed.

For Africans in towns, life is no more secure. Under section 10 of the Bantu Urban Area Act, only those Africans who had been born in a town, had worked at the same job continuously for 10 years or more, or who had lived in that town for 15 years, had any right to remain there and acquire even minimal leasehold rights to property. Since 1969, Africans seeking employment in a town have only been allowed in on a contract basis, so that since then new migrants have been unable to acquire section 10 status. In 1979 the Wiehahn and Riekert Commissions suggested that the Government would be reconsidering the position of the "Section 10ers" (the more educated, skilled and semi-skilled workers as well as the teachers, clerks and small businessmen who constitute the urban élite or middle class) in an effort to fend off urban militancy and international criticism (*4*). This strategy, however, will hardly solve the problems of the majority of South Africa's inhabitants. Not only does it divide the African work-force even more rigidly into skilled and unskilled, it also divides the African population into those with the right to live in towns and the denationalized "foreigners", whose presence there depends on the permission of the authorities and the availability of work and housing.

Those considered redundant to the needs of the white economy or, in the words of a minister, the "unproductive people ... who because of old age, weak health or other reasons are unable to work", are simply sent back to the Bantustans (*24*).

The Bantustans are thus "reserves" in a very real sense. They are the site of South Africa's industrial reserve army of the unemployed, the very old and the very young who can be drawn into and thrown out of the economy according to its demands and at little immediate cost to whites (*25*). The ability to use the Bantustans in this way has become particularly important over the past decade, as farming and industry have become more capital-intensive and a large number of unskilled workers have become "superfluous" to the needs of the economy. The figure for African unemployment in the late 1970s was estimated at between 1 and 2 million, between 15% and 30% of the work-force (*26*). Through the operation of racially structured labour laws, it is the African population which bears almost the total burden of the structural unemployment that these processes entail and the brunt of any recession. The Bantustans provide a way in which this surplus population can be dispersed and controlled. Through a complex system of pass laws, labour bureaux and call-back cards, the State ensures that there is "a delicate balance in the distribution of the African population. Those who are needed stay where they are needed, those who are not stay in the reserves ..." (*27*).

In the Bantustans, Africans can only find employment by registering at labour bureaux, which allocate labour to different sectors of the economy: agriculture, mining or manufacturing. Once categorized, it is almost impossible for an African to change the sector in which he will work for the rest of his life. Contracts of service have hitherto been no longer than one year's duration, though in the face of the current shortage of semi-skilled and skilled labour, there are signs that they can now be lengthened to three. According to the Bantu Labour Regulations (Bantu Areas) Act, No. 74 of 1968, after the expiry of his contract, the worker has to return to the Bantustan (*28*). A variety of laws and practices and the inadequate provision of education and training have ensured that the vast majority of Africans have remained at best semi-skilled operatives who can, if necessary, be replaced at the end of their contracts. In cases, however, where the employer has invested in the skills of a worker, he can be "recalled" and his contract renewed. Given the poverty and starvation in the Bantustans, and the minimal trade union rights which blacks have in towns[7] this system gives an enormous amount of power to the employer and ensures the continued cheapness of African labour. For even if he has worked at the same job for several years, the African's powerlessness

[7] Until the recent reforms of the Wiehahn Commission, African trade unions could not be registered and were therefore not recognized for wage negotiations. It is now possible for Africans to belong to registered unions, but registration imposes strict financial and constitutional conditions, thus potentially tightening governmental control (*29*).

and rightlessness persist. He remains, in the inimitable official parlance, "permanently temporary" or "temporarily permanent".

Each year vast numbers seek to escape the starvation of the reserves by entering towns illegally, as is revealed by the numbers arrested annually under the pass laws, which govern African movement, residence and employment in the towns. In 1978 no fewer than 272 000 people were arrested under various influx control laws in the major urban areas (*30*). The fact that during 1976 only 39% of those prosecuted under the pass laws were actually convicted suggests the even wider purposes of control which these laws serve (*31*). The extent of this can best be appreciated when one considers that someone is arrested in South Africa every minute of the day and night under the pass laws. In addition, several hundred thousand Africans have fled from the impoverished Bantustans, or from resettlement camps, from areas destined for ethnic "rezoning", to establish huge illegal squatter camps on the edge of the job-giving towns. The people of such squatter camps as Werkgenot, Unibel and Crossroads on the outskirts of Cape Town live under the threat that their homes will be bulldozed and that they will be returned to the Bantustans (*32*). Nevertheless they fight to keep their families united and to eke out a livelihood in the face of constant harassment by the State.

Despite the fact that labour allocation and control is central to the contemporary apartheid state, apartheid is a "total" system, which relies also on what can be called ideological state apparatuses for its reproduction. Examples of these apparatuses are education, the media, health care—indeed the whole network of institutions which make up civic life. Particularly important is an educational system which is specifically designed to imbue white youths with notions of their effortless superiority and to train blacks "for their station in life".[8] It is buttressed materially by the grossly unequal expenditure on black and white education and by the nature of the syllabus. Thus in 1978-1979 the per capita expenditure on white and black school pupils (in the white areas) was, on average, R640 and R68.15 respectively (*34*). In 1978 only 0.4% of African schoolchildren were enrolled in the final year of secondary school, compared with about 6% for whites (*35*).

Apartheid is frequently defended by Afrikaners as necessary to their own survival and identity. It has been attacked by some as no more than the irrational invention of the Afrikaners, which runs counter to the rational demands of the economy. Many outsiders, embarrassed by its racism, which is an affront to the international community, appear to believe that a liberalization of the more overtly racist laws will somehow reform apartheid out of existence. This is not so. All South African whites rely crucially on apartheid for their privilege and status (*36*). Such inequalities have been called "morally

[8] This was the explicit intention of the Bantu Education Act of 1953. See the speech by H. M. Verwoerd (then Minister for Native Affairs) to the Senate, June 1954 (*33*).

indefensible and politically explosive" (*37*). They are the result, however, of calculation. Both implicitly and explicitly, the ideology of racism and the deliberate manipulation of ethnicity reproduce a social system which perpetuates the rightlessness, insecurity and powerlessness of blacks in order to protect white power, privilege and prosperity.

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CHAPTER 2

ORIGINS OF SOUTH AFRICAN SOCIETY AND ITS HEALTH CARE SYSTEM

To understand apartheid and the development of its health care institutions it is necessary to look at their historical roots, because much of South African propaganda is based on an official view of history. Making use of a "dual economy" version of South African society, the Government argues that the problems of South Africa are analogous to those of the Third World. Examination of the historical evidence shows this to be based on a distorted version of the past. Essentially, apartheid has been the particular way in which South Africa has modernized. The patterns of disease and health care relate directly to the nature of its industrialization and the unequal distribution of resources rather than to any lack of "development" among the black population. Health care policies are directly related to more general government strategies of control through reform.

I. The Origins of South African Society

To understand fully both apartheid and the development of health care institutions in South Africa, it is necessary to look, however briefly, at their historical roots. This is particularly so because much South African government propaganda is based on a distorted version of this history, and is widely accepted as an explanation of contemporary policies. The old racist notions based on biological differences have to a large extent been abandoned; now history is called on to legitimate apartheid (*1*).

According to this version of history, blacks and whites arrived simultaneously in South Africa, and the settlers expanded into an "empty land", only encountering the African population for the first time in the late 18th century in the Eastern Cape. Even more remarkably, when the white settlers expanded into the interior in the course of the 19th century, they are alleged to have encountered scattered groups of people in much the same position as the contemporary Bantustans (*2*). Thus, according to the former Prime Minister, Mr Vorster, "The fact that 13% of the land in the Republic is Bantu and 87% is occupied by Whites is a division decreed by history" (*3*).

Abundant archaeological and documentary evidence exists to disprove these assiduously perpetuated myths. This shows that Iron Age cultivators who were probably the ancestors of the contemporary Bantu-speaking population occupied South Africa at least as far as the Natal coast and probably well into the eastern Cape before the middle of the first millenium A.D. (*4*). From the start, the settlers entered a vibrant African world in which they were, until the last third of the 19th century, only one of many contenders for power, land and cattle (*5*).

The contemporary exclusion of Africans from political power and economic control is further justified on the grounds that "they are not yet ready". Until the white man came to South Africa, so the official view maintains, Africans stagnated in a world of ethnic rivalries, internecine warfare and wild superstition, from which they are only now being redeemed through the beneficent policies of apartheid. Making use of a "dual economy" model of South African society, the propaganda suggests that the problems of Africans in South Africa are analogous to those of the rest of the Third World—problems of "development" against which white South Africans (among them medical men and nurses) are valiantly battling (*6*). Yet this "dual economy" model is not only based on a profoundly racist and distorted version of South Africa's history; it also blatantly ignores the connexion between white prosperity and black, especially African, impoverishment. Before the mineral discoveries of the late 19th century, the benefits of skill, technology and wealth were by no means the monopoly of the white man. The disadvantages of a simple agrarian society, an undeveloped technology and superstition were not confined to blacks.

In the last third of the 19th century, South Africa consisted of a cluster of still independent African polities, two Afrikaner republics and, on the coast, the British colonies of the Cape and Natal. The latter were by the mid-century typical colonial states meshed into the world economy and in large measure sharing in the institutions and technology of the British metropole. In the interior, on the other hand, despite increasingly significant differences in their socioeconomic structure, African and Afrikaner societies were by today's standards relatively evenly matched in political, and indeed even in educational and economic, terms (*7*).

The discovery of diamonds at Kimberley in 1868 and gold on the Witwatersrand in 1886 wholly transformed this earlier picture and shaped contemporary southern Africa. Within 30 years the entire subcontinent had come under colonial control. The Afrikaner republics and the remaining independent African kingdoms were conquered, largly by British troops, and the societies of southern Africa to as far north as present-day Zambia and Malawi were increasingly meshed into a single political economy. In large measure in response to the imperatives of industrialization south of the Limpopo river, the Union of South Africa was formed in 1910. In it, 1.25 million white men

held total political power over about 5 million blacks, who were almost wholly unrepresented in the central political bodies of the State (*8*).

At the same time, the mineral discoveries brought major demographic, economic and social changes in their wake. Within 30 years, South Africa had become the world's largest supplier of diamonds and, more importantly, of gold. Immigration to South Africa, especially from Britain, no longer needed official encouragement, and the new urban markets led to the development of capitalist agriculture and a revolution in rural social relations. Roads and railways had to be built and harbours extended. The demand for African labour became insatiable and the methods used to procure it ruthless. Vast quantities of overseas capital, the most sophisticated European technology, and cheap labour made it possible to render the low-grade deep-level ores of the Rand profitable. By 1899 the goldfields were employing nearly 100 000 black workers and 12 000 white workers—figures which rose to around 400 000 black and 40 000 white in the early 1970s (*9*).

It was in these early days in the diamond- and goldfields that many of the constituents of South Africa's present-day policies of apartheid were first formulated. From the outset, South Africa's industrial revolution was predicated on specific forms of racial exploitation which have continued to play a major role in the development of its economy. Control of the labour market was centralized through increasing sophistication of the migrant labour system, which was based on "reserves", compound housing and a variety of controls, including the pass laws, to prevent desertion and to undermine worker resistance to low wages. All this resulted from the demands of the mining magnates and capitalist farmers for a mass of extra-cheap, unskilled labour (*10*).

The migrant labour system, which is central to an understanding of contemporary southern Africa and its disease patterns, was initially devised in part as a result of African resistance to working on the mines for lengthy periods. Quite quickly, however, the mining magnates realized that the migrant could be paid lower wages than the white worker, since the subsistence costs of his family would theoretically be borne in the countryside. He was thus a single male "target worker" whose rural family could also bear his welfare costs in illness and old age (*11*). At no point was the use of white unskilled labour considered, both because its costs were too high and because it was feared that white working class militancy might cross the colour line. It was far more difficult for black migrant workers to organize to improve their lot. Once the Chamber of Mines developed its centralized recruiting agencies and received state assistance to control strike action and desertion, African wages dropped so that they were lower in the gold mines in 1911 than they had been in the 1890s. They did not rise in real terms again until 1972, when black labour and political militancy and changes in the political geography of southern Africa began to force them upwards (*12*). Yet the enormous increase

in the price of gold since the mid-1970s has barely been reflected in current black earnings (*13*). For much of this century the majority of workers on the goldmines of South Africa have come from beyond its political boundaries, where land is still available for the migrants' families and fewer other employment opportunities exist (*14*).

The very low wages offered to Africans in the mining industry have been in contrast (both historically and in the present) to the very high level of white wages. In the early days of the mining industry, skilled workers were scarce and had to be attracted to the Rand from overseas. Within a few years, however, the mine magnates attempted to cut their costs by introducing an increasing number of lower-paid black workers into jobs previously undertaken by white labour. The resistance which the skilled worker put up in the face of this process of deskilling and undercutting led to a variety of barriers to African advancement being established, both legally and by convention (*15*). Discriminatory educational and apprenticeship provisions, also dating from the first decades of this century, and closed-shop agreements between white unions and employers since the mid-1920s, have protected white workers from black competition. Although recently the specific legislative barriers to African job mobility have been removed, the grossly unequal access of black and white to education and training means that this had only a marginal effect (*16*).

By the 1920s, skilled English-speaking workers had already been joined by a flood of newly proletarianized Afrikaners. Poor, landless and unskilled, they constituted a serious social and political problem for the South African State. In the late 1920s it was estimated that one in five Afrikaners was "poor white" (*17*). In the towns, "poor whites" faced competition from skilled English-speaking workers and from the equally unskilled and poor, but not totally landless, Africans. The health and welfare needs of the dispossessed, black and white, were not dissimilar.

At the same time, Afrikaner business found itself unable to compete with large-scale operations dominated by English-speaking South Africans and international interests. It sought a series of protective measures from the State, which the emerging Afrikaner élite hoped to capture through an alliance with this deprived working class (*18*). It is this which partly explains the anti-imperial populism of Afrikaner nationalism, and its demands for protection against black workers and the small but growing Indian and African middle class. It also perhaps explains why the economic and welfare problems of "poor whites" were partially resolved at the expense of the "poor blacks".

In the rural areas territorial segregation of ownership limited the land available for African cultivation, thus simultaneously eliminating competition to white agriculture from African peasant producers and ensuring the

exodus of workers to white-owned farms and mines. This is what lay behind the passing of the Native Lands Act in 1913 and its extension, the 1936 Native Land and Trust Act, whereby some 13% of the land of the Union was set aside for Africans. The rest of the country was designated for white possession (*19*). The Land Acts were crucial in establishing the basis of the contemporary Bantustans and critically underpin apartheid policies. By limiting the amount of land available for African cultivation, at a time when the black population was on the increase, the Acts were, and are, a major factor in the impoverishment of the African rural areas, and therefore in contemporary disease patterns.

Even in 1913, the majority of the African population did not live in the reserves. Many lived on white-owned farms as share-croppers, wage labourers and rent-or-labour tenants. A major object of the 1913 Act was to transform all these people into wage labourers, but this has been a long-drawn-out process. Throughout the 20th century, however, white agriculture has become more capital-intensive and market-oriented, with the massive assistance of the State (*20*). Increasing numbers of African farm dwellers have consequently found their access to land restricted. As we have seen, some have been turned into wage labourers, working on contract and oscillating like the urban workers and miners, while others, particularly the elderly, the women and the children, have been marginalized in the Bantustans. All this, too, has been reflected in rates of mortality and morbidity.

From the beginning of this century landless Africans made their way to the towns. The Land Acts accelerated this process, as did the growth of secondary industry. The Government tried to control the influx in the interest of white farmers and mine owners, through the pass laws and the Urban Areas Act of 1923. Only sporadic attention was paid to the serious welfare needs of either the poor white or the African population. During the Second World War and immediately after, the growth of manufacturing increased African trade union activity and the absence of white workers at the front improved the black worker's bargaining position and wage levels. A number of social welfare reforms[1] were implemented by the State in the face of African militancy, the manifest inability of the reserves to support their population and the worsening conditions in the towns (*21*). Yet in 1948 even these very tentative and ambiguous moves towards reform were swept aside by the electoral victory of the Afrikaner National Party under the slogan of apartheid. The Nationalists secured only 40% of the votes cast in 1948, which represented less than 5% of the population if blacks are included (*22*). Nevertheless they have been in power ever since.

[1] These included pensions for the black aged and blind, albeit at substantially lower rates than for whites, and a feeding scheme for all schoolchildren; there was even talk of recognizing African trade unions, but this was blocked by the opposition of the Chamber of Mines.

Between 1948 and 1970 South Africa's rate of economic growth was probably rivalled only by that of Japan (*23*). Although much of the framework of apartheid existed when the Nationalists came into power, this growth rate and the uneven distribution of its benefits were also in large measure the result of heightened government intervention. This involved an increased control over labour, the direction of investment into industry, the establishment of parastatal enterprises and the encouragement of multinational capital to invest in South Africa on favourable terms. Between 1948 and the 1980s the extent of foreign investment in South Africa increased vastly, strengthening the economy and the repressive apparatus of the apartheid State (*24*).

Over the past 30 years the economy has been dominated by government enterprise on the one hand, and a handful of highly concentrated conglomerates on the other. Increasingly, moreover, as Afrikaner capital has been strengthened, it has become intimately connected with English-speaking and international financial and industrial concerns (*25*). This in turn may partly explain the liberalization of rhetoric in South Africa in the late 1970s.

Through the 1950s the Nationalists ruthlessly crushed any opposition to their policies and deliberately tried to destroy the African political leadership,[2] which had grown up over the previous half-century (*26*). Apartheid policies began to affect every sphere of life, and in the face of new exigencies—the rising tide of black opposition, increasing world criticism and the new economic imperatives of monopoly capital from the 1960s—the Nationalists also refined and extended their Bantustan policies. In part to defuse working-class militancy in the towns, from the late 1950s they legislated to resurrect the authority of chiefs in the reserves and to establish a new collaborating class of functionaries in the Bantustans (*27*). Through the 1960s the Nationalists may have had the illusion of success in maintaining economic growth and political quiescence. After police shootings at a peaceful demonstration against the pass laws at Sharpeville in 1960, and the banning of the major African nationalist movements, most opposition to Nationalist policies was forced underground or into exile. By the mid-1960s government ministers boasted of South Africa's stability and tranquillity.

The illusion was swiftly shattered in the early 1970s, however, with the changed external situation and with massive strikes which then spread through South Africa in 1972-1973. The uprising of the schoolchildren of Soweto in 1976 was followed by similar revolts in most of the towns and on many of the campuses of the Republic (*28*). This turbulence was repeated in 1979 and in 1980 and was accompanied by another spate of protracted work stoppages and strikes.

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[2] The African National Congress, founded in 1912, was probably the most outstanding of the African political organizations seeking peaceful change in South Africa. It, and the offshoot Pan African Congress, were both banned in 1961. Even before that time, their leaders had been banned under the Suppression of Communism Act, tried for treason and generally harassed.

In response to this ferment, over the past few years the Nationalists have devised new strategies in an attempt to defuse growing militancy by coopting a section of the educated and skilled urban work-force. In some ways this bears a close resemblance to the strategies of the 1940s although the welfare schemes that are now devised are all conceived within the framework of the Bantustans. It is, however, in this context that the proposals of the recent Wiehahn and Riekert Commissions to recognize the rights of African urban dwellers and to register black trade unions, as well as the provisions of the ostensibly progressive 1977 Health Act, have to be understood.[3] Although claimed as indications that "apartheid is dying", they are, if anything, signs of its continued vitality.

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II. The Changing Patterns of Disease and Health Care Policy

Health has been one of the key areas for South Africa's propaganda machine from the late 1960s. Innumerable articles in the Government-sponsored magazine *Report from South Africa* with headings such as "Vast Scope of Welfare Services" or "Non White Health" or books such as *Health and Healing* and, more recently, the glossy hardback *The Health of the Nation,* are liberally illustrated with pictures of smiling black patients in the most up-to-date hospitals being attended by equally happy black nurses and white doctors (*1*). "With all its aspects considered", so runs an article in *Report from South Africa,* April 1972, "South Africa has probably the finest health services on the African continent, services which certainly are better than, or compare favourably with, those in many other countries throughout the world. Not

only are general health services good, but the standards are high. In some fields (heart transplants are an obvious example) South Africa is a world leader" (*2*).

In so far as problems exist they are placed squarely on the fact that:

> "The Bantu, generally speaking, are not yet what is termed a developed people ... Persuading the Bantu peoples of South Africa to accept modern medicine has been a big task, involving a painstaking campaign ... It has not been merely a question of bringing the medicine, the vaccines or the mobile units to the Bantu people, or indeed, bringing the Bantu peoples to the doctors, the nurses and the hospitals. The real struggle has been against ignorance, superstition, mistrust, fear and witch-doctors. Gradually, however, the Bantu is being weaned away from the centuries-old superstitions and belief in witch-doctors, and the future is hopeful" (*3*).

Even a cursory examination of the historical record reveals the racist distortions in this version of South Africa's past and present patterns of disease and health care policies. Contemporary patterns of disease owe far more to South Africa's industrialization—its "development"—than to any lack of "development" among the black population; while the notion that blacks, unlike whites, have been inseparably wedded to superstitious practices finds little confirmation from the 19th and 20th century evidence.

Pre-industrial South Africa

Disease patterns

It is almost impossible to describe with certainty the health conditions of Africans in South Africa before the onset of colonialism, or indeed until well into the 20th century. Like all pre-industrial populations, there seems little doubt that periodic famine was responsible for cutting black population size, and that both infant mortality and maternal death rates were high. In a number of areas, vectorborne diseases such as malaria, trypanosomiasis and schistosomiasis were endemic and probably caused by widespread debilitation. Nevertheless, most early 19th century observers of both the Nguni and the Sotho-Tswana societies before the devastations of the *Mfecane*[1] agreed on their fine physique, absence of deformities and superior diet.[2] In all of these aspects Africans were compared favourably with the peasants and early industrial working class of Europe (*4*). The one major exception was the Khoisan/coloured people of the Cape Colony, who already by the 19th century had been reduced to the status of the labouring poor of a colonial economy.

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[1] The wars which accompanied the rise of the Zulu empire in the second and third decades of the 19th century.

[2] Dr J. van der Kemp, one of the first trained European medical men to visit the Xhosa of the eastern Cape, wrote as follows: "The country is remarkably healthy. I do not know any incidence of intermitting fevers, consumption, scorbutic or hydropic complaints ... There is however a great mortality among this people occasioned by putrid typhus ... when milk is scarce in the dry seasons and [on account of] close confinement in their huts."

From the very earliest days of contact between the indigenous hunter-gatherer Khoisan population and European traders, even before the actual establishment of the Dutch settlement at the Cape, European alcohol and strong Caribbean tobacco formed staples of the trade. The establishment of what became known as the "tot system" (payment of agricultural labourers on the wine and wheat farms of the Western Cape by an allowance of wine or cheap Cape brandy) vastly extended the addiction to alcohol, with effects which are still in evidence today. It is probable that alcohol and tobacco played almost as significant a role as epidemic disease in the lives of hunter-gatherer and herder communities in the 17th and 18th centuries, although they were as much a symptom as a cause of their social disintegration (*5*). It is likely, too, that venereal diseases and tuberculosis were prevalent among the coloured population of the towns from an early date, although the firmer evidence for this comes from the later 19th century, when the situation was dramatically worsened by the impact of the Industrial Revolution (*6*).

We have no sure knowledge of the disease patterns of the settler populace until the later 19th century. While Natal led the way with the compulsory registration of white births and deaths from 1867, and in the Cape registration was made compulsory for all sections of the community in 1895, in the Orange River Colony it was introduced for whites only during the British administration in 1902, and in the Transvaal as late as 1908, again for whites only, except in mining districts (*7*). It would seem that, even before the mineral discoveries, epidemic diseases were much feared, perhaps because of their relative rarity. When they did strike they did so with devastating effect among a relatively vulnerable community. As in the case of African societies, infant mortality rates were high and, because of high maternal mortality, it was not uncommon for men to marry three or four times (*8*, *9*).

Health care

Before the coming of colonialism and for a long time thereafter, Africans had their own methods of diagnosis and therapy. The diviner diagnosed the cause of illness, suggested ways of either propitiating the ancestors through ritual or identifying the enemy who had supposedly "caused" the disease, and providing medicinal protection (*10*). He—or more commonly she—was thus a "witch-finder" rather than a witch-doctor, despite colonial nomenclature. Having made the diagnosis, the diviner handed the patient over to the medicine-man, generally an experienced herbalist with considerable practical skill, for treatment. According to the missionary-ethnologist A. T. Bryant, in the early 20th century African herbalists were familiar with over 700 medicinal plants. He himself recorded the uses of some 240 remedies (*11*). Like midwives, apothecaries and osteopaths in Europe, who came under increasing attack and were marginalized throughout the 19th century, so traditional

healers among Africans were the subject of intemperate attack during the colonial period from missionaries and doctors, who ignored the important healing functions they performed for the individual and society. The clash was not one of science versus superstition as it was and is so often portrayed. It related rather to the sociopolitical function of health care in society. Moreover, despite the advances of Western medical techniques over the past 100 years, their uneven distribution and the often abrasive social relations which have accompanied their application mean that considerable numbers of Africans still place confidence in traditional practitioners. Even in contemporary South Africa modes of thought from precolonial society have been manipulated by the settler State and at the same time have proved resistant to its assaults. As Harriette Ngubane has recently shown, many Africans draw a clear and wholly rational distinction between diseases of the body, which the white doctor may be able to remedy, and social or mental disease, which *izangoma,* or diviners, are far more likely to understand and be able to relieve (*12*).

In the 19th century, both the British colonies of the Cape and Natal had medical institutions, which to a large extent mirrored those of the 19th century metropole, to cater for their settler population. Cape Town, the only centre of any size in the 18th and much of the 19th century, had a medical fraternity even when the British arrived. In the 19th century they worked largely among the urban middle class and were mainly concerned with epidemic disease. In the 18th century youths born at the Cape were sent to the Netherlands to study medicine, and in 1807, a year after the British occupation, a committee was appointed to report on the medical qualifications of local practitioners. It licensed 4 physicians, 9 surgeons and 9 apothecaries (*13*). By the second half of the 19th century, medical practitioners with British training and qualifications were to be found in many of the smaller towns of the Cape and Natal as well. Most municipal authorities had appointed both District Surgeons and Medical Officers of Health from among the white practitioners, whose main concern was with the physical well-being of the settler population (*14*). Even so, white patients from rural districts would only see a doctor when they came into town to transact business or attend church (*15*).

Hospitals were few and far between. The handful of government hospitals had their origins not infrequently in the local gaol, or in the surgeries that were opened up in the periodic wars that occurred along the eastern frontier. It was only after the passage of the Hospitals Act in the Cape in 1893 that many of the smaller towns began to build cottage hospitals, subsidized by the Cape government (*16*). In Natal, too, after the building of a small hospital in Durban in 1854 and Grey's Hospital in Pietermaritzburg 8 years later, it was the Anglo-Zulu war, the South African War and the Bambatha rebellion which led to their expansion (*17*).

For the most part, then, settlers in the rural districts were dependent on herbalists and home remedies, many of them heavily influenced by indigenous African practices. Maternity services were virtually nonexistent, although midwives played some role in alleviating the terrors of childbirth (*18*).

If this was the situation among settlers in the Cape Colony and Natal, in the trekker republic of the Orange Free State and the South African Republic set up in the interior there was even less provision of health services.[3] The trickle of qualified medical practitioners from the coastal colonies were itinerants and missionaries. Even when doctors began to settle in the interior they were largely outnumbered by the unqualified, some truly dedicated to alleviating human suffering, others adventurers preying on the vulnerability of the gullible. As late as 1885 there were barely 30 doctors in the Transvaal as a whole. Moreover, the absence, before the mineral discoveries, of any heavy concentrations of population meant that the demands for a public health system were minimal (*19*).

All over South Africa, Africans were, by and large, left to the ministrations of traditional healers, the good offices of missionaries and the patent medicines of traders. From the late 18th century Christian missionaries combined their preaching of the gospel to save the soul with a pharmacopoeia to treat the body, though, with few exceptions until the emergence of the medical missionary of the 20th century, their object was conversion and the healing of bodies was distinctly subordinated to that purpose. Most traders also carried a variety of patent medicines in their waggons, for both black and white clients. Until well into the 20th century, the poor relied on patent medicines to relieve their ills, often at great physical and material cost, as the Union Government's Committee of Inquiry into the Advertisement of Proprietary Medicines and Medical Appliances in 1939 pointed out (*20*).

The impact of industrialization

Changing patterns of disease

The mineral discoveries of the late 19th century affected the health of South Africa's population as dramatically as they transformed every other aspect of material life.

In the towns and the reserves and on the mines, increasing impoverishment, unhealthy working and living conditions, long hours of work and inadequate nutrition made an increasing number of the population suscep-

[3] Cf. this statement from the settlers of Lydenburg (in the Eastern Transvaal) in response to Dutch inquiries about the possibilities of physicians settling among them: "Medicine men are absent here, and our medical supplies come from outside ... The country is covered with many species of herb and grass, but as we have no *plantekundige* (botanist) with us, we do not know their precise strength" (*19*).

tible to disease. As in 19th century Britain, where it had been remarked that tuberculosis was "the social disease ... perhaps the first penalty that capitalistic society had to pay for the ruthless exploitation of labour" (*21*), so in South Africa, tuberculosis, venereal disease and other infections were the price paid by the population, both black and white. As we shall see, the rates were particularly high because of the migrant labour system.

Already by the mid-1880s, medical men at the Cape were noting with concern the very high incidence of tuberculosis and venereal disease among the coloured and African population of the colony: and there can be little doubt that much of it originated in Kimberley (*22*). With the opening up of the goldmines and, even more importantly, of the deep-level mines in the mid-1890s, the problem became increasingly serious. It was the migration to Kimberley and the Rand of British, especially Cornish, miners already suffering from silicosis, and the very high dust levels in the mines, which made miner's phthisis a dramatic killer. In 1904 it was revealed, for example, that the average life-span of Cornishmen who had worked on rock-drills in the Transvaal was only 36.4 years, with an average period of rock-drill employment of only 4.7 years. Yet the existence of high mortality was in itself no guarantee whatever that significant reforms would inevitably take place. Indeed, substantial reforms of working conditions only occurred more than 25 years after the first exploitation of the mines (*23*).

Adequate compensation for white miners was the direct result of their own militancy and the consequent State intervention on their behalf. In a series of Acts known as the Prior Law, the State laid down the basis for a comprehensive system of compensation for white victims of phthisis between 1912 and 1918, while after 1916 both black and white miners were periodically checked for phthisis by a Government-appointed Dust Inspectorate. After 1912, the worst ravages of the disease were probably controlled for white miners if not eliminated (*24*). Black mine workers were by no means so fortunately placed. Here the migrant status of African workers and the labour policies of the mining industry in response to the increased cost of compensation for white miners were of crucial significance: expensive white miners were replaced by black migrants, and the major burden of phthisis was passed on to the black work-force. As a result, by 1910 "tuberculous phthisis" was the second largest killer of African labour, causing 18% of all African deaths on the mines (*24*). Accident rates were another appalling indicator of the callous disregard for human life displayed in the early years of the mining industry (*25*), although conditions did improve dramatically on the mines themselves over the next decade, in part as a result of direct State intervention (*26*).

As conditions improved in the mine compounds, however, doctors in rural areas began to note the spread of tuberculosis and venereal disease among hitherto healthy populations on "an alarming scale" (*27*). Evidence presented to the 1930-1932 Native Economic Commission confirmed this picture. In

the 1930s and 1940s it was estimated that 75% of the Transkeian population was infected by tuberculosis, and in most parts of rural South Africa the disease had become endemic (*28*). Dr Isidore Frack wrote at the time:

> "In South Africa we have produced the most up-to-date and scientific means of producing this disease in natives. Raw natives are recruited from native territories, brimful of health and natural vitality, and sent down the mines in skips. After a period varying from two to six years they develop silicosis and ... contract tuberculosis. They are then withdrawn from the mines and, after a few months spent in a native mine hospital, are repatriated to the territories [i.e., the reserves]. A natural reservoir of tuberculosis is being established in healthy country natives. The town native becomes infected in the same way and the native population is becoming tuberculised" (*29*).

More poignantly, the missionary Junod wrote from Gazaland in south Mozambique, a major supplier of migrant labour for the mines from the 1890s, of the "pathetic complaint" which the people sang there:

> There is a disease ... the doctors can do nothing about.
> It is the *ndere* (tuberculosis).
> The sun has gone down for me...
> Oh father, I die (*30*).

The connexions between migrant labour for the mines and industries of South Africa and disease in the rural areas were very clear also to the Secretary of Health, Dr George Gale, who gave evidence to the Native Laws (Fagan) Commission in 1946. In view of the vast expansion of the migrant labour system into other industrial sectors which was to follow the National Party victory at the polls in 1948, his views are worth quoting at some length. After a wide-ranging attack on the migrant labour system, Gale argued:

> "The individual mine labourer recruited under the Native Labour Regulation Act is hygienically housed, well fed and medically cared for while on the mine. It is sometimes claimed that an advantage of the mine compound system is that it provides the Native with good food and medical services. That is true, but the mine medical services protect the mine worker only so long as he is on the mine. They do not extend to the rural area to which he returns when his health breaks down *owing to the conditions of migrant labour.* Obviously they cannot; but the point is that the mine medical services do not meet the really serious detrimental effects, for health, of the migratory system.
>
> "To begin with, the mines recruit only physically fit persons. Among those whom they reject are many who have become unfit through venereal disease, tuberculosis and muscular-cum-articular 'rheumatism'—chronic degenerative diseases of which the principal initial cause is conditions of mine labour ... The migrant labourer returning with untreated or inadequately treated venereal disease may infect his wife (and other women) in rural areas ... Gonorrhoea in women is a principal cause of sterility. Syphilis in women causes miscarriages and still-births, and even when living children are born they are frequently congenital syphilitics. Sterility, miscarriages and the birth of sickly children are frequent cause of marital unhappiness and even of divorce among Natives. In many areas the incidence of syphilis among child-bearing women is 25 per cent or over" (*31*).

In 1939 the Bantu Nutrition Survey found that the incidence of congenital syphilis among schoolchildren in rural areas was 23%, as high as in urban areas (*32*).

Gale went on similarly to analyse the spread of tuberculosis in the countryside brought by mine workers who became infected when their resistance had been lowered in the meanwhile by silicosis, latent syphilis, worm infestation, chronic malaria and physical fatigue. Moreover, he pointed out, all that could be said of the migrant miners could also be said of migrant labourers in other industries—except that at work their health and welfare needs were generally totally ignored. He ended by arguing cogently in favour of a stabilized residential work-force, with families permanently settled in the town (*33*). His view was accepted neither by the Commission in its final report in relation to the mining industry (*34*), nor by subsequent South African governments. Under the circumstances, the boast of the Chamber of Mines that by this time the mines had the finest hospital and medical services for their workers and were providing extensive training for African nurses and orderlies, though probably true, was somewhat beside the point (*35*).

As we have already seen, the 1920s and 1930s witnessed a greatly accelerated movement of both black and white rural dispossessed to the towns. And the processes of capitalist development took their toll in the health of people in both the towns and the countryside. Although undoubtedly it was the African population which bore the brunt of these developments, within the white community there was great unevenness in the distribution of both health problems and medical attention. Accounts of public health officers and school medical inspectors revealed a very high rate of morbidity among rural Afrikaners, especially in the malarial bushveld of the Transvaal and on the alluvial diggings of the Northern Cape (*36*). Other parasitic diseases, such as schistosomiasis and tapeworm infestation, were also common. To some extent these were perhaps environmental hazards, but they were given an easy grip in a population suffering from poverty and malnutrition. In the towns, tuberculosis and rickets were common among the newly proletarianized Afrikaners, though never on the same scale as among Africans. In addition, the Carnegie Commission appointed to investigate the "poor white problem" in the early 1930s and a number of nutritional surveys among white schoolchildren[4] in the late 1930s revealed a frighteningly high degree of malnutrition (*37*).

State policy and the treatment of disease

In the last decade of the century, the new concentrations of population in the towns which followed in the wake of the mineral discoveries, together with

[4] Among the white boys surveyed in the 1938 nutritional survey, the following were (*a*) malnourished and (*b*) had no milk to drink:

	Cape	Natal	Transvaal	Orange Free State
(*a*)	31.5%	16.4%	47.6%	43.6%
(*b*)	28.0%	20.0%	2.0%	16.5%

the association of infectious diseases with the poor in Britain, heightened consciousness of public health issues (*38*). In the Cape Colony, the first Public Health Act which made the notification of smallpox and other infectious diseases compulsory was passed in 1883. This was in response to an epidemic which raged on the diamond-fields for 10 months without check because of the pressure of the mine magnates to deny its existence, fearing that the news would adversely affect their labour supply (*39*). The legislation formed the basis for subsequent South African public health legislation.

In Natal, fear of contagious disease was mainly aroused by the coming of indentured Indian labour to the plantations and led in 1875 to the establishment of "Medical Circles" to provide medical services on the estates. By the late 19th century, there were 14 small hospitals and dispensaries serving the plantations. In addition, the "constant dread of immigrant-induced infection" led to the establishment of 5 isolation hospitals in Natal between 1883 and 1903 (*40*). Colonial medical services for Africans were developed much later. It should be added that, notwithstanding the concern with epidemics from the Orient, the actual health of Indians on the sugar plantations was appalling (*41*). The first hospital for Africans in Natal, apart from a handful of beds in Grey's Hospital in Pietermaritzburg and Addington in Durban, was only established through the private endeavours of the American medical missionary James B. McCord in 1907 (*42*). Even this was in the teeth of bitter settler opposition.[5]

Both in the coastal colonies from the 1870s onwards, and in the interior by the beginning of this century, fears of cholera, smallpox and plague also served to rationalize attempts to segregate both Africans and Indians in municipal locations (*43*). It was, however, not really until the second decade of this century, and in some places later, that urban segregation became institutionalized and more effectual. Urban segregation did not, of course, solve the health problems of the black population—though it did, among its other effects, insulate wealthier whites from the more contagious diseases. Within the locations there was very little attempt to ameliorate conditions, except in the face of dire emergency and rising working-class militancy. As the African locations themselves came to be seen as a menace to the health of the whole population, through the spread of tuberculosis and venereal disease, so fears of contamination led to public health action (*44*).

Thus, although the Act of Union in 1910 had left health matters to be dealt with by local provincial and municipal authorities, who continued to be responsible for regional hospitals, in 1912 a Union-wide Tuberculosis Com-

[5] The general attitude was summed up by the Vos Committee on hospitals in 1925 when it stated: "A great deal of prejudice is unfortunately shown towards the natives, but if people will only realise how their homes can be affected or... infected from the source from which they draw their supply of labour, they will admit that by keeping the native free of disease, and in some cases highly infectious diseases, they are safeguarding themselves".

mission was appointed. Its widespread criticism of health conditions in the slums and locations of South Africa as well as in the mining areas was very severe. In particular, it condemned the slums and locations as a menace to the health of the whole population and attributed their squalor to white landlordism and the lack of municipal control over sanitation and housing. It described much of the latter as unfit for human habitation (*45*).

It was only after the 1918-19 influenza epidemic, in which an estimated 130 000 blacks and 20 000 whites died[6] that the first Unionwide Public Health Department was established. Even then, control over hospitals and other health services was still left in the hands of the provinces and municipalities, a situation which was to lead in the course of the century to an exceptionally complex set of health authorities. Interestingly enough, the only other area in which the State took action over and above the provinces in these years was by the appointment of a Mental Health Commissioner under the Mental Health Act of 1916, which placed the control of mental hospitals and institutions for the mentally retarded under the Ministry of the Interior (*47*).

There was a considerable expansion of hospital facilities for whites following the establishment of the Department of Public Health, and a development of medical services with free treatment being offered to the wholly indigent. Nevertheless, many Afrikaners were reluctant to accept charity and remained suspicious of hospitals, which in any case were mainly confined to the larger towns. In the countryside, many a gullible sufferer was preyed on by quacks claiming to produce miracle cures. In both town and countryside the poorer Afrikaners, already in sharp competition with the African community, often blamed their chronic ills on "kaffirgif" (poison manufactured by "kaffirs"—a derogatory term for Africans) "designed exclusively to annoy Europeans" (*48*). At the same time, there is evidence that Afrikaners were not averse to seeking help from black medicine men and diviners and even from some of the very small handful of Western-qualified black practitioner (*49*).

Both the development of more effective Western medical technology and the expansion of the public health sector, particularly in combating parasitic diseases, began to make an impact on this situation. In 1922, the University of Cape Town established its own medical school, to be followed a couple of years later by the University of the Witwatersrand. Now for the first time whites could acquire a medical qualification in South Africa. Africans were not accepted in either university until the Second World War. As late as 1939 less than 40% of medical students were drawn from the Afrikaner population, who were already a majority within the white group (*50*). The proportion of

[6] Cluver gives figures of 12 000 whites and 130 000 blacks (*46*); most other sources suggest a total of 150 000.

each language group within the profession illustrates the continued economic dominance of English-speakers within the white population and the exclusion of blacks. Probably far more important than health services in improving health standards among the white population was the expansion of the economy, which opened up new channels of employment at higher wages in the second half of the 1930s and during the Second World War. This, together with the welfare services, particularly those related to nutrition and housing, struck at the root cause of much of Afrikaner ill health and poverty.

Africans were not so fortunate. It can be argued that the welfare provision for whites was made financially possible through the superexploitation of blacks. Much of the thinking behind health policy towards Africans in these years is to be seen in the reports of the Department of Public Health, which declared in 1938:

> "With a national agriculture and industrial economy based on cheap Native labour the health conditions of the non-European have become of paramount interest to the European. Further, the fact has been stressed that disease knows no colour bar and the European community is continually paying the penalty for tolerating reservoirs of infection among the Bantu population. In spite of such utilitarian arguments, widespread apathy or even opposition to efforts to provide for the fundamental health requirements of the Native are still encountered. It is only in the last year or two that serious thought has been given to the non-European health problem as a whole. This revealed immediately the deplorable lack of knowledge of the Natives' health and social conditions" (*51*).

The training of African medical practitioners and nurses

While a number of mission doctors strove to provide both medical and hospital attention for African patients and to train African medical personnel, until relatively recently the expansion of Western medical education among Africans in South Africa was even slower than in the 19th century. In 1928, following experiments in Natal and the Eastern Cape to train Africans as medical workers (*52*), the Union Government set up a special commission (the Loram Commission) to inquire into the training needs of African doctors in South Africa. The Commission rejected the Natal missionary McCord's view that the urgent need for health manpower and the low level of education among Africans should lead to the evolution of a shorter training, with lower entrance qualifications. It came out in favour of full equality with the white medical profession in terms of training (*53*). The six fully trained African practitioners in the Union at that time and the South African Medical Council fully supported this view (*54*).

The Commission also recommended that full medical training should be made available "somewhere" in South Africa. Overseas training raised anxieties among whites about the capacity of teachers outside South Africa to understand the nature of a segregated society (*55*). It proved impossible for even highly qualified African doctors to obtain employment in government

hospitals and they met with discrimination on every hand (*56*). Under the circumstances Western-trained medical practitioners, already imbued with the urban-based, hospital-centred view of medicine from their education, by and large confined themselves to private practice in the towns as the only way they could make a reasonable living. Not surprising, perhaps, is the political activism of most of the Africans so trained (*57*).

Despite the acceptance by the Loram Commission that equal training should be granted to African doctors and the government approval of its recommendations, no new African medical school was established. At the same time the South African Nursing Council insisted that African nurses should have the same entrance qualifications as white nurses and this seriously limited the number of nurses training.[7] Although African women had been trained as nurses since the beginning of the 20th century, the first registered African nurse qualifying in 1908, substantial expansion in the numbers of African nurses came only after the Second World War and in the context of severe discrimination (*58*).

The effect of the stand on "equality" was to replicate some of the least useful aspects of Western medical practice, given the socioeconomic causation of so much disease in South Africa, and to impede the training of urgently needed health workers. The refusal of the local universities to admit Africans and the wholly inadequate financing for the very expensive overseas training meant that a decade after the Loram Commission there were still fewer than 10 Western-trained African doctors in the Union of South Africa. Faced by the appalling picture of health in the rural areas which was by then beginning to emerge, the Secretary of Health in 1934 sponsored a scheme for training medical aides at the black university-college of Fort Hare in the Eastern Cape. Much of the finance for this scheme came from the Chamber of Mines, seriously worried lest the future of their labour supply from the reserves would be endangered (*59*).

Despite the apparent advance which the medical aide scheme represented, particularly as it was to be funded by scholarships, it neither trained the urgently needed rural health workers nor provided an outlet for the growing African élite in full medical training. Although initially intended as a 3-year course for those with a Junior Certificate qualification, Fort Hare insisted on matriculation as a prerequisite, and extended the course to 5 years (*59*). Salaries were low, and the aides could neither engage in private practive nor leave government service without disqualification from further practice (*60*). Within 10 years the scheme had been jettisoned.

With the failure of the medical aide scheme on the one hand, and the growth of the educated urban African élite on the other, pressure began to grow from

[7] See also the discussion in a publication by C. Searle (*58*).

1939 onwards for the admittance of Africans to the Universities of Cape Town and the Witwatersrand. In 1939 the Botha Commission on the Training of Doctors recommended the establishment of a new medical school in Durban for the training of African and white doctors interested in rural and tropical diseases. During the war years the first Africans were registered at the University of the Witwatersrand on government scholarships. After 1945 plans for the Natal Medical School were pushed forward and this accepted its first students in 1951 (*61*). The advent of the Nationalists to power in 1948 meant that, contrary to the wishes of its founding fathers, it was, from the outset a wholly segregated, purely African institution. It soon established a reputation for excellence, however, and managed to fight the attempts of the Government in 1957 to bring it under the control of the Department of Bantu Administration (*62*).

These battles have been parallelled in recent years in the government schemes to close down the Durban Medical School in favour of the Afrikaner-dominated medical school at GaRankuwa, north of Pretoria in Bophuthatswana. As in the 1950s, the combined outcry of the medical fraternity, the university and international academics has so far led to a stay of execution.

The National Health Commission 1942-1944

Recognition of the essential interconnexion of disease patterns in the Union was one of the factors which led to the appointment of a National Health Commission between 1942 and 1944 under the chairmanship of Henry Gluckman, who later became Minister of Health. The more general context of this Commission should also be remembered. South Africa was fighting in the war against Nazism and there were many who were beginning to question the basis of their own society. A rising tide of black working-class militancy in the 1940s, reminiscent of the period which characterized the end of the First World War, had its effects on health care as well. There had been talk of a "national health service" as early as 1939. In a few areas some daring and innovative experiments were being carried out, the most notable of which was probably the Community Health Centre for Africans at Polela in Natal (*63*). The Commission's brief was to "enquire into, report and advise upon the provision of an organised National Health Service in conformity with the modern conception of 'Health' [which was carefully defined in the report] which will ensure adequate medical, dental, nursing and hospital services for all sections of the people of South Africa" (*64*). In a number of spheres, the Commission made wide-ranging recommendations. Having taken evidence from over 1000 witnesses, the Commissioners were struck by the high level of morbidity in South Africa, much of it resulting from the "grinding poverty of almost all of the non-European, and a substantial part of the European, population of this country" (*65*). It emphasized the need for a comprehensive

health service, sponsored by the State, which would actively promote and preserve health. At the same time, it pointed out that unless there were vast improvements in the nutrition, housing and health education of the people, "the mere provision of more 'doctoring'" would not lead to any real improvement in the public health (*66*).

Attacking the "haphazard and disjointed" nature of existing health services, the Commission recommended the rationalization by the State of the amazingly complex and at times wasteful existing structures. Perhaps its most imaginative suggestion was that the country should be served by a grid of some 400 health centres based on the model established at Polela (*67*). It recommended that the health service should be financed by a general health tax, for health should be regarded as a fundamental right; it considered as wholly unsatisfactory "the present arrangement whereby medical services are purchased as a commodity" by only a very small percentage of the community who could afford to do so (*68*).

Although the recommendations of the Health Commission were received with acclaim in Parliament, and the Chairman of the Commission, Dr Henry Gluckman, was made Minister of Health in the following year, two of the basic recommendations of the Commission were not accepted by the Government (*69*). The plans for a health tax were dropped, and the attempts to coordinate hospital services by removing them from the jurisdiction of the provinces were also jettisoned. These two factors vitiated from the outset the attempt to create a fully unified and comprehensive health service at an administrative level. The best that could be achieved was the setting up of a coordinating body to try to reduce the overlap in function between State, provincial, and local health authorities, and to ensure that transregional issues were dealt with. A Health Council to advise the Minister was also established. Significantly, however, of its 52 members, only 4 were black: 2 African and 2 Asian or coloured members (*70*).

National Party policy towards health

At a number of levels, the recommendations of the 1944 Health Commission went far beyond the general consensus of the white ruling group at that time, though it was carried along by the postwar idealism and determination to see change. Whereas within the Smuts Government there had been at least one powerful section committed to some kind of stabilization of the African work-force and an improvement in living standards—largely the representatives of large-scale manufacturing industry—with the accession of the National Party to power in 1948 the changes espoused by the Health Commission fell into disfavour. Most of the more progressive aspects of the recommendations were dropped and there was an onslaught against the health centres, and in particular against the newly formed Institute of Family and Community Health at Clairwood in Durban (*71*). This had aimed at

providing a comprehensive system of health care for all sections of the Durban community, through the work of trained interdisciplinary teams of health workers—doctors, nurses, health educators, social workers and other auxiliaries. Its key function, however, was to train cadres to work at the 50 or so health centres which were established shortly after the passage of the Health Act (*72*).

For a few years the health centres and the Clairwood Institute survived on their own momentum, the latter financially supported by a Rockefeller grant. When the Durban Medical School (for black students only) was opened in 1951, 3 years' participation in the practice of preventive and family medicine under the auspices of the Institute became part of the curriculum, and was eventually formally incorporated into the university structure in a Department of Social Medicine. Government hostility did not abate, however, and by 1960 both the Institute and most of the health centres had died through lack of funds and in the face of opposition from many in the medical profession (*73*). The change in the mood of medical practice can be appreciated by comparing the report of the Gluckman Commission with that of the 1962 Snyman Commission on the High Cost of Medical Services and Medicines. By that time, it was clear that the whole focus was away from "comprehensive health care" and towards high technology and curative medicine, dedicated in a large measure to the demands of the medical profession and of the white community (*74*).

Ironically, it was only after the upheavals of the 1970s and the changes occurring in the internal and external circumstances of South Africa that some of the 1944 Health Commission proposals were revived, but in the wholly changed context of the Bantustanization of South Africa. In keeping with the deliberate creation of the Bantustans, a dual health structure has been fostered, with one kind of medical practice for the rural areas, and another in the "common areas"—something which was not envisaged in 1944. The roots of this are to be found in the 1950s, with the recommendation of the Tomlinson Commission that health services in the reserves should be brought under a single health authority. In 1963 this was agreed, and responsibility passed to the Department of Bantu Administration (*75*). A considerable, if sporadic, attack on the position of the mission hospitals in the Bantustans culminated in the early 1970s with the formal assumption of control by the State over the financing and direction of mission medical work in the rural areas. Often these were the only services available to rural communities. As the Bantustan strategy has progressed, these hospitals together with other health responsibilities have been handed over to the local governments (*76*).

The general reformism of the later 1970s saw a revival in the Bantustans of some of the ideas of the social medicine of the 1940s, with an emphasis on the role of local clinics, health teams and the training of paraprofessionals (*77*). At

the same time, health services in the "common areas" were streamlined by the provisions of the 1977 Health Act (No. 63), which replaces the 1919 Public Health Act and its various amendments. Even within this administrative sphere, however, its scope is more limited than that envisaged in 1944. The three-tiered health service remains, with responsibilities divided between State, province and local authorities, while the attempts at coordination appear to duplicate the compromises of 1945. Despite the profession of interest in preventive medicine, the continued emphasis on private medical practice and large hospitals suggests that high technology, curative personal health care will remain the norm for the white population, and perhaps for a section of the blacks with rights in urban areas (*78*).

This dualism both replicates and legitimates the existing power structure in South Africa. That the reforms have a social utility in the present crisis in South Africa is clear. It remains to be seen, however, how far the declaration, so similar to the pronouncements of the international medical community, can and will be carried through in practice—and what effect they will have on "the health of the people".

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CHAPTER 3

LIVING CONDITIONS AND PATTERNS OF DISEASE

South African authorities argue that the patterns of morbidity and mortality found in South Africa are characteristic of a "developing country". This argument is untenable. Neither the socioeconomic history nor the absolute wealth of the Republic permit comparison with developing countries. The apartheid system has systematically created pathogenic living conditions for the black population. Malnutrition and infectious and parasitic diseases are, of course, common in many developing countries. Unlike those countries, however, South Africa possesses the economic prerequisites necessary for the prevention or control of such conditions; their continued existence can be linked to deliberate social policies.

The greater part of disease and mortality patterns is accounted for by social factors relating to the ownership and control of productive resources. Blacks run a disproportionalitely high risk, even after the relative rarities, which account for 5% at most, are taken into consideration.

Introduction

In his preface to the government publication, *The Health of the People*, in 1976, the South African Secretary of Health, Dr J. de Beer, declared that "after painstaking research all endemic diseases of Africa have been eradicated in South Africa". This claim is grossly misleading. It is true that white South Africans no longer suffer from the "endemic diseases" of Africa, and that among the black population the most devastating diseases are not those endemic to Africa. But the latter are far from eliminated. Although in the 1950s and 1960s it was optimistically assumed that many of the vectorborne and parasitic diseases commonly associated with tropical Africa had been brought under control in the Republic, it is clear today that the policies of apartheid and the consequent worsening of the living conditions of the African population have led to their widespread recurrence. Overcrowded urban townships, squatter camps and rural "resettlement" villages provide ideal breeding-grounds for the increased spread of communicable diseases, chronic

infection and parasitic infestation. Even worse is the malnutrition and its associated infections which dominate the pattern of disease and account for more deaths at almost every age among blacks than any other single cause. The monopolization of resources by a small proportion of the population and the migrant labour system with all it implies have led to a disease pattern closer to that of early industrial Britain than that of precolonial Africa.

While whites enjoy standards of living and suffer diseases similar to those in developed Western countries, the health of the majority of blacks is undermined by the social conditions which have provided prosperity for the whites, who control the productive resources of the country. A small black urban élite is beginning to demonstrate an increasing incidence of disease broadly considered as "diseases of development": hypertension, cardiovascular accidents, diabetes mellitus and peptic ulcers. For the vast majority of blacks, disease is determined by physical impoverishment, which is the result of the policies of apartheid.

Infant mortality rates can be said to reveal the benefits, the services, and the higher income levels available in the cities. But they cannot tell how the survivors live and die. Unless Africans are part of a small privileged section of the population, they live under the constant threat of being removed to a "homeland" they have never seen. Their families are disrupted by the pass laws, by poverty and its frequent companions, drunkenness and violence. Child labour is widely used, while the opportunities for education and leisure that are open to white children hardly exist for black children.

Morbidity and Mortality Patterns

There is ample evidence in the patterns of disease and death of bad living conditions and malnutrition during childhood. Disease and mortality among coloureds and Africans are dominated by infections and conditions intimately connected with the position of blacks in the economy. For example, 16 times more young coloureds than whites die from infections and over a third of them die from tuberculosis. In the older age groups, 12 times more coloureds than whites die from infections, over 80% from tuberculosis (*1*).

Whites demonstrate much lower death rates at all ages up to 64 years than the other population groups in South Africa. Among blacks, with the exception of young adults among whom accidents and violence are the major causes of death, infections account for the greater proportion of deaths at all ages (*1*). Dr C. H. Wyndham, Senior Epidemiologist at the Institute of Biostatistics of the South African Medical Research Council, has calculated that over half (53%) of the mortality among whites was due to their "destructive life style". This contrasts with 41% among Asians, 18% among coloureds and 13% among Africans. Conversely, 55% of African deaths were typical of "less

developed communities", i.e., poverty, as were 50% of coloured deaths, 28% of Asian deaths, and only 11% of white deaths (*1*).

National statistics of mortality patterns do not exist for all people in South Africa. Reasonably accurate data are available for certain areas, however, and these provide some insight into the patterns. Table 1 lists the top 15 causes of death in Cape Town in 1979. In the rural areas it is probable that perinatal mortality, dysentery and gastroenteritis, and pulmonary tuberculosis are more prominent as causes of death among Africans than in urban areas.

Table 1. Top 15 causes of death, Cape Town, 1979, all ages

	White	Asian	Coloured	African	Rural African[a]
1.	Degenerative heart disease	Degenerative heart disease	Malignant neoplasms	Malignant neoplasms	Other causes
2.	Malignant neoplasms	Malignant neoplasms	Other causes	Other causes	Pulmonary tuberculosis
3.	Senility and ill-defined conditions	Cerebrovascular disease	Cerebrovascular disease	Pneumonia	Congenital anomalies and perinatal causes
4.	Cerebrovascular disease	Diabetes	Degenerative heart disease	Pulmonary tuberculosis	Dysentery and gastroenteritis
5.	Other causes	Senility and ill-defined conditions	Senility and ill-defined conditions	Cardiovascular disease	Pneumonia
6.	Other heart disease	Other heart disease	Other heart disease	Congenital anomalies and perinatal causes	Malignant neoplasms
7.	Pneumonia	Congenital anomalies and perinatal causes	Pneumonia	Other heart disease	Other heart disease
8.	Emphysema and asthma	Diseases of urogenital tract	Congenital anomalies and perinatal causes	Dysentery and gastroenteritis	Cerebrovascular disease
9.	Suicide	Pneumonia	Emphysema and asthma	Road accidents	Other accidents
10.	Other respiratory diseases	Diseases of nervous system	Road accidents	Senility and ill-defined conditions	Road accidents

11.	Diseases of the urogenital tract	Pulmonary tuberculosis	Hypertensive disease	Other accidents	Other respiratory diseases
12.	Diseases of arteries	Motor-vehicle accidents	Other accidents	Homicide	Senility and ill-defined conditions
13.	Hypertensive disease	Other accidents	Pulmonary tuberculosis	Degenerative heart disease	Degenerative heart disease
14.	All other accidents	Suicide	Other respiratory diseases	Hypertensive disease	Hypertensive disease
15.	Congenital anomalies and perinatal causes	Nephritis	Diabetes	Diseases of nervous system	Diseases of nervous system

Source: Reference *13*.

[a] Estimated.

We shall consider in some detail the mortality and morbidity rates of tuberculosis and cardiovascular diseases and the mortality and morbidity rates in infancy and early childhood. Tuberculosis and cardiovascular disease and the contagious diseases dealt with below account for the greater part of disease and death in South Africa. They indicate how the burden of economic development is borne by blacks.

Maternal and Child Health

Despite the enormous sophistication of South Africa's medical establishment, it has failed to yield such basic information as national mortality rates for the different races and an age pyramid of the African population. These are important indicators of a society's well-being. Although the official data are incomplete, they generally show large discrepancies between blacks and whites even when the statistics refer to the urban blacks, whose health is considerably better than that of the rural population.

The racial discrepancies reveal the extent of physical impoverishment which results from apartheid. The bulk of this burden is borne by black children, many of whom do not survive long enough to experience the degradation of further racial discrimination. About half of the black population is under 15 years of age.

Perinatal mortality

Perinatal mortality is mostly a function of two interlocking factors: first, the level of prenatal and obstetric health care; secondly, the health of the mother. Particularly important here is the question of physical work during

the last trimester of pregnancy (*3*, *4*) and the nutritional state of the mother (*5*). Other factors include mutagenic substances (certain pesticides) which increase the likelihood of congenital malformations. Tuberculosis and rickets during the mother's childhood can affect the shape of the mother's pelvis and produce difficulties in childbirth, but this makes a relatively small contribution to the perinatal mortality among blacks in South Africa. Black women generally have to do physical work until very late in pregnancy as they do not have social security or enough money to survive if they stop working. Prenatal care for blacks is nonexistent in many areas and in the urban areas where it is available it is substantially inferior to that provided for whites.

As with so many other conditions, statistics relating to perinatal mortality at the national level are nonexistent, but some insight can be obtained from the relatively good statistics available for certain urban areas. These are presented with the caution that other urban areas may be considerably worse off, and undoubtedly the conditions for Africans in rural areas are worse. Table 2 demonstrates the racial stratification of perinatal mortality. The rate is 12 times higher among blacks in urban areas than among whites. Among coloureds and Africans, who account for 94% of deliveries in Cape Town, about two-thirds of the perinatal mortality is attributable to stillbirths. At least 75% of all fetal deaths precede labour. Table 3 shows the social strati-

Table 2. Perinatal mortality (ICD 760-779) excluding congenital anomalies, Cape Town, 1979

	White	Asian	Coloured	African	Rural African[a]
Rank as cause of death	20	6	9	6	4
% of all deaths	0.5	5	3	6	12
Rate per 100 000 population	3.8	25	17	47	60-100

Source: Reference *13*.

[a] Estimated for rural areas of South Africa, 1980.

Table 3. Stillbirth rate (per 1000 live births) in some South African urban areas[*]

		White	Asian	Coloured	African
Cape Town	1979	4	6	12	19
Pietermaritzburg	1979	6	10	7	14
Benoni	1978	11	31	—	34
Durban	1977	15	18	12	25

Source: Annual report of the medical officer for health of city concerned for year indicated.

[*] i.e., where the available data are of reasonable quality.

fication of stillbirth rates. The difference in prenatal care available for blacks and whites is obvious. Since Cape Town has relatively good prenatal and obstetric services, data from there present the perinatal mortality in the best possible light.

Congenital malformations are excluded from Tables 2 and 3 but are considerable. In Cape Town there were 10 deaths caused by congenital anomalies (ICD 740-759[1]) among 265 000 whites, 28 among 533 000 coloureds and 6 among 108 500 Africans. Relatively few people (12 000) classified as Asian live in Cape Town. Taking population size into account it can be shown that there is a 50% increased risk of death from congenital malformations for Africans and coloureds compared with people classified as white (risk ratio 1.56; 95% confidence interval 1.07-2.2, Poisson assumption). This indicates that either blacks have more congenital anomalies—perhaps the outcome of exposure to certain pesticides or other chemical mutagens—or white babies with congenital malformations survive better than do their black counterparts. The latter explanation is more likely, given the better health care of whites.

A study in Cape Town showed that perinatal mortality is more frequent among the offspring of women of lower weight and height, and noted that mothers classified as coloured have a significantly lower weight and height than those classified as white. It pointed out that maternal height is an indicator of nutrition during childhood, and weight is an indicator of more recent nutrition (*6*). The smaller stature of coloured primigravidae (women in their first pregnancy) has been confirmed by South African researchers (*7*).

Low birth weight is strongly associated with increased neonatal morbidity and mortality, and black children have significantly lower birth weights than those classified as white (*7*). The commonest cause of death among coloured neonates is asphyxia, a condition which is particularly common among low-birth-weight babies (*8*). There is also a higher rate of haemolytic disease of the newborn among coloured neonates (9 per 1000 compared with 2 per 1000 for whites). This condition is caused by some defect in the baby's blood-clotting mechanism. Although the precise mechanism is not known, it may be related to poor nutrition in pregnancy (*9*).

Infant mortality

It is generally acknowledged that the infant mortality rate (the number of babies per 1000 live births who die before their first birthday) is an easily obtained and useful indicator of health status and health care in a society. Table 4 illustrates the close relation between the infant mortality rate and gross domestic product (GDP) per head. South Africa is a noticeable outsider,

[1] International Classification of Diseases, 1965 Revision.

Table 4. Socioeconomic and health indicators for selected countries

	Infant mortality	Life expectancy at birth	Medical personnel per 100 000 population	Gross domestic product per head (US$)
Sweden	9	75	964	8 670
United Kingdom	16	72	567	4 020
Federal Republic of Germany	17	71	842	7 890
Guyana	40	53	92	630
Malaysia	75	58	127	860
Albania	87	68	555	540
Botswana	97	43	114	410
South Africa	117	51	399	1 340
Zaire	160	43	50	140
Niger	200	39	21	160

Sources: World Population Data Sheet April 1976; United Nations Demographic Yearbook 1977.

having a disproportionately high GDP for its infant mortality. This is probably because the GDP largely accrues to the social classes labelled white, while the infant mortality is mostly borne by those classified as black.

Table 5 illustrates the consistently higher infant mortality among blacks than among whites. The bulk of the white infant mortality is not easily

Table 5. Infant mortality in 12 South African urban areas (rate per 1000 live births)

	Year	White	Asian	Coloured	African
Cape Town	1979	10	12	19	34
Port Elizabeth	1979	13	31	58	52
Pietermaritzburg	1979	8	20	23	48
Johannesburg	1976	22	25	57	43
Durban	1977	23	29	22	62
Kimberley: urban	1977	18	45	83	153
rural	1977	—	—	165	197
Benoni	1978	6	22	—	69
Vereeniging	1978	25	31	130	94
Kingwilliamstown	1978	9	37	—	94
Springs	1978	10	29	133	98
Bloemfontein	1977	22	—	74	104
Pretoria	1977	14	16	29	92
South Africa as a whole	1970[a]	22	36	133	124
South Africa as a whole	1980[b]	12	22	110	120

Source: Annual report of the medical officer for health or public health department of city concerned for year indicated.

[a] See reference *1*.

[b] Estimate.

preventable, mostly being due to perinatal problems and congenital anomalies. Among coloured and African children, it is infections diseases—the close companions of malnutrition—which are the big killers. These are largely preventable as a cause of death. Although no national statistics exist, isolated surveys show that about 60% of the infant mortality among rural Africans in South Africa is associated with pneumonia and gastroenteritis. In urban areas the picture is not too different. In Durban, for instance, more than 50% of black infant deaths are attributed to pneumonia and gastroenteritis. The Medical Officer for Health of Cape Town reported in 1979 that among blacks "two-thirds of post neonatal infant mortality was readily avoidable" (*13*). Among coloured infants nationally, infections and parasitic diseases account for 28 times more deaths per 1000 than among Whites (*1*).

In rural areas infant mortality rates are characteristically much higher. One particularly illuminating study demonstrates the relationship between social stratification and infant mortality by distinguishing between the rate among black Cape Town residents, migrants in urban areas, migrants living in the rural areas of the Transkei, and people living in rural areas who do not take part in migrant labour. While the infant mortality rate among settled black urban dwellers was 82 (more than 4 times that among settled white urban dwellers), this population group was better off than the unsettled migrants in the urban areas, among whom the rate was 107. The latter in turn fared considerably better than migrants living in the rural areas, among whom it was 227. For families in rural areas who did not have access to the earnings of a migrant worker, the situation was worst of all: among them the rate was 282 (*10*).

Time trends in infant mortality are worthy of particular note. Longitudinal studies of the rate among whites indicate that it has fallen steadily over the past 40 years—from 63 in 1935, when it was high among "poor whites", to 19 in 1976, which is close to the rate in Western Europe and North America. By 1978 the white infant mortality rate was in the region of 12 per 1000 live births, substantially lower than in many Western developed countries (*11*). The decrease for coloureds has been more erratic, but since 1970 it has fallen from 133 to 112 in 1976, at which time it was nearly twice as high as the white rate in 1935, and 6 times the white rate at that time. Within the city of Cape Town, however, longitudinal studies suggest a more dramatic reduction in the infant mortality rate for coloureds, from 150 in 1941 to 26 in 1977 (*8*). In Soweto, near Johannesburg, a similar trend has been reported. A small house-to-house survey in four selected areas of Soweto found a rate of 25 among Africans, and clinic records of notified births in one area of Soweto revealed a rate of 38 in 1974 (*12*). One does not know how valid these figures are, but if they are representative of the situation in Soweto they do indicate an improvement on figures available for urban and rural areas a decade ago.

The apparent decline in the infant mortality rate in selected black urban areas is misleading for several reasons. First, it is much easier to reduce the rate from 100 to 90 than it is from 20 to 10 per 1000 live births. It is probably impossible to reduce it from 10 to zero. This exponential character of the decline is masked when one quotes simple rates. Table 6 gives perhaps a more realistic picture by presenting the natural logarithm of the rates. This is the arithmetic description of an exponential decline. Secondly, whatever transformations one performs with the data the fact remains that the infant mortality rate among Africans and coloureds in 1977 was higher than it was among whites in 1950 (Table 6). Thirdly, these figures reflect the best situation in South Africa. In the rural areas the situation is very much worse. Our estimations, which can at best be approximate since there is such a shortage of basic information, lead us to suggest that the rate in 1980-81 was probably well in excess of 100 among Africans in South Africa as a whole. In some rural areas it is certainly over 200.

Table 6. Amount of change in the rates of infant mortality over time, Johannesburg (rate multiplied by $\log_e$)

	White	Asian	Coloured	African
1950	3.5	4.3	4.6	5.5
1960	3.3	3.9	4.2	4.8
1970	3.0	3.4	4.2	4.6
1973	2.9	3.5	4.1	4.1
1977	2.8	2.9	4.0[a]	3.7

NOTE: The logarithmic model is probably more realistic than the presentation of infant mortality as simple rates.

Source: Reference *59*.

[a] This figure is based on the infant mortality rate as given by the Medical Officer of Health, 1977.

Fourthly, the figures do not take into account child and perinatal mortality. In Cape Town, for instance, while infant mortality among blacks was dropping, the perinatal mortality and child mortality were steadily rising. Half of the child mortality in 1979 was attributable to infections and malnutrition (*13*). The claim that the decline in infant mortality in Cape Town is largely due to the success of measures introduced for dealing with the problem of gastroenteritis sounds hollow in this context. Black infants are rehydrated and returned to their homes to die later that year or the next, when they no longer count as infants. Even with rehydration, the Medical Officer for Health reported in 1979 that over 6% of coloured infant mortality and over 16% of African infant mortality in Cape Town were accounted for by gastroenteritis (*13*).

Child mortality

Considering all causes of mortality in the age group 1-4 years a familiar pattern is evident. In 1970 the mortality rates in this age category were (per 100 000) 563 for children classified as whites, 1091 for Asians, 4001 for coloureds, and 3845 for Africans (*1*). Once again these figures reflect the situation among urban Africans in selected cities. It is probably an optimistic figure for urban Africans in general, and is unlikely to reflect the situation in the rural areas. A figure twice this size would not be an unreasonable estimate of child mortality in the rural areas of South Africa.

In Cape Town in 1979 the death rate among black children aged between 1 and 4 years was over 4 times that among whites (*13*). (odds ratio 4.2, 99.9% confidence interval 2.9-5.7, Poisson assumption). In Port Elizabeth in 1979 the child mortality rate among Africans was 39 times that among whites, while among coloureds it was 57 times that among whites of the same age (*14*). In Pietermaritzburg, too, the child mortality in 1979 demonstrated a familiar pattern: whites 0.04, Asians 0.06, coloureds 0.22 and Africans 0.43 per 1000 population (*15*). In Kimberley the pattern was even more striking, with the mortality among African children 25 times that among whites (*16*).

A reason for this state of affairs is provided by the distribution of preventive measures among children of different social strata. Table 7 demonstrates the number of children receiving vaccinations in Kimberley in 1977—not an atypical year. To provide some idea of denominators, since full demographic data are not available, in that year 616 white, 1016 coloured and 1276 African children were born to residents in the area (*16*).

Table 7. Immunization of children, Kimberley, 1977

	White	Coloured	African
Course of 3 poliomyelitis vaccinations	1 249	266	0
Diphtheria and tetanus vaccinations	636	159	140
Measles vaccination	306	20	0

Source: Reference *16*.

(See text for details of populations to which these figures relate.)

Maternal mortality

Maternal mortality, like perinatal mortality, reflects the level of health care available. More important in South Africa is the effect of the anti-abortion laws, which forbid the interruption of pregnancy, irrespective of the wishes of the woman. Those women who choose to have some control over their lives

have either to appeal for abortions on medical or psychiatric grounds, after which the decision is entirely out of their hands, or to risk illegal abortion. The burden of this risk does not fall evenly among the various social strata, however, since white women generally have far greater access to safe abortions. This may be through better knowledge of and contacts within the medical profession, or simply because their greater wealth enables them to travel to countries where abortion is legal.

Maternal mortality at Grey's Hospital and Northdale Hospital in Pietermaritzburg between 1969 and 1979 has been reported as 27 per 100 000 live births among whites and 91 per 100000 live births among coloureds and Asians (*17*). From Cape Town a similar figure has been reported for whites, with the rate among coloureds being slightly lower than that in Pietermaritzburg (*18*). In both areas the principal cause of death was infection associated with incomplete abortion.

Cardiovascular Disease

In the mid-1960s South African medical science was catapulted into the limelight, receiving international acclaim, when Christian Barnard transplanted the heart of a young person into a middle-aged white man. Since then, ischaemic heart disease among whites has remained the focus of cardiovascular disease research in South Africa, often to the neglect of other aspects.

Epidemiological studies throughout the world demonstrate that socioeconomic factors play a major role in the distribution of cardiovascular disease within a population. South Africa provides a laboratory for this sort of investigation, for nowhere else are the socioeconomic contrasts between various sectors of the population so striking. The division between "haves" and "have-nots" is clearly drawn by colour of skin and rigidly maintained by a constitutional framework. This situation is reflected in the disease and mortality patterns and the diagnostic and health care practices.

Overall picture of cardiovascular mortality

People classified as Asian and coloured are the most frequent victims of cardiovascular morbidity and mortality in South Africa (*11*, *19*) (Table 8). This is contrary to the notion that whites bear the brunt of cardiovascular disease as the price for their "level of development". In only one disease, sex and age category—ischaemic heart disease in men aged 15-24 years—do the death rates among whites exceed those of all other racial groups. However, owing to the high mortality among Asians, coloureds and Africans from infections and perinatal problems (*1*) cardiovascular disease among them represents a relatively lower proportion of all deaths than among whites.

Table 8. Mortality rates (per 100 000) and percentages of all deaths from diseases of the circulatory system (ICD Group VII), by age group (years)*

	15-24	25-34	35-44	45-54	55-64
Whites	8 (7%)	30 (18%)	141 (36%)	433 (46%)	1 093 (53%)
Asians	14 (16%)	41 (18%)	207 (36%)	762 (51%)	1 932 (56%)
Coloureds	24 (11%)	72 (15%)	227 (25%)	609 (37%)	1 392 (46%)
Africans	19 (7%)	55 (12%)	156 (20%)	371 (26%)	821 (31%)

Source: Reference *19*.

* These data were derived for the years around 1970.

Ischaemic heart disease accounts for over 50% of deaths among white men over the age of 45 years. Among the three other groups it ranges from less than 1% to around 30%, being lowest for Africans (*19*).

People classified as Asian have the highest cardiovascular mortality in South Africa and among the highest ischaemic heart disease mortality in the world (1064 per 100 000 men aged 55-64 years). They also have the highest mortality from hypertensive and cerebrovascular disease in the country. Coloureds have the highest mortality rates from rheumatic heart disease at all ages under 55 years, over which age rheumatic heart disease constitutes only 1-2% of cardiovascular mortality. They come second to Asians in mortality from hypertensive and cerebrovascular disease (Table 9).

Data regarding cardiovascular deaths among rural Africans in South Africa are virtually unobtainable, but estimates of rates among urban Africans show that cerebrovascular disease and "other cardiovascular causes" are the main

Table 9. Ranked age standardized rates (per 100 000 population) of mortality from various subgroups of cardiovascular disease

White	Asian	Coloured	African	British population
IHD 195	IHD 250	CbV 150	CbV 100	IHD 95
CbV 50	CbV 160	IHD 120	OHD 80	CbV 30
OHD 15	HTD 70	OHD 70	HTD 45	OHD 5
HTD 10	OHD 40	HTD 55	IHD 15	HTD 5
RHD 10	RHD 15	RHD 25	RHD 15	RHD negligible

Sources: References *19, 21, 22, 23* and *25*.

NOTES: IHD = Ischaemic heart disease; CbV = cerebrovascular disease; OHD = other heart disease; HTD = hypertensive heart disease; RHD = rheumatic heart disease.

The "standard" population used to derive these comparative figures was an estimate of the combined South African population. Figures have been rounded to indicate that they are approximations.

Rates apply to men and women aged 15-64 in the years around 1970.

causes of cardiovascular death, followed by hypertension. In the great majority of deaths assigned to this "other" category the cause is imprecisely diagnosed.

Broadly speaking, then, the major cause of cardiovascular death among whites and Asians is ischaemic heart disease, while among coloureds and Africans the bulk is due to cerebrovascular disease, hypertensive heart disease and, notably, "undiagnosed" heart conditions (Table 9). Cardiomyopathy accounts for around 15% of deaths in the "other" category among Africans, a much higher proportion than among other racial groups. For the greater part this is idiopathic, probably nutritional, in origin. Another form of cardiomyopathy, which has been well described among sugar-cane workers in Natal, is thought to be the result of strenuous work in hot conditions (*20*). A small number of cases still occur from beriberi heart disease, mostly among urban African compound dwellers (*21*). Tuberculous pericarditis remains an important cause of cardiovascular death among Africans in South Africa, whereas for whites it is virtually nonexistent (*22-24*). This condition provides an example where drug therapy and surgery have improved survival but had little or no effect on incidence. Pericardectomy carries an extremely high mortality in most countries of the world, whereas South African surgeons seem to have very good results. It is ironic that this profoundly social disease, suffered mostly by blacks, has helped to elevate South African surgical skills (monopolized by whites) and win them international acclaim.

Diagnostic accuracy and cardiovascular mortality

It will be clear from Table 9 that a disproportionate number of Africans and coloureds are classified as dying from "other cardiac causes". This category includes "chronic disease of endocardium" (ICD 424[1]), "pulmonary heart disease" (ICD 426), and "cardiomyopathy" (ICD 425). It also includes two categories where a diagnosis is not made, "other myocardial insufficiency" (ICD 428) and "ill-defined heart disease" (ICD 429). These two together account for two-thirds of "other" cardiac deaths and are plainly a function of diagnostic accuracy and level of health care. The relative frequency of this diagnostic label, in descending order Africans, coloureds, Asians and whites, is inversely related to socioeconomic status. As a percentage of all cardiovascular mortality between 25 and 65 years of age this "other forms of heart disease" category (ICD 420-429) accounted for 33% of African, 17% of coloured, 7% of Asian and 5% of white deaths. In England and Wales during the same years for which these data were derived, 6% of all cardiovascular deaths were classified thus (*25*).

[1] References to the International Classification of Diseases pertain to the 1965 Revision.

The elasticity of this category makes it difficult to interpret changes of mortality patterns over time. For example, one autopsy study of Africans who died between 1959 and 1976 reported an increase in myocardial infarction from less than 1% of cardiac deaths to nearly 12%. There was also, however, a decrease in idiopathic heart failure, from 33% to 14% of all cardiac deaths (*26*).

As far as ischaemic heart disease in concerned, it is possible that this condition is overdiagnosed among whites and probable that it is underdiagnosed among Africans.

Ischaemic heart disease

Infections and perinatal mortality together account for over 30% of African deaths and less than 5% of deaths among those classified as white. Excluding these would substantially increase the proportion of all mortality represented by ischaemic heart disease among coloureds and Africans. As rates in the live population, despite these exclusions of perinatal mortality and infections or the different age structure of the population, Africans still have substantially lower rates of ischaemic heart disease than whites, Asians and coloureds. The difference is not explained by conventional risk factors such as smoking, dietary habits, age, hypertension, diabetes or hyperlipidaemia (*19, 27, 28*).

The suggestion that Africans are "more primitive" (*27*) is unrealistic, since blacks and whites in South Africa live in the same economy. The point is, perhaps, that whites control the economy while Africans provide the labour. Coloureds and Asians are caught somewhere in between, characteristically being artisans and traders. It has been noted recently among civil servants in England that the lower grades have more elevated rates of ischaemic heart disease than the higher grades (*29*). In Great Britain the mortality from ischaemic heart disease has increased among the working classes over the last 40 years, whereas among the professional classes the rate has changed little over the past 20 years (*29*). This may explain the higher rates of ischaemic heart disease among Asians than among whites, but it does not explain the lower rates among coloureds and Africans.

Three possible explanations exist. First, Africans are dying from other causes before they suffer the effects of ischaemic heart disease. In fact, if all those people who die of tuberculosis, gastroenteritis or perinatal problems were to die instead of ischaemic heart disease in each racial group, the rates of ischaemic heart disease among Africans would be higher than those among whites. Secondly, Africans who actually die of ischaemic heart disease are classified as dying of something else, and this, as indicated above, is likely. Thirdly, and perhaps less likely, Africans provide the bulk of the labour which runs the South African economy. Physical activity, albeit mostly in leisure time, has been inversely related to risk of ischaemic heart disease (*30*).

Rheumatic heart disease

"No disease has a clearer-cut 'social incidence' than acute rheumatism [rheumatic fever], which falls perhaps 30 times as frequently upon poorer children in industrial towns as upon well-to-do ... the incidence of acute rheumatism increases directly with poverty, malnutrition, overcrowding and bad housing" (*31*). This is as true in South Africa today as it was when reported of England in the 1920s.

In South Africa rheumatic heart disease is the cause of death of 12 times more young African and coloured women per 1000 than of their white counterparts. Adding men and women together, the death rates (per 100000 people) in the age group 15-24 years were whites 1.6, Asians 5.3, coloureds 9.2, and Africans 7.4. At all ages blacks have higher mortality rates for rheumatic heart disease than do whites (*19*). It is noteworthy that these differences are larger for the younger age groups in both sexes. This probably reflects the more rapid decline in incidence among whites than among other groups.

In Natal the incidence of rheumatic fever in Asians is 6 times greater than in whites; in addition, Asians have twice the chance of developing the complications of carditis and congestive cardiac failure after an attack of rheumatic fever (*32*). In Soweto, a township with some 2 million African people living in overcrowded conditions, as many as 20 per 1000 older children suffer from rheumatic heart disease (*33*). This is an exceedingly high proportion by international standards (*34*). About 7 per 1000 African children of all ages living in Soweto suffer from the condition (*33*).

Rheumatic heart disease probably results from the reaction of a malnourished body to streptococcal throat infection, and overcrowding is probably the most important social factor in its occurrence (*34*). In 1978 the particular streptococcus implicated in rheumatic heart disease was found in the throats of 6% of Soweto schoolchildren (*33*) and in 42% of black children with sore throats in Bloemfontein (*35*).

This disease demonstrates very clearly an outcome for children of the social stratification in South Africa. Its relation to social conditions is probably beyond dispute. It is likely that the mortality rates are underestimated for Africans in particular, but also for Asians and coloureds. This is because the diagnosis depends on clinical examination in life or postmortem examination. Blacks are considerably less likely to receive these examinations than are whites.

Hypertensive heart disease

In the early 1970s the mortality rates from hypertensive heart disease were 4-10 times higher among coloureds, Asians and Africans than among whites. Between 10% and 20% of African cardiovascular deaths were accounted for

thus, compared with 3-5% of white deaths (*19*). It is probably reasonable to assume that this is a function of health care received by the various groups, since hypertension is generally controllable with adequate medical treatment. Surveys in Durban showed that, on average, blood pressure is higher among blacks than whites, and that over 90% of the blacks had been undiagnosed whereas most of the whites had been diagnosed (*34, 37*). Another study considered the quality of health care of Africans who are diagnosed as hypertensive. This revealed that around 10% of those with a diastolic pressure of 120 mmHg (16.0 kPa) or above were given no treatment. Only about half of the patients with a diastolic pressure between 90 mmHg and 119 mmHg (12.0-15.8 kPa) were started on treatment, with the decision about treatment apparently independent of age or actual blood pressure. Over two-thirds of those started on treatment had ceased to return for follow-up prescriptions within one year (*38*).

Parallel studies among whites are not available for comparison, but whites almost certainly receive better attention than this. Blacks in general receive their care in outpatient clinics, whereas hypertensive whites are almost all seen by private practitioners. The point is not that private practitioners are any more skilled than their conterparts in the busy outpatient clinics. They do, however, have a lot more time to explain hypertension and the treatment to their patients. Over two-thirds of whites belong to some medical aid scheme, whereas less than 10% of blacks are thus insured against medical expenses. The remainder have to pay for each visit to private practitioners and for prescriptions.

Cerebrovascular disease

In all age and racial groups women have higher mortality rates from cerebrovascular disease. The rates are highest among people classified as coloured, followed by Asians and then Africans. Whites have relatively low mortality from cerebrovascular disease—about half that of Africans and one-third that of coloureds and Asians, among whom it accounts for 30-40% of all cardiovascular deaths (*19*). The link between hypertension and cerebrovascular disease is well recognized (*39, 40*), and it is probable that the factors which produce an increased mortality from hypertension among blacks also contribute to their mortality from cerebrovascular disease.

Summary of cardiovascular disease

The breakdown of cardiovascular mortality and morbidity into specific disease entities is probably very biased by diagnostic practice, which affects various social classes differently. In addition, a very large proportion of blacks die of infections before they reach the age when they may be at risk from ischaemic heart disease. This notwithstanding, there are large differences in

the cardiovascular morbidity and mortality experience of the various social strata in South Africa. Whites have relatively low rates of cardiovascular disease, with the exception of ischaemic heart disease. A large proportion of cardiovascular deaths among blacks are ill-defined. The higher proportion of deaths among Africans and coloureds is related to hypertension, and these deaths are therefore probably preventable by adequate health care. The "interracial" differences in cardiovascular mortality and morbidity correspond closely with the economic and political stratification of South African society.

Tuberculosis

Tuberculosis is deservedly known as the great disease of poverty and is endemic among black South Africans. This was not always the case. The disease was virtually unknown in South Africa until brought there by infected individuals from Great Britain and other countries of Europe who came to the country to benefit from the agreeable climate. It was given immense impetus by living and working conditions on the goldmines and diamond-fields from the late 19th century onwards and then spread like wildfire in the impoverished countryside. Today the condition dominates the disease pattern among blacks in both town and countryside.

The official South African statistics reviewed here consist mostly of notification data (Table 10) and analyses of deaths provided by the medical

Table 10. Pulmonary tuberculosis notification rates (numbers of notifications per 100 000 population)

	Year	White	Asian	Coloured	African	Risk ratio African/ White	Reference
Cape Town:							
City	1979	16	58	199	365	72.3[a]	*13*
Langa	1979	—	—	—	1 951		*13*
Pietemaritzburg	1979	32	72	66	814	25.4	*15*
Port Elizabeth	1979	17	224	475	741	43.6	*14*
Durban	1977	16	146	73	333	20.8	*43*
Kimberley	1977	14	—	387	316	22.6	*16*
South Africa as a whole							
	1968-77	18	142	326	280	15.56	*11*
	1979-80	17	145	330	1000[b]	58.83	

[a] The discrepancy between this figure and that on p. 120 results from slightly different methods of calculation of risk (odds ratio on p. 120 and rate ratio in Table 10). That based on the odds ratio is likely to be a more accurate estimate.

[b] Estimate.

officers for health of various urban areas for the latest years available. These data were supplemented by annual reports of the larger mining corporations and scientific papers published in various medical journals. Where possible, the data are analysed in terms of the racial groups in which South African society is stratified economically and politically.

The social stratification of tuberculosis

In the first 11 months of 1980, 41 351 new cases of tuberculosis were officially notified (*41*). This produces an overall annual incidence rate of 169 per 100 000 people. The average reported annual incidence per 100 000 people during the decade 1969-79 was 18 for whites, 27 for Asians, 266 for coloureds and 93 for Africans (*42*). These data include total population estimates as denominators, and Africans are underrepresented in the numerators since rural Africans have little contact with the notification apparatus.

According to the annual report of the Medical Officer for Health of Cape Town, where the notification machinery is more evenly applied than in the country as a whole, the incidence rate of all forms of tuberculosis in 1979 (per 100 000 people) among whites was 18, Asians 58, coloureds 215 and Africans 1465 (*13*). These figures take account of people coming into the area from outside and indicate that Africans are about 80 times more at risk from the disease than whites (risk ratio 82.1, 95% confidence interval 71.2-94.7). Estimates of incidence for the different racial groups in other South African cities are provided in Table 10.

The age structure of black and white people affected by tuberculosis differs considerably. Among whites more than 50% were older than 50 years of age, whereas among blacks the incidence is more evenly distributed across age categories. Poor demographic data make these trends difficult to analyse. In Cape Town around 10% of white tuberculosis cases in 1979 were under 15 years of age, compared with 43%, 32% and 37% of Asians, coloureds and Africans respectively (*13*).

Mortality from tuberculosis demonstrates the same picture, with the burden being carried predominantly by coloureds and Africans. At the national level there were between 12 and 17 times more deaths due to infectious diseases among coloureds than among whites. Among coloureds 70-85% of this mortality is attributable to tuberculosis, which contrasts with less than 1% among whites (*1*). Examination of the annual reports of the medical officers for health in various South Afican cities produces a picture of mortality similar to that of incidence (Table 11). Among whites tuberculosis is not a major killer. In the urban areas it accounts for 1-5% of mortality among coloureds and 5-10% of mortality among Africans (*13, 16*). In Durban in 1977 tuberculosis was responsible for 20% of the total number of deaths of black

Table 11. Tuberculosis mortality (number of deaths per million population)

	Year	White	Asian	Coloured	African	Reference
Cape Town	1979	15	80	120	750	*13*
Guguletu and Langa	1979	—	—	—	1 723	*13*
Port Elizabeth	1979	22	—	436	1 003	*14*
Johannesburg	1975-76	30	60	410	250	*47*
Kingwilliamstown	1978	0	—	900	470	*13*
Pretoria	1977	0	70	0	30	*13*
South Africa as a whole	1978	18	27	226	93	*11*

children and 40% of that of black adults between 20 and 50 years of age (*43*).

In the Bantustans there are no comprehensive studies demonstrating the precise extent to which rural Africans are affected by tuberculosis. Most calculations and estimates indicate that between 10% and 20% of the Bantustan population suffer from the disease at some stage during their lives. The first tuberculosis prevalence survey in KwaZulu indicated that at any one time 27 out of every 1000 children under the age of 18 years have chest X-ray evidence of active tuberculosis and a further 3 per 1000 have miliary tuberculosis (*44*). The South African Medical Research Council reported an annual incidence in 1979 of 1% in KwaZulu and of 2.7% in the Taung and Ganyesa district of Bophuthatswana (*45*).

A recently analysed series of adults with disseminated tuberculosis indicated that 13% were whites, of whom 75% survived; one-third were coloureds, of whom 69% survived; and 55% were Africans, of whom 41% survived (*46*).

With regard to trends over time, the picture varies slightly from place to place. In Cape Town the incidence has dropped recently among whites and coloureds but increased among Africans and Asians (*13*). In Port Elizabeth there has been a steady increase in the number of notifications over the past 3 years (*14*). In Johannesburg the number has remained roughly the same each year since 1972, with a slight increase for Africans (*47*).

The incidence of tuberculous meningitis is a useful indicator of control of tuberculosis, and it is noteworthy that there has been no decrease in this form of the disease over the years. In the first half of 1981 there were 170 proved cases (*48*). In Cape Town the incidence of tuberculous meningitis stayed approximately the same from 1963 to 1979, when the rates per 100 000 people were zero for whites, 10 for coloureds and 5 for Africans (*13*). Mortality statistics demonstrate a familiar picture. In Cape Town between 1967 and 1979 there were 2 white deaths from tuberculous meningitis, 59 Asian and coloured deaths and 69 African deaths (*13*). Standardized for population size

these produce a ratio of 7:84:577 for whites, Asians and coloureds, and Africans respectively. There is evidence of concern about the trends in tuberculosis nationally. The annual report of the Department of Health in 1975 expressed concern at the increase in the incidence of tuberculosis of 3.7% and the increase in that of tuberculous meningitis of over 13% (*49*). The 1978 annual report anticipated a further increase over the following few years (*11*).

Despite this, there is substantial evidence of a diminution in the use of procedures for early diagnosis. In Cape Town there was a 40% decrease in the use of mass miniature radiography between 1975 and 1979. This is likely to affect mostly blacks, since whites had far more full-size X-rays taken per case diagnosed than blacks (*13*). A similar trend was evident in other urban centres and in the use of mobile radiographic unit (*14, 15*). Neonatal BCG inoculation is not evenly distributed between racial groups. An example of this is to be found in Kimberley in 1976-77, when 90% of white babies received BCG compared with 61% of coloured babies and 47% of African babies (*16*). The regional health authorities in the Southern Transvaal suspended the use of rifampicin in the first half of 1981. Although this is the most effective known antituberculosis drug, it has been discontinued as a result of a cut in the budgetary allocation for such drugs in the area (*50*).

Analysis of occupation of those diagnosed as having tuberculosis in Durban in 1977 revealed that two-thirds were unemployed and unskilled labourers (*43*). Annual reports of the main mining corporations indicate that the incidence of pulmonary tuberculosis among African miners was around 850 per 100 000 in 1979 (*51, 52*). There has been a steady increase in the incidence of the disease since 1942 to the present, and mortality rates averaged over 3-year periods, have been the same since 1955 (*53*). Tuberculosis accounts for around 50% of black compensation cases and around 2.5% of white (*53*).

Careful analysis indicates that the declining incidence of tuberculosis in Europe and the USA has resulted from improved socioeconomic conditions, in particular the increased availability of food (*54*). This is contrary to the belief that modern drugs, surgery, screening methods or even vaccinations play the dominant role. In South Africa today the situation is far from being under control.

Compared with those of other developed countries, South Africa's rates of tuberculosis are alarming. In the USA in 1977 the estimated incidence of the disease was 13.9 per 100 000 people (*55*). In England in 1978-79 the incidence was 16.4 and in Wales it was 13.5 cases per 100 000 people, figures which include immigrants (*56*). In South Africa a conservative estimate of incidence is 250 per 100 000 people, with the incidence among Africans in the country being 15 times that among whites (*57*). On the basis of incidence among miners, who are the nutritional élite among black workers and have more

access to diagnostic facilities than their fellows, registration data from urban areas and the sporadic and incomplete countryside surveys, it would seem that a more realistic estimate of tuberculosis incidence among Africans in South Africa each year would be in the region of 1000 cases per 100 000 people. There is evidence that the annual incidence in some areas may be as high as 2700 per 100 000 people (*45*).

A recent review of factors in the failure of tuberculosis treatment at a hospital in Bophuthatswana revealed that 36% of previously treated patients returned with smear-positive tuberculosis (*55*). This is witness to the inability of curative medicine to deal with this major cause of morbidity and mortality. Even in these curative exercises there seems to be a lack of interest, if the cut-back in mass chest radiography is anything to go by. Because of a reduction in the number of diagnostic tests performed on blacks one can expect an apparent decline in the number of notified cases.

Infectious Diseases

Patterns of disease and mortality are very different between the racial groups, mostly as a function of their political and economic situation. Infectious and parasitic diseases are a particularly important facet of these patterns since they are, in the main, preventable. Their wide occurrence in one stratum, while another stratum in the same society remains relatively free, can be taken as evidence of social inequality.

Enteritis and pneumonia account for 60-80% of black child and infant deaths (*1*), while among white children they account for less than 10%. Infectious and parasitic diseases together account for 68 deaths per 1000 live births among coloured children within the first year of life—28 times the mortality from the same cause suffered by white babies (*1*). In the first 4 years of life 45 times the number of coloured children as white die of infectious diseases. Three-quarters of these die from enteritis, 14% from measles and 6% from tuberculosis (*1*). (Tuberculosis has been dealt with in some detail above.)

Chest diseases

In addition to tuberculosis black children suffer from chest and infectious diseases which are closely related to their nutritional status and housing conditions. At the national level deaths from chest diseases, 93% of which are due to pneumonia, are 13 times as common in coloured babies as in white. By the end of the first 4 years of life, 18 times more coloured children die than white children, and 88% of these deaths are caused by pneumonia. In the older age group there are between twice and five times more pneumonia deaths among coloureds than among whites (*1*). (See tabulation below.) Once again, figures are not available for the African population at the national level, but in

the vicinity of Durban pneumonia was a factor in 40% of the deaths of African and Asian children under 10 years of age and in a similar proportion of adults between 20 and 50 years of age (*32*). In Soweto in 1978, pneumonia alone accounted for 18% of all childhood deaths in a hospital, in which 25% of the children admitted were malnourished (*59*).

Pneumonia mortality, South Africa, 1970 (rate per 100 000 population)

	White	Asian	Coloured	African
Age 0-4 years	46	232	725	591
Age 5-34 years	4	12	15	19
Age 35-64 years	20	82	118	122

Malnutrition also complicates certain conditions, which to the well-nourished are little more than an inconvenience, turning them into major killers. Whooping-cough is one such example (*60*), and measles, too, is frequently complicated by pneumonia, which increases by 400 times the number of deaths from measles among malnourished children (*61*). Measles is said to account for more deaths among South African black children in 3 days than among all children in the USA in one year, or among South African white children in several years (*52*). In the decade 1970-79 in Cape Town there were 5 deaths from measles among whites and 400 among blacks. Taking population size into account, this means that urban black children are at least 32 times more at risk of dying from measles than white children (*13*). Rural Africans are probably worse off still. In Port Elizabeth in 1979 there were more than 5 deaths per 100 000 from measles among coloureds and nearly 13 per 100 000 among Africans. Half of these were under the age of one year. There were no deaths from measles among whites in Port Elizabeth in the same period (*4*).

Again in Cape Town, measles accounted for 4% of African infant mortality in 1979 and 2% among coloureds. Among whites measles was not a cause of infant mortality (*13*). Influenza, bronchitis and pneumonia were the causes of death in over 24% of black infants in Cape Town, compared with less than 4% among white infants (*13*). Examination of mortality from these chest conditions in Port Elizabeth in 1979 is equally revealing. The mortality rate (per 100 000) for whites was less than 1, for Asians 35, for coloureds 74 and for Africans 79. Africans were thus 100 times more at risk than whites from influenza, bronchitis and pneumonia. There is also a striking difference in the age of those affected. All the whites and Asians affected were over the age of 50, while nearly half of the coloureds and Africans were under the age of 4 years (*14*).

Whooping-cough, too, affects the various social strata differently. In Cape Town in 1979 the incidence (per million population) was less than 4 for

whites, 9 for coloureds and 37 for Asians. There have been no white deaths from whooping-cough in Cape Town for the past 12 years, whereas around 5% of blacks with the disease die (*13*).

A familiar and perhaps predictable picture is seen in the distribution of the potential pathogen *Mycoplasma intracellulare.* The South African Medical Research Council reported a prevalence of 5.2% in rural Africans, 0.6% in urban blacks, 0.5% in Cape Coloureds and 0.0% in whites (*63*).

Meningitis

Racial differences are also seen in the incidence and type of meningitis. Pyogenic meningitis affects black children far more than white, among whom the less dangerous viral (aseptic) meningitis is more common. In 1979 well over 1000 cases of meningococcal meningitis were notified, almost all of whom were black (*42*). In the first 10 months of 1982, 609 cases were notified, again almost all black (*63a*). In 1977 and 1978, 34% of black children presenting with bacterial meningitis in Soweto had overt signs of malnutrition (*64*).

Gastroenteritis

Poor nutrition undoubtedly contributes to the establishment of gut infections (*65*). In addition, all infections—but particularly diarrhoeal infections—cause an increased loss of protein, and for those who are already protein-deficient this can be very serious. The synergism between enteritis and malnutrition has been well documented in South Africa (*32*, *66*, *67*) and is the reason why gastroenteritis is one of the biggest killers of black children, causing about 60% of child deaths in the urban areas. Nearly 90% of deaths of coloured babies in their first year are due to this cause (*1*). In Cape Town in 1979 gastroenteritis accounted for over 16% of African and 6% of coloured infant mortality. Among whites it was not a cause of infant mortality. In the decade 1970-79 there were 24 deaths from gastroenteritis among whites and 2167 among blacks. Taking population size into account, blacks were thus about 45 times more at risk than whites (*13*). In Port Elizabeth in 1979 only one white person (aged 72) died from gastroenteritis and diarrhoea, compared with 211 Africans, 80% of whom were under 4 years of age (*14*). Taking population size into account, Africans were over 100 times more at risk of dying from diarrhoea and gastroenteritis than whites. At the national level the incidence of gastroenteritis is simply not known, since only the most seriously affected black children are taken to hospital and only the worst of these are actually admitted. Among white babies the situation is entirely different, with the first signs of infective diarrhoea leading to rapid referral to hospital and early admission.

At numerous hospitals there is a "drip room" where babies who have become dangerously dehydrated through diarrhoea are rehydrated on an outpatient basis. Inpatient care is not feasible for these babies, who are invariably black, because the problem is so extensive that facilities are inadequate. Also, the unchanged impoverished home environment soon sends them back to the hospital in the same critical condition and rehydration is again necessary. In 1976 some 11 350 coloured and African infants were admitted to the drip room at Red Cross War Memorial Hospital in Cape Town. There were 16 455 coloured, Asian and African births in Cape Town in that year (*68*).

Gastroenteritis is far less common among breast-fed infants, who account for less than a third of all cases and generally suffer less serious attacks. This is particularly relevant in South Africa, where the companies marketing powdered milk continue their advertising, which portrays health and bottle-feeding as synonymous. Bottle milk does not convey the protection against infection found in breast milk, and some powdered milk feeds have salt concentrations which are dangerously incorrect for babies. Added to this there is the danger of contaminated water in homes where there is no plumbing and no electricity. In the urban areas it is only the relatively well-to-do mothers who can afford to breast-feed their babies since they do not have to go out to work. Compounding the problem of poverty, the cost of an adequate amount of artificial feeds represents one-third to one-half the wage of a black urban labourer (*69*). It is little wonder then that, in addition to the increased incidence of gastroenteritis among bottle-fed babies, kwashiorkor is particularly common where bottle-feeding has replaced breast-feeding in the first months of life.

Typhoid fever

In many of the "resettlement villages" in the Bantustans, typhoid fever affects older children and young adults, in addition to the diarrhoeal diseases, and has reached epidemic proportions. In some of the Bantustans—Venda, Gazankulu and Kangwane in particular—the incidence was found by a Department of Health study to be 6 times higher than in the country as a whole (*42*). One in every 750 boys between 5 and 14 years of age in Venda got typhoid in 1977 (150.7 per 100 000) (*69a*). There are indications that in the Ciskei resettlement camps, such as Sada and Dimbaza, the rates are higher still, as they were in the case of Limehill in the early 1970s. A striking feature of typhoid fever records is the relative constancy of the number of notifications each year for the past 50 years. Up to 1982, there were around 4000 new cases each year and between 90% and 95% of these were Africans. In the first 8 months of 1981 there were 2880 cases of typhoid fever, almost all black (*48*). On the basis of data relating to all cases occurring in Cape Town in the decade 1970-1979, blacks were found to be at least 7 times more at risk from typhoid

fever than whites. In recent years this figure has become much larger, being around 50 (*13*). The case-fatality rate of typhoid fever varies from year to year, but in general terms seems higher now than in previous years (1.2% for 1976-77 compared with 0.3% for 1965-66) (*11*).

The 1980-82 cholera epidemic

During the outbreak of cholera among blacks on the goldmines in the Klerksdorp area in the mid-1970s a "blueprint" for cholera surveillance was drawn up by the South African Institute for Medical Research (*70*). Despite this, an outbreak in the Eastern Transvaal in October 1980 rapidly spread to involve 3 of South Africa's 4 provinces within 3 months (*71*). During this period there were 1372 confirmed cases of cholera, 23 deaths from cholera and an untold number of unconfirmed cases (*72*). By the end of August 1981, there had been 3744 confirmed cases since the beginning of that year (*48*). In a single week in the month of February 1982, 3941 confirmed cases required treatment (*71a*). Between January and November 1982, confirmed notifications numbered 13 127 (*63a*). The Malelane Farms Irrigation Scheme, which was developed for the benefit of white farmers in the area, was almost certainly the starting-point of this epidemic of cholera, which by 1982 seemed to have established itself as an endemic disease in South Africa (*73*).

In 1979 around 50 000 cases of cholera were reported to the World Health Organization, nearly 40% of which were in Africa. In the first 3 months of the South African epidemic there were nearly a third as many confirmed cases in South Africa alone as in the whole of Africa in any 3-month period in 1979 (*72*).

Prevention of diarrhoeal diseases

The 1980-82 cholera epidemic demonstrates graphically the failure of the South African Government to provide sanitation and clean water supplies for the whole population. The rapid spread of the epidemic, despite notification to the Department of Health in the first weeks of the outbreak, reflects the relative impotence of fairly sophisticated surveillance programmes in the absence of the basic conditions for health.

The incidence of nonspecific gastroenteritis, salmonellosis, typhoid fever and amoebic dysentery also demonstrates the lack of public health facilities, absence of clean piped water and inadequate sewage disposal systems in black areas in South Africa. In the rural areas blacks have effectively no clean water supplies or sewerage installations. In the large townships, which provide cheap black labour for the cities, the public health facilities are completely inadequate for the population living there. Water supplies in these heavily populated areas are frequently cut off without warning, a recent example of

this occurring in Soweto (*74*). Squatter communities, of course, have no public health facilities, but even in areas with settled "permanent" residents most public health resources are spent on services for whites. To quote the Medical Officer for Health of Vereeniging in 1978: "There is a real health danger in respect of sewage/nightsoil disposal due to the fact that only 7.3% of the non-white residential area is connected to the general sewerage system" (*75*). This contrasts with 92% of the white area. In black areas, 92% of the people have to make do with the emptying of pails three times a week (*75*).

Diphtheria

Other infections whose spread is highly dependent on social conditions indicate the potentially explosive health situation in South Africa. In the first 8 months of 1981 there were 39 confirmed cases of diphtheria, one of the most notorious infectious diseases in Europe during the last century (*48*). The real incidence is probably far higher than this. The occurrence of a single case of diphtheria in other developed countries is considered almost a public health disaster. In South Africa the disease is practically endemic and arouses virtually no comment. It is confined almost exclusively to blacks. In Cape Town in 1979 the incidence rates (per million) were zero for whites, 0.56 for coloureds and 9.2 for Africans (*13*).

Cerebrospinal fever

This refers to an infection, usually in epidemic form, of the brain and spinal cord. *Neisseria meningitidis* is often involved. In recent years there has been a dramatic increase in the number of notified cases. In Cape Town, for example, the number of notifications went up by 50% from 1978 to 1979, to reach the highest level since 1968. In 1979 there were around 4 white cases and over 50 black cases per 100 000 people. This condition is closely linked to overcrowding in cold weather, and its prevention is, according to the Medical Officer for Health of Cape Town, mostly a question of providing proper housing (*13*). Its recrudescence coincides with the renewed vigour of the white authorities in bulldozing dwellings in squatter communities while failing to provide adequate alternative accommodation. This takes place in a situation characterized by a chronic shortage of housing. There are over 20 000 coloured families on the official waiting list for accommodation in Cape Town (*13*).

Trachoma

In the first 11 months of 1982 there were 502 notified cases of trachoma, all of whom were black (*63a*). This is about 10 times the number usually reported

by that time of year. Trachoma is a severe eye infection, the incidence of which is a direct function of inadequate sanitation. In northern Lebowa, a Bantustan in the Transvaal, 24% of people (119 from a random sample of 493) were found in a recent survey to have the infection (*76*). Some 36% of children under the age of 4 years were affected by the disease. Some 150 000 people in the area are afflicted, of whom an estimated 20 000 suffer visual loss due to the infection (*76*). The disease is also endemic in Gazankulu, another Transvaal Bantustan (*77*).

The distribution of the disease between the various racial groups illustrates once again the differences in living conditions, with particular regard to density of occupancy and sanitation. Over a 10-year period between 1970 and 1979, there were 4 cases notified among whites, 3 among Asians, 6 among coloureds and 3187 among blacks (*76*). This means that, in a 10-year period, blacks are about 1000 times more likely to contract trachoma than are whites.

Other notifiable infections (see Table 12)

In the first 11 months of 1982, over 213 new cases of tetanus were reported (*63a*). This is a very rare condition in other developed countries. Each year there are around 100 new cases of leprosy and scarlet fever, almost all of them black. In 1980, some 200 human rabies contacts were reported (*41*).

Table 12. Some notifiable infectious diseases (rate per million population)

	White	Asian	Coloured	African
Diphtheria	6	3	13	21
Leprosy	0.5	3	3	8
Malaria	33	8	2	90
Ophthalmia neonatorum	1	4	23	7
Acute poliomyelitis	1	9	16	22
Puerperal fever	2	1	3	5
Tetanus	0.3	12	8	15
Trachoma	0	0	0	35

NOTES: The data used to calculate the numerators for this table were derived from debates in the Houses of Assembly in 1976 and 1977 and pertain to the years 1974, 1975, 1976. The denominators were calculated from the 1971 census allowing for annual growth of each racial group.

All these conditions are likely to be heavily underestimated, since many blacks do not come into contact with the reporting apparatus. Even so, they reflect a volatile health situation, where social conditions are such in most black communities that outbreaks such as the 1980-81 cholera epidemic cannot be contained despite early recognition.

Intestinal and other parasites

Many communicable diseases have resulted from the poverty and poor living conditions of South Africa's black population. In addition, the diseases at one time regarded as endemic to Africa, but largely eliminated by Western medical achievements in the 1940s and 1950s, have been given a new lease of life under apartheid. Infestation by intestinal parasites, which today is mainly a function of overcrowding and poor living conditions, is one such example. White children in the Cape Peninsula are infected far less often than coloured children (6% compared with 99%) (*78*). A study comparing intestinal parasitic infestation in Xhosa schoolchildren showed that in the urban location of Guguletu, outside Cape Town, 97% were infected. Perhaps somewhat surprisingly, in view of popular misconceptions, less than 10% in Tsolo, a rural area of the Transkei, were similarly infested (*79*). In the rural areas it may be that the particularly cold winters kill the parasites, but in Cape Town overcrowding and insanitary conditions determine their prevalence among poorer sections of the community.

Roundworm, a particularly common intestinal parasite of black children in Cape Town, can produce heavy infestation, sometimes complicated by intestinal obstruction, perforation and occasionally death. Such complications are more common in poorer communities but, quite apart from these, the main effect of parasitic infestation is the chronic undermining of the health of the affected child.

A study of intestinal infestation in KwaZulu carried out by the Research Institute for Disease in a Tropical Environment revealed a high prevalence in African children. Over 50% of children were infested with *Ascaris*; over 50% with *Trichuris trichiura*; nearly 40 % with *Necator americanus*; and nearly 5% with *Entamoeba histolytica (80).*

Scabies

Similarly, in the poor urban communities scabies has now reached epidemic proportions. Apart from the discomfort of the itching it causes, secondary infection with certain bacteria can lead to acute glomerulonephritis. This has now replaced streptococcal sore throat as the commonest cause of acute glomerulonephritis in South African blacks. There is also good reason to believe that these parasitic diseases are a particular scourge in the "resettlement" villages consequent on population removals, although there have been no epidemiological studies of their prevalence.

Schistosomiasis

One of the diseases of Africa which colonial medicine claimed to have virtually eliminated is schistosomiasis. Yet today estimations of its preva-

lence in South Africa suggest its widespread recurrence. In 1948 Dormer suggested that it occurred among 10% of blacks in Durban (*81*); a later study reported an annual incidence among Asians of *Schistosoma haematobium* (which affects the bladder) of 30% and of *S. mansoni* (which affects particularly the digestive tract) of 10% (*82*), while another reported that 100% of blacks in Durban were affected with one or the other form (*83*). A survey of *S. mansoni* infestation by the Department of Health in the Transvaal in 1978 showed that the annual incidence was 45 per 1000 high-school children. At some schools the condition affected more than 20% of all children. The report suggested that the highest rates of infestation occurred where irrigation was used (*84*).

Malaria

Irrigation is also a factor in the widespread recrudescence of malaria. This is another of the diseases supposedly brought under control by Western medicine, and there is a good deal to connect its spread beyond the original, fairly limited, areas of endemic occurrence with the Western economic development in South Africa. In the earliest years of this century outbreaks reached epidemic proportions as relatively nonimmune labour was brought in to work on the railways and sugar plantations which were established in sparsely populated zones such as the North Eastern Transvaal and Zululand. In the period 1957-71 the disease seemed relatively under control, with 300 notifications a year (*49*). The number of notifications has now increased dramatically from 1500 a year in 1971-76 to 3500 in 1977. In 1978 there were around 7500 notifications (*11*). In 1980 this figure dropped back to approximately 3500 (*41*). Improvement in the notification procedure is unlikely to explain this epidemic. Although some of the affected areas were previously known endemic areas, others, such as Bolubedu, have been newly invaded by the disease with the introduction of open-channel irrigation. The Government seems relatively unconcerned by the epidemic, perhaps because it affects comparatively few whites. While there was a threefold increase in incidence among whites between 1971 and 1978, the incidence for blacks over the same period increased by a factor of between 20 and 30. Over the past 10 years, the Department of Health has reported a case-fatality rate in nonmalarious areas of 2.6% (*85*).

Conclusions: infectious diseases

The overcrowded, poorly ventilated dwellings in the Bantustans, the illegal squatter camps and the official townships inhabited by migrants and poor families all provide perfect breeding-grounds for infection. The risk of contagious disease has been further increased by the policies of forced removals of millions of Africans to grossly insanitary and ill-constructed "resettlement

villages" in which neither sewage disposal nor piped water, let alone electricity, has been available. In all these circumstances, moreover, the poor nutritional status of the inhabitants multiplies the risk of serious infection. Just as body growth is stunted by malnutrition, so certain of the cells which defend the body against infection (lymphocytes) have impaired function. This crucial connexion between malnutrition, infection and the deliberate social policies which lead to overcrowding in conditions of physical impoverishment lies behind the failure of South Africa's medical services to eradicate such diseases as tuberculosis and typhoid fever. Both of these have been notifiable since 1919, yet both are very much in evidence today.

Cancer

As in the case of heart disease, the racially different incidence of some malignancies can be related to social factors. In only very few malignancies that are common in blacks has any specific genetic basis been demonstrated, such as in the case of retinoblastoma. Although certain diseases, such as liver cancer in Mozambique and cancer of the oesophagus in the Transkei, appear to have a geographical pattern, this could be the result of exposure to a carcinogen or of some defective protective mechanism, possibly in childhood, rather than a different population distribution of a hypothetical genetic factor.

African goldminers have been extensively investigated and therefore provide an important source of information despite the select sample they represent. Among them, by far the commonest cause of cancer death (53%) is primary liver cancer, hepatoma (*86*). In part this is related to the large proportion of miners from Mozambique, where the disease is widespread, although the cause of the condition is unknown. A genetic predisposition is unlikely, as grossly differing rates have been reported among ethnically similar goldminers coming from different areas. Again some dietary factor—in particular, mouldy maize—has been implicated and there appears to be some association with childhood nutrition (*87*).

According to a recent South African Medical Research Council report, in the Transkei, aflatoxin (from the mould on maize) is the most important cause of liver cancer; other environmental contaminants play little, if any, role (*88*). The prevalence of aflatoxin can be related to the deterioration of agriculture in these areas, and possibly to the development of makeshift storage techniques by African families as they try to store food for times when it is less plentiful. The protection of maize prices by the Maize Board makes it uneconomical for them to sell when they have a surplus and buy back when in need. The shortage of land for Africans to cultivate means that every available piece is used, often to exhaustion, irrespective of whether or not it is suitable. It is interesting that the major strategy on recognition of the aflatoxin problem

is to check for contamination of food which is used by whites or exported. Little is done for those who have to continue living in the affected areas.

The incidence of cancer of the oesophagus has reached epidemic proportions in certain areas of the Transkei. Of all cancers suffered by African goldminers between 1965 and 1972, 12% involved the oesophagus, compared with less than 1% of cancers among white adults (*86*). Cancer of the oesophagus is also rare in most of the rest of Africa, especially outside the areas of maize cultivation. There is, in fact, strong suggestive evidence linking the increasing incidence of this cancer with the consumption of maize which has been grown in unsuitable soils and stored under unsuitable conditions. Both the cultivation of maize in unsuitable soils and the absence of green vegetables from the diet in the Transkei are directly traceable to the deterioration of African agriculture consequent on land shortage and the migrant labour system. The increasing incidence of cancer of the oesophagus in southern Natal is of direct relevance in this regard (*88*). In a national survey of cancer of the oesophagus in 1976, 80% of sufferers had evidence of past childhood protein-energy malnutrition, 10% of whom had been seriously affected. Further, 78% had musculoskeletal deformities due to rickets. What demarcated the areas in which the cases were most prevalent was the widespread occurrence of nutritional deficiencies (*89*).

It is not proposed that these major killers, liver and oesophageal cancers, are as directly related to apartheid as, for example, tuberculosis and perinatal mortality. They do reflect yet another facet of apartheid, however, in their relation to the deterioration of African agriculture. They are also illuminating as to the strategies which arise from research into the conditions.

Among white males it is lung cancer which tops the list of malignancies, comprising 20% of all cancers, compared with 5% among African goldminers (*86*). Again, the incidence is beginning to change as Africans become more urbanized and consumer habits change. In Natal, the incidence of lung cancer has increased dramatically over recent years and now accounts for more than 20% of all cancers among urban African men. Among African women in Natal the rate by the end of the 1960s was higher than that for women in England and Wales. The well-known association between cigarette-smoking and lung cancer probably accounts for a part of this increase as the cigarette manufacturers have found a rapidly expanding market among the urban black population. Atmospheric pollution is also likely to be a factor in the increase, as may be the case with the increase in tuberculosis, with which the condition may be associated.

Improved diagnostic accuracy may also be important in the increasing incidence, as are dusty working conditions. An interesting point in this regard is that blacks seem to die of lung cancer at an age significantly below that of whites. In Cape Town in 1979, for example, 92% of whites with lung cancer

were over the age of 55 years, compared with 61% of coloureds, Asians and Africans (*13*). This may be because old black people do not receive the same level of medical care as white people, and consequently are not diagnosed as readily. Another possibility is that more lung cancer among blacks is occupationally related, since occupational cancers often have shorter "latent periods" than nonoccupational cancers of the same site.

Other Diseases

Although they do not account for the majority of deaths among blacks, there are certain diseases which have a different incidence in different population groups, without any known social causation. This would appear to be the case with sickle-cell anaemia, certain types of liver disease, and certain malignancies which affect black more than white adults. Veno-occlusive diseases of the liver and idiopathic cholestasis affect black children more than white, and these differences are not readily accounted for by the social differences which explain other, more common, liver conditions. Similarly, certain unusual and poorly understood conditions which weaken the heart walls and large blood-vessels are found more commonly among blacks and might have a genetic basis. The occurrence of osteoarthritis, particularly common in one area of KwaZulu, may have a geographical basis. In many other cases, the differential racial morbidity may not in itself be socially determined but the disease outcome clearly is.

While diabetes mellitus, a disease with some genetic basis, is relatively common among coloureds, Asians and whites, it is found relatively rarely among Africans. Yet Africans who do suffer from this condition die far younger than their white counterparts, mostly below the age of 55 years, and a large proportion (37%) die of infections. This indicates that the standard of treatment they receive is similar to that of whites in the pre-insulin era.

Admissions to hospital of people with duodenal ulcers increased 2 to 3 times for Asians and 12 times for Africans in Durban between 1950 and 1976. In addition, the disease is apparently more common now in women of both groups than it was 15 years ago. While the greater prevalence may in part simply reflect increased medical care over the past 25 years, the relative increase among African and Asian women suggests that it is more likely to be due to other social factors. Moreover, whatever the improvement in medical care in Durban the excess of bleeding complications among Africans still probably indicates inferior medical care as compared with that given to other racial groups.

Other diseases of the digestive system, such as haemorrhoids, appendicitis, ulcerative colitis, diverticular diseases, polyposis and cancers of the colon and rectum, are considerably rarer in blacks than in whites. A survey of two rural

and six urban high schools revealed that between 0.4% and 0.7% of African children get appendicitis, less than one-tenth of the rate for white children (*90*). Blacks do, however, have a far higher mortality from appendicitis than whites; roughly 2% of those presenting actually die from the condition or from postoperative complications (*91*). The mortality of whites from appendicitis can be calculated from various hospital annual reports to be less than 0.1%.

National figures of chronic diseases do not allow breakdown of disease by colour of skin, but some insight can be obtained from urban areas with relatively good records. In Cape Town the standardized rates of all chronic diseases show that coloureds are disproportionately affected (37.4 per 1000). Africans bear the second largest burden of chronic disease (24.7 per 1000), with whites affected only half as much (11.6 per 1000) (*13*). The rate among Africans may be even higher than this, as those who are too old or ill to work are usually returned to the Bantustans and thus excluded from the statistics. In addition, Africans tend to die from preventable infections such as tuberculosis and do not live as long as whites to develop chronic diseases.

Psychiatric Disorders

No society is free from mental disorders, and human groups living under similar conditions tend to have similar patterns of mental morbidity. The disorders which shape the "profile" of the mental morbidity of a population do not have single causes; most of them are the result of complex interactions between environmental, biological (including genetic) and personality factors. The relative predominance of one or another type of condition is related to the age structure of the population, to the ecology and conditions of life, and to socially conditioned patterns of behaviour.

Only fragments of the epidemiological picture of psychiatric morbidity in South Africa can be obtained at present, because of the almost total lack of social and epidemiological studies which compare rates of mental disorders in different groups of the population. The absence of psychiatric epidemiological studies of the African population is particularly noteworthy, as it indicates that the magnitude and nature of the mental health problems of the majority of the population of the country are largely unknown to the medical profession and the health planners.

Nevertheless, the few publications which report data on the mental morbidity of South Africans allow some tentative inferences to be drawn although, with a few exceptions, the populations studied have been clinical rather than community samples. The data, however, are striking and unusual. They point to a characteristic pattern of mental morbidity and suggest that the conditions of life created by apartheid are directly implicated as a pathogenic factor.

The total prevalence and incidence of mental disorders among blacks in South Africa is not known. Le Roux (*92*) conducted a questionnaire survey among African university students and found that 13 out of 227 reported at least one case of "psychological deviancy within their families". He concluded that "mental disorganization is not an uncommon phenomenon" among Africans (*92*), but his figures cannot be translated into prevalence rates. The only available prevalence figure is the rate of hospitalized psychiatric morbidity (0.64 per 1000 in 1968 (*92*); 0.71 per 1000 in 1976 (*93*)), which, because of the scarcity of services, probably represents only a small fraction of the true rate.

The relative frequencies of different types of disorder can be ascertained or inferred more easily than prevalence figures for the total mental morbidity. While there are no reasons to believe that the incidence and prevalence of functional psychoses such as schizophrenia, or affective disorders (depression) would be different in the white and black populations, there are other categories of morbidity which distinguish sharply the two populations. The unusual features of the psychiatric profile of South Africa are as follows:

1. High incidence and prevalence of retarded psychomotor development in childhood due to preventable causes. This phenomenon has been studied in African (*94*), coloured (*95, 96*) and Indian (*97*) children, and in each case was found to be associated with severe malnutrition, kwashiorkor or marasmus. Considering the staggering rates of malnutrition among black children in South Africa (see Chapter 4), the incidence of such developmental disturbances must be very high. No such cases have been reported in white children.

2. High incidence of organic brain syndromes arising out of preventable causes in both children and adults. Wesley and others found that the incidence of bacterial meningitis (often complicated by severe malnutrition) in African children was 24 times higher than in white children, and the incidence of tuberculous meningitis was 172 times higher (*98*). In adults, pellagra, general undernutrition, and infectious and parasitic diseases are frequent causes of psychiatric disorders among blacks but do not occur in the white population (*99*).

3. Unusually high rates of alcohol abuse, alcohol-related psychiatric disorders and disabilities have been found among Africans and coloureds (*100, 104*). Gillis pointed out that "plain poverty and adverse social circumstances have a lot to do with it (alcoholism), for alcohol has a numbing and care-diminishing effect which makes life more tolerable for those who have to struggle daily for the bare necessities of living" (*100*). Alcohol problems among the deprived and oppressed blacks begin earlier in life, give rise to more psychiatric complications and have a worse prognosis than alcohol dependence in whites. All the data available so far point to social factors and hence to the apartheid system as being responsible for these phenomena.

4. Unusually high rates of suicide. The survey of suicide in Durban reported by Meer (*105*) indicated that in 1971 Africans and Indians had the highest rate (17.5 per 100 000 and 17.3 per 100 000 respectively) in the population studied. Most of the Africans committing suicide were young adults. This is probably the highest rate of suicide anywhere in Africa, and the psychosocial stresses of apartheid are directly implicated, as Meer's statistics and case histories suggest.

In all the four groups of mental health problems described above, the contrast between their frequency and pattern in whites and blacks is striking. Some of these categories of morbidity are virtually nonexistent in the white population, while they have a major share in the morbidity of the black population. Moreover, these problems are only the tip of the iceberg. Many other mental health problems remain undetected and untreated, even if fragments of evidence suggest that they may be highly prevalent. For example, Ames & Daynes (*106*), who surveyed a number of black families in the Transkei, pointed to the frequency of psychosomatic disorders and other psychological problems among women whose husbands had been caught up in the migrant labour system. Since there are millions of women in South Africa in this position, the prevalence of psychological disorder directly related to their stressful life conditions can be expected to be extremely high.

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CHAPTER 4

THE EXTENT AND EFFECTS OF MALNUTRITION

By far the most important single feature in the socially stratified disease and death rates in South Africa is malnutrition, an outcome of the economic inequalities which are linked to the policies of apartheid. Between 30% and 40% of all young black children suffer from malnutrition. This is reflected in the high mortality rates, particularly those pertaining to gastroenteritis and pneumonia.

Despite the claims of South African apologists, malnutrition is not merely caused by inadequate food production, nor by ignorance of the value of foodstuffs. Quite simply the majority of blacks, through deliberate social policy, can no longer produce enough food for their needs and they receive wages which are too low to make up the shortfall. This poverty is the outcome of economic development under apartheid, which disrupts family and home life through the migrant labour system. The subsistence farming of blacks has been progressively undermined through appropriation of land and mass removals to labour reserves. Economically, white monopoly over land, markets and state resources has precluded the intensification of black agriculture necessary for the support of the increasing population. Socially, the necessity for labour to migrate has disorganized families and kinship systems in rural areas to the extent that traditional support systems have all but disappeared.

In immediate terms, shortage of food makes wage employment necessary for survival. The vast numbers of people in this position means that competition for employment is fierce and consequently wages are low. Low wages, since they barely keep the worker and some of his family alive, prevent those in this position of dependence from getting out of it. Thus malnutrition is central to the production and maintenance of a cheap labour supply. Apartheid provides the legal framework within which malnutrition fulfils this role.

Introduction

The migrant labour system, poverty in the reserves, low wage economy and forced resettlement of millions of people create a society where 3 children die

from malnutrition every hour (*1*). Figures from the Department of Statistics and from numerous hospitals throughout South Africa indicate that between 15 000 and 30 000 children die each year from malnutrition, excluding those who die from nutrition-related diseases such as tuberculosis. In the rural areas 200-300 black children out of every 1000 die every year, most of them from malnutrition.

Not only are an enormous number of deaths directly attributable to malnutrition, but this condition causes people to die from diseases which in better nourished people are not so common, such as tuberculosis, or not so serious, such as pneumonia and gastroenteritis, or relatively trivial, such as measles. Many malnourished adults suffer and die from infections (*2*). Although malnutrition does not appear high on the list of major causes of death in infants and children, it is an important contributing cause. Its relationship with enteritis is well stated by Wittman & Hansen: "The major part of the problem of malnutrition is not reflected by the incidence of kwashiorkor but by the incidence of severe gastroenteritis in malnourished children" (*3*). Pneumonia may also be related to malnutrition, and measles, with or without complicating pneumonia, definitely is (*4*).

As blacks adopt a Western diet there is no decline in nutritional diseases. Kwashiorkor, marasmus, pellagra and many others threaten the majority of blacks. At the same time, this change to a Western diet causes them to lose their apparent protection against appendicitis, gallstones, peptic ulcers, atherosclerosis, coronary artery disease and various types of cancer (*5*).

The Supplementary Benefits Commission in the United Kingdom defined poverty as a living standard so low that it excludes and isolates people from the rest of the community. This psychological effect of malnutrition does not appear in the morbidity and mortality rates. But it is this total isolation and destruction of Africans that results from the deliberate social and economic manipulations of the apartheid system.

The Supplementary Feeding Schemes

An attempt to understand the extent of malnutrition will be helped, apart from an examination of the morbidity rates, by a scrutiny of the figures from the Government-sponsored supplementary feeding schemes. These do not operate at all in the Bantustans (labour reserves), and in urban areas they are underutilized by blacks (*6*). They are administered by the local authorities, which apply for subsidized milk powder for the malnourished children in their areas. The criteria for malnutrition are fairly rigidly laid down (*7*). In the financial year ending in 1980, 93% of the R199 000 allocated by the Department of Health was spent on this programme (*6*). This is less than the money spent per hour on defence in South Africa, which, in 1978-79, was equivalent to R184 084 and now amounts to a substantially larger sum.

Apart from the likelihood that white children receive preferential treatment, figures from the supplementary feeding schemes indicate that many times more blacks are in need of supplementary feeding than whites. In Port Elizabeth in 1979, for example, the number of children under 1 year of age who received supplementary feeding was 40 among whites, 102 among Asians, 296 among coloureds and 328 among Africans. In the 1-4 age group the numbers per 1000 were 3 among whites, 48 among coloureds and 27 among Africans (*8*). In Kimberley in 1979, 39% of coloured infants and 37% of African infants were judged eligible for the supplementary feeding scheme, compared with less than 5% of white infants (*9*). A study of the effects of supplementary feeding conducted by the Department of Health in Johannesburg in 1975 and 1976 showed that there was no increase in the weight of children following supplementary feeding. In many cases the nutritional status of the children even deteriorated (*10*). The scheme is clearly inadequate to deal with the extent of the problem.

Around 100 000 children in South Africa "benefit" from this scheme—in 1979 to the average sum of R7.50 each. The total State subsidy of the scheme in 1980 was about R750 000. This contrasts with a subsidy of R4 million to subsidize butter production, which is consumed mainly by whites or exporexported. Even so, there has been cause for criticism as the supplementary feeding subsidy has been cut. A spokesman of the Dairy Board is reported as saying "As the price of milk products has risen, the subsidy has been cut and, in spite of fears of rising malnutrition, the subsidy is down to 20.75c (from 57.5c) a kilogram" (*11*).

The link between supplementary feeding and life under apartheid has been well described by a nursing sister at a rural clinic in an unpublished interview with a South African social scientist:

> "Our people are suffering from lassitude and fatigue psychosis, they care only about starving and getting a job, any job. The milk scheme introduced for malnourished under-fives is failing because all children of migrant workers are left in the care of their grandmothers. This could mean anything up to twenty, depending on the number of sons away working in the towns. When the grannies come to the clinics to receive the milk ration, the sisters know that the milk will be used by the starving grandparents. What is the use of complaining—the grannies must survive, otherwise who would be left to look after the children?"

The Prevalence of Malnutrition

Several estimates of the prevalence of malnutrition have been made. Professor John Gear of the Department of Community Medicine at the University of the Witwatersrand is reported as saying that as many as 750 000 black children in South Africa are malnourished (*12*). From Mdantsane in the Ciskei it was reported in 1980 that three-quarters of the children were undersized for age (*12*). From the supplementary feeding data it appears that at least

30-40% of younger black children satisfy the rigid criteria of malnutrition for eligibility to participate in the scheme.

One of the simplest ways of establishing the extent of malnutrition is to measure the height and weight of the children and relate this to their age. Various charts have been worked out for international comparisons on the basis that a certain proportion of the childhood population will be overweight, most will be normal (around the 50th centile) and some will be underweight (below the 10th centile). Those below the 10th centile are usually poorly nourished and those below the 3rd centile usually suffer from malnutrition. A child below the 10th centile is three times more likely to die before adolescence than a child above the 50th centile, and those below the 3rd centile are much more in jeopardy than this.

About a third of a random sample of coloured children aged 1-16 years living in Western Township near Johannesburg were found to be below the 3rd centile (*13*). A study in Cape Town has shown that there is a stepwise improvement in height and weight with income, and that far more infections are suffered by those at the lower end of the scale. Half of the families of people in the study were living below the Poverty Datum Line[1] (*14*), and 75% of these remained below it throughout the first 5-year period for which they were studied (*15*). The connexion between weight attainment and severity of infections has long been known (*3, 16*) and a further study in Cape Town has highlighted the connexion between income, nutritional status and infection (*17*).

The association between malnutrition and severe illness also shows up strongly in statistics from South African hospitals. In Baragwanath Hospital near Johannesburg 70% of African children admitted are below the 3rd "Boston-Stuart" centile (*17a*), as were 30% in the child outpatient population. Half of those admitted had clear evidence of a particular malnutrition syndrome. Almost all the children involved come from the municipal area of Johannesburg and are not, as is often alleged, referrals from rural areas (*18*). In 1978, over 25% of all child deaths were among children who had an overt clinical picture of malnutrition (*19*).

Similar figures are available from other hospitals. At King Edward VIII Hospital, which serves the black population of Durban, about half of all children admitted in 1974 were malnourished (35% in 1960) and a quarter of these died. Malnutrition is reported to be the cause of a third of African and Asian child deaths in Durban (*20*). At the Charles Johnston Memorial Hospital in KwaZulu 75% of all children admitted were below the 3rd centile. Slightly under a half of these were actually admitted with the diagnosis of malnutrition. In a survey in the Nqutu region in 1972, 39% of some 5000

[1] A minimum cash level of subsistence, calculated by South African social scientists over the years, on which black families can be expected to survive.

children under the age of 5 years were malnourished (*21*). The Annual Report of the Medical Officer for Health in the City of Durban in 1977 revealed that there were more deaths due to malnutrition in that year than in any year since 1968. This is even excluding deaths in the areas that were redesignated as "outside Durban" after 1976. The increase in the number of deaths is not accounted for by an increase in population size (*22*).

Specific Syndromes of Malnutrition

Kwashiorkor is a protein-deficiency state in which there is swelling of the abdomen and limbs. Marasmus is a more serious state of gross wasting which results from protein-energy malnutrition (PEM). Only two-thirds of children diagnosed as suffering from kwashiorkor survive for 5 years or more (*23*). Both kwashiorkor and marasmus occur widely among the black population, mainly affecting younger children. In the rural areas in the summer the situation is particularly bad, when the increased fly population causes repeated attacks of diarrhoea, which aggravate malnutrition. In the urban areas kwashiorkor arises in conditions of poverty, poor housing and family disruption (*15*). Studies by the National Research Institute of the South African Medical Research Council show that about 5% of younger black children in the rural areas suffer from marasmus and 10-15% from kwashiorkor (*24*). Regional studies indicate that this is probably underestimated. For example, in KwaZulu 16.4% of children are thus affected (*25*). In the urban areas there is relatively more marasmus and less kwashiorkor (about 5% and 4% of black children respectively). Although more employment and therefore more food is available in urban areas, the relative frequency of marasmus means that when malnutrition does occur it is more severe. This may be because the impoverished in the urban areas do not have even the meagre support systems that exist in the rural areas. Early weaning because mothers have to go out to work also plays a major role.

Kwashiorkor has not been a notifiable disease in South Africa since 1967, when the number of new cases among whites dropped to less than 10. At that time the number of new cases among blacks was around 10 000 per year and the unreported incidence probably several times higher. About 10% of children suffering from kwashiorkor also suffer from xerophthalmia, a painful condition of the eyes caused by vitamin A deficiency. It is the most important cause of blindness in young South African children (*26*). Kwashiorkor depresses the body's response to infection and consequently bronchopneumonia is a major cause of death in these children. Where vitamin A deficiency complicates kwashiorkor the death rate rises from 15% to 80%. For those who survive, vitamin A deficiency during growth frequently leads to skeletal deformity (*27*). A 15-year prospective study of over 200 infants admitted with kwashiorkor was recently reported from Cape Town. About a third of the children died on or soon after admission. For those who survived, "housing

adequacy had deteriorated" over the 15 years of follow-up. More than 25% of boys demonstrated "potentially serious antisocial behaviour" (*28*), although it is difficult to know how much of this could be related to their childhood malnutrition, how much to their having to live in urban slums, and how much to their response to being studied like specimens by social and medical scientists.

Apart from its common association with other deficiency states and infections, kwashiorkor causes fatty degeneration of the liver which makes that organ more vulnerable in later life to stresses such as alcohol abuse and repeated infections. Kwashiorkor has also been implicated as a predisposing cause of liver cancer (hepatoma) (*29*).

Pellagra is a severe and common deficiency of B group vitamins and affects South African blacks of all ages. It is more common in the summer and mostly affects the skin, but repeated bouts can lead to dementia or psychosis. In 1976 there were around 26 000 cases of mental disorders caused by pellagra and it accounted for half of all black admissions to Pretoria Mental Hospital (*30*). Pregnant women, herd boys and agricultural workers are the most vulnerable, as they have a particularly inadequate diet, but there is also an increasing incidence among adult male migrants in towns. In the Ciskei 26% of the age group 7-8 years show signs of pellagra, which is more than double the prevalence among the same age group in the urban areas (*31*).

Among children in Natal, rickets is even more common than pellagra (*20*). This severe condition is caused by a low intake of calcium or lack of vitamin D. It results in swollen and painful joints and, when present in early childhood, often leaves physical deformity. In 1978, over 1% of children admitted to hospital in Soweto had rickets (*19*). In the black population at large, the prevalence has been estimated to be about 5 per 1000 (*32*), rising to 20 per 1000 in certain age groups in the Ciskei (*24*). This is in a land of plentiful sunshine, among people who formerly consumed large quantities of milk.

Despite the fact that scurvy is preventable and treatable by eating citrus fruits, which South Africa exports on a massive scale, it occurs in about 3 per 1000 blacks around Durban (*20*). It is relatively rare in the rural areas, but in urban areas, where the traditional diet is replaced by Western foods such as white bread, refined sugar and proprietary carbonated soft drinks, the incidence of scurvy is increasing. It is well known that stress can increase the vitamin C requirement and the role of infections in lowering vitamin C levels through increasing urinary excretion has been demonstrated in animal experiments (*27*). In children, otitis media, pneumonia, influenza, measles, typhoid, malaria and nephritis are well-recognized precipitators of scurvy, and all of these are more common and more serious among black South African children than among white.

An investigation of the intake of vitamins A and C in African mineworkers, who probably are the best off nutritionally among black South African work-

ers, demonstrated that, while there was no clinical evidence of deficiency, subclinical deficiencies of both vitamins were widespread (*27*). During the first 4-6 months of service by African miners, serum vitamin A levels decrease significantly. Morbidity during this period is higher than at any other time in a minor's career (*27*). Biochemical measurement may reveal extensive subclinical malnutrition, but the practical value of these measurements is somewhat limited, since they tell us little except what we already know about malnutrition. In South Africa at present there are other, more powerful, indicators of the distribution of malnutrition, such as child deaths due to infections or even those due to malnutrition itself. Nevertheless, the picture which emerges from these data is corroborated by biochemical studies. It has been shown, for instance, that the Xhosa in the Bantustans have lower levels of serum albumen (protein) than the Xhosa in Soweto (*33*). An interesting aspect of this study was the comparison of the two groups with a Tswana rural community whose traditional methods of food production were relatively intact. This group had significantly higher protein levels than either the Soweto group or those in the Transkei, where food production has been totally undermined (*33*). It has also been demonstrated that 15% of urban black children have biochemical evidence of subnutrition, even when they are apparently healthy at the time of examination (*20*).

Iron deficiency is said to be rare among South African blacks, supposedly because of the extensive use of iron pots for cooking. In fact in the 1960s it was reported that 60% of all black children in South Africa suffered from iron-deficiency anaemia (*34*). In a study in KwaZulu, clinical anaemia was almost entirely confined to the 1-year age group but biochemical evidence of iron deficiency was found in 36% and folate deficiency in approximately 15% of African preschool children (*25*). Another nutritional curiosity which attracts medical attention away from the real issues of malnutrition is the entity known as "Bantu siderosis". Excess iron is deposited in various organs of the body after prolonged use of iron pots for cooking.

Effects on Mental Health and Development

Many studies indicate that chronic undernutrition during childhood may be deleterious to brain growth and intellectual development (*35*). Studies in South Africa support this (*36, 37, 38*). Opinion on malnutrition as a cause of mental retardation is far from unanimous, however, since the social conditions which cause malnutrition in themselves affect mental development (*39*). Evaluation of the effects of malnutrition on the mental development of blacks is further complicated by the highly speculative and unscientific nature of intelligence assessment across cultures (*40*). Indeed the argument that chronic malnutrition leads to decreased intelligence may sometimes be used as a convenient rationalization by those who wish to attribute to blacks an inherently inferior status as regards capacity for achievement.

It can be argued that it is the social matrix of apartheid rather than malnutrition *per se* which prevents blacks from realizing their full potential. From conception through childhood and maturity, blacks are at a material disadvantage in South Africa. Black mothers are often obliged to work throughout pregnancy and weaning, probably compromising the early development of the child. At the national level neither prenatal care nor infant-feeding schemes exist for blacks, though they do for the white population. The inferior level of education for blacks has already been alluded to and has been the focus of major student unrest in recent times. In rural areas African children start school late because they have to contribute to the household economy. They also have to leave school early to find work and so contribute to the family income. With such gross social discrepancies it is unreasonable to attribute "lifelong underachievement" to malnutrition. If anything the malnutrition is more a function of enforced lifelong underachievement than vice versa.

The Myths of Malnutrition

Although many of its effects are not seen, there remains a large amount of incontrovertible evidence relating the distribution of malnutrition to economic and political aspects of South African society. Undernutrition almost exclusively affects individuals classified as black. Since the remedy to this situation involves profound economic and political changes, several convenient but fallacious explanations for the distribution of malnutrition have been developed by those who benefit from the existing state of affairs. Among these myths are "excessive population growth", "food shortage" and "ignorance". These require closer scrutiny.

Population growth

A widely held belief among South African whites is that if the black population growth were slowed down, undernutrition would not be so widespread and resources could be used more effectively. This is, however, the view of a particular interest group. Resources are concentrated at present in the hands of a small group of people and it is these who would benefit most from a decrease in population growth. When too many impoverished people have to subsist off too little, strain is put on the system from which the minority benefit. For these, the logical way of easing the strain is to slow down the population growth of the majority.

For most blacks, on the other hand, adult labour is now the family's only saleable asset. It is necessary to produce enough labour power for survival and, since so many black children die before reaching an economically active age, many must be born to ensure a family's subsistence. In fact, half of all deaths among blacks occur under the age of 5 years, compared with only 7% in

the same age group among whites (*2*). There is, moreover, considerable pressure on blacks to have children to provide for their old age—if they live that long—since they are very poorly provided for by social services.

It is true that whites make up a progressively smaller proportion of the South African population, but for blacks the decrease in available land, which results from the delineation of the Bantustans and the compulsory removals into those areas, is far more important. The Bantustans have become overpopulated relative to food production, since very few blacks have the capital necessary to meet increased demand with intensified production. This would still be the case even if there were access to arable land, much of which is controlled by chiefs, who are installed by the white administration. Little other employment exists in the rural areas and this has led to a widespread system of migrant, or—more correctly—highly controlled, contract labour. In view of the breakup of family life that this causes, to talk about a "failure of family planning" is to joke in bad taste.

As long as the majority of the people lack the means to produce their food or the means to buy it, hunger and malnutrition will still affect the same proportion of the population, regardless of the success of any family planning programme. This is because hunger, malnutrition and the associated infections are not caused by population pressure. Rather malnutrition and population growth both reflect the same failure of a political and economic system, a system whereby the national productive resources are monopolized for the benefit of a few while the vast majority of people exist in poverty and insecurity. If it is accepted that the fundamental role of any society is to ensure the well-being of all its members, then the extensive presence of malnutrition in South Africa can only be interpreted as a failure of that society.

Although, on the face of it, overcrowding in the urban areas seems to be the result of population growth, this too has more to do with availability of employment and the provision of adequate housing than increased numbers of people. By definition apartheid refuses to acknowledge the rights of blacks other than as units of labour. This has led to the development of overcrowded urban and rural slums where conditions are perfect for the transmission and incubation of infectious diseases. Diseases which decades ago ceased to be a major problem among whites—e.g., diphtheria, rheumatic fever, tuberculosis and extensive parasitic infestation—are rife in these conditions of overcrowding and in the absence of piped water or other social services.

The politics of food scarcity

Absolute food shortage is not the cause of malnutrition in South Africa, where more than enough food is produced to meet the optimum energy requirement of everyone in the country (*37*). According to FAO data, protein availability per person per day is higher than in any other country in Africa. In

fact, food production has outstripped the increased needs of the population. The exponential annual increase in population over a recent 20-year period was 2.4%, while the annual increase in demand for food was 3.2%. Food production went up by 3.9% per year, and cereal production by 5% over the same 20-year period, with only a 2.2% increase in the demand for cereals (*41, 42*). The South African maize crop in 1981 was expected to break all previous records. Maize production was predicted to go up to 14 million tons from 11.1 million in 1974. This would mean a surplus of 7 million tons (*43*).

Yet increased production has not increased the general availability of food. The export of foodstuffs and control over domestic distribution by marketing boards have prevented this. Food exports have expanded dramatically over the past few decades, accounting for around 15% of all exports in the 1970s. According to FAO trade figures, the export of agricultural products more than doubled, while that of foodstuffs, animal products and fish products more than trebled between 1970 and 1975 (*42*). Food imports have been far less than food exports for many years, in 1975 being one-quarter as much. Almost all the imported food is of luxury quality. Earnings from maize exports topped R266 million in 1979/80 (*44*). If Professor Gear's estimate of 750 000 malnourished children in South Africa is correct, maize export earnings were equivalent to R350 per malnourished child per year.

Even if no food were exported, however, prices would keep an adequate supply of it well out of the reach of South Africa's low-paid blacks (see Tables 1–3). Market control boards operate to keep prices high and to prevent food

Table 1. Wages in industry

Industry	Wage per week (Rand)	Date when wages started to apply
Commercial and distributive trade (whole of South Africa)		
General assistant, male	19.50	5 December 1980
General assistant, female	15.50	
Building (Port Elizabeth and Uitenhage)		
General employee	32.97	31 October 1980
Baking and confectionery (Port Elizabeth and Uitenhage)		
General assistant, male	26.68	5 December 1980
General assistant, female	22.54	
Motor transport (goods) (Transvaal and Orange Free State)		
General worker, male	29.28	12 September 1980
General worker, female	22.56	
Leather industry, footwear (whole of South Africa)		
General labourer	31.28	1 January 1981

Building industry (Queenstown)		
Unskilled worker	18.06	5 January 1981
Fruit and vegetable canning		
Grade IV worker, male	35.00	31 October 1980
Grade IV worker, female	32.00	
Automobile manufacturing (Eastern Cape)		
Labourer	72.00	1 January 1981
Woodworking (whole of South Africa)		
Labourer, male	16.00	19 December 1980
Labourer, female	12.80	
Laundry and dry-cleaning (Transvaal)		
General employee, male	30.00	19 December 1980
General employee, female	25.00	
Knitting (Transvaal)		
General worker	34.00	9 January 1981
Local authorities (Cape Peninsula)		
Unskilled worker, male	25.50	14 December 1980
Unskilled worker, female	20.40	
Local authorities (certain Natal areas)		
Unskilled worker, male	19.50	14 December 1980
Unskilled worker, female	15.60	
Local authorities (Eastern Cape)		
Unskilled worker, male	23.00	14 December 1980
Unskilled worker, female	18.40	
Local authorities (Transvaal and Sasolburg)		
Unskilled worker, male	19.50	14 December 1980
Unskilled worker, female	15.60	
Cement manufacturing (whole of South Africa)		
Labourer	32.80	9 January 1981

Source: Government Gazettes.

Table 2. Comparative food prices (as at the end of June 1980)*

	South Africa (Witwatersrand)	Great Britain (London)
Tea (250 g)	R1.19 (£0.67)	£0.38½ (R0.69)
Coffee (250 g)	R1.29 (£0.72)	£1.32 (R2.38)
Oats (1 kg)	R0.65 (£0.36)	£0.52 (R0.93)
Rice (2 kg)	R1.59 (£0.89)	£0.88 (R1.58)
Margarine (250 g)	R0.39 (£0.22)	£0.17½ (R0.26)
Potatoes (5 kg)	R1.45 (£0.81)	£1.54 (R2.77)
Minced meat (1 kg)	R1.78 (£0.99)	£1.50 (R2.70)
Bread, white loaf (900 g)	R0.31 (£0.17)	£0.31 (R0.56)
Sugar (1 kg)	R0.43 (£0.24)	£0.35 (R0.63)
Milk (1 litre)	R0.46 (£0.26)	£0.32 (R0.58)

Source: Reference *43*.
* R1 = £0.56; £1 = R1.80.

Table 3. Annual increase in food prices: selected countries

	1960-65	1965-70	1970-75	1975-76	1976-77	1977-78
South Africa	2.6	3.0	11.7	7.4	10.3	1.9
Japan	7.2	6.1	3.0	9.1	6.7	3.5
Tunisia	4.8	3.1	5.2	6.4	5.0	6.5
USA	1.4	4.0	9.5	3.1	6.3	7.3

Source: INTERNATIONAL LABOUR ORGANISATION. *Bulletin of labour statistics*. Geneva, 3rd quarter, 1979.

flooding the domestic market. There are reports that milk has been pumped into the sea, butter stockpiled and dried eggs added to stock feed in order to maintain prices (*43*). To maintain meat prices, Dr Jan Lombard of the Meat Board announced that beef production would be decreased by 15% in 1981. Prices were predicted to rise at least 20% over the same period (*45*). The increase in meat price is ostensibly to finance the safer production and marketing of meat. However, little or no disease in South Africa can be ascribed to eating infected meat. The meat regulations seem in this context to relate more to the requirements of the export market, the meat monopolies and the railways and abattoirs than to the health of the people (*46*). Fresh milk consumption per head decreased from 65 kilograms in 1960-61 to 39 kilograms in 1978-79, evidence of the dramatic increases in prices and the worsening material conditions of the majority of the population.

It is interesting to note that the food weapon is now directed outside the country's borders. Dr Joor de Loop, Director General of Finance, spoke warmly at the Agricultural Preview Conference in Pretoria in January 1981 of the opportunities for South African food. He reported that South Africa currently exports goods worth more than R1000 million to other countries of Africa and said that this was a "golden opportunity for South Africa to expand its export trade in agricultural products". He went on to say that political objections were crumbling and this presented opportunities for South Africa to build bridges (*47*). It is ironic that trade with those countries which openly condemn the policies and practices of apartheid should be seen by the South African administration as a way of perpetuating apartheid.

Ignorance—malnutrition and education

Another widely held belief about malnutrition in South Africa is that it is the product of "ignorance", particularly in relation to the nutritional value of different foodstuffs. Yet in the last decade or so research in nutrition has disproved a number of previously held views about such issues as the "protein gap" (*48-50*). To see the problem as a protein shortage is to place a mistaken emphasis on protein, since people with an adequate energy intake generally do not suffer from protein deficiency. It is also a mistake to see malnutrition as

caused by the choice of "traditional" foodstuffs over the more protein-rich and expensive Western diet. Maize, the staple food of Africans in South Africa, provides plenty of energy and contains on its own almost sufficient protein. It needs only modest supplements of animal or pulse protein to provide an adequate diet. A study of some 3000 children in the Transvaal demonstrated that differences in diet between children with kwashiorkor and those without were quantitative not qualitative (*51*). Little credibility can be given either to the argument that certain taboos, such as those against children and unmarried women eating eggs, cause malnutrition. In so far as these taboos are still observed they generally exist within an integrated indigenous way of life supported as yet by adequate food production and dietary habits.

A further misconception is that the adding of non-conventional foods, such as amino acid fortification, to the diet prevents and repairs nutritional deficiencies. Careful biochemical studies show that this is not the case (*50*). Malnutrition is above all a question of poverty, the result of the maldistribution of wealth and the maldistribution of available food. The problem is one of access either to food production directly, or to a sufficient cash income to buy food. Tables 1 and 2 provide some idea of what can be bought with the wages of those who find employment in the urban areas. For those who work on white-owned farms the wages are considerably lower, supplemented often with a dose of cheap wine, in those areas which still practise the "tot" system, or with food and clothing provided at a reduced price. Under apartheid blacks have been deprived of both land and an adequate income, and will continue to be so deprived even if some of the more obvious symbols of apartheid are removed.

Lack of education itself does not cause malnutrition. In the rural areas the educational status of mothers was found to be approximately the same among families of the severely malnourished, the underweight and the well-nourished. The same proportion was illiterate and the same proportion had primary and secondary education in each group (*52*). This suggests that in the Bantustans, where families are severely disrupted, poverty is intense and employment possibilities are few, education is barely relevant in the fight for survival. In the urban areas, however, the relationship between education and malnutrition is somewhat more complex. In Soweto, for example, a definite correlation has been found between severe malnutrition and lack of education (*53*). Here what appears to be critical is the access to employment which a superior education affords, rather than any direct relation between education and diet. This is particularly important in view of the gross disproportion in State expenditure on black and white schooling. In 1974, half of all blacks over the age of 15 had no schooling, compared with less than 1% of whites of the same age (*54*). In 1975 the total State expenditure on African education was less than half the *increase* in defence spending. Seventeen times more is spent

on education of white than black children in the urban areas (*55*). African children in the rural areas fare considerably worse than this.

The Production of Malnutrition

The development of the goldmining industry, with its insatiable demand for cheap labour, together with the development of white capitalist agriculture earlier in this century, led to the existing system of migrant labour. This is founded on the increasingly impoverished and overcrowded rural reserves, the existence of which is framed constitutionally. For much of this century Africans have been progressively removed from access to the means of production (land and cattle). This process has been accelerated over the last two decades with the removal of around 3 million Africans from areas designated "white" under a variety of apartheid laws and policies. African agriculture has been unable to sustain this increase in population and this has led to a transition from subsistence agriculture to dependence on wages from migrant labour. Whereas in the last years of the 19th century and the early years of this century African farmers were producing grain for the market, today African agriculture is characterized by overpopulation and low productivity.

The causes for this are manifold. First, 70% of the population has been crowded into less than 13% of the land. Secondly, the South African State has intervened repeatedly to protect and develop white agriculture at the expense of black agriculture. As early as 1912, a Land Bank and agricultural cooperatives were established to extend credit and support to white farmers. State export subsidies to whites encouraged the production of exportable goods and State grants provided capital to intensify production through mechanization, fertilizers and irrigation. The lack of capital among black farmers meant that they could not intensify agriculture to keep up with increasing demand for food or competition with white-owned agriculture. State subsidies in an average year in the last decade amounted to R203 million for white agriculture compared with R35 million for agriculture in the Bantustans, indicating that this one-sided support remains in operation. Lack of access to marketing channels for blacks, marketing measures to safeguard the sale of produce from white-owned farms, and selective taxation which discriminates against blacks, as in the case of tobacco production, soon eliminated competition from cash-croppers and consolidated a white monopoly in agriculture. Thirdly, along with this progressive undermining of black agriculture, the development of the migrant labour system drained off most able-bodied men to the towns so that production in the Bantustans declined still further. A vicious circle of decreasing production, increasing impoverishment and migrant labour was thus established. This had a profoundly disruptive effect on the family structure which, with the destruction of kinship support systems, contributed further to the cycle of poverty in the Bantustans.

Even in the Transkei, the most developed Bantustan, agriculture only contributes 20% of income, the remainder coming from the earnings of migrant labour (*56*). Some 40-50% of the annual cash income is spent on food, most of which is bought from white farmers, who have a virtual monopoly over food production. Apart from a small handful of Africans who have managed to monopolize wool production in the Bantustans, all significant crop production in the area under their nominal jurisdiction is now undertaken by the Bantustan governments (tea and timber in the case of the Transkei). While this undoubtedly makes increasing contributions to government revenue, it is of scant benefit to those who work on the plantations and who are paid at rates similar to those on white-owned farms.

The introduction of sheep into the economy of the Bantustans has important implications for nutrition, as was recognized when sheep-farming was first mooted as a plan for "developing the reserve economy" in the 1930s. Although cattle are not usually consumed, their milk provides a valuable source of nutrition. The recent reintroduction of sheep-rearing in the Bantustans (there are now as many sheep as cattle in the Transkei) has been concentrated in the hands of a few farmers, who have moved them into already overstocked pastures. Their wool has provided a valuable source of cash income for the élite, but sheep do not meet the need for food of the majority of the people. Several observers have commented on the decreased availability of milk in the Bantustans (*57, 58*). Very few people in the Bantustans eat meat more than once a month and most eat meat only once every 2-3 months. Eggs are seldom eaten since it is more economical to raise chickens for sale (*57, 58*).

Undernutrition does not affect the Bantustan populations uniformly. Despite their overall role as labour reserves, the population in the Bantustans can be clearly stratified into three major groups. The vast majority are perpetually undernourished, since families do not have enough employable adults to provide an adequate cash income. Most of this group have little or no land and seek work on the land of others in exchange for payment in kind. The second group, who usually have access to small parcels of land, are constantly battling to stay above the undernutrition threshold. Their welfare depends to a large extent on the wages sent back from the urban areas by migrants. Lastly, there is a small powerful élite which has been fostered by successive administrations. It is this group which makes up much of the bureaucratic apparatus in the "new independent homelands". Not only are they usually in receipt of emoluments from the State, they are also wealthy stock-owners and frequently have power over the allocation of land and other resources.

It is above all the women and children in the Bantustans and relocation camps who bear the brunt of South Africa's policies and whose access to health care facilities is most disadvantaged. For this reason, too, they are the group about which we tend to know least.

Malnutrition and family relations

As mentioned above, migrant labour earnings account for between 70% and 80% of household income in the Bantustans and only those who can send out adult wage-earners can survive. This system both breaks up the family and ensures continued low wages in the urban areas. Initially, low wages were justified by employers on the grounds that they were supplemented by the subsistence production of women in the reserves. This is clearly not true since the Bantustans are heavily overpopulated in relation to food production. The large number of workers thus available sustains the low wages in the urban areas and on the white-owned farms. Moreover, the constant absence of the majority of able-bodied adult males from the countryside has further decreased the already lowered production in the Bantustans. Their enforced bachelordom in the towns has led to a very high illegitimacy rate in both town and countryside.

A recent study in the Ciskei emphasizes how this disruption of family relationships promotes malnutrition and puts thousands of children at risk. In both urban and rural groups studied, 60% of malnourished children were illegitimate, whereas 80% of well-nourished children were legitimate. Less than half of the malnourished children were looked after by their mothers, and in only 14% of these cases in the rural areas and 36% in the urban areas did the father contribute to the support of the malnourished child. It is a popular misconception that in cases of illegitimacy and in the absence of father or mother or both, the "traditional extended family" will automatically provide for the care of the child. As one observer pointed out:

> "The fabled extended family now usually consists of one old woman in a hut on a hill, too decrepit to work, who is forced to carry on the backbreaking struggle of caring for small children. If granny sickens or dies the children must go to even more unsuitable relatives" (*59*).

In the Ciskei, at least a quarter of the children who were malnourished had guardians who were senile, mentally defective or guilty of child abuse (*59*). In fact over the past century the extended family in the Bantustans has been increasingly replaced by the nuclear household—father, mother and children. Yet with the absence of adult men even this nuclear family is a myth rather than a reality for the majority of Africans in South Africa, with particularly dire consequences for the young.

The "tot" system

On most white-owned farms a part of the wage is paid in kind as goods and services. Thus workers are dependent on their employers for food and have little available cash. Consequently they have little mobility to seek alternative employment, even if this were possible under the pass laws. The "tot" system is a variety of payment in kind whereby cheap wine is given in lieu of wages. Amounts vary from place to place, but may be as much as 2-3 bottles per

worker per day (*60*). This system is still very much in evidence today and naturally undermines the nutrition, the morale and the family life of the workers.

Disease and poverty

The extremely low wages which the vast majority of blacks receive in the towns and on white-owned farms and mines keep them in perpetual poverty, constantly on the borderline of hunger. As mentioned earlier (page 144), a Poverty Datum Line has been calculated, but most blacks have to live below the level of this artificial construction, which reflects the difference in income and standard of living between black and white South Africans. Whites could not conceive of their basic needs being met at the level of the Poverty Datum Line, which thus serves to institutionalize the disparities between the various social strata. Even so, the fact that the wages of most blacks are below this level is a useful indicator of the probable extent of undernutrition.

In 1952 the Tomlinson Commission estimated that the average income in cash and kind needed by rural Africans was about R194 a year, or about R16 a month. Despite the dramatic inflation of food prices since then (see Table 3) many families do not reach even that level now. In the above-mentioned study in the Ciskei, only 2% of households with malnourished children had an income above R10 a month, and in the urban area of East London 90% of households with malnourished children had an income of less than R20 a month (*52*). The average income of a sample of 150 families in the Nqutu area of KwaZulu was around R15 a month in 1975 (*61*), of which two-thirds came from the earnings of absent migrants. In 1978 another study from the same area indicated an increase in income to about R23 a month (*25*). Despite this increase many families remain abysmally poor. The questioning of a consecutive series of 200 Zulu attenders at a prenatal clinic revealed an income of R2 per family member per month (*62*). More than 75% of rural households still have an income below a Poverty Datum Line adjusted to take account of rural conditions. In the Transkei 67% of families have an income below that necessary for even a "typical" diet calculated at local store prices. The food alone would cost the "average Bantustan family" (of 0.5 men, 1.5 women and 3 children) R41 a month. An alternative *umngqushe* (basic) diet of maize and beans would cost around R17 a month. At the time these figures were calculated even this sum was more than a labourer in the mines could send home each month. Since then, mine wages have increased but fewer people are being employed. While more food may be available to the families of those with increased wages, for the majority this is not so.

Benefits of the economic boom experienced in South Africa in the last decade are unevenly distributed. Of the 41 companies declaring their profits in the last 2 weeks of February 1981, only 3 showed profit increases of less

than 20%. Most increased their profits by between 21% and 150%, and some by over 300%. At the same time a recent investigation showed that between July 1978 and December 1980, wages in Soweto increased by less than 20%. But in the same period the prices of goods bought by Soweto residents rose by almost 40%. In 1980 alone meat went up in price by 54%, vegetables by 35% and milk by 26%. The "economic boom" thus produced a fall in workers' living standards of around 20%. Growing unemployment (currently around 2 million) means that the burden of poverty on black families is increased (*60*).

Another study in Soweto revealed the proportion of the community which has to subsist below the Poverty Datum Line. In more than 60% of Soweto families the wages of both mother and father are not enough to reach the stated level. The same situation obtains for a third of the families, even when all the wages of the members of the household are combined—and child labour is common (*53*). In Western Township, also near Johannesburg, the average income of coloured families is nearly three times that of Africans, and whites are several times better off than coloureds (*63*). By and large, urban blacks suffer less malnutrition than their rural counterparts, simply because the chances of employment are better in the urban areas, whether this is in the formal or the informal sector (petty trading, beer brewing, small-scale services). Family incomes are much higher in the towns and this largely accounts for the flow of people even to the very insecure and squalid squatter camps on the outskirts of the cities. In Crossroads, which is little more than a shanty town made from bits of wood and corrugated iron near Cape Town, family incomes average R86 a month compared with R23 in the rural area of Nqutu (*64*).

Notwithstanding the difference in the cost of living between town and countryside and the fact that R86 was still below the Poverty Datum Line at the time of the study, major urban/rural differences are shown up by the proportion of malnourished children in each community. As crudely measured by the "Shakir Strip" (which estimates upper-arm circumference) 2% of children in Crossroads and over 7% of children in rural Nqutu were severely malnourished (*64*).

Similar methods of measurement in other rural areas showed that 12% of children in Tsolo in the Transkei and 14% in Muldersdrift in the Transvaal were similarly afflicted. Another study in the Transvaal showed that 66% of rural black children were moderately underweight (a further 7% were suffering from protein-energy malnutrition) compared with 21% of urban black children and 6% of white children. As striking was the finding that 18% of white children were overweight, some to the point of obesity, compared with 7% of black children in town and 0.4% of black children in the countryside (*51*).

These discrepancies in nutritional status are particularly significant, since it is central to the South African Government's policy to remove blacks from the towns. The vast majority of Africans face a constant struggle with the authorities in order to establish their rights to live and work in the towns where they and their families have the greatest chance of survival.

Mass removals

The organized relocation, with or without the consent of those concerned, of over 2 million blacks from white-designated towns and rural areas is a main factor in the production of malnutrition in South Africa. A long succession of legislation has facilitated this—the Squatters Act of 1895, the Land Settlement Act of 1912, the 1913 Land Bills, the 1936 Native Trust and Land Act are some of the early milestones. Under the present Bantustan policies the removals continue unabated. "Black spot" (pockets of blacks living in an otherwise white-designated rural area) removals, squatter removals and the removal of labour tenants from white farms share a common feature. The people are removed from the production in which they are engaged—in the past, mostly food production. They are moved to townships and relocation villages in which they have no access to land and employment possibilities are minimal or nonexistent. Faced with the threat of starvation (tents and rations are usually provided for the first 6 months) the men have to leave their families to seek work as migrant labour.

The method of removal is usually itself disruptive and without concern for the people involved. A recent illuminating example comes from Ladysmith in Natal in January 1981, where hundreds of homes were demolished by South African police and municipal bulldozers while the residents were out at work. In an interview to justify the demolitions, the Town Clerk is reported as saying "I am only involved in the removal of illegal structures and health hazards ... the people do not come under my jurisdiction". The demolitions were apparently to make way for expansion of industry in the area (*65*).

The 1980 KwaZulu drought

Any country can be struck by the vagaries of weather, but the ability to deal with natural disasters such as drought can be indicative of the extent to which the government is concerned with the well-being of the people. In mid-1980 the Bantustan of KwaZulu was struck by the most severe drought in living memory. The sugar-cane crops died off for the first time in Natal's history and over half of KwaZulu's cropland yielded no food. Malnutrition was estimated to affect some 3 million people and there was a reported increase in nutrition-related diseases. About 100 000 livestock and an unknown number of people died during the drought (*66*).

Water-tankers delivering water to the stricken areas were returning half full because of a lack of storage containers (*67*). The entire episode proved something of a windfall for white farmers in the Greytown and Winterton areas, who moved into the stricken areas to purchase cattle for about 10% of their pre-drought value (*68*).

The Management of Malnutrition

Malnutrition and the infections which invariably accompany it dominate the disease pattern among those in South Africa who are classified black. Among those classified white they are not a substantial problem. These diseases are therefore very much a part and the result of social relations in South Africa. The health care apparatus, which is supposed to cope with health problems, reflects and reinforces the monopolization of economic resources by a minority. The "new offensive" in health care in the country has come and gone, leaving the situation substantively unchanged. The major drive behind health care with regard to malnutrition is to alleviate some manifestations of poverty while leaving unchanged the structures that produce it.

Medical treatment does little against malnutrition in a population. Some of the specific deficiency states, such as beriberi, respond to thiamine. Dehydrated babies might die sooner if not given intravenous fluids. But these methods generally reach only the small percentage of people who live around a hospital. For the most part the rural areas remain unaffected by the international standards of medicine practised in the prestigious hospitals in the cities. Even the hundred or so hospitals and several hundred clinics which exist in the Bantustans do little to change the picture. As one South African worker explained, "Without food or money, no medicine or medical services will help us. We cannot eat medicine. It is taken before and after meals, but without work we are without meals" (*43*). The inspired efforts of various mission hospitals, the nutrition rehabilitation units, or *kwash kraals,* in which the mother is educated while caring for her malnourished child, hardly begin to deal with the problem. Various liberal and church organizations such as "Kupugani", "Valley Trust" and "Helwel" direct their energies to the distribution of cheap, nutritious foods, agricultural training projects, and efforts to raise the basic level of education. Many of these projects are admirable but the limited scale of their activity compared with the momentum of apartheid means that for every one case of malnutrition dealt with, thousands more are produced.

The State Health Department is supposed to provide subsidized skimmed milk for those who are diagnosed as malnourished. This service is not provided in the Bantustans, where people are most in need. In addition, there is no evidence that these feeding schemes do anything to improve the health

status of malnourished children. Rations are distributed for a certain period in relocation camps. These contain a calculated amount of the "appropriate nutritional elements in quantities sufficient for minimum daily requirements". These measures, too, have achieved little improvement in nutrition statistics and still less in conditions of life.

As long ago as the 1960s, it was clear that the problem of malnutrition is primarily one of inadequate energy intake. The "easy" solution of protein supplementation or the development of more nutritious cereals has been shown to be at best partial and in part illusory, with the exception of some atypical local dietary situations. Food aid and grants cannot replace, and in some cases may hinder, domestic production. Even increases in domestic production will not solve the problem of those who do not have access to it. In South Africa resources are concentrated in the hands of a small group and it is they who benefit from any increase in production. High-yielding varieties of grain, irrigation and mechanization have not meant that more food is available, only more exports and higher profits. This is because the technology which achieves the increased production is owned by those in whose hands the resources of the country are already concentrated. A combine-harvester replacing labour on lands which were formerly owned, then rented, and then laboured on by ten families hardly has the same effect as a combine-harvester owned and used by the families themselves.

People have lost the simple faith of the 1950s and 1960s that all that was needed was economic growth, which would "trickle down" and solve the problems of hunger and poverty. For whites in South Africa the economic boom of the past few decades has meant a standard of living and health on par with that of most European countries. Blacks do not share in this well-being and, for most, hunger and poverty determine the way of life. Their progressive separation from the land has put blacks in the position where for their subsistence they depend on wages received for labour in white-owned agriculture, mining and industry.

Efforts to manage malnutrition in South Africa are concerned with merely the tip of the iceberg. They attempt to deal with malnutrition syndromes, deficiency states, associated infections or even less conventionally associated factors such as education, or the production and distribution of food. But the sum total of malnutrition has not been affected. Its underlying cause is the search for subsistence, which is the lot of blacks in the South African economy. Apartheid has played a central role in that it legalizes the separation of blacks from the production of adequate food and controls their entry into the economy even as units of labour. For as long as this separation from production exists, the malnutrition problem will not be solved.

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CHAPTER 5

THE IMPACT OF APARTHEID ON PSYCHOSOCIAL DEVELOPMENT

Apartheid is a major source of physical and mental ill health because of the stress and tension it generates in the daily lives of millions of people; the destruction of social support systems such as the family and the community through mass uprooting; and the pervasive insecurity, harassment and violence which characterize the psychosocial environment. The argument that industrialization and urbanization are the principal factors responsible for this is false—the stressfulness of the environment with all its adverse effects on health is generated by design and guaranteed by legislation, and represents a structural feature of apartheid.

The system of enforced migrant labour, police control and repression aims to dehumanize every aspect of life for the black majority, and to perpetuate its sense of powerlessness. The effects of this can be seen in the high rates of violent crime, alcoholism and drug abuse, and suicide.

Yet the apartheid system has not succeeded in its goals. Over the years black South Africans have developed both individual and group strategies to retain their dignity and group identity in the face of poverty and exploitation. New attitudes and a new consciousness are emerging which look beyond day-to-day coping. These point to a future when the apartheid-created obstacles to a healthy and socially productive life for all the people of South Africa will be irrevocably eliminated.

Introduction

The previous chapters have summarized the way apartheid actually creates physical illness for the majority of South Africa's population, and the inherent inadequacy of the health services, themselves structured in a discriminatory fashion. No less important and crippling in a more insidious way are the effects of racist ideology and practices on psychosocial development and mental health.

In 1976 the world was presented with pictures from Soweto and the other black townships of South Africa of policemen shooting down black schoolchildren armed only with sticks and stones. The violence was the most start-

ling ever publicized about South Africa since the shootings at Sharpeville 16 years before and came in sharp contrast to the incessant propaganda that the country represented an island of stability in an unstable and uncertain world. The massacre served as a reminder of the violence at the heart of South African society, a daily reality for the vast mass of South Africans and an intrinsic part of the operation of apartheid. Despite the pretensions of change, this violence remains endemic and immediate. It is as pervasive as the imperious attitude adopted by whites towards blacks, and as quantifiable as the statistics pertaining to the millions of people uprooted from their families and homes, pass law arrests, floggings and hangings, prostitution, addiction, suicide and homicide. This violence to individuals and communities has a profound effect on psychosocial development and mental health in South Africa.

Mental Health Research

One of the more revealing features of scientific research in the Republic of South Africa is the almost total absence of any examination of the psychosocial implications of the apartheid system. Social and psychological research in South Africa is channelled mainly into two kinds of study: investigations of "race attitudes" in samples of different population groups (mostly students), and studies on "within-group" differences in aptitudes, cognitive functions and other aspects related to job performance and selection in industry. In recent years, research on the attitudes of Africans to contraception has been added which reflects concern and anxiety about their allegedly high birth rate. Even where such research does not serve manipulative purposes, by and large it fails to deal with the real problems of living under apartheid.

This lack of research is hardly surprising, since psychosocial research and critical introspection can be threatening in a situation where the economic and political roots of social injustice have been covered up for so long with racial myths. This negative attitude to critical research has been expressed with clarity by Dr Robbertse, President of SIRSA (the Afrikaans-speaking Psychological Institute) when he warned in 1967 that "... the lecturers of psychology in our Afrikaans universities have been ensnared in the net of the doctrine of racial equality and ... are busy poisoning the minds of our students with it."

In the full report of his address (*1*), not included in the English summary released to the press, he went on to stress the need to study racial differences "in intelligence, temperament, physiology, brain structure, rates of maturity". He encouraged members of the Psychological Institute of South Africa "to undertake research in this field on a greater scale because it concerns the scientific basis of separate development and strikes at the roots of our continued existence". In contrast, there has apparently been no attempt to inves-

tigate the psychological effects of the enforced break-up of families under the migrant labour system, the mass uprooting of some 3-4 million people, the harassment and institutionalized violence which are part of the psychosocial climate of apartheid. In the words of the novelist and poet, A. Brink, this is "a mentality which must deny the humanity of another person in order to survive oneself; once another person's humanity is denied, he can be destroyed, because he is no longer a *person*" (*2*).

There are few systematic studies on the psychosocial effects of the apartheid system and this is often used as an excuse to bury the issue or to contend, with seeming scientific detachment, that a verdict of not proven is the best judgement feasible under the circumstances. However, the evidence of the destructive effects of apartheid on the psychosocial development and mental health of those forced to live under it is overwhelming, even if based on analogy and inference. It can be gleaned from official statistics and fragments found in scientific publications. Works of literature and art, and press reports provide an insight into the experiential reality of apartheid. In addition, there is evidence which can be considered as an indicator of the psychosocial environment within the health care system itself. This includes the attitude to and treatment of the mentally ill. Neglect of the mentally ill is associated with a general lack of concern with the mind and with the human being.

Apartheid and Mental Ill Health

Apologists of the racial ideology and practices prevailing in South Africa frequently question the validity of any analysis pointing to apartheid as the principal source of physical and mental ill health. Rather, they see it as the inevitable consequence of industrialization and urbanization in a multiethnic society. Moreover, the same argument continues, although differences in health status exist between the white minority and the black majority, they are diminishing and the health care provided for blacks is superior to the health care available to the population in other African countries.

Industrialization and urbanization can be a source of stress and have adverse effects on health and psychosocial well-being. These have been studied and extensively documented. Economic, political and social systems can either exacerbate or buffer these effects. In the case of South Africa, the destructive psychosocial stresses are not mere accidents or the unavoidable side-effects of socioeconomic processes which have escaped rational control and planning. They are generated by design, guaranteed by legislation and represent a structural characteristic of apartheid.

Technologically, some facilities available to black patients in South Africa may be better than those in certain developing countries in Africa. The comparison is irrelevant, however, since South Africa is and has long been

one of the wealthiest countries in the continent. Many African countries have laid the foundations of their health systems on an entirely different philosophy of health care based on social justice.

There is no evidence that the differences in health status between whites and the oppressed groups in South Africa are diminishing. Indeed, the evidence points in the opposite direction and some of this has been reviewed in the preceding chapters. What remains to be summarized is the extent to which apartheid shapes the psychosocial environment in order to perpetuate a system of social injustice and exploitation.

Coping Mechanisms and Social Support Systems

Throughout history mankind has demonstrated a remarkable capacity to withstand the extremes of physical and psychosocial stress. Even in the destructive conditions of the American plantations, uprooted slaves were able to "struggle to survive spiritually as well as physically, to make a livable world for themselves and their children within the narrowest living space and the harshest adversity" (*3*).

While apartheid undoubtedly causes vast and unnecessary human misery, it would be misleading to see black South Africans as simply helpless and hapless victims. Over the years, blacks have developed both individual and group strategies to enable them to retain their sense of individual dignity and group identity in the face of poverty and exploitation, constant insecurity, harassment and humiliation.

They have resisted subordination through political organization, workers' action, the uprisings of schoolchildren and the armed struggle of the liberation movements. In both town and countryside, people turn to family, friends and church to sustain themselves in times of trouble. In addition, mutual aid societies have been created to cope with the financial aspects of poverty and crises of unemployment and death. These include burial societies and various forms of savings associations such as the *stokfels* noted in the slumyards of Johannesburg by E. Hellman as early as in the 1930s, which still exist as rotating credit associations in which members (usually women) pool a portion of their earnings and then take turns in "scooping the pool". In addition there are the vividly named urban societies to which members make regular financial contributions to help to tide fellow-members over a calamity. These include the *mashambane* (hold hands society) and the *mabidisho* (river in flood society) (*4-6*). For large numbers of people the independent churches provide a sense of belonging, a source of comfort and a means of surviving in a hostile world.

There are other, more individual, ways in which Africans deny their inferior and subjugated status. Many deliberately refuse to accept white norms

and values, as in the case of the so-called "reds" of the eastern Cape (named after the red clay with which they decorate themselves) or in the recent adoption of tribal dress. Others find alternative strategies to "beat the system", ranging from deliberate clumsiness and loafing at the workplace to the private mockery in the seclusion of the black community of the white man's idiosyncrasies. All these reactions and social organizations can be seen "as forms of resistance, defensive and offensive strategies" for a hard-pressed people (*4*). In the countryside they frequently give the appearance of "traditionalism"—a misleading epithet for social forms which may be created out of older cultural traditions but draw on past experience to confront and cope with new problems.

The Destruction of the Family

In practically every human society the family is the basic unit. Its economic functions may vary but its role as a socializing agency and as one of the most important social support systems available to the individual is almost universal. One of the main casualties of the apartheid system has been the African family, in all its aspects.

The impact of the migrant labour system, influx control and resettlement on physical well-being has been examined in other chapters. The psychosocial stresses have been no less profound. A detailed recent assessment of the effects of migrant labour on the rural periphery of South Africa has pointed out that "virtually every adult male in the Bantustans is faced with the contradiction that his absence is a condition of his family's survival. But his absence also undermines the conjugal stability from which his family derives its identity" (*7*).

By the 1940s there was already a volume of well-developed anthropological literature drawing attention to the consequences of migrant labour for family life (*8-10*). Postponed and broken marriages and the distorted sex ratios were even then leading to high rates of illegitimacy. The lengthy absence of husbands and fathers created problems in the socialization of children, as well as high rates of marital breakdown, desertion and widowhood in the periphery. The preferential access to higher paid jobs for the younger men led to a breakdown in the authority of the elderly. If anything the situation has deteriorated since then.

In the absence of men, women take care of the day-to-day management of the household, but they have very little control over the necessary resources. With their almost total dependence on the erratically remitted earnings of an absent husband or son, they suffer constant anxiety and insecurity. There is frequently a disjuncture between the economic power and overall authority which the absent husband expects to exert and the daily demands and re-

sponsibility for rearing the family which the women have to carry alone. The wife of a black migrant in Cape Town put it graphically in an interview in 1978 (*11*):

> "Marriage is not worthwhile for us black women. It traps us. Men are having it all right in town with their girl friends and the money, while we must keep home on empty pockets and empty promises. We feel deserted. We feel lonely in this desolate place where so many of our husbands must leave to find work, and stay away all year, sometimes many years ... I do not hear from my husband for many months. The money has stopped coming, even when I cry for it, it does not come. My children are hungry. I am hungry. No food. No money..."

B.A. Pauw, talking of the "hysterical" spirit possession among Xhosa women, known as *amafufunyane,* asserts that nearly a third of the complaints leading to this condition are direct results of the insecure position of women. Also in the Transkei, about a fifth of the women participating in the prophet movement led by a Mrs Paul in the 1960s (which reached mass proportions) joined out of distress caused largely by domestic problems of which *ukutshipa,* or desertion by a husband, father, brother or son, was the typical example (*12*).

It is frequently asserted by government apologists that it is wrong to impose the norms of the Western nuclear family on African families, and that the migrant labour system is somehow in accord with the traditional norms of African family life. Nevertheless, "a system in which large numbers of men spend long periods at work leaving their women and children at home generates economic insecurity, marital disharmony, material and emotional misery and problems relating to sexual morality and legitimacy, irrespective of cultural definition of these matters" (*13*).

The problem of births out of wedlock is of concern not because of any normative judgements but because of the enormous disruptions and suffering which result. In traditional society, children were regarded as an asset, and room was found for the illegitimate child, either in the family of the mother's husband or, if *lobola* (bridewealth) had not been paid, in the mother's family. Recent studies show that families in the countryside are increasingly unable to cope with the burden. Children born out of wedlock are also often unwanted. The problems are particularly acute when an unmarried mother is forced to seek work away from home, leaving the child in the care of a foster parent, who is usually the grandmother.

Recent reports from the Nqutu district in KwaZulu suggest that as many as 90% of all first-born children are born out of wedlock. Many of them are the babies of 12- or 13-year-olds who, themselves born out of wedlock, seek an outlet for their own lack of affection, deprivation of maternal care, educational impoverishment and boredom through sexual experience. A general practitioner in the Ciskei talks of the "self-fertilising catastrophe of illegitimacy" (*14*). For these teenagers, as for their mothers before them, there has

been little parental modelling, little emotional satisfaction. Their own infants are now unwanted,

> "... and from the time they are conceived they are seen as a nuisance. They are dumped as soon as possible after birth in the hands of other relatives who may or may not have the resources or inclination to properly care for them. Such children grow up grossly deprived—deprived of affection and very often food. Nobody really cares for them, nobody notices them, nobody comforts them, they in fact bring themselves up. All the factors commonly accepted as decent social behaviour, attitudes and standards are specifically lacking in these children. Little wonder then that they grow up as if specifically trained to indecent behaviour..." (*15*).

In the absence of much research elsewhere, it is difficult to know how far the above observations are typical of the rural periphery as a whole. More impressionistic evidence from elsewhere suggests that while the Ciskei and Nqutu districts may have been particularly hard hit recently by resettlement and overcrowding, they are by no means unrepresentative of the social chaos and disorganization happening in other rural areas (*16-18*).

The existence of large numbers of children, many of them unwanted, is not dysfunctional to the South African economy. Although it is illegal in South Africa to employ any child under the age of 16, many of the homeless and parentless children are picked up in vans by white farmers during the harvesting season as a source of easily exploitable labour from the age of 6 or 7. Their wages may be no more than the defective fruit and vegetables the farmer cannot dispose of on the market. On the sugar plantations of Natal, youngsters of 13 or 14 were earning as little as 50 cents for a full day's work cutting cane in the late 1970s (*9*).

Rootless and alienated adolescents fuel gangs of juvenile delinquents in both town and countryside. Known as *tsotsis*, they vent their deprivation and frustrations on other blacks. The existence of large gangs of desocialized young people can have explosive consequences in a context in which there is already an intolerable shortage of land and overcrowding, and in which the State deliberately manipulates and fosters ethnic division. Thus in the Umsinga district of Natal over 260 lives were lost in the course of 1978 in so-called faction fights. It is no coincidence that this is an area which has seen the resettlement of some 15 000 people evicted from white farms over the past 10 years. Having been forced to get rid of their cattle, they are now settled on half-acre (about 200 m^2) sites in an area 6 miles long and half a mile wide (about 10 km × 1 km)—ostensibly temporarily but in fact indefinitely. The label "faction fight" becomes a convenient excuse to avoid further examination of the causes of the social strain these appalling mortality figures reveal (*20*).

Uprooting and Forced Relocation

The forced uprooting of millions of people and their relocation in rural areas have exacerbated the effects of migrant labour. However, very little

attention has been paid to the psychosocial repercussions. When the South African State uproots a community it generally does so in a bureaucratic and brutal fashion. The stories are legion of children returning home from school to find their dwellings destroyed by bulldozers and their parents removed by administrative orders. Whereas most commonly "uprooting" refers to a one-time episode, many Africans have been removed several times in a generation.

The effects of this can perhaps be gauged from a recent study at the University of the Witwatersrand of the vast rural slum called the Winterveld which has been created in Bophuthatswana. This is an area about 35 km from Pretoria, inside Bophuthatswana, which was originally held in freehold by African farmers. Today some half a million people live on the land of black landlords, in a state of hopelessness and despair. They have been moved there off white farms and mission stations, from African locations around Pretoria such as Lady Selborne, which have since been demolished, and from so-called blacks spots (African freehold farms elsewhere in white areas). The vast majority of people have lived there for 8 or 10 years, but with the current high rate of unemployment their status is increasingly being called into question, for the vast majority of Wintervelders are not Tswana. As in other areas of relocation, neither the Bophuthatswana "Government" nor the South African Government is willing to take any responsibility for the mass of people who have suddenly become "superfluous" to the white economy.

What the process has done to families in the Winterveld, and especially to the women, who bear the brunt of the process of sloughing off excess labour, has been graphically described:

> "The majority of Winterveld families are nuclear, although it is common to find grandparents ... living with the family. The constant resettlements which many of these people have experienced means that it is not often that relatives live near each other. It is possibly this feature which may explain the marked absence of any non-monetary redistributive economy in the area, for it is rare that women will say that they and their neighbours help each other with baby-sitting, washing, borrowing and lending of money. It would seem that on the Winterveld the fear and insecurity that characterize life, especially in view of the threats of eviction, have in many instances led to the creation of a 'cut-throat' mentality. Women do not trust, speak to or help neighbours—'friends destroy marriages' is a typical response to questions related to the nature of interaction. What this situation in fact means is that the isolation that defines the life of housewives in many Western countries is, in a situation such as this, total ..." (*21*).

Partly as a result of the political pressures building up in the Winterveld, many of these people are moving again. For some it will be their fourth move in a generation (*22, 23*). In the light of this, the term "uprooting" as used in recent psychosocial literature (*24*) is difficult to apply to a large proportion of forcibly relocated Africans. Many of them have never had the primary experience of "rootedness". According to a South African anthropologist:

> "It is this prevailing insecurity and powerlessness, in the face of an authority equipped with overwhelming force, exercising detailed control and surveillance and operating largely as a law unto itself, that makes the lot of Africans under apartheid so like that of inmates of a 'total

institution'. Perhaps the most apt comparison is not so much with a mental hospital or even a prison, but with a concentration camp, for such an institution not uncommonly has the function of providing labour as well as facilitating control (*25*).

Life in the Mine Compounds and Hostels

Disastrous as have been the consequences for the women and children left behind in the Bantustans and resettlement camps, the migrant labour system has also been destructive for the male migrants themselves. Again, documented evidence is sparse, but a sociological report commissioned by the Anglo-American Corporation in 1975 in an effort to find out the causes of a recent eruption of violence in its compounds provides a rare insight into the processes involved in the induction of new recruits into the mines. The report was based on the participant observation of 4 black field workers who spent 10 weeks in the compound and was directed by the South African sociologist, Professor Dunbar Moodie. It describes the typical experiences of a migrant from Lesotho, but it could be from any part of the rural periphery:

"Already in the NRC (Native Recruiting Corporation) hostel (en route to the mines) the attitudes of the men with him have begun to alter. 'The wildness and uneasiness of the migrants begin just here'. Like soldiers en route to battle they seem both exultant and fearful. Their language becomes coarser and more boisterous. They shout lewd invitations to women walking along the railway line and regale one another with horrific accounts of the cruelty of the white man and work underground. They chant in song form about how they left their children starving in miserable conditions, about going in a cage like rats underground—in Lesotho, they sing, they are like monkeys, free. As they cross to the flat land (the highveld of the Orange Free State) they become mere men; underground they will become as rats, harried and trapped ... They sing of the mountains (of Lesotho) with a fatalistic certainty that they will never see them again" (*26*).

On arrival at the mine town, they are taken to the recruiting centre:

"where they have to strip naked and run in droves. They are kicked and pushed to the doctor, after washing in bitter cold water. After the examination they are sent to be X-rayed, then on to the finger-printing. They wait until their name is called out by a police-boy, their escort to a particular mine" (*27*).

The acclimatization procedures were deeply resented by the migrants, and much of the treatment is deliberately humiliating, a way of initiating the miners into a subculture which is deprived of any values about human dignity (*28*). While it is possible that men no longer have to stand naked in the mines of this particular group, the debasing procedures are far from accidental. As has been remarked of the compound system in Rhodesia before 1930, what employers wanted was "a system which aimed at total control of the worker both in and outside of his working hours". Although in practice they could never achieve total control, this nevertheless has remained an ideal both in mine management and, indeed, more generally in the control of the migrant labour force (*29*). Thus, although mine managers have had to come to terms with "the workers' insistence on and defence of a relatively independent social

life", it can be argued that the mining compounds share many of the features of total institutions such as prisons and concentration camps. According to Goffman:

> "Total institutions disrupt or defile precisely those actions which in civil society have the role of attesting to the actor and those in his presence that he has some command over his world—that he is a person with adult self-determination, autonomy and freedom of action" (*30*).

Their rules contribute to "the abasements, degradations, humiliations, and profanations of self... the whole process whereby the inmate's self is systematically mortified..." (*31*).

In the mining compounds life is minutely organized, though access to the outside world of the township is no longer as difficult as in the early years of the industry. Within the compound the workers are generally allocated rooms on a tribal basis in the interests of control. Although it is frequently maintained that this is merely a response to worker preference, the Moodie report unequivocally rejects this view. According to this report, miners believe that "ethnic housing exacerbates tensions and causes divisions to form and conflict to take place along tribal lines". It concludes that "ethnic conflict would all but disappear if a policy of integrating the hostels were carried out" (*32*). The conclusion is all the more noteworthy in that it followed in the wake of a serious outbreak of violence among miners, which expressed itself on tribal lines. The management strategy of "divide and rule" is proving somewhat volatile.

Harassment and Insecurity: the Life of Migrants in Towns

For mineworkers, notwithstanding the hazardous work, there are at least compensations in the relatively good housing and food now provided by the mining corporations and in the comradeship engendered by dangerous teamwork sucessfully accomplished (*33*). For many of the other male, and increasingly female, migrants to towns even these compensations are lacking. In addition to missing the warmth of family life and worrying over the financial security of those left at home, the migrants are forced to fend for themselves in a harsh and actively hostile white-dominated world. Observers talk of the women in the Bantustans as frequently apathetic and depressed, of men in the urban single-sex hostels and barrack-like flats as "listless numbed working machines" (*34*).

In a less structured way than in the mines, the urban worker is subjected to a myriad of laws and regulations designed to harass, humiliate and thereby control. Yet, as Goffman again points out, the "generalised authority directed to a multitude of items of conduct that occur and recur and constantly come up for judgement [leads to] chronic anxiety about breaking rules and the consequences of breaking them". As in total institutions, so in South African

townships, staying out of trouble "is likely to require persistent conscious effort" (*35*).

The pervasive insecurity of their lives and their apparent powerlessness in the face of a State equipped with overwhelming force which exercises detailed control and surveillance over them frame the destiny of Africans in South Africa, even outside the compounds. At every turn the individual has his view of himself as an independent agent undermined and thwarted. Manganyi goes so far as to say that this has resulted in "a generalised loss of drive and interest in society" (*36*). Indeed, he maintains that:

> "In the life of the (urban) African, there is hardly any situation ... in which his self-esteem is nourished. His wife and children may have been forced by conditions beyond his control to lose the modicum of respect which they may have for him as an effective, self-steering agent in his psychosocial environment ... his subjective experience is one of being emasculated..." (*37*).

Faced with these pressures, it is barely surprising that many migrants turn for solace to drugs and alcohol or to prostitutes and homosexuality; or that their frustrations spill over into antisocial activities and violence.

Urban Dwellers

Although not affected in the same way by the ravages of the migrant labour system, life for the more settled black urban communities is also characterized by the insecurity, violence and poverty associated with apartheid. Apologists for apartheid assert that the problems faced by blacks in towns are the inevitable consequences of the early phases of industrialization and urbanization. In fact South Africa has been experiencing industrialization for over 100 years, and whites no longer suffer these consequences. As has been shown, apartheid is the specific way in which this industrialization has taken place, ensuring that its costs are borne by the black population. Indeed, over time the burdens for the black communities have been increased rather than diminished. Apart from the strains of poverty and overcrowding, which South African blacks allegedly share with millions of others in the developing world, apartheid causes additional psychosocial stress and dislocation, even for those relatively privileged in the towns.

Police Violence and Social Violence

This apartheid-induced stress operates at a number of different levels. Even for urban blacks, State-instigated violence is a daily occurrence. The enforcement of the pass laws in particular (see Chapter 1) means that thousands of men and women are manhandled daily by the police. The African journalist, Joyce Sikakane, herself a third-generation urban dweller, describes some of the impact of a typical pass raid by the so-called blackjacks. These black-

attired police invade people's homes in the middle of the night in search of "illegal" townspeople and force people from bed in varying stages of undress and indignity. "We children were terrified by these raids" she writes. "We clung to the slippery torsos of our parents, screaming our lungs out with terror" (*38*).

The state of violence goes further. In 1978, for example, 153 adults and 10 juveniles were killed by policemen "in the execution of their duties", and 462 adults and 33 juveniles were wounded (*39*). According to Professor Barend van Niekerk of Natal University, in 1978 South Africa had the highest percentage of judicial executions in the world—47% of the world total (*40*).

The relations between white individuals and the blacks exacerbate the situation. In South Africa whites often take it upon themselves as a matter of course to reprimand blacks who are seen to contravene the norms of apartheid society. The people of the townships do not suffer only from the violence of whites. As in the countryside, apartheid society also manufactures antisocial and criminal behaviour in the towns. Sikakane talks of a "class of dehumanized being" which indiscriminately turns its anger against the black community itself, and robs, assaults, rapes and kills other blacks (*41*). In Soweto alone during the period 1 July 1978 to 30 June 1979, 648 cases of murder were reported, 1151 of rape, 430 of culpable homicide, 7532 of assault with intent to do grievous bodily harm and 3549 of robbery. In the Cape Peninsula the corresponding figures, except those for murder and culpable homicide, were even higher. In the case of Soweto, less than half of these reported cases, already an underestimate of the total number of criminal acts, were actually brought to trial (*42*). The annual figures for 1979 were approximately the same (*43*). Apartheid incites criminal behaviour by creating a range of trivial statutory offences which at an early age inure individuals to the penalties of the law, by destroying families and by depriving Africans of rights. Very often the police turn a blind eye to the violence perpetrated on the black community, although when it suits them they also connive at the formation of "tribal" vigilante groups, the so-called *maghotla.* These are ostensibly formed to combat crime in the absence of adequate state provision, but there are frequent allegations from the inhabitants of Soweto of floggings, assaults, interrogations and kangaroo courts being inflicted by these vigilante groups, which seek recognition from the State (*44*).

The high crime rate is again not dysfunctional to the apartheid State. It effectively divides black from black and deflects aggression from the whites, whose lives and property are the main concern of the police. For both black and white, however, the huge crime rate has a significant ideological function. It reinforces notions among whites of black savagery and their own civilized superiority, while reinforcing black ideas of powerlessness and inferiority. Domestic servants moving to the oasis of security in the white suburbs also

have these notions of black backwardness and white civilization visually and materially confirmed. Thus the high crime rate in the townships serves to legitimate and reinforce white rule. Nevertheless, it also has psychosocial costs for the whites, who have armed themselves with guns and huge guard dogs in the comfortable suburbs of Johannesburg, Cape Town and Durban.

The poetry, novels and short stories written by Africans frequently focus on this insecurity and violence, and even the essays written by black schoolchildren are dominated by episodes of violence and their fear of violence (*45*). Given that violence is a daily experience for millions of urban dwellers, this is hardly surprising. According to Sikakane: "It is very rare for any worker to board a bus, taxi or a train without having stumbled across a corpse lying in the street. It is agony for a family to see daybreak with one member not having slept at home" (*46*).

Drugs and Alcohol

For large numbers of the black population the only relief from the tensions and insecurities of life in the apartheid State are *dagga* (marijuana) and drink. Among both coloureds and Africans, alcoholism has reached serious proportions, and many black leaders see drink as one of the gravest social problems confronting their people. From the very beginnings of colonization the manipulation of alcohol has been a powerful weapon in the hands of the white farmer and industrialist. On the wine farms of the western Cape, the "tot" system, whereby labourers were paid in alcohol, played a major role in the proletarianization of the Cape Coloured people from the 17th century onwards. The opening up of the mines both in Kimberley and on the Witwatersrand also saw the deliberate use of alcohol to create a docile work-force (*29, 47*). Today, no township or mining compound is free from mine-run or municipal beerhall and liquor stores. According to Joyce Sikakane, the people of Soweto have:

> "easy access to the incredible number of liquor stores, beerhalls and bar lounges strategically built near the railway stations and main street intersections. These liquor dens tell the sordid story of an oppressed people lulled into oblivion. To add insult to their dehumanisation, the liquor profits ... are used by the Government to finance the development of the Bantustan wastelands" (*48*).

In the mining compounds also, the beerhall stands are a central feature and are filled with men as they come off shift, morning or evening. The mines have learnt to cope with the problems of drunkenness and the loss of productivity, partly through the provision of suitably doctored beer. The beerhall serves other purposes. In the early days it was a temptation to the miner to spend his hard-earned money before he went home, and thus lengthen his contract. Now it provides a drug for the addicted.

For a constantly humiliated and exploited work-force, alcohol may provide a temporary release, though at high cost. According to a group of workers on an Orange Free State goldmine:

> "As they were treated like animals on the mine they behaved like animals. The drinking and subsequent vomiting by miners over the weekend was quite appalling! The lavatories and corridors were an unbelievable mess and represented evidence of the miners behaving like animals" (*49*).

The extent of alcohol-related problems among the black population (especially in urban and industrial areas) has never been fully documented, but partial surveys indicate that it is very serious. Both Fialkov (*50*) and Gillis & Stone (*51*) found that the prognosis of alcoholism among Africans and coloureds was ominous. In a one-year follow-up study of 116 white and 86 black alcoholics admitted to the psychiatric emergency unit of the Groot Schuur Hospital, Cape Town, Fialkov demonstrated a high proportion of serious physical illness in blacks (including pellagra and tuberculosis, conditions not diagnosed in any white patient) and a high rate of psychotic disturbances, such as hallucinations, attributable to the toxic effects of alcohol. Following discharge from the emergency unit, the availability of outpatient aftercare was much better for white than for black patients. According to Fialkov: "Usually the patients in the white group were seen (at the outpatient clinic) either the same day or within 7-10 days of discharge, while the blacks were seen after a more extended period, sometimes up to three weeks after discharge from casualty."

Fialkov noted that an element that affects treatment adversely is the racial factor: "In this society, the therapist is often a middle-class white, while the patient may be black and of a lower social class. This situation creates difficulties within the therapeutic relationship..." (*50*). Gillis & Stone followed up for 6 years a sample of 500 coloured residents of a Cape Peninsula area and came to the conclusion that: "... excessive drinking among coloured men begins in early adult life, or even in adolescence" (*51*).

Neither study, however, examines the social roots of alcohol problems. Moreover, the nature and extent of alcohol problems among Africans have received almost no medical attention.

Like every aspect of life under the apartheid system, the sale of alcohol is also regulated by laws referring to race. The Liquor Act of 1977 establishes "special authorities for the sale of liquor to Bantu, coloured or Asians". The Bantu Laws Amendment Act No. 4 of 1976, which amended the Bantu Beer Act of 1962, decreed that "in addition to general dealers, employers of more than 25 Africans over the age of 18 years who operate outside the area of jurisdiction of any local authority and who are authorised by the Minister to do so, may sell and supply packaged Bantu Beer or beer powder, provided that the beer or powder is acquired from a local authority or the Bantu Investment Corporation or the Xhosa Development Corporation" (*52*). In practice, this

amounts to an almost direct encouragement of alcohol abuse. Some of the local authorities (governed by whites) in black townships derive a significant proportion of their income from sales of alcohol. Thus, in 1976-77, 20.75% of the income in the budget of the West Rand Administration Board (Chief Director, J.C. de Villiers) was derived from beer and liquor profits (*53*). It is not accidental that, during the Soweto uprising, students called on residents to stop drinking and requested more educational facilities instead of beerhalls.

The social control function of alcohol in this situation comes out no less clearly. For an impoverished people, alcohol aggravates all the other social problems and contributes to the violence and despair that characterize township life. In 1976 the schoolchildren of Soweto and Cape Town perceived accurately the centrality of this addiction in their and their parents' oppression. Among the first targets for arson were the State and municipal beerhalls and liquor stores (*54*).

Suicide

The psychosocial climate of apartheid creates an anomalous, stressful environment which breeds all kinds of social pathology. Over 7000 Africans die as a result of violent crime every year, and the daily average prison population per 100 000 was 476 for Africans (80 for whites) in 1969-70 (*55*).

A survey of suicide in Durban (*56*) indicated that while in the past Africans had a low suicide rate, in 1971 they had the highest incidence of suicide among all racial groups (17.5 per 100 000, compared to 17.3 for Indians, 17.1 for whites and 9.2 for coloureds). Perhaps a more important finding was that the majority of Africans committing suicide were young adults, while suicide among whites was found to be associated predominantly with advanced age. It should be noted that in 1948, when the protagonists of apartheid came to power, there was a sharp increase in the suicide rate; it rose from 8.8 in 1947 to 18.1 in 1948 for blacks, from 15.8 to 36.3 for coloureds, from 20.5 to 23.6 for Indians, and from 17.5 to 19.2 for whites (*57*). This may have been linked to the anticipated racial reclassification of the population.

Violent Repression, Violent Assertion

Yet the insecurity, violence and alienation bred by apartheid have had effects other than suicide and drug abuse. The apparently even keel of the South African social system has now begun to rock as new attitudes evolve and a new consciousness arises which looks beyond day-to-day coping. In his

famous court statement of 1964, Nelson Mandela outlined the emerging features of this new consciousness: "... Africans want a just share in the whole of South Africa; they want security and a stake in society. Above all, they want equal political rights, because without them our disabilities will be permanent" (*58*).

Increasingly there are signs that the morale of black youth has been raised by the political liberation of the black territories surrounding South Africa and that "in the 'black underworld' ... a whole revolution seethes" (*59*).

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CHAPTER 6

OCCUPATIONAL HEALTH AND DISEASE

The approach to occupational health in South Africa hinges on the view of blacks as units of labour. Legislation guarantees maximum exploitation through influx control, racial stratification of wage levels, protection of employment for whites and stratified compensation for occupational disability or death. Black migrant workers are subjected to many stresses from which whites are exempt: racial harassment, family disruption through the migrant labour system, untenured employment, barely subsistence wages, poor living and hazardous working conditions. The black work-force is literally decimated by accidents and infections, particularly tuberculosis. An increasing proportion of black workers—between 75% and 80% of black miners over the past decade—are either involved in accidents or suffer from disease which causes loss of work time. Also among miners, in 1979 around 8.5 blacks per 1000 contracted tuberculosis each year. Tuberculosis accounts for 50% of all black compensation cases and 2.5% of white. An emerging theme in occupational health in South Africa is the increasing intervention of the State in the interaction between employers and workers. The increasing organization, militancy and articulateness of black workers are the major reason for this.

Introduction

In every country there is an interaction between employers, the State and workers which is reflected in legislation, level of control over conditions of work, compensation practices and occupational health care. In many countries, including South Africa, there is inequality in this relationship between "participants". While demands are made of the "partnership" by all participants, in South Africa it is the interests of employers and managers (who in general are white) which prevail. These interests are portrayed as the national interest, as being good for the country. Despite this presentation of industrial profitability as national prosperity, the costs and benefits of the economy are very differently distributed. Most of the costs in terms of disease and disability fall to the workers, who in South Africa are black, and most of the benefits accrue to the employers and the whites who share their interests (*1*).

The State has an important role in that it guarantees continued production through providing a framework within which the production continues. This involves legislation, enforcement of legislation and sometimes the provision of welfare services. The State leans towards the dominant participant, the employers, since it relies on the economy for its continued survival. In addition to revenue income there are close economic links between the State sector and the private sector of production. Representatives of management are included in State research bodies, which are often funded directly or indirectly by the employers. The nature of legislation, too, leads to the conclusion that the State in South Africa enshrines the interests of the employers as the "national interest".

We are currently witnessing a situation in South Africa where employers and State are attempting to retain the initiative in the struggle with black workers through an increased State interest in their material conditions. This has taken the form of numerous commissions of inquiry, certain legislation and limited political concessions. The basic situation remains unchanged, however, with blacks bearing the brunt of the costs of production while the whites, in alliance with the employers and the State, reap the benefits of national wealth.

Some General Considerations

There are certain general considerations which frame any discussion of occupational health and disease notwithstanding the physical health benefits derived from health care. Occupational health care is usually provided either directly by those who control production or indirectly by the State. In South Africa occupational health care has an ideological function in that it conveys "a way of doing things"; it has an economic function in that it increases profit; and it has a political function in that it mitigates against workers' organization, both between races and within a particular group working in the same process. Occupational health is an area of struggle between management and workers and its orientation depends on the outcome of that struggle. In very few societies does occupational health come under the control of workers with whose lives it is concerned, even though it often develops directly from workers' struggles. For this reason it does not function primarily in the interest of the workers, although there is often a beneficial spin-off. This is seemingly contrary to the term "health care", which to most implies a benevolent intervention, particularly when that intervention is made by fair-minded well-intentioned individuals. What this chapter is concerned with is not the individuals that carry out occupational health care, but its objective role in society, in this instance South African society.

Occupational health care in South Africa imparts a set of values which legitimate the existing situation by several mechanisms. First, each occupa-

tional disease is portrayed as something that individuals suffer from rather than something that the work-force as a whole is vulnerable to. Secondly, knowledge of these diseases is monopolized by a small group of people who are not workers and who have a community of interest with the employers. Thirdly, the practice of compensating the individual rather than relying on education and control of the workplace by the workers has a similar effect of isolating individuals and pre-empting joint action by workers to solve the problems. Individual compensation also emphasizes and legitimates exchange of money for health.

By constituting part of the "bundle of subsistence" (what is necessary for survival), the welfare provided by the employers serves to depress cash wages and thereby increases profit. It is provided instead of wages rather than in addition to wages. In fact, in South Africa very little welfare is provided by employers since the subsistence and welfare of families of black workers is supposedly provided by the Bantustans. The "bundle of subsistence" is therefore illusory at two levels. First, the Bantustans do not provide adequate welfare for the dependents of migrants and, secondly, in so far as occupational health schemes do exist, they have effect after the fact. If, say, 30% of the work-force have some illness or accident each year, then 70% have received wages depressed in anticipation of the provision of those occupational health services. Where occupational health care actually improves the health status of the workers, and this is for the most part a theoretical rather than an actual possibility, its aim is usually to improve production. An example is the effect of nutritional input on the goldminers of the Rand. These workers, who were regarded as the nutritional élite of South African black workers, are maintained in peak physical form to withstand the extremes of conditions underground for protracted periods (*2*). By reducing the necessary labour time to perform any strenous task the productive output is increased.

Perhaps the most important function of occupational health care is the political effect of disintegration it has on the work-force. It propagates an individualist rather than a collectivist ideology; it rationalizes and legitimates the exchange of health for compensation and provides this in line with the racial stratification which it maintains and reproduces; it institutionalizes issues around which organization of the workers might take place through the interposition of a "third neutral party" which carries out occupational health care. This disorganization of workers is a major cutting edge of occupational health care in South Africa.

Occupational Health and the Origins of Apartheid

In South Africa it was particularly the discovery of diamonds in the 1860s and gold in the 1880s that initiated industrialization along the lines that have led to the current racial imbalances. As early as 1893 the Volksraad, the

parliament of the Boer Republic of the Transvaal, adopted the first explicit industrial colour bar in the form of safety regulations. These stipulated that no African, Asian or coloured might prepare charges for blasting in the goldmines. This was despite competence gained at mining and blasting in the Kimberley diamond fields by coloured labour. The mining authorities soon found that this colour bar made no difference in terms of safety and in 1896 the racial clause was omitted from blasting qualifications, to be included in other occupations—banksmen, onsetters and engine drivers. It was under the British administration of Lord Milner that decisions taken in terms of the Mines, Works and Machinery Ordinances of 1903 led to a rigid demarcation of work along racial lines. These, too, were for the greater part framed in terms of safety at work although other discriminatory ordinances, such as the Municipal Franchise Ordinance and the Precious Stones Ordinance, also played important roles. Health regulations passed in 1906 compounded the emerging racial legislation. Among these were regulations compelling mine owners to provide change houses for whites and coloureds but not for Africans.

Miner's phthisis was a well-known and extensive cause of mortality in the goldmines around the turn of the century, yet reforms of working conditions to prevent this only took place 25 years after the first exploitation of the fields. In 1904, for example, the average age at death of Cornishmen who worked the rock drills was 36 years with an average period of rock drill employment of only 4-7 years.

When the first health statistics of the goldmines were compiled in 1902-1903, the death rate averaged 69 per 1000 on the Rand mines Africans accounted for 82% of all deaths, mostly due to pneumonia, scurvy, meningitis and enteric fever. It is important to note that roughly the same proportion of whites as blacks died (if one excludes those who died after returning to the reserves), which reflects the general expendability of labour at that time. It was, however, the beginning of the period during which differential conditions of work, remuneration for work, health care and compensation were to form the early matrix for what was to become apartheid. After 1960, with the gradual introduction of minimum standards of diet, housing, sanitation and hospital care, the death rate among blacks fell to 33 per 1000 per year. Among whites it fell to around half of this figure.

A series of Acts known as the Prior Laws laid the basis for a comprehensive system of compensation for white victims of miners phthisis. This meant that the condition came under some degree of control after 1912 but for blacks these laws had a contrary effect. There was a gradual deskilling of whites into overseer positions which increased the contact blacks had with the dusty occupations. Compensation for blacks followed some five years after the first compensation laws for whites but, more significantly, blacks were compensated at a far lower level. This provided a major wedge which was driven firmly between white and black workers. With the development of new pro-

cesses, unfamiliarity due to a high turnover of migrants resulted in an extremely high rate of industrial accidents. In the mines belonging to the Rand Mines group there was, for example, an annual turnover of the workforce of 104% in 1979 (*3*). Over the years the rate of accidents among whites has become progressively smaller in relation to that among blacks. Differential health care has probably had little effect on the vast differences in disease pattern between white and black miners, which is more a function of differences in nutritional status and living conditions. The superior health facilities for whites have, however, served to reflect and fortify the notion of white superiority over the years. It was with mining that racial discrimination became entrenched in South Africa, and occupational health care played an important role in this by emphasizing racial inequality. Thus the foundations were laid not only for racial divisions but also, through compensation, for the division of labour itself.

Ergonomics and Apartheid

Ergonomics is the study of the relationship between man and work. In most modern contexts this study is oriented towards the design or redesign of the workplace to make it more suitable for humans (*4*). In South Africa this science takes a different form; it is founded on the principle of maximal exploitation of labour and is particularly noteworthy because that exploitation is explicitly in terms of colour of skin. The tradition of exploitation of labour in this way goes back to the early days of goldmining in the Transvaal. Once it became apparent that the mining corporations would have to feed the migrant workers in order to increase productivity, the Chamber of Mines outlined a policy which laid the foundations for the current link between ergonomics and apartheid. As early as 1910, the Chamber of Mines viewed the African as a machine requiring a certain amount of fuel and took as its standard the "minimum amount of food which will give the maximum amount of work" (*2*). In fact, up to 1906 no minimum amount of food was established; rather, a maximum amount of food and a minimum number of hours of work were decreed. Africans were to work not less than 9 hours a day underground and 10 hours a day above ground with a diet of not more than 2.5 pounds (just over 1 kg) of maizemeal per day and 2 pounds (just under 1 kg) of meat per week.

Today ergonomics in South Africa has come a long way in terms of sophistication. The Chamber of Mines has for many years financed a Human Sciences Laboratory whose explicit mandate is to maximize the exploitation of labour. Among the contributions made in this field is a classification of African mine labourers which "minimizes wastage". Some quotations from scientific papers on this concept may convey its orientation.

"At the recruiting depot they are required to pass a medical examination, which is necessarily somewhat perfunctory and is meant to exclude men with overt disease and gross malformations. When the recruit arrives on the mine he is reexamined, usually by the mine medical officer, and is classified according to the grade of work the examining officer considers he is capable of carrying out.

"Human Sciences Laboratory examined the mine medical officers' classification to determine the percentage of Africans not capable of performing the tasks of their respective categories, and the wastage of labour due to wrong classification. Only a small percentage was wrongly classified into category A (any strenous work) but 81% of categories B and C (moderate and light work) were found to be capable of doing category A work. This large percentage could probably be reduced by using a more sophisticated method of classification, such as one based on height/weight tables and the use of skinfold measurements. Alternatively a test of physical working capacity could be introduced" (*5*).

Indeed the Human Sciences Laboratory went on to develop a test chamber which simulated the conditions of strenuous deep-level mining. In order to obtain employment workers have to undergo this test of physical working capacity.

One approach to ergonomics is to design the work process to suit the capabilities and convenience of people. According to Dr C. H. Wyndham, now Senior Epidemiologist for the South African Medical Research Council:

"A preferable approach is to survey the energy requirements of the different tasks in the industry in question and to employ a selection procedure ... to ensure that only those men with adequate oxygen intakes are selected for more arduous physical tasks. This is the approach which has been adopted by the Human Sciences Laboratory in the goldmining industry in South Africa" (*5*).

In a report of the work capabilities of various rural and urban Africans Dr Wyndham sheds some light on the relationship between health interventions and the exploitation of labour:

"It is also apparent from these results that a much smaller percentage of rural Bantu males than urban Bantu males is capable of continuous high levels of physical effort. This fact must be borne in mind in the siting of Bantu homelands or border areas, or new industries which require hard physical work. In this context, consideration should be given to the improving of the physical work capacities of rural Bantu males. This could be done by better nutrition, particularly more calories and animal proteins, and by improving their health by eradicating endemic diseases, such as malaria and bilharzia, for it is unlikely that the health and welfare of rural populations will be improved by their own efforts" (*6*).

This attitude, expressed as it is by a senior member of the South African medical profession, requires underlining. First, this sector of the medical profession apparently see themselves as functionaries of the employers, taking upon themselves the task of maximizing profits. Secondly, the Bantustan policies are fully accepted within their approach to occupational health. If we interpret his words correctly, Dr Wyndham suggests that Bantustans should be defined in terms of the work-force available for heavy industry. Since Bantustans by policy do not contain heavy industry, we presume he means ergonometric considerations should be used to allocate people of high phys-

ical work capacity outside the Bantustans. Finally, he suggests that the health and nutrition of "rural Bantu males" (notably excluding African women and children, who are marginal to the South African economy and therefore not considered) should be improved to increase productivity. This is perhaps indicative of the concern of a sector of the white medical establishment with regard to nutrition. The suggestions as to how this improvement can be achieved reveal the attitudes which link ergonomics and apartheid. Blacks are units of labour.

Occupational Health Legislation

There were in 1980 at least 32 Acts of Parliament governing industrial health which fall under 12 different government departments. There are three major areas which are thus concerned: health conditions at work, industrial diseases and accidents, and medical aid and benefit schemes. They are loosely interwoven and in effect provide a framework of protection by the State of the white lower classes while allowing a high rate of profit from black workers.

Health conditions at work are governed by the Factories Act and the Shops and Offices Act, which lay down minimum requirements of floorspace, ventilation and lighting, toilet facilities, protective clothing and appliances. These Acts, together with the Unemployment Insurance Act, provide sick-leave regulations. Essentially all this applies only to whites and, although fairly expensive for employers to implement, is relatively cheap when the total work-force is considered. Health conditions at work for blacks are contained to a limited extent in the Bantu Labour Legislation Act. The Mines and Works Act is wide enough to include industrial health, although no specific provision is made anywhere in the Act to govern health conditions in the mines.

Industrial diseases and accidents are governed by the Workmens Compensation Act, which contains comprehensive lists of compensatable diseases. In the implementation, however, there is structural inequality in that unskilled labour is usually black and migratory, and therefore easily "lost to follow-up".

Medical schemes originate partly from the early Mutual Aid Societies and partly from private commercial insurance schemes. These are overwhelmingly used by whites (see page 205) and even then are clearly stratified by social class. They thus institutionalize class differences at the same time as providing some sort of solidarity from those who are excluded, the blacks.

The Erasmus Commission of Enquiry on Occupational Health in 1976 found that 72% of the 8 million economically active (formally employed) people in South Africa were not covered by legislation. This is in part due to lack of coordination of the various laws and departments concerned with

occupational health, but mainly a reflection of the lack of worker demand at that time for better conditions of work. As this demand has increased, the State has started to intervene through occupational health measures. Even so, several years after the Erasmus Commission, things have not greatly improved. Dr E. Gougas, former Transvaal Chairman of the South African Society for Occupational Health, estimated that of South Africa's 30 000 factories fewer than 1000 had basic industrial health facilities (*7*). Professor Ian Webster, Director of the National Centre for Occupational Health is reported as saying in 1980: "We're doing a bit more on industrial metals, more on asbestos, more on quartz dust, but I wouldn't say that regular monitoring has increased very much since the Erasmus Report" (*7*).

Occupational Health Information

An important aspect of occupational health in South Africa is that most figures are based on employers' reports, and are unlikely to reflect the situation fully. The figures are usually reported as productive time lost, and provide little indication of the long-term effects of the diseases or accidents, or the proportion which are carried back to the reserves undetected to manifest their effects at a later date. In small industries employing less than 50 workers no health inspection service is necessary if whites are not employed. These establishments are comparatively numerous and rely in general on State-provided health services, so no data are available from them. Impressions mainly derive from the major employers, in particular the mines, and it is only a limited number of these that provide figures.

Occupational Accidents

This is one area where relatively comprehensive figures are available, admittedly only for the mining industry, and they highlight the general expendability of labour in South Africa. It is difficult, however, to evaluate any racial differences in accident rates, since whites by and large are protected from accidents by the nature of the jobs they do. In the course of the last century there was a significant decrease in the death rate from occupational accidents in the mines, probably largely the effect of improved first aid. In the last two decades, however, the accident rate has remained virtually unchanged, and the death rate from accidents has stayed more or less constant over the last decade. In 1960, 21.9 whites per 1000 were injured in mining accidents compared to 20.8 in 1971. Among Africans the rate of those recorded as permanently injured actually increased from 9.8 per 1000 in 1960 to 13.2 per 1000 in 1971, 39.8 per 1000 in 1976 (*8*) and 100 per 1000 in 1979 (*3, 9*). To a large extent this may be accounted for by improved reporting. Each

year between 1970 and 1979 some 800 people died from accidents in the South African mines, 500 of them in the goldmines, which represents 1.3 deaths per year per 1000 workers. In the goldmines there is 1 death a year among every 200 African goldminers, and about two-thirds of those who die do so immediately (*8*). These figures are substantially higher than those in developed countries and even in some developing countries, such as Kenya and Zambia (*2*).

The Workmens Compensation Commissioner reported an annual average of over 350 000 occupational accidents in 1974-76 involving an average of 31 million manhours lost, 32 530 permanently disabled and 2354 fatalities a year. These only reflect reported accidents, the more serious or obvious ones. Apart from the large proportion of workers who are involved in accidents (17% of all industrial workers have occupational accidents of one sort or another each year), there is evidence that the number is actually increasing (*3, 9*).

The history of occupational accidents in South Africa is liberally peppered with the warnings and admonitions of scores of commissions. Indeed it has almost become a tradition that commissions be appointed, in the early days by the big employers (mining corporations) themselves and now by the State, and that they produce reports to little effect. It is most likely that the high accident rates will continue for the simple reason that employers have no need to do anything about them. Provided that productivity and profitability can be maintained, which depends more on the large labour reserves than on the quality of individual workers, the employers have little reason for altering the current state of affairs. Since 1927, occupational accidents have been defined in South Africa in terms of working time lost, indicative of the priority requirements of employers.

Most occupational accidents are not fortuitous, unavoidable events. Broadly they are the result of defective adaptation to or inadequate control of the working environment. However unintended and unforeseen they are, accidents can often be averted by sufficient care or by technical safeguards. Seen in this light occupational accidents are a function of the separation from the production process of those who operate it. There are several components to this. Far from its professed prophylactic function, the colour bar reduces standards of efficiency and safety by keeping blacks unskilled and allowing whites to monopolize the preferred occupations. The development of unfamiliar processes is bound to result in extremely high industrial accident rates. This is not peculiar to South Africa. What is peculiar to South Africa in this regard is the migrant labour system, which means "permanently temporary" black labour and, among other things, that blacks often have to accept different jobs when returning for new contracts. Since management controls all aspects of the production process, high accident rates point to deficiency in management.

Apart from manhours lost, which are relatively easy to replace, the only cost management has to pay for occupational accidents is the levy to the Workmens Compensation Commissioner. All further cost is borne directly by the Commissioner. Moreover, management is protected from claims by injured workmen under the Workmens Compensation Act. Section 7 of this Act prevents an employee taking action against an employer to recover damages in respect of an occupational injury, but Section 8 allows the workman to take action against any third party responsible for the accident. Section 43 allows that where accidents do occur as the result of negligence of the employer the workman may apply to the Workmens Compensation Commissioner for compensation. Section 71 allows that where a factory proves to be particularly accident-prone the employer can be forced, at the discretion of the Commissioner, to pay a higher levy. There is thus no substantial provision to force employers to pay for accidents which are the result of their negligence. The allowances paid out by the Commissioner are totally inadequate since they are worked out as a percentage of wages earned. This means that unskilled labourers, who are particularly unable to organize for better working conditions because of their replaceability, and who in general are more vulnerable to occupational accidents, receive virtually no compensation.

While legislation thus protects the employers against their own negligence, no such protection is afforded to the worker. In terms of Section 27 of the Act, if the accident is attributed to misconduct of the workman, and at present this usually rests on the decision of the management, no compensation is payable unless the accident causes severe disablement or death, and persons wholly dependent on the workman are left without income. The employer may also refuse to pay the cost of medical care in the case of "misconduct" of the worker.

The detailed rules for the enforcement of protective and preventive measures also put workers at an immediate disadvantage. The rules are not public documents and are enforced at the discretion of the Factories Inspectorate (State appointments). Further, there are secrecy provisions in the Factories Act which are frequently used by the Factories Inspectorate. Workers can request an investigation into any aspect of their working conditions but, if this clause is invoked by the Factories Inspectorate, they are not entitled to know the outcome or even whether the investigation was carried out.

The Factories Inspectorate is appointed by the Department of Labour and has the sole legally sanctioned mandate to enforce protection in the factories. Even if it could be shown that they act on behalf of or in the interests of the workers, they do not have the staff to enforce adequate protection, as was pointed out by the Erasmus Commission. In 1974 there were 66 posts allocated to the occupational safety section (there is not even a division in the Department of Labour) to deal with the conditions of work of over one and a

half million workers in some 30 000 factories. Less than half of these posts were filled (*10*).

But the problem could not be solved simply by hiring more factory inspectors. The notion that enactment of legislation produces adequate protection is itself misleading. First, the legislation has been enacted on behalf of the employers. This is true both in the context of the law as discussed above, and because disenfranchised blacks have no access to the legislative process. Blacks are prevented from bringing extra-parliamentary pressure to bear, since the majority are transient migrant workers whose relative lack of skills makes them eminently replaceable, and, until recently, the organization of unions has not been recognized. The second fundamental reason for the failure of legislation to decrease occupational accidents is that "adequate protection" is not a constant standard but is dependent on the cost of protection to the employer and the forcefulness of workers' demands for protection. In South Africa accidents, as has been shown, represent no major loss to employers, and until recently workers in general have not been strongly organized. It is the growing militancy of black workers that has forced the State to appoint the various commissions of inquiry (Wiehahn, Riekert, Erasmus and Niewehuisen) in an attempt to defuse and contain the situation. Information from the annual reports of various large employers provides some idea of the frequency and importance of occupational accidents.

The Anglo-American Corporation, which employs about 176 000 blacks in its mines, reported that around 90% of workers suffer reportable accidents on duty. A further 5% have non-reportable accidents (*9*). Company figures between 1976 and 1979 are also revealing. Over this period there was a decrease in work time lost due to disease, disablement and accidents at work (to 1.32 per 1000). As many as 10% of workers on Anglo-American goldmines in the Rand suffer occupational disability (*9*). Several important trends are apparent from the annual medical report of the Rand Mines group. There has been no major decline in the total number of accidents, a gradual decrease in "accidents directly due to employment" and an increase in "accidents not due to employment" in the goldmines (*11*). One does not know whether this is the result of a reclassification of accidents or the violence in the mineworkers' compounds. An increasing proportion of the black work-force (between 75% and 80% of black miners over the last decade) were either involved in accidents or suffered from disease which caused loss of work time. If tuberculosis is excluded, 550 workers per 1000 suffered diseases in 1976 which lost an average of 3 shifts per worker per year. There were also 175 accidents per 1000 directly due to employment and a further 78 accidents per 1000 not directly due to employment, for which an average of 2-3 shifts were lost per black worker per year (*3*). Again it should be stressed that these figures, presented as they are in terms of work time lost, reveal the situation only in so far as it concerns the employers. "Small" accidents are unlikely to be reported by

workers, as they can jeopardize work possibilities. This is particularly true of non-mining employment and even more so for black workers on white-owned farms. These figures, startling as they are, represent the state of affairs in the better mines, and in mining the conditions of work are probably better controlled than in any other sector.

Of a total of 799 mines in South Africa only 305 are "controlled" or come under the authority of the Department of Labour.

Occupational diseases

Pneumoconiosis

This is an incurable, noninfectious occupational disease which results from the inhalation of microscopical metallic or mineral particles. Workers are at risk wherever such particles are encountered—in mining, sandblasting, tunnelling, manufacture of abrasives, road construction, quarries, foundries, potteries, etc. According to the Erasmus Commission of Enquiry (*10*), 25% of all workers thus exposed suffer from pneumoconiosis. Because the disease often manifests itself some time after exposure it is difficult to establish the incidence rates of the condition, particularly since most African miners return to the Bantustans after contracts in the mines. Since, in general, reliance has been placed on reports from the various mining companies, and since reports are usually only available where conditions are relatively good, the picture given is far rosier than the reality. In 1979, 2.2 workers per 1000 in the Rand Mines group were newly diagnosed as pneumoconiotics, but a breakdown of this by colour of skin is not available (*3*). The average number of notified cases of silicosis (pneumoconiosis from silica-containing dust) in all occupations per year between 1974 and 1977 was 160 whites and coloureds and 649 Africans. A further average of 1153 Africans were registered each year as having tuberculosis and silicosis. While the number remained constant for whites over this period, for blacks there was an increase in registration of about 20% per year (*12*). This is not accounted for by the change in size of the work-force.

Tuberculosis

Perhaps more illustrative of the conditions of work in South Africa is the frequency with which black workers contract tuberculosis. Even assuming that all black miners who contract the disease are diagnosed, and all those who are diagnosed are compensated (which is not the case), the incidence of newly compensated cases among black miners is at least double South Africa's national rates. For migrant industrial workers the situation is probably as bad, but far fewer are diagnosed since they do not have chest X-rays before and after each contract.

Considering that all men are medically screened before being employed on the mines, the rate at which black miners contract tuberculosis is inordinately high. In 1970-72 between 2 and 3 black coalminers per 1000 contracted it and of these 4% died. In the goldmines in the same period, between 3 and 4 black miners per 1000 were known to contract the disease, and of these 1.5% died (*13*). Since that time there has been an increase in the reported incidence of the condition. In 1975, 5.7 per 1000 black miners contracted tuberculosis (*11*). In 1979 around 8.5 per 1000 black miners working for the Rand Mines group (*3*) and 8.55 per 1000 in Anglo-American contracted it (*9*). In 7 years up to 1978 an average of 3846 Africans working in "controlled" mines (which employ some 60% of all miners) contracted tuberculosis and of these an average of 101 died of the disease each year (a mortality rate of 30 per 100 000). This compares with 247 white and coloured miners who suffered the condition and 2 who died (a mortality rate of around 5 per 100 000) (*14*). Tuberculosis accounts for 50% of all black compensation cases and some 2.5% of white cases.

A review of autopsies performed on miners between 1953 and 1970 revealed that 32% of blacks with evidence of pneumoconiosis also had evidence of active tuberculosis while a further 10% had evidence of past tuberculosis. Among whites with pneumoconiosis, 0.15% had an active lesion and 1.9% had evidence of past tuberculosis (*15*). The findings for blacks are similar to those reported in a series of over 1000 autopsies on African coalminers (*16*). Not only are the differences in the rates striking, but the proportion of active to past tuberculosis reflects the racial discrepancies in medical care. In the same series, neoplasms and chronic bronchitis were far more frequent among whites than in any other race group (among blacks chronic bronchitis was not recorded). Evidence of acute infections, however, was significantly more common among blacks than whites. Thus whites die more commonly of pneumoconiosis and malignancies (29% of whites and 18% of Africans) while blacks die more commonly of tuberculosis and acute infections.

This is consistent with the epidemiological picture outside industry. As it applies to occupation, this implies that, while both blacks and whites have their health undermined by work, whites die later in this process. Their living conditions protect them from contracting tuberculosis and acute infections, and their superior health care provides a better prognosis once the infection has been contracted. They are still susceptible to the more long-term occupation-related illnesses, such as chronic bronchitis and cancers.

Asbestos-related diseases

Research related to asbestos in South Africa is a paradoxical contribution to medical science; knowledge is developed at the expense of those who are in contact with the substance, and is put to the service of those who monopolize

the resources of society. The early observations about asbestos by H. Montague Murray at Charing Cross Hospital, London, by Auribault as early as 1906, by Pancoast in the United States of America, and by Cooke, who gave asbestosis its name, all found expression in South Africa. The South African medical establishment has been at the forefront of research on pathology related to asbestos and, through international conventions and symposia, has established South Africa favourably in the eyes of the international medical fraternity. It has, however, done little for those who actually suffer from occupational contact with asbestos.

In 1976, South Africa had 47 mines producing asbestos with over 20 000 employees. About the same number are at work in industries that use asbestos. Over the 5 years up to 1977, 1813 asbestos mine employees were certified as having asbestosis (interstitial lung disease) and a further 700 as having pleural plaques. The Erasmus Commission quotes one survey in which 160 certified cases of asbestosis were found at 3 factories, which employed 1635 workers, and reports from the Northern Transvaal indicate that over a third of asbestos miners suffer from asbestosis (*17*). Some 44% of employees in an asbestos cement factory surveyed by the National Centre for Occupational Health had asbestosis (*18*). Chest X-rays of the employees of a brake-lining factory in 1978 revealed lung changes in more than 30% of them (*18*). This extremely high prevalence of asbestosis among asbestos workers in South Africa indicates very poor control of conditions within the industry, since incidence is directly dependent on exposure.

Mesothelioma, an incurable malignancy of the lung lining which is usually fatal within 2 years, is another well-known hazard of occupational exposure to asbestos and its relatively common in the North Western Cape, where crocidolite asbestos is found. Over the past 20 years 700 cases of mesothelioma have been registered, by far the majority of them with a definite history of asbestos exposure. Over 50% of these cases were white, which suggests poor recording among Africans, who represent over 90% of asbestos miners but only 20% of the cases. Blacks in general have poorer access to diagnostic facilities than whites.

Investigations of 1000 randomly selected black employees of 4 mines in the Kuruman area indicate a mesothelioma incidence rate of 8 per 1000, inordinately high by any standard (*19*). In one particular occupational group—women who hammer out the zinc from banded ironstone—12 out of 53 were found to have mesothelioma. These figures indicate that the condition is probably not as rare as was hitherto imagined. Data from Canada suggest an incidence of 1.4 per million (*20*). Lung cancer is generally a more common cause of death from asbestos than is mesothelioma, and can be caused by any type of asbestos fibre (*21*). People occupationally exposed to asbestos also have a far greater risk of developing laryngeal cancer than those not thus exposed (relative risk estimate 14.6) (*22*). Asbestos exposure also causes an

increased incidence of ovarian cancer in women (*23*) and of gastrointestinal cancers in both sexes (*24, 25*). In addition, deaths from cardiovascular diseases are more frequent among asbestos workers (*20*).

In the United Kingdom the maximum permissible concentration of crysotyle asbestos in the air is 2 fibres/cm^3 and of crocidolite, when worked with under special permit, 0.2 fibres/cm^3. In Sweden there is no permissible concentration and the use of asbestos in industry is effectively banned. In South Africa no special permits are necessary and the proposed maximum permissible concentration, which is not enforced by law but suggested by the Department of Mines, was, according to the most recently available references, 40 fibres/cm^3, to be reduced gradually over the years (*1*).

Mortality from other diseases in the mines

Mortality from other diseases in the goldmines has actually increased from 1.88 per 1000 workers in 1967-68 to 2.2 per 1000 in 1975-76. In the coalmines this increase has been from 0.9 to 2.2 per 1000 workers (*11*). In 1979 the rate was 2.8 per 1000 (*3*). These figures, when added to the mortality from tuberculosis, other chest diseases and accidents, are particularly high considering that the men employed in the mines are at peak fitness.

Occupational Exposure in Industry

In the health debate of June 1977 in the Houses of Parliament, Mr W. L. Voslo declared that "1.6 million factory workers are still lagging behind comparable countries as far as legislation and precautionary measures relating to occupational health are concerned" (*26*). The extent of this exposure was partially documented by the Erasmus Commission of Enquiry into Industrial Health.

Noise

The most common physical danger to which workers are exposed is noise. If noise equivalent to 85 dB is sustained for an 8-hour period, auditory loss is a real danger. Noise legislation was introduced in South Africa in 1974, but compliance with the maximum equivalent noise level of 85 dB is extremely poor (*27*). There is not a single industry in which some area is not described as a noise zone. Of the 1,6 million workers in about 30 000 factories, 15% work in noise zones and are threatened with some degree of industrial deafness.

Heat

Though heat-stroke is a particular problem on deep goldmines, other workers are faced with the danger of excessive heat, and the potential working

population exposed to heat is about 300 000. Excessive heat may cause dermatitis, dehydration, heat-exhaustion and heat-stroke. All these reactions are reversible and disappear if exposed persons are removed from the source of heat. However, workers exposed to heat radiation at coke furnaces, glass furnaces and foundries can be rendered sterile for protracted periods by the intense heat radiation.

The Erasmus Commission points to the "world famous" programme of heat acclimatization on the goldmines, which has succeeded in reducing heat-stroke mortality from 14 per 100 000 per annum to 4 per 100 000 per annum (*10*). This involves exercising candidates for deep-level mining to the point of exhaustion in simulated conditions of heat and high pressure, and is a good example of the use of occupational health techniques as a means of adapting workers to hazardous conditions—instead of attempting to change those conditions and render them less dangerous.

Radiation

Unlike other industrial health hazards, which have largely been ignored, protection against radiation has been recognized as being of some importance. The Erasmus Commission considered this to be a consquence of the fear of nuclear war and the related concern with nuclear energy. It might also be because most of the 7000 registered radiation workers are white. Among these only 3 people per year received a dose exceeding the maximum permissible level (*10*). By 1975, 1700 licences had been issued in respect of some 3500 radioactive products or processes. However, the governmental authorities have particulars of only 25% of the estimated total number of workers exposed to radiation, and during 1975 alone 67 occurrences of over-exposure were brought to the notice of the Department of Health by the South African Bureau of Standards (*28*).

Lead

One of the more striking findings of the Commission was that of the extremely dangerous conditions prevalent in industries using lead and the increasing number of notified cases of lead poisoning since 1972. It noted the abnormally high level of lead absorption among workers and pointed out that in South Africa no maximum permissible level had been established for the concentration of lead in blood. It found, moreover, that if South Africa were to be submitted to Swedish standards, 45.6% of workers would have to be withdrawn because they had been subjected to an overdose of lead. Similarly by standards established in the United Kingdom and the USA, 26.1% and 44.0% respectively of the work-force would have to be withdrawn from the industry. In South Africa only 3.2% are withdrawn and this represents a

"voluntary" withdrawal as against a compulsory withdrawal. Many factories in South Africa would have to close if Swedish standards were applied (*10*).

Among the symptoms of acute lead poisoning are headache, muscle fatigue, loss of appetite, nausea, vomiting, and loss of weight. Long-term effects include polyneuritis, anaemia, joint pain, kidney problems, sterility, and cardiovascular disease. The most common form of organic lead poisoning is through tetraethyllead, which affects the central nervous system. In 1973-74, 158 678 workers were exposed to lead in a wide variety of industries and 36% of these suffered poisoning resulting from inhalation of lead fumes or dust. Thirteen out of 18 lead-using firms surveyed by *The Star*, a leading South African newspaper, failed to meet standards of safety enforced in European countries (*29*).

The Erasmus Commission revealed the danger of unscrupulous employers who might try to create a favourable picture by giving their workers calcium versenate, which, though it reduces the concentration of lead in urine, can itself lead to chronic nephritis and permanently affect the kidneys. It found that even where legislation prevailed, for example in the case of women who were forbidden to work in industries where high lead absorption occurs, it was not strictly applied.

Table 1 lists a number of dangerous substances, including lead, and the industries in which workers are exposed to them.

Occupational Hazards of Migrants

The hazards to which black workers in South Africa are subjected go beyond those mentioned above, which are to some extent to be found in most Western industrial countries. The migrant labour system also undermines physical and mental well-being and the migrants are more vulnerable to communicable and parasitic diseases for several reasons. Migrants from different and often distant geographical areas come into contact with those who are often poorly nourished. The social conditions in which they live provide ideal breeding-grounds for infections such as tuberculosis and venereal diseases. The multitude of mental and physical stresses acting on these workers are added to by racial harassment and their being obliged to live away from their families as bachelors in barracks. Without adequate industrial bargaining power, blacks are unable to demand the wages that would buy them a sufficient quantity of food. Consequently nutritional disorders are widespread and many migrant workers are on the borderline of malnutrition; in addition, they are afflicted with parasite infestations, which are particularly common in the urban areas.

Table 1. Occupational exposure to dangerous substances

Toxic substance	Type of industry	Number of factories, mines or works involved	Number of potentially exposed workers	Known harmful effects
Ammonia	Textile and artificial fibre weaving	671	230 173	Irritates eyes, nose, skin.
	Leather and rubber industries	838	63 285	Blindness, corrosive burns, blisters.
	Pressing, paper and associated industries	1 107	68 704	Asphyxiating gas may cause death.
	Chemical industries	2 563	192 547	Survivors may suffer bronchitis and pneumonia.
	Metal plating and paintwork	167	6 532	
	Photographic processing laboratories	110	2 410	
	Laundries, dry-cleaning	1 338	26 021	
		6 794	589 672	
Ozone	Metal plating	289	4 704	High concentrations over long periods cause oedema, haemorrhage, chronic bronchitis. Chronic low doses may cause headache, malaise, shortness of breath and drowsiness.
	Steelworks (where there is welding)	3 324	155 371	
	Photopressing	110	2 410	
	Basic chemical manufacturing	70	13 320	
		3 793	175 805	
Vinyl chloride	Plastics production	451	23 767	Cancers of liver, kidney, and lung.
	Secondary industries in petroleum manufacture	14	585	Chronic brain damage.
		465	24 352	Acro-osteolysis.
Benzine	As for ammonia	6 794	589 672	Primary irritant to eyes and respiratory tract.
	Paint industry	111	5 768	Headache, dizziness, unconsciousness, convulsions and death.
		6 905	595 440	Leukaemia.
Carbon bisulphide	Metallurgical industry	131	27 214	Skin irritant. Chronic exposure can cause mania, hallucinations or depression. Gastrointestinal, heart, liver and kidney functions may be affected.
	Ice-cream manufacture	35	1 261	
	Pottery	25	27 002	
	Fertilizer production	22	4 557	
		213	60 034	

Table 1 (*continued*)

Toxic substance	Type of industry	Number of factories, mines or works involved	Number of potentially exposed workers	Known harmful effects
Platinum	Platinum refineries	5	1 461	Platinum itself is not toxic but salts formed during refining can be, causing allergic dermatitis or irritation and chronic inflammation of the respiratory system.
	Glass factories	196	12 240	
	Ceramics	56	6 271	
	Chemical laboratories	Not known	Not known	
Chromium	Chromium mines	17	3 514	Traumatic atrophic rhinitis, bronchogenic cancer. In one survey (*10*) 75% of workers had active lesions in the nose and 46% had complete perforation of nasal septa.
	Soap factories	59	6 094	
	Factories using lead wastes	2 086	158 291	
		2 162	167 899	
Vanadium[a]	Ceramics	196	12 240	Chronic bronchitis, emphysema and cancer of lung. Can cause anaemia, and damage to kidneys and nervous system.
	Petroleum refineries	13	2 644	
	Glass factories	196	12 240	
	Vanadium smelters	3	452	
		408	27 576	
Lead	Tanneries	33	2 211	Acute symptoms of poisoning include headache, muscle fatigue, loss of appetite, nausea, vomiting, loss of weight. Long-term effects include polyneuritis, dementia, anaemia, joint pain, kidney problems, sterility, and cardiovascular disorders. Some 36% of those exposed suffer poisoning as the result of inhalation of lead fumes or dust. In South Africa, no maximum permissible level for lead in blood has been officially established.
	Rubber and rubber products	406	26 842	
	Printing works	756	34 271	
	Typesetting	7	288	
	Paint manufacture	104	5 688	
	Explosive and fireworks	5	4 577	
	Match manufacture	6	1 212	
	Agricultural chemicals manufacture	22	4 557	
	Brickworks	301	32 624	
	Pottery, sanitary ware and tiles	5	6 001	
	Glass manufacturing	196	12 240	
	Lead smelting	15	768	
	Cable manufacture	146	19 343	
	Galvanizing works	14	842	
	Battery manufacture	31	3 537	
	Copper alloys	39	5 677	
		2 086	158 678	

Table 1 (*continued*)

Toxic substance	Type of industry	Number of factories, mines or works involved	Number of potentially exposed workers	Known harmful effects
Manganese	Manganese ore works	17	5 160	Chronic bronchitis.
	Ferromanganese works	5	1 806	Parkinsonism.
	Battery manufacture	31	5 677	In South Africa, no occupational exposure limit
	Brickworks	301	32 624	for manganese has been officially established;
	Explosives and fireworks	5	4 577	50-55% of workers had urinary levels above
	Match manufacture	6	1 212	maximum recommended levels (*10*). Some four
	Glass manufacture	196	12 240	years after this finding at least one major ferro-
	Rubber industry	406	24 842	manganese producer had not reduced its wor-
	Paint manufacture	104	5 688	kers' exposure (*29*).
		1 071	93 826	
Mercury	Leather tanneries	33	2 211	Some compounds are skin irritants; most prob-
	Paint factories	104	5 688	lems from inhalation. Acute exposure can cause
	Potteries, sanitary ware and tiles	196	12 240	vomiting, diarrhoea, gingivitis, pneumonia, kid-
	Agricultural chemicals manufacture	22	4 557	ney damage, cardiac failure.
	Paper and paper products	186	29 907	Chronic exposure can cause gingivitis, emotional
	Basic chemical factories	70	13 320	instability, headache, sleeplessness, auditory
	Manufacture of mercury lamps, fluorescent lighting and mercury-containing lamps	99	4 632	loss and visual restriction. Poisoning with certain organic mercury com-
		710	72 555	pounds can result in ataxia and tremors. Since the Erasmus Commission the National Centre for Occupational Health has found that one-fifth of workers in several mercury amalgamation plants and one fluorescent light factory are exposed to potentially disabling amounts of mercury.
Iron	Iron and Steel Corporation			Hight concentration of dust with iron oxide and
	Numerous mining concerns		10 486	silica can produce pulmonary fibrosis. In South Africa, no occupational exposure limit has been officially established.

[a] South Africa produces 40% of the world's vanadium.

The contract workers in the mines probably have the best diet of all black workers in South African urban areas, since good physical condition must be maintained for the high levels of production demanded in extreme conditions underground. A minimum food provision is stipulated by law and the cost deducted from wages. No such legal requirements apply to other industrial workers, who generally buy their own food. For the large numbers of urban unemployed acting as an immediate labour reservoir, getting enough food presents a considerable problem. This is taken advantage of by certain large employers. Alongside the growing black industrial awareness and the consequent increasing frequency of industrial disputes, a practice has developed of maintaining reserve compounds of labour. Unemployed labourers stay voluntarily in these compounds without wages or adequate food; they are paid only in the event of strikes, in which they act as strike-breakers. The need for food and wages among these unemployed thus prevents their fellows from demanding a living wage.

The nutritional status of urban blacks is compromised by differential prices of foodstuffs as well as poor employment possibilities, low incomes, poor houses and poor social services. Since the residential townships are distant from the main commercial centres, blacks have to pay more for food. A comparative price survey carried out by the South African Council of Churches Ombudsman, Mr Eugene Roelofse, showed that it was substantially cheaper to buy groceries in Killarny, a well-to-do white area, than in Soweto. Mark-ups of the order of 50% were reported by the Ombudsman (*31*).

Occupational Hazards in White-Owned Farms

The designated "white areas" occupy 87% of the whole land area of South Africa. In 1973 a third of the economically active population was involved in commercial agriculture, 84% being African. This group of about 1.5 million people, half of them migrants and their dependents, is probably the most disadvantaged and discriminated against in South Africa.

On most white-owned farms a part of the wage is paid in kind (as goods and services). In this way workers are dependent on their employers for food; they have little available cash and consequently little mobility to seek alternative employment even if that were possible under the pass laws. The "tot" system is a variety of payment in kind still in evidence today where wine is given in lieu of wages.

Agricultural workers on white-owned farms are also exposed to numerous hazards. Accidents are probably by far the most common of these, but since there is no way of ensuring their registration, there is no indication of just how common they are. Pesticide poisoning is a notifiable disease. There has been a

dramatic decrease in the number of notifications over the past few decades but large interracial differences remain. According to data from the Bureau of Statistics for the period 1965-70, the mean annual incidence of pesticide poisoning per million population was 1 white, 3 Asians, 4 Africans and 13 coloureds. The excess for coloureds is almost certainly due to the large numbers of coloured labourers employed in fruit farms in the Cape. In 1979, 100 fatal cases and 72 nonfatal cases were reported, almost certainly an underestimate of several orders of magnitude. Organophosphates account for about 80% of all deaths from pesticides and about 60% of nonfatal intoxications (*32*).

Zoonoses include anthrax, brucellosis, tuberculosis, leptospirosis, herpes, Marburg virus disease, trypanosomiasis, tickbite fever, ringworm and malaria. From currently available data there is no way of knowing precisely how widespread these diseases are. The Erasmus Commission presented evidence that 80-90% of all blacks in the Eastern Transvaal suffer from schistosomiasis but pointed out that without pre-employment medical examinations it was difficult to ascertain whether black workers contracted the disease in the course of their employment.

This artificial delineation between what is strictly occupational and what is "environmental" is a strong theme in the approach to occupational health in South Africa. It begins with the refusal to acknowledge the existence of the families of migrant workers, who are treated as bachelors. It includes the notion that, when the members of a family that lives on a white-owned farm all contract a disease which is spread through the particular irrigation system used, it is only those members of the family who are actually paid to work on the farm who can be considered to have an occupational disease. Again, the approach stems from the view that blacks are merely units of labour.

Compensation and Insurance

Workmen's compensation is sometimes misused by management as a relatively cheap substitute for safe working conditions. Moreover, it retains for management the initiative in matters concerning the workplace and conditions of work. The individual approach implicit in compensation is a disincentive for unity of labour and, since compensation takes place after the fact it legitimates the conditions under which the disease or accident happens. In South Africa racial differences in compensation policies and practices both reflect and reinforce differences at the wider economic level.

As early as 1907 compensation was introduced for whites disabled in occupation. By 1912 silicosis was compensatable for all races, with blacks receiving from 1% to 20% of whites' compensation for first-stage silicosis and

from 7% to 12% for second-stage. For many years, death or injury due to occupational accidents among blacks was compensated only at the discretion of the company concerned. These discrepancies exist today. For first-stage silicosis blacks receive 10%, for second-stage 7%, and for tuberculosis 12% of the amount whites receive for the same disability. Compensation for coloureds varies but does not exceed 50% of that granted to whites. During the 1970s, white mining wages doubled and African wages quadrupled, whereas compensation for blacks did not. In 1975 black miners received one-ninth as much as their white counterparts, in manufacture and construction one-fifth as much and in the retail trade one-third as much. The 1977 amendments to the Workers Compensation Act of 1941 gave the same burial expenses for whites and blacks and fixed disability payments at a maximum of 75% of earnings regardless of race. The apparent fair-mindedness of this is belied by the fact that salaries for blacks are only a fraction of those for whites.

As important as this increase in the amount of money paid to blacks in compensation is the dramatic decline in the number of people getting compensation in the mines. Between 1969 and 1975, 25% fewer Africans were compensated for pneumoconiosis (760 in 1975 as against 1028 in 1969), whereas the number of whites compensated remained more or less constant (around 250 per year). Outside mining, too, fewer Africans get compensation. Between 1969 and 1975 an average of 1744 cases of occupational disease were compensated each year, 396 of them white or coloured. The reason for the decrease in the numbers of blacks compensated is unclear. It may be because they are sent back to the reserves or that they die off earlier. It is very unlikely that it is due to any decrease in the number of people affected by occupationally incurred disorders.

There is also a marked racial bias in medical insurance schemes; 69% of whites, who are predominantly skilled or semiskilled, are covered compared with 8% of Africans, who are predominantly unskilled. The bias of curative medical schemes is also very obvious, although some benefit schemes, notably in the clothing and food industries, show some attempt at preventive health programmes. Sick pay funds have been introduced, mostly on the initiative of employers, in numerous industries. These provide an average of 45% of salary (compared with full pay, which is allowed under the Factories Act).

The notable racial difference in compensation and insurance in part reflects the cost of replacing labour, and in part serves to reinforce the notion that white lives are of greater value than black. At a more general level it supports the idea that life and limb must be traded for wealth, and it has the inherent political effect of disorganizing labour, since it presents the accident or disease as an individual matter rather than something that the whole work-force is susceptible to. In the appointment of the Niewehuisen Commission the South

African Government has clearly recognized the potential value of occupational compensation.

Concessions, Commissions, Cooption and Coercion

The new concern about occupational health and the "liberalization" of labour relations throughout the last decade have not been the result of any benevolence on the part of those who control production in South Africa. They are due only in small part to outside pressure by countries which have invested in South Africa, and much more to the intervention of the State and employers in a rapidly developing situation of labour unrest. Since the 1972 strikes in Durban, a wave of black labour militancy has spread through South Africa accompanied by a mushrooming of labour organizations. This has precipitated a series of pre-emptive and reconciliatory concessions on the part of employers and juridical intervention by the State in an attempt to defuse the impending explosion in labour relations.

The increase in wages for black goldminers was an early response which, although far less than the increase in white wages, represented the first real wage increase since the 1890s. The Erasmus Commission of Enquiry was appointed to look into the conditions of work and to make recommendations for an improved structure of occupational health care. It provided many of the statistics used in this chapter, with the notable exception of industrial accidents, which it considered outside its mandate. The Commission reported that industrialists were not "health oriented", put few resources into the prevention of occupational diseases and, where measures were applied, this was either compulsory by law or economically advantageous for the industry. The Commission's major conclusion was in the form of an outline of how control of the field of occupational health—essentially control of conditions in the workplace—could be retained by the State on behalf of the employers, clearly in line with the policy of increasing State intervention. The Commission specifically ruled out the participation by workers' organizations on the grounds that many blacks working in South African industry and mines were from the countries surrounding South Africa, which had no interest in South African (i.e., white) welfare.

Also following the worker militancy in 1972-73, strikes by black workers were legalized in an attempt to contain the growing unrest within a legalistic framework. Prior to this spate of strikes, the number of Africans involved in industrial disputes did not exceed 10 000 in any one year, but in February 1973 this figure rose to 100 000 and since then it has not fallen below 30 000.

Beside the mushrooming of black labour organizations, the resistance of the African population expressed itself in the townships and climaxed in June

1976 in bloody uprisings and subsequent urban unrest, including mass strikes and stay-aways, involving more than 50 000 Africans throughout the country. This new dimension and scale of resistance were a clear warning that the control of State and employers over the black population could not be maintained in its present form, which hinged on direct repression and control of the labour force. In 1977 the Government appointed two further commissions of enquiry: the Wiehahn Commission to investigate the state of labour legislation with particular regard to the problem of labour disputes; and the Riekert Commission to revise the influx control system within the broad context of the Bantustan policies. Soon after this the Niewehuisen Commission was appointed to look into the question of workmen's compensation. In December 1977, 18 job reservation orders were cancelled and in June 1978 the employers and the registered unions in the steel and engineering industry agreed to drop the "closed shop" agreement which barred Africans from certain grades of work.

The general strategy behind the four commissions (Erasmus, Wiehahn, Riekert and Niewehuisen) and the concessions by employers is clear—to eliminate focal points of internal opposition and defuse such organization as had arisen, to provide a tightly controlled framework for industrial organization. The intention is to impose separation between economic and political demands, and to win over certain strata of the black population by coopting leadership from the black middle class and a labour aristocracy through the granting of selective concessions.

This last aspect of the strategy has predictably generated hostility towards the ruling class from the lower classes of whites, alliance with whom has been fundamental to apartheid. The work positions of the white lower classes had hitherto been protected through job reservations, and material separation between whites and blacks had been maintained through wage differentials, compensation differences and better social services, including medical care. This hostility was expressed in the white miners' strike of March 1979, and the collapse of this strike, following the tough stand by the Chamber of Mines with government approval and backing, was significantly consistent with the new strategy and out of keeping with the old. The new strategy includes several Acts of Parliament both in the sphere of labour relations (the Industrial Conciliation Amendment Act No. 94 of 1979) and in health care (the Health Act No. 63 of 1979) that make up the "New Deal" through which the South African State has intervened "to change things so that things can stay the same".

The new Black Community Development Bill introduced in November 1980 was contrary to the strategy proposed by the Riekert and other commissions. The new law sought to scrap "Section 10", which gave security of residence to certain categories of black town dwellers. Under the new law the rights guaranteed will depend on regulations made by the minister without

going to Parliament. The essential point about these concessions and the cooption of a black middle class is that, apart from some international interests, they have fooled nobody. Black workers are becoming increasingly militant and better organized. The black middle class continues to be disillusioned by racial harassment and humiliation. For the vast majority of people in South Africa, the widely publicized "improvements" have little to do with everyday life.

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CHAPTER 7

THE POLITICS OF HEALTH CARE

In all societies the health services reflect aspects of the existing social relationships and may act to legitimate and reinforce them. Several major themes can be identified in current health practice and policy in South Africa—increasing state intervention through health care, a continued curative orientation, a continued bias in favour of the urban areas, and perpetuation of white dominance. These themes emerge strongly despite the professed concern of the authorities about "primary health care" and "comprehensive services".

Introduction

Health care services in any society act at a number of levels. Foremost among these may be the provision of care for perceived health problems, although these perceptions are not necessarily objective and neutral. The nature and distribution of health care are not simply derived from utilitarian notions of the "greatest good for the greatest number" and are not related only to effectiveness in reducing disease or alleviating suffering. In all societies health services reflect existing social relationships and may act to legitimate them. The philosophy underlying health care is thus difficult to divorce from the wider ideological underpinnings of a social order. The nature and distribution of health care are not only the outcome of ideological, economic and political struggles and decisions but also, in turn, act upon those struggles and decisions.

The connexions between health care and social engineering are particularly clear in South Africa, where they have a long history. In the mid-19th century, for example, the establishment of Grey's Hospital in Kingwilliamstown to serve the newly conquered territory of "British Kaffraria" was explicitly designed to destroy the power of the chiefs and witch-doctors and thus win the Xhosa over for "civilization and Christianity". It was believed, according to E. H. Burrows:

> "...that the plan could not be carried out so as to benefit the Native Tribes and destroy the influence of the Witch Doctors except by educating Native Surgeons, and employing them afterwards as District Surgeons with liberty to practise among their own people... In this way the Witch Doctor [who was believed to be behind the political and military resistance of the Xhosa] would be chased out of the field (*1*).

"Educating Native Surgeons" was thus to be used to undermine the African political organization in the 19th century. With subsequent broader social changes there was an increasing assertion of white dominance which was also reflected in health care. This left little room for "Native Surgeons" as health care was progressively monopolized by whites, a major trend which has shaped health care in South Africa over the past century. By reflecting the major emerging economic relations of white supremacy, health care has reinforced and reproduced them. Thus while whites enjoy a health care system similar to those in other developed countries, characterized by ready accessibility and high standards of proficiency, blacks endure a system characterized by overcrowded facilities and chronic shortages of medical personnel. The health apparatus is controlled by whites and run primarily for the benefit of whites, as is the South African economy.

The connexions between health care and social control, including reform and repression, have been complex and continuous throughout the 20th century. Social welfare and public health measures, in general the bounty of whites, have in certain instances been extended to blacks. This extension has coincided with the widely recognized need for ameliorative action, the breakdown of existing institutions and rising militancy. It is clear that the link between "disease and discontent" and the palliative role health care can play in this has not been lost on the South African authorities. In the wake of the black working-class militancy in 1972-74 and the uprisings in the African townships, a new Health Act "designed to promote the health of all sections of the population in the Republic" was passed. The close relationship between the material and ideological role health care can perform was alluded to, perhaps with unintended force, by the Superintendent of the Day Hospitals Association in the Western Cape, J. A. Smith, at a conference on the economics of health care held at the University of Cape Town in 1978, when he remarked:

> "We are here to discuss health and wealth. Health and wealth for the majority spells social peace. Disease, discontent and poverty for the majority spells social unrest ... I believe the enlightened new Health Act [Act 63 of 1977] can be a catalyst to bring about dramatic changes in the health of the people of this country, and to fight the enemy within, disease and discontent" (*2*).

It is clear that, in response to changing internal and external pressures, a new strategy is being devised to make apartheid more acceptable to sectors of the black population and to the outside world. First, the development of the Bantustans has become a top priority and there is a massive campaign inside and outside South Africa to ensure their acceptance as newly created "facts". Secondly, within the "common areas" the position of Africans who qualify for residence under section 10 of the Urban Areas Act is under constant review, and deliberate attempts are being made to create and coopt a black "middle class". The present report is clearly being written at a critical juncture and comments on trends which are as yet still emerging. At this moment of

transition and flux it is difficult to predict the outcome of the new strategy and to work out how deep it goes. The evidence available to date indicates that the professions of interest in comprehensive services and primary health care are simply changes in the image of overt racism in South African society, like the removal of "Whites only" signs on park benches. The changes can be seen as State intervention to ensure the continuing control of resources by a minority.

The functions and functioning of health care in South Africa can be reviewed in terms of the four major trends currently evident—increased State intervention, continued curative orientation, continued bias in favour of the urban areas, and perpetuation of white dominance.

Increasing State Intervention

Between 1959-60 and 1975-76 the expenditure on health care in the private sector increased fourfold (from R93 million to R378 million), while over the same period public sector health expenditure increased by a factor of 5.4 (from R96 million to R515 million). Despite this apparently large increase in expenditure, the State health expenditure represented only 2.1% of gross national product (GNP) in 1974-75, the same proportion as it represented in 1959. The private sector took up a decreasing proportion of GNP, from 2.1% in 1959 to 1.5% in 1975-76 (see also Table 1).

The relative increase in public compared with private expenditure on health is consistent with an international trend. In the USA, for example, 22% of total health expenditure in 1966 was by the public sector and this increased to 38% by 1974. In the United Kingdom 3.9% of the GNP was spent on the National Health Service in 1951 and this increased to 5.3% in 1976. This trend has drawn comment from several noted health economists. Abel-Smith suggested in the 1960s that the increased health expenditure by the public sector compared with the private sector could be attributed, on the basis of international trends, to an increase in GNP *per se* (*4*). Although there have

Table 1. Public sector expenditure as a percentage of total health expenditure

	Public	Private[a]
1960	43	57
1970	57	43
1976	61	39

Source: *Steenkamp Commission of Enquiry into the Pharmaceutical Industry.* Pretoria, Government Printer, 1978 (Document RP38).

[a] Excluding industrial hospitals.

been dramatic increases in the proportion of GNP expended on health care in many countries, this is not the case in South Africa, as we have seen above. Another suggestion is that increasing State expenditure on health is related to increasing State participation in the economy (*5*) and this indeed seems to be the case in South Africa.

The parastatal companies such as the Iron and Steel Corporation (ISCOR), the South African Railways and Harbours (SAR & H), the Electricity Supply Commission (ESCOM), the South African Coal Oil and Gas Corporation (SASOL), which produces oil from coal, the Uranium Corporation (UGOR), which exploits 25% of the West's known uranium, the Armaments Development and Manufacturing Corporation (ARMSCOR) and the Southern Oil Exploration Corporation (SOEKOR) have all dramatically increased the State's monopoly over crucial areas of the economy. The role of the State in promoting Afrikaner-controlled private companies is also of great importance. A movement to increase the economic power of the Afrikaners began in 1920 and was carried for the greater part by the powerful Afrikaner secret societies, the Broederbond and its ancillary, the Reddingsdaadbond (Rescue Deed Association). Since then the State has openly encouraged dealings with Volkskas (Peoples Bank) and the insurance groups SANLAM and SANTAM. These businesses and others which represent Afrikaner capital have been assisted as part of deliberate government policy over the last three decades.

A few figures indicate the increased extent of State capitalism in South Africa. Between 1960 and 1970 public sector fixed investment grew at an average annual rate of 13.3% compared with 11% in the private sector. Over the same period private manufacturing capital outlays rose by 4.5% annually while public sector manufacturing concerns, such as SASOL, increased their capital spending by about 9%. The public sector share of total fixed investment rose from 41% in 1960 to about 46% in 1970 and well over 50% in 1980 (*6*).

Private and public health funds are also spent differently. State hospitals and State-aided institutions account for almost all infectious disease facilities, while care of the elderly (meaning the white elderly) is provided almost entirely by privately owned institutions. The State and the private sector share the supply of mental health facilities, although in practice this means very different things for blacks and whites. The private sector involves 71% of all hospitals in South Africa and 34% of all beds. The Department of Health describes 25% of these as "purely for profit" (*7*). Some 90% of dentists and 60% of doctors are not State-employed. The South African State appears to be displacing private medicine at a number of levels to increase its intervention in health. It has virtually eliminated the mission hospitals, which were staffed and funded by overseas interests. By the end of 1978 more than 70 mission hospitals in the Bantustans had been taken over by the Government and

"handed over" to the Bantustan administrations. The State competes to some extent with the medical profession in the orientation of medical training of staff for hospital work rather than private practice. In general, however, there is a relatively comfortable symbiosis of private practice with State hospital services.

Recently the State Health Department has established chairs of preventive and community health at various medical schools. However, the State retains control over finances and the right to veto staff appointments and to deny staff the security of university conditions of service. According to Professor P. Smythe:

> "There is considerable concern in medical circles that the Government intends a wider take-over of facilities of medicine of the universities, divorcing them from their university ties and allegiance and establishing a MEDUNSA-like system under the control of State Health. If this is so it will be the Department of Community Health which will provide the necessary Trojan horse ..." (*8*).

In a society where the State represents the interests of a small minority, this increasing intervention through health care has serious implications.

With the changing political climate in South Africa, the State has also intervened increasingly to shape attitudes to social conditions. It is increasingly attempting to present a face of benevolence in its interventions. In 1977 this attempt was formalized in the 1977 Health Act which now provides the legislative framework excluding the Bantustans and has largely replaced the previous health legislation from the time of the 1919 Public Health Act. Despite the enthusiasm with which the 1977 Act was greeted in some quarters, its major functions seem to be to streamline and consolidate existing practice while adopting the terminology which has become internationally acceptable. In this it was preceded by the recommendations of the 1944 South African Health Commission which, over 30 years ago, attempted to restructure health services, describing them as "disjointed and haphazard, provincial and parochial" (*9*). Despite a promising beginning and the initial acceptance of its main recommendation by Parliament, the far-reaching programme for a national health service was ultimately defeated. The 1977 Act falls far short of even the 1944 recommendations. Like the 1944 Commission, the 1977 Act has set up coordinating committees to sort out the overlapping functions of the three-tiered health system (State, provincial and municipal). The major difference is that in 1944 these committees were seen as transitional, to pave the way for a fully fledged national health service for the whole country. The 1977 Act is more limited, applying only to the "common areas" outside the Bantustans. This omission is not accidental but an integral aspect of the Bantustan policy which creates and institutionalizes the poverty necessary to ensure a reserve of cheap labour. Similarly the failure of the 1944 Commission to get its recommendations implemented was not simply bad luck. The reasons for its failure are complex, but include certain economic

considerations. Important sectors of the South African economy depended at that time, as indeed now, on the impoverishment of a large sector of the population from which cheap labour could be drawn. In those days, however, that impoverishment could not be as easily delineated as it can today under the fully fledged Bantustan policy. If anything like comprehensive health care with universal accessibility had been brought in at the time it would have threatened the continued supply of cheap labour. Without the threat of starvation or the need for money to pay for medical attention and education, the labour flow might have dried up. In addition, if health care were provided to blacks (who were and still are disenfranchised) by the State, this could have been taken amiss by the white electorate, who were voting for a government to look after their interests and not those of blacks. In 1944 the Health Commission declared unequivocally that "unless there were drastic reforms in the sphere of nutrition, housing, health education and recreation, the mere provision of more doctoring would not bring more health to the people of the country" (*9*). The 1977 Act does not seem to recognize the problem in quite the same way, and certainly does not recommend any "drastic reforms". Even so, it is doubtful whether the 1977 Act will be implemented any more than were the 1944 recommendations.

It is perhaps not accidental that in the current economic climate there has been a call for the reordering of health priorities internationally towards more effective and lower-cost medical strategies. High-technology medical care, introduced over the last two decades, has proved inefficient in developed countries from a cost-benefit point of view, and is demonstrably inappropriate in developing countries. South African propagandists have been quick to seize on the language of the international development experts and to focus on preventive medicine and community development for their own ends. The glossy hardback propaganda volumes produced on the "independent" Bantustans of Venda, Bophuthatswana and the Transkei emphasize the crucial role of the local clinic staffed by nurses rather than doctors and with health education as the pivot of health care. The hospital is presented as the centre of integrated district and local health teams which work closely with the local communities (*10-12*). As pointed out above, the 1977 Health Act consolidates and coordinates health services in the rest of the country, where the State Health Department makes considerable play on the need for comprehensive health care, preventive medicine and health education (*13, 14*). Pilot schemes have apparently been initiated in Kimberley, the Orange Free State and elsewhere to bring together the three tiers of state, provincial and municipal health care (*15*).

Some changes in health care in South Africa certainly have taken place over the past few years. An increasing emphasis is being placed on primary curative services in both the urban areas and the Bantustans. In areas of Cape Town and Soweto, maternal and child health services are reported to be

having a significant impact on infant mortality rates. In the Bantustans, the expenditure on welfare services has increased considerably since the early 1970s although this increase is minute compared with that in expenditure on curative medical services. However, the effect that even these increases are having on morbidity and mortality is unclear. In April 1979 moves were initiated to reduce the inequality between the salaries of black and white doctors, a glaring anomaly which has embarrassed members of the medical profession. Recent unrest among black doctors reflects the failure of these tentative moves (*16, 17*). In any event the reduction of this particular inequality does not affect the basic structure of inequality in the society or even within health care. It can be understood, however, in the context of the policy of coopting a black middle class. In 1979, at least partly in response to WHO influence, the proportion of the health vote to be spent on mental health facilities was increased considerably (see also the section on mental health care, p. 230). Further, much has been made by South African propagandists of the new medical school for Africans at Garankuwa, near Pretoria. Less attention is being given to the phasing-out of the training facilities for African doctors in the Natal medical school, which has admitted black students since 1951.

It is necessary to look behind the apparently increased concern for the health needs of the African population. Indeed this will help towards an understanding of why State intervention in South Africa is not an unqualified good. It can be argued that the much-vaunted reforms help in very direct ways to reinforce and legitimate the structures of the apartheid State. The health strategy in the Bantustans and the 1977 Health Act can be seen to perpetuate white dominance. First, the separate health schemes presume that the Bantustans are a "natural fact" of South African life. Secondly, health care is provided in very different ways for blacks and whites. High-level technology and ultra-specialized and heavily subsidized State and private medicine continue to be the norm for whites. Intermediate technology and primary curative services staffed by nurses and paraprofessionals who are often inadequately trained and still too few in number to meet health needs characterize health care for blacks. Thirdly, the relations of dominance in the wider society are constantly reiterated in the relations between doctors and other health care workers, which are based on a hierarchical technical division of labour. Fourthly, this same dominance is embodied in the relationship between the health care apparatus as a whole and the rest of society. The protection and privatization of health knowledge are consonant with the relations of alienation that characterize societies in which the productive resources are monopolized for the benefit of a minority. Perhaps the most important of these is the way health care has been explicitly locked into the Bantustan structure. The separation of services thus gives a material reality to the ideology of "separate development".

As has been shown, the practice of apartheid is responsible for much of the ill health in South Africa. The disease patterns are not, as is frequently claimed in government propaganda, the result of a "dual structure" of South African society. Nor are they due to the "developing status" of the black population or the "hidebound traditionalism" and "ignorance" of the Africans. The disease patterns are very much the outcome of identifiable economic and social relationships. For this reason the constraints on health care imposed by apartheid and by the very existence of the Bantustans cannot be remedied simply by additional health care facilities or even a change in the approach to health care. The main thrust of the 1979 Health Year in South Africa was the production of impressive pamphlets on nutrition, family planning and schistosomiasis control. This has come and gone with no let up on population removals, no decrease in the numbers of unemployed, no improved access to land or other means of production. If anything, there has been increased control over the entry of blacks into the general economy. Developing welfare services in the Bantustans under these conditions disguises the extent to which the very existence of these artificial delineations is the cause of poverty and disease. Health services thus perpetuate white economic and political dominance through legitimating the Bantustan system.

Continued Curative Orientation

It is clear from the allocation of finances that, despite the talk about primary care and comprehensive services, the South African State is either not prepared or not able to reorient the health care apparatus from hospital-based curative towards primary curative and preventive services. There is evidence, moreover, that curative expenditure, which is administered mostly through provincial allocations, is increasing at a greater rate than the centrally administered public health programme. Provincial allocations are increasing by between 20% and 25% each year whereas the Department of Health vote, which includes administration, infectious diseases, mental health, medical care, health protection and various support services, is increasing at about 10% each year (see Table 2).

Table 2. State expenditure on health, 1979
(millions of Rand)

160	Department of Health: preventive and curative
68	Bantustans: almost all curative
654	Hospital services: curative
500	Private sector subsidy: curative and custodial
1 382	Total expenditure in 1979

Source: *Annual report of the Department of Health, 1979*. Pretoria, Government Printer, 1980.

Hospital and other curative services are by far the most important single item of health expenditure, accounting for over 80% of the Department of Health expenditure and over 90% of provincial expenditure if one includes subsidies to private hospitals and mental institutions. Expenditure on infectious diseases, including hospitalization and buildings, on genetic services, and on administrative support services comes to around 5% of all State health expenditure. Expenditure on health protection, which includes pollution control, control of consumer goods, public environmental services and industrial health control, takes up less than 1% of all public sector health expenditure (based on expenditure figures from the 1975-76, 1976-77, 1977-78 and 1978-79 health votes). Around 1% is spent on family planning and nutrition services (*7, 19, 20*). All State contributions to medical research come to less than 1% of the public sector health expenditure and, of this 1%, less than a fifth can be related even remotely to nutrition, infectious diseases or primary curative or preventive care (*20*). This means that even by the most optimistic estimates only 5-6% of all State health expenditure is spent on other than curative programmes. The private sector spends virtually no funds on preventive programmes, the one exception to this being a few of the industrial benefit associations which have introduced vaccination programmes.

In the Cape Province in the 1978-79 financial year some 58% of the total R240 million to be spent on health care by the provincial administration was scheduled to be spent in the Cape Peninsula, where about 10% of the people live. Over 70% of this was to be spent on the running costs of two large hospitals, Groote Schuur and Tygerberg. These running costs amount each year to four times the total annual expenditure by the State on the control of tuberculosis in the entire country (*21*). In 1980 the Administrator of the Cape, Mr Eugene Louw, set aside R309 million for the maintenance and running costs of hospitals in Cape Province. This represents about 80% of the provincial health allocation (*22*) and 12 times the amount spent each year by the State for tuberculosis control in the whole country (*21*). This illustrates that, even if there were some intention to redistribute health resources—for which there is little evidence—the State is effectively committed to the maintenance of the large disease palaces which have won South Africa international acclaim for their high standards of clinical expertise. These hospitals also effectively represent white control over science and technology within South Africa, reflecting the centralization of resources and the control over those resources by a minority. The apparently illogical allocation of health resources in relation to disease patterns in South Africa takes on a cold logic when one considers these political priorities.

The curative orientation is maintained throughout the health sector with cheaper and "more appropriate" services for urban blacks in the form of primary curative clinics operating in various urban centres. Baragwanath Hospital in Soweto used to run 8 clinics, 4 of which had maternity facilities.

These were closed during the 1976 June uprising and by 1979 only 3 were reopened. The reluctance of white doctors to enter the township has led to the development of a "nurse-physician" service which deals with some 75 000 patients each year, 20% of whom are referred to doctors. In the Eastern Cape Province, primary curative care clinics exist in Cradock, Graaf Reinet, Grahamstown and New Brighton near Port Elizabeth. At each of these, 75% of the 200-250 patients attending each day are dealt with by nurses alone. In the Cape Province there are 15 day hospitals which provide curative care mainly by doctors. They are established in the poorer areas and exist essentially to ease the pressure on the large hospitals. In one Bantustan hospital, Bophelong hospital in Bophuthatswana, "specialist nurse practitioners" have been trained to do much of the work which for whites is done by doctors (*23*).

Thus whites are generally cared for by doctors either in hospitals or in private consultation rooms, while blacks use health centres where only the most serious cases are seen by doctors. The point about this is not that doctors provide better primary curative care than nurses, for it is doubtful that this is so. What is important is that there is a huge discrepancy between the nature and availability of health care for people classified by skin colour. The health care which is presented as "better"—that provided by doctors—falls to whites, while nurses, who are hierarchically below doctors, provide the care for blacks. Certainly any black person with enough money can see a private practitioner if there is one in the area, but in general blacks do not have enough money, they are not covered by insurance schemes (see page 227), and there are extremely few private doctors in the rural areas, where most are forced to live. The discrepancy in health care thus not only reflects the social inequalities but also reinforces them through conveying an inferior position for blacks.

The Geographical Bias

One may wonder why the South African State has intervened at this juncture even to the extent of these limited primary curative services for blacks. By and large health services have not been extended to the rural areas, where objectively they are most needed. It can be suggested that their development is a response to political demands more forcefully expressed by blacks in urban than in rural areas, and that it has little to do with the health needs of the population. In addition, they relieve the pressure on the large hospitals by dealing with the problems which would otherwise "clutter up" outpatient departments. The urban bias in the distribution of health facilities is particularly apparent in South Africa. Throughout the world hospitals tend to be built in the towns rather than in the rural areas, but in South Africa this tendency is strengthened by apartheid, which determines that blacks have to live in the underserved rural areas while whites can live wherever they choose. Thus whites are provided with hospital services comparable in standards of

excellence to those of Europe and North America. Urban blacks have access to some of these. Blacks in the Bantustans, however, are marginal to the economy and consequently the level of services provided for them is very low. The total health budget of all the Bantustans, where some 40% of Africans are forced to live, is the same as the annual running costs of one of the large modern hospitals in Johannesburg or Cape Town. In 1978, 0.23% of the GNP went on health in the Bantustans, compared with 2.3% in the rest of South Africa (*47*).

The regional distribution of hospital beds indicates a pronounced urban bias for blacks and a similar but smaller bias for whites. For whites there is 1 hospital bed for every 92 people in the urban areas and 1 for every 109 in the rural areas. There is 1 for every 109 black people in the urban areas, 1 for every 191 black people in the rural "white" areas and 1 for between 154 and 527 people in the Bantustans (Bophuthatswana and Kangwane respectively) (*24*). The regional distribution of doctors is also revealing. According to the 1975 Register of Medical Practitioners, 66% of doctors practise in metropolitan areas, whereas less than 6% practise in villages or rural areas, in which, even excluding the Bantustans, over 50% of the population live. In the Bantustans, which contain 13% of the total population, there are around 400 doctors. This is about 2% of the 20 000 doctors available for the rest of South Africa. The doctor-to-population ratio varies from one Bantustan to another, ranging from 1-2 per 100 000 in Lebowa (*25*) to 10 per 100 000 in KwaZulu (*24*). In Lebowa in the first 6 months of 1981, for example, 108 full-time posts for doctors were allocated to care for patients in 4362 beds. Only 34% of these posts were filled, with some of the shortfall made up by part-time seasonal workers (*25*). One recurring problem is that even those few doctors who do go to work in the Bantustans are ill-equipped to deal with the problems that confront them (*25*).

Nearly a third of the doctors in the rural areas in 1975 were graduates of universities outside South Africa, many of them being missionaries and humanitarians working in mission hospitals. With the take-over of the mission hospitals by the South African Government and their subsequent hand over to the Bantustan administration, many of these doctors have left their work, to be replaced largely by white South African national servicemen. These are generally completely inexperienced, most of them coming directly from medical schools in the cities (*26, 27*). The much publicized decentralization of health services to the Bantustans has had at least two important ideological effects. First, it has lent some legitimacy to the Bantustan policy and, secondly, it has to an extent let the South African Government "off the hook" with regard to health conditions in those areas. Less than 10% of State health expenditure between 1975 and 1979 went to the Bantustans either directly or through the South African Bantu Trust. Almost all of this represented capital and recurrent costs of curative services (*19, 20*).

In the "white" rural area of Paarl, populated by 24 000 people classified as white and about four times that number classified as black, the urban/rural imbalance is also evident. Comparing it with urban areas, a letter to the *South African medical journal* complained:

> "...there should be four hospitals in Paarl. There is one hospital and one day hospital. We should have 73 doctors in those hospitals and 23 in the district. Actually we do not have 10 doctors in state employment at our hospital... In the district we do not have a single doctor. The clinics are staffed by sisters in a mobile unit. We should have 1380 beds available. We do not have 30% of that" (*28*).

The Maintenance of White Dominance

The obvious distribution of health resources according to colour of skin of the population has at least three interlocking facets. First, it is the reflection of the "racial picture" in the economy. This is the consequence of the second two facets, and it is also through these that health care reinforces and reproduces racial discrimination in South Africa. Secondly, the health services form part of the political "contract", or alliance, between the ruling class and the rest of the whites in South Africa. In terms of this alliance, health care, like the vote and numerous other privileges afforded to whites, is a kind of bounty in exchange for support. Another example of this alliance is the R720 million made available for salary increases for white civil servants in 1981. This group constitutes a third of the economically active whites and 70% of them are Afrikaners, who provide the bulwark of the ruling National Party. The relative importance of this group is borne out by the fact that their pay increase took up 29 times more money than is spent on tuberculosis control in the whole country in one year (*21, 29*). Thirdly, the "racial" distribution of disease and health care conveys the ideology of white supremacy, lending a concrete form to white control over resources and production. This is done through health care in many ways. Most doctors are white and most nurses are black. Even those few blacks who do acquire medical training are steeped in the ideology of white supremacy. Pay differentials affect almost all levels of health personnel. There is a racial bias in the availability of social services, pensions, grants, hospital services and preventive campaigns. There are racial differences in quality and quantity of health care at all levels. Certain aspects of health-related services, including dental services, mental health and family planning, reveal the quantitative and qualitative racial differences in health policy and practice in South Africa.

Availability of services

If one compares the availability of health services, even using the limited indices of resources per unit of population, South Africa compares reasonably

on the basis of national averages with other developed countries in the same GNP bracket. There is 1 doctor to 1500-2500 people, 1 nurse to 550-700 people and 1 hospital bed to about 150 people (*30*). However, in the same way as the economic wealth of the country is monopolized by whites, the health services, too, are predominantly available for whites and designed to meet the need of whites. Whites receive 72% of all personal income with the rest divided among the other population groups (*31*). Medical aid benefits cover 73% of whites and less than 10% of all the other population groups. Whites spend 40 times more on doctors of any description than do Africans. The proportion of white income going on health care is around 3% whereas coloureds spend around 1.5% and Africans around 1.2%. The income of these latter groups is also considerably lower than that of whites. Although the expenditure on patent medicines accounts for nearly half of the purchases of urban Africans for health care, this amounts to less in absolute terms than the expenditure on patent medicines by any other population subgroup (*45*). The stratified access to health care is also reflected in the number of medications held in homes. In a recent study of various social groups, Buchanan found an average of 9 different medicines in white households, 7 in urban African households, 3 in Asian households and less than 1 in rural African households (*36*).

According to Department of Health publications, 75% of its health expenditure goes on services for blacks (*32*). This is extemely misleading since whites are provided for out of the much larger provincial allocation. In addition, only a minute proportion goes toward health care in the Bantustans, where those who are in most need live. Almost all of the rest goes on curative services to cater for the black urban élite. This expenditure is quite consistent with the policy of coopting a black middle class.

Even so, blacks have substantially worse services than whites. The remuneration from the central State to the provincial administration for hospital services for blacks is half that for whites. Some indication of the quality of services can be gained from the analysis of hospital running costs. Figures from the Orange Free State, Natal and the Transvaal indicate that the cost per patient is very much a function of colour of skin, with two or three times more being spent on whites (*33*). This is due in part to a lower quality of service and in part to the underprovision of facilities for blacks, which results in a lower unit cost for utilization. It is due in part also to the lower wage bill for blacks, which results from wage discrimination by colour of skin. Wages make up 65% of the total running costs of large hospitals. An estimate of likely quality of care can be obtained from a comparison of the running costs of a large white hospital (Addington) and a large black hospital (King Edward VIII) in Durban. In the hospital for blacks, salary costs and the cost of provisions per patient were around 60% lower, and the cost of medical supplies around 35% lower, than the costs of the same items per patient at the white hospital (*34*).

Total running costs were 42% lower than those of the white hospital, a difference accounted for by higher occupancy and fewer staff, which are probably reflections of quality of care.

Even among the variously classified blacks there is discrimination in services available. An example of this is the directive of April 1981 that Africans should be turned away from Johannesburg's Coronation Hospital (*35*).

Health personnel

By the end of 1980 there were over 20 000 doctors in South Africa. This gives a doctor-to-population ratio which compares favourably with that of other developed countries. When broken down by colour of skin, we again find the discrepancies with which we are familiar in South Africa. One in about 350 whites is trained as a doctor, whereas the corresponding proportion for Africans is 1 in 45 000-50 000. There is evidence that this discrepancy is actually increasing as African population growth is not matched by an increase in the training of black doctors. The point is not that the ratios indicate different levels of care, although this is so. Nor can it be said that white doctors do not look after black patients. What is important is the access to the position of physician, with all that this entails. Only one of the functions of doctors has to do with diagnosis and treatment and this does not always require expensive medical training. Other functions have to do with conveying a set of social values and the privatization of knowledge. It is particularly important for white supremacy that this role should be reserved predominantly for whites, even if the basic diagnosis and treatment functions can be carried out by various other health personnel, such as the "specialist nurse practitioner" (*23*).

Between 1951 and 1976 only 218 African doctors qualified in South Africa, about 1% of the number of white doctors. In 1977, 601 whites, 65 Asians, 21 coloureds and 6 Africans qualified from South African medical schools. At that time there were 5905 white, 444 Asian, 34 Chinese, 120 coloured and 270 African medical students. In part the low black enrolment is due to apartheid in earlier education. The inferior Bantu Education, which was the focus of the 1976 and 1980 student revolts, means, among other things, that very few Africans are given the mathematics and science training to qualify them for admission to medical schools. In addition, the numbers of places for blacks at medical schools are restricted. A new medical "university" (it is State-controlled) has been opened at Garankuwa, near Pretoria, and is scheduled to enrol around 80 medical students each year. Existing places for Africans at the predominantly white medical schools are rapidly being phased out, and a new medical school is planned for the Witwatersrand with an annual intake of some 200 white students. It is thus clear that the medical "university" at Garankuwa is hardly a threat to white domination within and through the medical profession.

Within the cloisters of the profession the ideology of white supremacy remains relatively unaffected by the recent changes. Racist practices extend even after death. Black medical students are not allowed access to white cadavers during their anatomy training and there is no black pathologist working in any State mortuary. No white patients are used for clinical demonstration purposes in the teaching of black medical students and, as doctors in the State service, blacks are not permitted to look after whites. In 1976 a case in point arose in Port Elizabeth when an Asian doctor was prevented from operating in a State hospital on one of his white private patients. According to the Director of Health Services of the province at that time, whites who insisted on being treated by black doctors should apply for admission to black hospitals (*37*). This segregation does not work the other way around. A number of white doctors have black practices, black patients provide the teaching material for white medical students and whites teach black medical students.

Black health workers at all levels are paid less than their white counterparts. In the past few years there has been a well-publicized increase in the wages of black doctors to decrease the inequality between black and white members of the medical profession. Recent unrest in Natal indicates that even this tentative and very limited move is incomplete (*16, 17*). Even parity of salary, had this been achieved in the small sector of society which doctors represent, would not mean financial equality. Blacks have very different living conditions to contend with and come under a different tax system. Blacks are not eligible for tax concessions for dependents as are whites, so that a greater proportion of the income of black doctors is taxed. There are also special taxes which apply only to Africans. The South African Institute of Race Relations calculated that a black family with an annual income of R6000 would pay twice the tax of a white family of the same size with the same income (*38*). Since few blacks in South Africa have a large income, taxation discrimination is one of the less substantial manifestations of racial inequality in the country. Black doctors are without any doubt a part of the élite of their "racial" group. They are still, however, subject to much of the degrading and limiting legislation which controls the lives of blacks in South Africa. Black doctors are subject to the Group Areas Act, which determines where they may live and where they may practise. African doctors have to carry Reference Books (passes) which may be demanded at any time by the police. It is true that whites have identification in the form of a "book of life" and in numerous other countries citizens must carry some form of identification. These are in no way comparable to the passes, since they do not determine where the holder should live and work. They are not used, as are passes for blacks, to control the everyday activity and movement of individuals. Whites are seldom if ever harassed for not carrying their documents, whereas for the scores of thousands of Africans who are arrested under the pass laws each year there

is the constant threat of loss of employment. This usually involves endorsement out of the "common areas" and obligatory return to the Bantustans. Black doctors are subject to the curfew laws in the urban areas and a black doctor visiting patients on night calls must be able to produce an explanation if stopped by the police. While at medical school black medical students are generally subject to the same laws as black migrant workers, and are not allowed to live with their wives and children.

Within nursing, the divisions by colour of skin which characterize South Africa are very evident. By far the majority of senior and qualified nurses are white, while the larger proportion of junior nurses are black. Training is separate for black and white nurses. Although blacks are represented on the South African Nursing Council, which is out of the ordinary in South Africa, they are distinctly in the minority. In the South African Nursing Association a familiar pattern is evident. There are different branches for people with different colours of skin and these have to meet separately. The chronic nursing shortage has induced some relaxation in the entrenched regulation that there should be no contact between black nurses and white patients, and that no white nurse should be supervised by a black person (*39*). In 1976 the Minister of Health, Dr S. van der Merwe, said that black nurses would be allowed to nurse white patients, in private hospitals only, on the condition that no trained white staff were available and that the black staff were not being employed simply to contravene government policy (*40*). Differences in wages reveal clearly the stratification of the nursing profession. At the lower end of the wage scale for each grade, African nurses are paid roughly half the salary of white nurses. In 1979 the starting salary for an African nurse was R197.50 a month while whites started at R310 a month (*41*). At the upper limit of the wage scale for each grade, African nurses are paid less than whites at the lower end of the wage scale one grade below. With this very material division by colour of skin, the ideology of white supremacy is conveyed particularly powerfully.

The estimated cost in 1976 of raising the salaries of black nurses to full parity with white nurses was around R14 million. This would have been less than 1% of the defence budget of that year. Full parity for doctors would have cost only R1.5 million that year. Doctors have far stronger international connexions, are more vociferous within the country, and constitute a powerful "middle class". It is thus logical that concessions and reforms have been concerned mainly with this group.

Dental care

Dental care in South Africa follows a predictable pattern. The picture of racial discrimination is convincingly portrayed in data from the annual report of the Medical Officer for Health of the City of Cape Town in 1979 (*42*). These

indicate that people classified as white who attend dentists tend to have more fillings than those classified as coloured or Asian. However, the latter two groups have far more extractions than whites. Dentures are provided predominantly to whites (see Table 3). Apart from the rather unconvincing explanation that only those blacks who need extractions, and predominantly those whites who need fillings, actually attend dentists, it appears that blacks have about 10 times more chance than whites of having an extraction rather than a filling.

Table 3. Discrimination in dental care, 1979

	White	Coloured	Black
Fillings per 100 attendances	22	3	1
Fillings per 100 000 people	441	117	79
Extractions per 100 attendances	17	37	45
Extractions per 100 000 people	338	1 439	3 455
Dentures per 1000 attendances	5	2	1
Dentures per 100 000 people	94	70	86

Source: *Report of the Medical Officer for Health of the City of Cape Town, 1979.* Cape Town, 1980.

Medical Aid, Benefit and Exemption Schemes

Over 80% of beneficiaries of health insurance schemes are white. (In 1977, the proportion was 83%.) This hardly supports the idea that blacks can choose whether they see a doctor privately, with costs met by health insurance (see Table 4).

Table 4. Members and dependents of health aid schemes, 1974

	Ordinary	Widows	Pensioners	Dependents	Beneficiaries
White	1 068 783	16 178	39 139	1 901 676	3 043 776
Black	296 900	663	639	201 651	499 853

Source: SAIRR. *Survey of race relations, 1974.* Johannesburg, 1975.

Pensions

After the increase in the maintenance allowance for pensioners and disabled people in 1975, Africans received less than a quarter the allowance of whites while Asians and coloureds received about a half. A disproportionately

high number of whites receive these allowances. Each year roughly the same number of whites as Africans receive old age pensions and over a third as many whites as Africans receive disability pensions. In the population at large there are about 7 Africans to 1 white, although a large proportion of the former die in early childhood from preventable causes. The discrimination in pensions is revealed in the average amounts paid out to recipients. These allowances are subject to a means test whereby, above a certain "free income", the allowance is reduced. The free income for whites is four times that for Africans and twice that for coloureds and Asians. The annual increases retain the discrepancies (see Table 5).

Table 5. Average pension per person per year, 1977 and 1981 (Rand)

	White	Asian	Coloured	African
Old age	854	424	426	185
Blind	817	425	428	185
Disabled	832	444	421	183
1981 increase	156	108	108	84

Source: SAIRR. *Survey of race relations, 1977; Idem, 1980.* Johannesburg, 1978 and 1981.

Compensation for occupational diseases depends for whites on the degree of disablement. In each category of disablement coloureds get half of these amounts. In general Africans are not assessed on degree of disablement but are classified as disabled or not. Disabled Africans get considerably lower pensions than people of other skin colour. The situation is actually worse than that portrayed by the figures for pensions, since many African workers return to the Bantustans without any settlement of their claims. In particular, no claim can be settled if there is any irregularity with a potential beneficiary's Reference Book. One example of these irregularities is that the time spent in the "common area" is less than that registered with the authorities. Compensation for people with occupational disability is fixed at a ceiling of 75% of earnings, thereby continuing the inequality in wages. The lump sum payable to African families on the death of the breadwinner, if this is attributed to occupation, is currently approximately equivalent to 6 months of the compensation available to occupationally disabled whites. The compensation for occupational disability in terms of wages thus institutionalizes not only the exchange of health for wages, but also the different value of people in the economy according to the colour of their skin. The loss of a limb is thus presented as less important for an African than for a white person.

Ambulance services

The Group Areas Act of 1966 laid down, among other things, that blacks should not be transported in a white ambulance or vice versa. A series of tragic incidents has resulted in the modification and increased flexibility of this provision, particularly in the Cape Peninsula. In most other urban areas the use of ambulances continues to be determined by colour of skin.

Care of children and the aged

Replies read to questions in the House of Assembly indicate that around 3000 white children are judged each year to be in need of care. This is roughly three times as many as the numbers of African children who come into care juridically each year. In reality the number of Africans cared for by people other than their parents is many times this figure as a result of the migrant labour system. State subsidies for child care in homes follow the now familiar racial pattern. African children receive roughly a quarter as much as whites, while Asians and coloureds receive roughly half as much as whites. There is no State-funded care for the African elderly beyond their very low pensions. All sizeable towns in South Africa, on the other hand, have homes for elderly white people and almost all of these receive some State subsidy.

Sanitation

The public health provisions for whites in South Africa are both efficient and widely available. Blacks in the rural areas have no such services and in the urban areas have to put up with services substantially inferior to those afforded to whites. An example of this comes from Vereeniging, where 92% of whites dwellings are connected to the general municipal sewer system. Some 93% of black dwellings (there are approximately the same number of whites as blacks in the town) have to make do with the emptying of pails three times a week, and only about 7% are connected to the general sewer system.

Family planning

In 1978-79 the Government spent just under R8 million on family planning, an increase of 45% over expenditure in 1976-77. Between 1977 and 1978 the number of family planning advisers was doubled to provide 1 for every 4000 women. When this ratio is compared with that of doctors to population, it is clear that family planning is indeed a priority for the South African Government. The annual report of the Department of Health in 1978 boasts that the South African family planning programme is the eighth biggest in the world and, when population size is taken into account, it is surpassed only by China. The rationalization behind this emphasis is that family planning will

reduce the strain put on the system whereby too many impoverished people have to subsist off too little. It is a predictable solution which leaves the situation fundamentally unchanged. The widespread availability of contraception is undoubtedly beneficial where it increases the control people have over their own destinies. In South Africa blacks hardly have control over their daily food, let alone their destiny.

For those blacks who are interested in family planning, the options are limited. Certain methods (such as progesterone depot injections) which are considered unsuitable in the United Kingdom, other European countries, the USA, and among white South Africans are the only methods available to black women in some areas. In Kimberley, data from the annual reports of the Department of Public Health between 1977 and 1979 reveal that over 80% of white women who avail themselves of the family planning programme are put on oral contraceptives. Some 66% of African women and 46% per cent of coloured women, on the other hand, are given repeated depot injections.

The present abortion laws in South Africa require that once a pregnancy is initiated it may not be terminated on the decision of the woman concerned. The burden of this falls unevenly on the different social strata, since white women have greater access to the "appropriate channels". These involve persuading psychiatrists that childbirth would be injurious to mental health, or clinicians that it would be injurious to physical health. This situation is reflected in the number of legal abortions in the first 11 months of 1980: white 304; coloured 82; Asian 8; African 51. These figures contrast with the number of cases treated for septic abortions over the same periods: white 124; coloured 213; Asian 144; African 1060 (*47*).

Mental Health Care

In the last few years mental health care in the Republic of South Africa has been in the forefront of public debate, both internationally and within the Republic. This does not, however, imply that the abuses of rights and health evident in mental health care are more serious than in other sectors.

Nevertheless the situation in the mental health field deserves special attention because it epitomizes some essential features of apartheid in health. Although psychiatry is expected to be a medical discipline which deals with the human being as a whole, in no other medical field in South Africa is the contempt for the person, cultivated by racism, more concisely portrayed than in psychiatry. The racism which underlines the dehumanizing practices in mental health (as in other fields of health care) is not merely a manifestation of psychological attitudes on the part of the medical profession. It is the result of those objective social and economic forces described in some detail in Chapter 1.

Mental health care in South Africa is characterized by qualitative and quantitative stratification by colour of skin, an overwhelmingly custodial orientation, a geographical bias in favour of the urban areas, a large profit-making private sector and, as with other aspects of health care, rhetorical statements about a change in approach. The mental health care apparatus in South Africa is completely under the dominance of whites. There is, for example, no black psychiatrist in the Republic.

The 1977 WHO report

In response to a request from the United Nations Special Committee Against Apartheid, and in accordance with resolutions WHA16.43, WHA17.50 and WHA18.40, WHO undertook a study of the South African mental health services which was entirely based on published evidence. The report on this study was released in March 1977 (*69*). The study examined evidence from many sources and arrived at the following conclusions:

> "... The evidence demonstrates that apartheid in the area of mental health services leads to gross inequalities in the availability of mental health care for the different population groups in South Africa, and that the provisions for the "non-white" groups, especially for the African population, are inadequate in quantity and very poor in quality ... the State health services, being unable or unwilling to cope with the increasing number of mental health problems among the African population, have recruited the services of private companies for the maintenance in custodial care of between 8000 and 9000 black mental patients admitted on an involuntary basis. These custodial institutions are the predominant, or the only, form of mental health service available to the African population.
>
> "Since the private institutions for African patients are operated on a profit-making basis, depending on the number of patients detained, and since patients are admitted under involuntary provisions (thereby reducing the burden on the State services), the system is technically open to abuse and is the manifestation of socially harmful policies in the area of health. Such policies are however part and parcel of the overall doctrine and practice of apartheid, and radical improvements of the present situation in the mental health services are inconceivable as long as apartheid remains in force."

The WHO report received wide publicity. Summaries or the entire text appeared in a number of professional journals, newspapers, magazines and other media (*48*). As usual with criticisms of apartheid published by international bodies, the release of the WHO report was followed by a campaign of denials and attempts to cast doubt on its validity on the part of South African officials and representatives of the medical establishment. According to these sources, not only was mental health care under apartheid above suspicion, it was exemplary. Mr van der Walt, 1977 Director of Information at the South African Embassy in London, stated that:

> "... the institutions are visited regularly by medical inspectors and the nursing staff of the Department of Health. Patients and conditions in the institutions are daily seen and observed and reported by psychiatrists and medical practitioners in the employment of the Department of Health. The institutions are also regularly visited by members of Parliament of all political parties ... From time to time these institutions are also inspected by the Minister of Health..." (*49*).

Deploring the fact that "... the position of mental health in South Africa has recently been the target of an onslaught unprecedented in the history of South Africa", Dr van B. Viljoen said in the South African Parliament that:

> "Some Senators and members of the House of Assembly were privileged in being able to take a personal look at various institutions for mental health in South Africa... We were impressed by the standard which is maintained there and the dedication of the doctors and staff at the various institutions ..." (*50*).

In a similar vein, Professor L. S. Gillis, Chairman of the Executive Committee of the Society of Psychiatrists of South Africa, wrote:

> "The Society of Psychiatrists of South Africa wishes to rebut that information it knows to be false ... We cannot deal with all the issues raised in the WHO report, and some are frankly political, and this is not the function of a non-political professional organization. We do, however, feel that it is unwarranted to tie the apartheid tin to the tail of the psychiatric cat... to harness incorrect facts to a political bandwagon is neither appropriate nor constructive. Nor is credit given anywhere in the WHO report for the very extensive and advanced psychiatric services given to all South Africans without reference to colour or creed" (*51*).

The emphatic denial of any discriminatory or abusive practices within the mental health services by South African officials was accompanied by repeated invitations to objective and impartial visitors to inspect these services. The officials maintained that this would dispel the allegations of maltreatment, abuse and discrimination against black patients. An "open invitation" was extended to the Director-General of WHO by the Minister of Health of the Republic of South Africa in a press statement of 13 May 1976. As explained in the introduction to the 1977 WHO document on apartheid and mental health care, the Director-General decided to undertake a preliminary inquiry based on available documents rather than a visit, because the 1976 amendment to the Mental Health Act of 1973 gave the South African authorities powers to prosecute persons giving evidence about the psychiatric services.

The American Psychiatric Association visit

In January 1979, the Minister of Health again issued "an open challenge to any established organization to visit the country and see for itself" (*52*). In fact, the American Psychiatric Association (APA) had already responded to the invitation by the South African Department of Health and the Smith-Mitchell Company, and an investigative committee of the Association, composed of its President, Dr A. Stone, its former President, Dr J. Weinberg, Dr C. Pinderhughes, former Trustee-at-Large, and Dr J. Spurlock, Deputy Medical Director, visited South Africa for 17 days in September 1978. The APA Committee was specifically assured that the provisions of the 1976 amendment to the Mental Health Act would not prejudice its inquiry, and it was allowed to carry out a thorough investigation of nine of the Smith-Mitchell institutions. The Committee was not, however, allowed to study any

of the governmental psychiatric facilities in the same way. The APA experts examined any available evidence related to those harmful policies and practices which had been described in the WHO report and came to the following general conclusion:

> "Our investigation convinced us that there is good reason for international concern about Black psychiatric patients in South Africa. We found medical practices which were unacceptable and which resulted in needless deaths of Black South Africans. We found that the medical and psychiatric care provided Blacks was grossly inferior to that provided Whites. We found that, apartheid has a destructive impact on Blacks, their families, their social institutions, and their mental health. We believe that these findings, taken individually and as a whole, substantiate allegations of social and political abuse of psychiatry in South Africa."

This conclusion, based on first-hand evidence, categorically refutes the statements of South African Government officials, Members of Parliament and representatives of the medical professional organizations which were referred to above. The APA report is unique in that it contains the most extensive and explicit evidence collected so far with regard to the status of black psychiatric patients in South Africa. This evidence is in full concordance with the additional information collected by WHO since the publication of the 1977 report (*48*). There is suggestive evidence that mental morbidity in South Africa follows patterns created or enhanced by apartheid. While the morbidity of the white population does not differ substantially from that of other populations with comparable age structure and under similar socioeconomic conditions, the psychiatric morbidity of the black population shows high rates of preventable conditions due to physical and psychosocial stress and of avoidable chronicity due to lack of adequate care.

The larger amount of information now available does not, indeed, add any new dimensions to the picture of apartheid in mental health care as already presented in the preliminary WHO inquiry. It does, however, enable us to focus on the nature of mental health and psychiatric care in South Africa which is characterized by the following features:

1. Like every kind of health care, mental health care in South Africa is strictly segregated in accordance with the official racial classification of the population.
2. In terms of number of facilities and staffing, the services available to blacks are inadequate and insufficient. Qualitatively, mental health care provided for the black population is grossly inferior to that provided for whites and in many instances deficient by minimum standards. In some respects it is even hazardous to the health and survival of patients.
3. The Government-sponsored involvement of white-controlled, profit-making private enterprise in mental health care on a large scale has created a situation which allows profits to be made, through racial discrimination,

from the thousands of black patients who have been deprived of any participation in decisions concerning their own lives.

4. South African psychiatry is influenced by racist attitudes and stereotypes. Although such attitudes and stereotypes are not shared by all mental health professionals, their maintenance in the system is encouraged by official policies and they leave a distinctive stamp on the development of psychiatry. This results in harmful practices and a demoralization of staff at all levels.

The serious concerns to which consideration of psychiatry in South Africa gives rise are much broader than the public controversy surrounding the existence of the private companies operating psychiatric institutions. Criticism directed only at the latter, but ignoring the context in which they operate and the system of which they are a creation, is misleading and does not deal with the real problem. As in many other parts of the world, mental health in South Africa is a low public health priority of government health planners and has been neglected for a long time. What makes mental health care in South Africa unique is that this neglect is structured in terms of racial discrimination and social injustice. The burdens and suffering engendered by this state of affairs are thus carried by one section of the population, defined according to colour of skin. This fact justifies the concern of the international community.

Provision of mental health care according to a racial classification of the population

The claims about "very extensive and advanced psychiatric services given to all South Africans without reference to colour or creed" (*51*); and the assertion of the Medical Association of South Africa: "We do not recognize discrimination on any racial or religious grounds" (*53*), contradict every known fact. Only five months after the Chairman of the Executive Committee of the Society of Psychiatrists of South Africa made the above statement, he had to concede that "there are still differences in certain facilities for Blacks and Whites" which he attributed, astonishingly, to "cultural and socioeconomic factors in a developing country which have nothing to do with politics" (*54*).

The Medical Association of South Africa acknowledged that "the ratio of beds for non-Whites is only half that for Whites" and explained this on the grounds that "demand for hospital services is much lower among the Black people, especially in rural areas" (*55*). In a series of articles on the history of mental health services in South Africa, Minde pointed out that "another problem ... is the treatment of non-Whites, for whom there is no adequate psychiatric accommodation in the general hospital" and that, in contrast, "there is no shortage of beds for Whites" (*56*).

Provision of mental health facilities and services in South Africa is accorded on the basis of the racial classification of the population and the facilities for the non-white majority represent only a fraction of those available to the white minority. Care for the mentally ill in South Africa is provided by many different agencies, whose administration is highly complex, and responsibilities are split between the Department of Health, the Department of Bantu Administration and Development, private companies, the so-called homeland governments, missionary societies, and voluntary welfare organizations such as the South African National Council for Mental Health.

In 1972, following the report of the Commission of Inquiry into the Mental Disorders Act (the so-called van Wyk Commission), new legislation was drafted and a Mental Health Act replaced in 1973 the obsolete Mental Disorders Act of 1916. The 1973 Act was apparently influenced by the England and Wales Mental Health Act of 1959 and was designed to "modernize" South African psychiatry by following the movement away from custodial care towards active therapy, psychiatric facilities in general hospitals and community services. None of the provisions of the Act made a reference to race. However, the developments which the Act was supposed to stimulate have not taken place, and the general regulations which were introduced to govern its application are entirely based on the apartheid policy. For example, the regulations include provisions concerning differences in money paid for treatment, which are based on race. Different tariffs were introduced for whites and blacks, according to which black voluntary patients with a gross annual income above R500 pay 1 or 2 rand a day, while whites with incomes up to R1200 pay no daily fees, and whites with higher incomes pay between R0.50 and R2.

At variance with the recommendations of the van Wyk Commission, the administration of the psychiatric services was not decentralized. On the contrary, even the academic centres have been taken over by the apartheid bureaucracy: "... the Department of Health retains control of mental hospitals and has taken control of university departments of psychiatry at teaching hospitals. Professors of psychiatry are now a part of the Department of Health and are only to a small extent responsible to university and provincial authorities" (*56*).

At the end of 1979, it could be said, on the basis of the number of psychiatric inpatients in the Republic of South Africa, that the provision of treatment facilities for blacks (per 1000 population) was much less than the provision for whites, and that, while most of the white patients were treated in State hospitals, more than half of the black patients were in private institutions. The data in Table 6 are based on information given by the Minister of Health in 1977 and 1980 (*57*). As is often the case with statistics released by the South African Government, the figures differ from other published data. Thus in

1976, the number of patients resident in the State institutions was 16 851 (government figure, 17 055), and the number in institutions run by private companies, 11 037 (government figure, 8316). The latter figure corresponds more closely to the figures released by Smith and Mitchell, according to which the private institutions have a total of 10 945 beds (of which 650 are in institutions for white patients).

Table 6. Institutions for mental patients

(A) Mental patients in different types of institution, by race

	State institutions		Private institutions		Total	
	1976	1979	1976	1979	1976	1979
White	8 497	7 286	708	643	9 205	8 808[a]
Coloured	1 999	2 342	483	480	2 482	2 956[a]
Asian	137	163	262	397	399	560
Black	4 700	4 700	6 863	5 540	13 285	10 240
Total	15 333	14 491	8 316	7 060	25 371	22 564[a]

[a] Includes 879 whites and 134 coloureds in licensed homes.

(B) Total cost to the State in respect of institutions in each of the above categories in 1979 (Rand)

State institutions	29 921 578 (14 491 patients)
Hired accommodation (i.e., private)	6 151 009 (7 060 ")
Licensed homes	729 042 (1 013 ")

Source: SAIRR. *Survey of race relations, 1977; Idem, 1980*, p. 563. Johannesburg, 1978 and 1981.

In 1980 the Minister of Health stated that it was his department's policy to phase out beds in mental institutions run by private organizations. During the period 1979-84 it was planned to expedite the establishment of 940 beds in the Eastern Cape and to build institutions in Soweto, Pretoria, Queenstown, Bloemfontein and Port Elizabeth (see Table 7). Much-vaunted changes and improvements in the existing mental institutions in respect of all races amounted in 1979 (Mental Health Year) to 400 former leprosy beds converted for Africans to alleviate overcrowding at Weskoppies. However, 2130 beds were either replaced or added for whites and 780 beds were provided or refurbished for coloureds, of which a small proportion were also available for Asians. A 2400-bed hospital was also being planned for coloureds at Mitchells Plain (*81*, p. 563).

Table 7: Institutions planned by the Minister of Health in 1980*

Place	Number	Date
Soweto	100 beds	June 1984
Pretoria	600	March 1983
Queenstown	90	July 1982
Bloemfontein	700	Sept. 1984
Port Elizabeth	1 080	Sept. 1984
Total	2 570	

* Beds are being planned to replace an official 5540 and possibly double that number (SAIRR. *Survey of race relations, 1980*, Johannesburg 1981, p. 562).

In matching the figures for beds and those for patients, it is also important to take into account the severe overcrowding of all mental health facilities for blacks. According to Gude (*58*), the actual number of beds for blacks in State institutions was 6892 while the number of patients on any given day was 9717. It is clear that fully reliable figures about the numbers of beds and patients are difficult to obtain. It is equally clear, however, that, even allowing for a margin of error and the current improvements, the ratio of beds (both State and private) per 1000 population for Africans is one-third that for whites (one-sixth if State facilities only are counted); for Asians it is one-fourth (one-eleventh in State facilities); and for coloureds less than one-fourth that for whites, though for this section of the population most improvements are being made.

In 1980, 7122 mentally ill people were detained in police cells, a matter which was raised in the South African Parliament when a white mental patient died as a result of assault by another (*59*). Given the paucity of hospital accommodation for black mental patients, there can be little doubt that they constitute the vast majority of the mentally ill held in gaol. In March 1981, the Director of Psychiatric Services announced that diagnostic centres were to be built as transit accommodation for mentally ill patients awaiting transfer to institutions (*60*). According to the Director General for Health, however, "it was not possible to implement these plans immediately", and in the meantime patients awaiting transfer to mental institutions are accommodated in police cells (*61*).

Private enterprise and mental illness

Given the inadequacies of State mental health provision, and the total failure to train sufficient numbers of personnel, it is not surprising that private enterprise has stepped into the breach. This has had several predictably unfortunate consequences. In a sense, the private institutions have turned out to be the "visible part of the iceberg" of racial discrimination in mental health care because the Government-run system of segregated facilities has been less

open to public scrutiny. For example, the investigative committee of the American Psychiatric Association was not allowed to evaluate the psychiatric services administered by the Government, which was in breach of the terms of reference under which the committee was invited to South Africa.

The emergence and role of the private psychiatric network fully merit international concern because they mirror in a particularly revealing way the implications of apartheid for mental health care. This network is only one aspect, however, of the many manifestations of racial discrimination in the health system and South Africa at large. A review of the information available on the functioning of these institutions may be useful since, according to observers and published statements of South African officials, the conditions and care provided there to black patients, substandard and grossly deficient as they are, appear nevertheless to be better than those prevailing in most State psychiatric facilities for Africans. The evaluation of the private institutions, therefore, has grave implications for the mental health care system in South Africa as a whole. The history of the network of private institutions has been summarized by Minde (*56*). According to this account, an effort to deal with the overcrowding of mental hospitals was made in 1962 by the then Commissioner for Mental Health. The building of new hospitals was considered unnecessary and the Commissioner handed over the care of black mental patients to a private firm—Smith Mitchell and Company. Arrangements were made to transfer patients from the overcrowded mental hospitals to vacant mine compounds in the Witwaterstand, which were thenceforth known as "licensed houses" under the terms of the Mental Disorders Act. Nursing staff, seconded from nearby mental hospitals, were paid by the company, though they retained their status as public servants. Medical officers, likewise from local mental hospitals, made regular visits to the compounds. Minde comments that the State had saved money by coming to this arrangement, but warns that "such a system is open to abuse".

Several aspects of the Smith-Mitchell operation are noteworthy:

1. From its inception, the scheme was designed to deal with African patients, as Minde pointed out. The claims of the Government (*62*) that this is a system catering equally for black and white patients are unfounded although a small proportion of chronic white patients are resident in Smith-Mitchell institutions (in segregated facilites and under substantially better conditions than black patients).

2. All the black patients (i.e., over 10 000 according to figures released by Smith-Mitchell) are certified and transferred from government facilities to private institutions on an involuntary basis (under sections 8 or 16 of the Mental Health Act of 1973), without their own or their families' involvement in the decision process.

3. The Government pays the private companies on a per capita basis. The rate is between R5.33 and R6.375 per day for each of the 650 white patients,

and between R1.695 and R1.915 for each of the 10 295 black patients. According to the APA Committee:

> "Smith Mitchell attributes the difference in the per diem rates for White and Black patients to the larger number of patients in its Black facilities and the higher wages paid to Whites. However, the committee gives little credence to these explanations, having observed the conditions and quality of care provided White patients in comparison to Blacks."

4. The private companies make a profit ("less than US$3 million" in 1973, according to the former director of a company, and a major shareholder in the system, Mr D. Tabatznik—1979). This profit is derived from "savings" achieved by providing subsistence at lower cost than in government facilities, by the use of patient labour for the building, maintenance and repair of the institutions, and by subcontracting patient labour to other firms. The APA Committee observed:

> "Since Smith Mitchell's *raison d'être* is to provide care for less than it would cost the Government, it adheres to the apartheid labour practices used by the Government. Blacks are paid substantially less for the same work than Whites by both the South African Government and Smith Mitchell. Furthermore, since Smith Mitchell's goal is to maximize profits, it is clear that, without close supervision, it might have a strong incentive to cut costs even to the detriment of patients."

It is clear that, whatever justifications are offered by the protagonists of this scheme as regards its inception and maintenance, the facts unequivocally lead to the conclusion that tens of thousands of mentally ill Africans, coloureds and Asians have been the subject of a mutually beneficial business deal between the Government and the white-owned profit-making companies. This situation has no parallel in the history and present state of psychiatric care; it certainly does have a parallel in the ownership and trading of slaves. It is a direct and grave consequence of apartheid in the field of health care, as pointed out in the APA report:

> "... the Smith Mitchell facilities can be viewed as only a subsystem of the larger South African apartheid system, reflecting in microcosm some of its pathogenic governmental and social structures and processes. A powerful contrived reality has been developed in South Africa which favours and protects Whites while excluding, neglecting or oppressing Blacks. Smith Mitchell functions in this context—indeed probably would not exist without it—and must fit and conform to it."

Staffing of psychiatric facilities

There is a chronic and serious staff shortage in the mental health services. Out of a total of about 150 psychiatrists in the country, the majority devote most of their time to private practice. Many eminent South African psychiatrists and psychologists have left the country since the apartheid regime came to power. Every year, 14% of the medical graduates in South Africa leave the country (*63*). The average physician/patient ratio for all psychiatric hospitals in the country is 1 physician to about 400 patients and, according to the Secretary of Health, Dr de Beer, it has deteriorated since 1960.

The State employs 28 full-time and 26 part-time psychiatrists (i.e., 1 full-time psychiatrist must service over 609 beds in government hospitals). In addition, there are 36 full-time medical officers without psychiatric qualifications. The psychiatric hospitals in the Bantustans have at their disposal 1 full-time and 1 part-time psychiatrist, and 7 part-time medical officers.

The Smith-Mitchell network, which claims to keep over 10 000 patients in custodial care, has only 1 full-time psychiatric consultant, who does not participate in direct care provision, 6 part-time psychiatrists and 11 part-time medical officers. An approximate calculation which converts the part-time services into full-time positions shows that 1 psychiatrist would have to provide care to 3550 black patients, and 1 medical officer to 3043 patients. Those ratios are, of course, rather theoretical, since the distribution of the physicians, the frequency of their visits to the private institutions, and other factors related to their availability appear to vary considerably.

The number of nurses employed by the State in 1976 was 4224, and those employed by the Bantustan "governments" 1064. Smith-Mitchell has 820 nurses in its employment, but it is not known whether this number includes nurses seconded by the Department of Health and actually paid by the Government. Although the ratio between the total number of psychiatric beds and the total number of nurses in the Republic seems to be adequate (5 beds to 1 nurse), the actual distribution of the nurses is highly biased: 4–8 beds for every nurse in the white institutions and 9–10 beds for every nurse in the black institutions. The magnitude of the bias can be illustrated by contrasting examples of racially designated institutions. Thus, the H. Moross Centre in Johannesburg (administered by the Transvaal Province Government) has 150 beds for white patients only and its staff includes 6 psychiatrists, 10 physicians, 12 clinical psychologists, 8 occupational therapists, 4 social workers and an unspecified number of nurses. On the other hand, the Randfontein "sanatorium" for Africans (a Smith-Mitchell institution) accommodates 3200 patients and has 2 part-time psychiatrists, 1 part-time medical officer, 21 nurses (i.e., 1 nurse for every 152 patients) and 164 nursing assistants.

The above data speak for themselves. It is obvious that even with the best motivation and skills, the psychiatrists and medical officers providing professional care to black psychiatric patients in South Africa can render no more than perfunctory services.

Diagnostic and therapeutic practices

The shortage of staff, the lack of African specialists, and the general lack of concern for the black patient result in substandard diagnostic and therapeutic practices. The APA Committee carried out a thorough investigation of a number of Smith-Mitchell facilities. They applied two criteria. First, was a "minimal standard" met in relation to the question: "Is the medical and

psychiatric care so inadequate and unsatisfactory as to make the treatment, rehabilitation or even physical well-being of the patients difficult to achieve?" The second was related to the question: "How are black psychiatric patients treated in comparison with their white counterparts?".

The Committee concluded that "the quality of the medical care at black facilities was ... grossly inadequate, applying a minimal standard". Among the facts leading to this conclusion, the APA experts emphasized the following:

1. Most of the patients interviewed had never had a physical examination during their hospitalization.

2. The part-time psychiatrists responsible for black patients speak none of the African languages and, in some cases, there is no other staff at the institution who speak the patient's language.

3. The training of white psychiatrists raised serious questions: "Several of the psychiatrists we interviewed had never heard of 'tardive dyskinesia' despite the fact that their main responsibility was the care of chronic psychotic patients, most of whom were maintained on neuroleptics. [Tardive dyskinesia is a preventable neurological complication of drug treatment in psychiatry.] Ironically, the black nurses at Thabamoopo ... were familiar with tardive dyskinesia".

4. There was an arbitrariness of clinical diagnosis: "Medical records demonstrated the inadequacy of the care provided by psychiatrists to black patients ... the brief mental status exams were often totally incompatible with the recorded diagnosis".

The gross deficiency of diagnostic practices in relation to black patients also finds ample support in South African publications. According to Le Roux: "a communication barrier ... exists between Whites and Bantu. The psychiatrist is often forced to make a diagnosis with the aid of an interpreter's rendition of a patient's responses" (*64*).

Diagnosis is not merely an academic exercise but a guide to the treatment and management of psychiatric patients. Within the South African system, however, a diagnostic label often leads to the reclassification of a patient into the category referred to in government publications as the "sediment of mentally maladjusted persons and deviates" (*65*). Therefore, the consequences of superficial or racially biased diagnostic practices must be viewed very seriously. Compared with whites, the diagnostic distribution of black patients includes fewer diagnostic categories. This suggests that far less effort is made to differentiate among various psychiatric syndromes in black patients, with the consequence that conditions which can be effectively treated are missed. An unusually high percentage of African patients in psychiatric facilities are, for example, diagnosed as suffering from schizophrenia

(59% of the black patients compared to 16% of the white patients) (*69*). It is not known what the true prevalence of various psychiatric conditions is in the white and black hospitalized populations but partial data published in South Africa (*66*) suggest that schizophrenia may be wrongly diagnosed in at least 25% of the Blacks so classified. The "communication barrier" between the black patient and the white doctor, the lack of concern and the absence of adequate professional supervision are serious obstacles to an even remotely correct assessment of psychopathology in the non-white facilities. It is justifiable to suspect that the high proportion of schizophrenia among hospitalized Africans reflects a high rate of faulty diagnosis. Such a conclusion is, in fact, supported by Le Roux, who deplored the "stagnant terminological dearth" of South African psychiatry and went on to state:

> "The latter (i.e. the terminological dearth) also seems to be the case with psychiatric diagnosis among Bantu patients where the diagnoses rigidly stress one major disorder, viz. schizophrenia. It is possible that this rigidity stems from an insufficient anthropological background of those concerned with the diagnosis" (*64*).

The majority of the "incurable" patients in the Smith-Mitchell institutions are transferred there from State hospitals with a diagnosis of schizophrenia, made even without a physical examination of the patient to exclude mental disorder associated with physical disease. Negligent diagnostic procedures, therefore, result in unnecessary certification and therapeutic neglect of a very large number of African patients.

Modern psychiatric treatment emphasizes the effectiveness of a relatively short hospitalization followed by active after-care in the community. Many conditions are now treatable on an outpatient basis, and even potentially serious disorders such as schizophrenia can be managed in the community. In addition to effective drug treatments, maintenance of a social support system around the patient is essential for his recovery or the remission of his symptoms. None of these approaches, which are changing the face of psychiatry in many parts of the world (including developing countries in Africa), are available to the vast majority of black psychiatric patients in South Africa. Although forward-looking mental health workers have made the attempt (against tremendous odds), the introduction of these approaches has been on a limited scale. The prevailing type of treatment in the black facilities is still custodial maintenance.

The treatment provided in the Smith-Mitchell institutions consists mainly of neuroleptic drugs. The APA Committee found no evidence of abuse of ECT (electro-convulsive treatment) or psychotropic drugs, and indeed noted that "the dosages of neuroleptics utilized ... are dramatically lower than those customary in the United States and the United Kingdom". Drugs are sometimes unavailable, and ECT (which can be an effective treatment in depressive and some other conditions) is not given.

Work therapy in the Smith-Mitchell facilities, although apparently well organized, raises ethical questions since it amounts to exploitation of patient labour. According to the APA Committee:

> "It is common in public mental hospitals everywhere for patients to do work around the hospital ... However, the Smith Mitchell facilities are private, profit-making institutions, and any work done by patients which reduces Smith Mitchell's costs adds to the profit of the private owners. Thus, what might be acceptable in other contexts is problematic here" (*67*).

Psychotherapy (for neurotic and other related conditions) is available mainly on a fee-paying, private basis. But, as Lambley & Cooper point out, "most black patients are forced by socioeconomic circumstances to seek treatment at inpatient or outpatient clinics of psychiatric hospitals, as private therapy is generally beyond their means" (*68*).

The institutional environment

Overcrowding, a depersonalizing custodial regime, and deprivation of elementary amenities and possessions are general characteristics of the environment in psychiatric facilities for Africans. Most of the Smith-Mitchell "sanatoria" are converted mine compounds in which many hundreds and, in some facilities, thousands of black patients are accommodated in barrack-like conditions. Following the newspaper reports and the WHO study (*69*), the Smith-Mitchell administration apparently puts special efforts into renovating and improving the physical aspects of the institutions (obviously motivated by the expected inspections by foreign groups). In spite of the improvements, the APA team found many of the institutions overcrowded and poorly ventilated. Patients are deprived of personal possessions and simple things like lockers or bedstands. The hygienic facilities are substandard and many patients are not issued bedsheets and shoes as a matter of policy. The food provided to African patients was not deficient as regards energy intake, but it was "distinctly inferior to that served to Whites in Smith Mitchell facilities". According to the Committee, "there is no justification for this inferior food on grounds of cultural preference, as the Department of Health claims". The Committee noted further that "the white facilities differ substantially" in all these respects, and attributed this to the "drastic discrepancy between the care and funds available to white and black patients".

Preventable deaths and physical diseases in psychiatric institutions

One of the most disturbing findings of the APA Committee, and one which confirms the facts outlined in the 1977 WHO study, was the "unduly high death rate" among black psychiatric patients, clearly attributable to medical neglect in cases of physical illness or injury:

> "Our random survey did not find a single black patient whose medical record demonstrated adequate medical care during the final illness. Even when patients were in fact diagnosed by a

physician as having a treatable illness, e.g., bacterial pneumonia, there was no evidence that the patient received antibiotics, and the course of these treatable illnesses indicated that no proper treatment was given ... we saw charts of black patients in their forties and fifties who were apparently allowed to die."

Since all Smith-Mitchell patients are transferred from State psychiatric facilities, one of the reasons for these avoidable deaths is the lack of adequate examination and treatment prior to transfer. Patients with acute physical illnesses are transferred from government facilities to the private institutions without even minimal medical attention before, during or after the transfer. That Smith-Mitchell institutions are no exception in this respect can be inferred from data reported in South African publications. Thus, Pollak & Shur kept for the purposes of their study (*70*) a record of every patient who received care for physical illness over a period of 4 months at the Madadeni Hospital (1400 beds) in Newcastle, Natal. This again indicates that physical examinations are not routine in psychiatric hospitals. The authors were "amazed at the amount of organic pathology encountered" and suspected that "even more pathology was undiagnosed". For example, a nurse at Madadeni Hospital, trained in psychiatry, "was asked how she would manage a known diabetic patient if he lapsed into a confused state". The nurse answered that "she would ensure that the patient was adequately sedated".

The Cole report on autopsy findings in 121 black, 64 white and 15 coloured patients who died in Sterkfontein (*66*) stated that "gross physical disease other than respiratory and cardiovascular disease and cerebral degeneration was nearly twice as common in black patients as in white patients" among the 70 cases diagnosed by the psychiatrists as senility or arteriosclerotic dementia. A total of 53 patients (44 black and 7 coloured, but not a single white) had a clinical diagnosis of toxic or infectious psychosis due to preventable conditions (pellagra and malnutrition) which were confirmed by the autopsy. Notably, out of the 20 cases with a clinical diagnosis of schizophrenia, 5 patients, all of them black, in fact had organic disorders which could produce psychiatric symptoms.

Violence to and maltreatment of black patients

According to the report by Pollack & Shur, 27.1% of the 1500 psychiatric patients examined had skin conditions and 9.2% had orthopaedic problems (*70*). The diagnostic breakdown presented by the authors explains these percentages, which are unusually high for a psychiatric hospital. The "skin" problems included among other things, "minor cuts, abrasions, abscesses ... human bites". The orthopaedic pathology was almost entirely "traumatic in origin, i.e., a fractured skull, fractured ribs, a fractured scaphoid, a fractured zygoma, a fractured hip in an 83-year-old patient and a fractured ulna". If these findings at Madadeni Hospital are typical of a psychiatric facility for

black patients, they strongly suggest violence as the origin. The evidence collected by the APA Committee supports this hypothesis:

> "All patients interviewed in Smith Mitchell facilities were asked if they had been beaten or assaulted by staff or had witnessed assaults on other patients by staff. A majority of black patients reported in the affirmative ... In contrast, no white patient at any of the three facilities we inspected reported ever being assaulted by a nurse or ever having heard of such an occurrence... the violence we did uncover grows out of the mentality of apartheid, which treats non-whites as inferiors and accepts the degrading of their humanity as a matter of course (*67*).

Low rate of discharge and absence of aftercare

The government hospitals, the psychiatric hospitals in the Bantustans and the Smith-Mitchell network of private "sanatoria" constitute practically the only mental health facilities available to the black majority of South Africa. Community services for blacks are almost nonexistent and it is hardly possible to speak of any form of social psychiatry in the country, as far as care of the black 75% of the population is concerned.

The Smith-Mitchell institutions claim to have a 10% annual discharge rate, and statements have been made to the effect that this should be regarded as high. Considering the type of cases which are referred to the private institutions from the government facilities, the discharge rate is, in fact, extremely low. The APA group found that many of the black patients in the Smith-Mitchell institutions were in their thirties, forties and fifties, i.e., hardly patients who could be regarded as "non-dischargeable" because of chronicity and advanced age. There are two factors which help to explain the low rate of discharge. The first is the complete and destructive social isolation of the majority of African psychiatric patients as a consequence of the apartheid policy of forced relocation of black families and communities. Thousands of patients are "siphoned out" from State hospitals (to use the words of a previous Commissioner of Mental Health), and the contact with their families cannot be re-established because of geographical distance or because of forced removal of the family to a destination which remains unknown to the patient and the hospital authorities. In this sense, the African patient has no community to return to after eventual discharge from a psychiatric facility. The second factor is the absence of any organized system of community services, after-care and post-discharge rehabilitation for black patients. It should be noted that the number of outpatient attendances at psychiatric facilities has indeed increased. In 1976, there were 362 374 recorded outpatient attendance (*71*). The vast majority of these contacts, however, were made at the outpatient departments of psychiatric hospitals (311 000) and cannot be considered "community psychiatry". Of the 51 372 nurse visits in the community, the number involving black patients is unknown, except for the 517 visits made by "homeland" community services. Apartheid not only makes Afri-

cans non-citizens in their own country, it literally destroys the last link with society of those Africans who are so unfortunate as to be classified as having a mental disorder.

Influence of racist stereotypes in mental health care

Although the influences of racist stereotypes would be emphatically denied by most South African psychiatrists (and many of them certainly do not hold them), they are inherent in many aspects of mental health care and often expressed in ways which are unintentionally revealing. In a letter to the editor of *Psychiatric News* (the newspaper of the American Psychiatric Association), Dr A. M. Lamont, former Commissioner of Mental Health of the Republic of South Africa, protested against the conclusions of the APA Committee which implicated the politics of apartheid in the degrading conditions for black psychiatric patients. He attributed the problems to the fact that "social conditions in all industrial revolutions are always ugly", and went on to explain this in the following way:

> "In South Africa the entrepreneurs are white and the labour force black ... Moving from one group to the other is difficult. In the USA your labour force during your Industrial Revolution were white immigrants who could merge with their employers as education and opportunities came their way. The indigenous population (American Indians) did not participate in the industrialization by providing a migrant labour force with a different colour and type of hair as well as basically different cultural attitudes. The type of hair is important in determining the type of offspring coming from interbreeding. In South Africa, people of mixed ethnic origins provide special social problems and are physically conspicuous. They have a high alcoholism rate which makes them an unreliable labour force... Next, one must take into account the enormously high birth rate of the Blacks ... The problem facing the black female is that as her male counterpart increases his earning capacity so does his polygamous propensity increase ..." (*72*).

These views belong to a senior South African psychiatrist, who, from 1961 to 1970, was the Commissioner for Mental Health and as such was responsible for the creation of the Smith-Mitchell network of private, profit-making institutions for black psychiatric patients (*56*). The dehumanized view of Africans, cultivated by racism, finds various expressions in psychiatry. One of them is the theory which relates certain forms of mental disorder to different levels of development of the races. Here we again encounter Dr Lamont, who felt that Africans have not yet reached the level of mental life at which they could suffer from depressions:

> "manic-depressive psychosis and especially the depressive phase are relatively rare in the Bantu at this stage of their social and cultural development" (*72*).

. It should be emphasized that the negative stereotype of the African is not limited to ideas about psychiatric morbidity; it is a totalitarian view degrading blacks in their entirety as persons:

> "The Zulu when angered is rather vicious ... to guard against the time of need the men often carry knives and knobkerries and when an argument does break out it is soon settled by a bash

> on the head, or a handful of stones thrown with devastating accuracy ... This predilection for trauma is not a little enhanced by a customary overindulgence in alcohol ..." (*74*).

The impact of racist stereotypes on the psychological treatment of black patients has been well described by Lambley & Cooper:

> "... a black person, in dealings with whites in general and white authorities in particular, has to deal often with persons who regard and treat him as an inferior... Attempts by a therapist to improve a black patient's assertiveness, sense of identity, or ego, are frequently made absurd in the South African context because such behaviour leads, if acted out in the 'real world', to very definite 'negative' reinforcement" (*68*).

Further evidence of racial prejudice is the derogatory attitude of the authorities to African traditional medicine, which has been defamed as "ignorance, traditional taboos and superstition". In 1969, a government publication stated with pride:

> "Gradually ... the Bantu have been weaned away from their centuries old superstitions and belief in witch-doctors; and it can be stated that in South Africa today the battle is all but won" (*75*).

In contrast to such attitudes, the way in which traditional medicine in South Africa meets the psychological needs of the people has been examined in considerable detail by Ngubane (*76*). Manganyi has emphasized that there was no intrinsic conflict but rather a "psychosocial synthesis" between traditional beliefs and utilization of the Western type of medicine (*77*), and some South African psychiatrists have pleaded for the need to study the methods utilized by traditional African culture in handling and treating mental disorders (*64, 78*).

Racism in mental health care finds material reality in the fact that there is no African psychiatrist in South Africa. According to Gillis, there were, in 1981, 1 coloured psychiatrist and 1 Indian psychiatric registrar (*79*). The explanations offered in various South African responses to the WHO document (*69*) and the more recent APA report (*67*), which both raised this issue, refer to some kind of inherent reluctance of graduating African physicians to specialize in psychiatry. Thus: "... Western-trained black doctors are disinclined to take up psychiatry" (*72*), and Gillis (*52*) stated that "opportunities for training exist and bursaries are regularly advertised for black psychiatrists, but no African has yet come forward". The "disinclination" of African physicians to specialize in psychiatry becomes less strange if one considers the powerful disincentives which have been created to prevent the rise of African doctors to a specialist position or any other position of high status. First, the number of African medical graduates is extremely small because of the restrictions on educational opportunities for Africans. Secondly, according to government regulations until comparatively recently, the income of a black specialist was lower than that of a white specialist with the same training and the same position (*80*). Although there is now parity in all grades except that of Medical Officer this may well have acted as a barrier in the past (*81*). Thirdly, "African doctors have been prevented from serving in senior specialist capa-

cities in large African hospitals because this would in most cases mean that they would be in a position of authority over junior white doctors, interns, or medical students" (*82*).

The attitude of the authorities to African nurses, whose services play a pivotal role in the South African health care system, can be illustrated by the lengthy comments made by Mrs C. Searle to the Select Committee of the Parliament which prepared the Nursing Amendment Bill, introducing apartheid in nursing in 1955. Among other things, Mrs Searle stated:

> "The non-European nurse in South Africa is being drawn from a social milieu and has a psychological attitude which is completely different to the generally accepted concept in the Western world... I am not prepared to describe her as a real nurse... the non-European nurse is at the moment unable to discharge, either through training or in the care of the sick person, these functions of a nurse, viz., the psychological and sociological care of the patient" (*83*).

Some years ago, the psychiatrist and social thinker, Frantz Fanon, wrote: "It is not possible to enslave men without logically making them inferior through and through". Racism, he continued, is the "emotional, affective, sometimes intellectual expression of this inferiorization". Dominant groups and classes have cultivated racism in its different varieties in order to rationalize and perpetuate social injustice, economic exploitation, and cultural oppression. The utility of racism for those who have a vested interest in its spread and maintenance lies in the fact that, once accepted, it simplifies the realities of the world; hard and fast lines seem to be drawn which divide people on the basis of attributes such as skin colour, and social inequality can then be seen as the correlate of a "natural" order.

This section has examined the implications of apartheid for the mental health and psychiatric care of South Africans. Healthy mental functioning and development depend on the presence and continuity of essential experiences such as a sense of security and worth, freedom for personal growth, and identification with a community of equals. The black population of South is deprived of these experiences. However, they Africa are resilient and resourceful. In spite of the psychological casualties inflicted by apartheid, a new sense of identity and purpose is growing. This new "mental health" gives black Africans hope for the future.

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CHAPTER 8

CONCLUSION:

DISEASE AND HEALTH CARE IN SOUTH AFRICA AND THE CONSTITUTION OF THE WORLD HEALTH ORGANIZATION[1]

1. *Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.*

This definition has attracted the attention of health workers throughout the world. Critics of its non-disease orientation, among them the South African Medical Association, point to the impracticality of the definition from the perspective of health care. However, the value of the definition lies in its conceptualization of health as a social phenomenon rather than the object or outcome of medical care. The effects on health of social inequalities are thus of paramount importance.

In terms of this definition, the black population in South Africa cannot reasonably be called "healthy". Even the small black middle class, who do not experience the threat of hunger, are subjected to restrictions of movement, employment, education and social activities. For the vast majority of the population the disease and death patterns bear witness to the distribution of physical well-being, while the high rates of alcoholism, suicide and violence are indicators of the lack of mental well-being. Even some whites, who in general are protected from physical impoverishment by their privileged position, pay a toll in mental and social well-being. There are numerous instances of families being split by racial classification, marriages being prevented and personal relationships persecuted under apartheid. For the few whites who dare show their dissent, the toll is far higher.

It is possible that with its "new face of liberalization" the South African Government will take the steam out of the more publicized and overtly racist aspects of apartheid. It is even conceivable that mixed marriages may be allowed in the future. The real discrimination in South Africa, however, goes on relentlessly, since this has to do with the ownership of productive resources, the control of the economy, and the interests primarily served in the exploitation of the wealth of the country. Although the new face of liber-

[1] *Constitution of the World Health Organization*, Geneva, 1976.

alization is presented in terms such as well-being and development, it remains part of a strategy which guarantees continued inequality with all the implications of this for health.

2. *The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.*

Blacks in South Africa do not have fundamental human rights in the above conceptualization of the term, since they are discriminated against in almost every aspect of daily life. This report demonstrates on virtually every page how economic and social inequalities, stratified particularly by colour of skin, determine disease patterns and health care in South Africa. Political belief, too, is a major factor in mental and physical well-being in this country, in which political arrests, harassment, detention without trial, torture and political banning orders are almost a way of life for opponents of the regime, black or white.

Health care and disease patterns are everywhere determined by social and economic conditions. What makes South Africa distinct is, first, the magnitude of the differences and, secondly, the racial ordering of those differences. South African apologists have long sought genetic reasons for the distribution of disease, or have blamed it on black ignorance, poor personal hygiene and inability to control population growth. The real reasons are to be found in the establishment and consolidation of white monopoly over the economy at the expense of blacks. Apartheid laws legitimate and reinforce the economic and social disadvantages of blacks, and this finds clear expression in the health status of the population.

3. *The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest cooperation of individuals and States.*

Because of the priority to consolidate white economic and political dominance, the attainment of peace and security in South Africa has been founded on entirely different principles from those envisaged in the WHO Constitution. Continuous repression and suppression of opposition of any sort has meant that violence rather than health is the underlying principle on which the "peace and security" of the society is founded. In this context the only "cooperation" that has been required by the South African State to maintain "peace and security" is support, tacit or direct, for the policies of apartheid.

For the majority of black South Africans "cooperation", or tacit support, involves merely staying in line. It means working for what is barely a living wage, being separated from their families for the greater part of the year,

working where, when and at what they are told, remaining humiliatingly deferential and suffering the continuous indignities of racial prejudice.

Up to now the health of all peoples in South Africa has had little to do with the particular brand of peace and security which is fostered there. Perhaps the recent, if half-hearted, attempts at providing primary curative health care are made in the realization that, to sustain white economic dominance in the face of escalating black militancy, "health for all people" is a less threatening proposition. Indeed, in the particular form in which health care is provided, it serves to reinforce economic inequalities. This is done by reflecting and thereby reinforcing the inequalities in a "normative" way. The white man's control over the medical profession and the clearly second-class health services available to most blacks exemplify this.

4. *The achievement of any State in the promotion and protection of health is of value to all.*

South African apologists will point to the recent extension of curative and certain preventive services, to the all but defunct nutrition supplementation programmes, to the theoretically universal availability of tertiary-level health care, and to the increased numbers of black medical students, as indications of the achievements of the South African State in serving the health needs of the people. This rings hollow when one considers the continued profound racial bias in disease patterns and health care services.

There are at least three reasons for this bias. First, health care is a reflection of economic relations—of who owns what. The South African economy is controlled by whites while the labour is in general provided by blacks. Secondly, health care in South Africa is a part of the political alliance between the ruling élite and white South Africans. Like the vote, welfare is provided in return for their support of the monopolization of power and resources by a small fraction of whites. Thirdly, the racial differences in disease patterns, medical care, and the promotion and protection of health, by reflecting the economic relations, serve to reinforce and reproduce those relations. In this context the achievements of the South African State cannot be considered to be of unqualified "value to all".

Such promotion and protection of health as have been provided by the State for blacks have often been aimed at diseases against which the whites are not protected by their superior nutritional status. Among these is poliomyelitis, while measles and tuberculosis, which ravage the black population, have been low on the list of priorities. The advances in transplant surgery which won South Africa international scientific acclaim primarily benefit whites. Not only are the majority of donors black and virtually all the recipients white, but the international recognition that arises from these scientific advances accrues to the white-controlled medical profession and State.

5. *Unequal development in different countries in the promotion of health and control of disease, especially communicable disease, is a common danger.*

One of the most substantial features in the exploitation of South Africa's natural resources, in particular gold, has been the use of labour imported from neighbouring countries. About half of the black labourers in South African mines come from outside the country's borders. This has meant an almost unlimited supply of unskilled migrant labour at extremely low cost. Perhaps more important is that this has impeded the organization of indigenous labour.

The recruiting authorities have become very conscious over the past few decades of the danger of importing communicable diseases and have devoted considerable effort to screening candidates for employment. The rapid increase in prevalence of conditions such as tuberculosis and venereal diseases in the areas to which these migrants return can be taken as evidence of a somewhat less rigorous approach to diseases leaving the country. No attempt is made, for instance, to follow up tuberculosis patients after their return home from the mines.

6. *Healthy development of the child is of basic importance; the ability to live harmoniously in a changing total environment is essential to such development.*

Official South African statistics, which almost certainly underestimate the situation, indicate that the black child population is literally decimated by conditions such as gastroenteritis and pneumonia, death from which is very often preventable. For those who survive, child labour, inferior schooling, and family life disrupted by the migrant labour system are common. For as long as things remain as they are, black children can expect lives similar to those of their parents. These are lives of perpetual underachievement under the apartheid system, lives centred around survival with each day's labour being necessary to provide subsistence.

In every aspect of economic and cultural development, blacks have been put and kept at a disadvantage in the race for control of the country's vast productive resources. The effect of this on black children in forms of physical deprivation is crudely illustrated by figures of mortality and morbidity. We can only guess the extent of their suffering. Casual outside observers and protagonists of apartheid frequently remark on how happy black children in South Africa look. Apart from the resilience, rather than comfort, that this displays, there is a sad irony in the picture. This is conveyed in a well-known Afrikaans poem which describes a young coloured boy who walks barefoot in the rain, alone but singing constantly. He sings because when he stops singing he cries from hunger.

7. *The extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health.*

Knowledge is a key to power and this is as true in relation to disease and health care in South Africa as anywhere. It can be cogently argued that considerable effort is made to extend knowledge of the benefits of medical science by the South African State. The high standards of clinical excellence, the remarkable scientific achievements in transplant surgery and contributions to the understanding of certain rare biochemical abnormalities and malignancies have propelled South African medical science, and with it the South African State, into the international limelight. Within the country the same expertise is held up as the justification for continued white dominance. At the same time the centralization of medical knowledge is epitomized in the large hospitals, which are owned, privately or through the State, by whites.

The benefits arising from health knowledge are, like the vote, by and large the bounty given to the whites to engender their support for the élite. Mankind has known for thousands of years that adequate food is necessary for health, and yet this is denied to a large proportion of South Africa's population. In the search for health knowledge, too, it is the interests of whites which are paramount.

8. *Informed opinion and active cooperation on the part of the public are of the utmost importance in the improvement of the health of the people.*

Both informed opinion and active cooperation are part of a democratic process, and in South Africa the democratic process does not extend to blacks. They have no right to choose who shall rule them, still less are they afforded informed opinion or opportunity for active cooperation. Such cooperation as is required of blacks by the white-controlled State is entirely passive, in effect merely the absence of dissent. State reaction to the isolated attempts at active participation through independently initiated community health projects indicates that, if anything, these are considered dangerous opposition.

Some blacks have been coopted into the health care system but, apart from any benefit that is derived by the black population in terms of curing disease, this "participation" of a black élite in health also serves the interests of the white minority. Because of their often inferior training, restricted numbers (in the case of doctors), obstacles to career progress, inferior facilities and strict subordination to white authority, black health care workers are often the unconscious conveyers of the notions of white supremacy.

9. *Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures.*

In so far as only whites are regarded as the "people" of South Africa, the Government has fulfilled its responsibility with regard to health and social

measures. If one counts the remaining three-quarters of the population, this responsibility has been abrogated in favour of the explicit objective of the Government to consolidate white, in particular Afrikaner, dominance of the economy. In the current phase, certain concessions are being made in health and social measures. In part, these concessions are the outcome of international pressure, but more importantly they have been forced by the growing political militancy of the blacks of South Africa. Despite such concessions as have been made, the racial stratification in disease and health care remains as witness of the differences in economic and political power. Until these issues of ownership and control are substantially changed, the patterns of disease and death, which reflect conditions of living, will remain unchanged.

Changing So that Things Can Stay the Same

As long as the majority of people lack the means to produce their food or the wherewithal to buy it, poverty and malnutrition will affect the same proportion of the population even in the presence of a successful family planning programme. This is because poverty, undernutrition and the associated infections are not caused by population pressure. Rather, an increasing population in the presence of widespread poverty is a manifestation of the same failure of the economic system whereby the resources of a country are monopolized by a minority while the majority live in insecurity.

Whatever halting steps appear to be taken towards change, the huge inequalities in South Africa continue and are replicated and legitimated in the medical sphere. The racial and class structuring of society permeates the medical profession at the ideological level and determines the institutional structure of health care. Theoretically it is possible that over the next decade the more overtly racist aspects of South Africa's policies may be eliminated, and it may well be that limited sections of the black population will achieve improved living and working conditions. Indeed the long-term viability of what the Government calls the "free enterprise system" in South Africa may well depend on the elimination of certain aspects of racial discrimination. There is also some evidence that the Government is responding to pressure from blacks inside the country, as well as from international financial interests, by making limited concessions in health care. Given the specific form which industrialization has taken under apartheid, however, even this "welfarism" will take place only within very severe limits. We can thus expect any concessions in health care to be made within the framework of the Bantustan policies and with continued inequalities which, by reflecting them, will bolster the social relations that perpetuate white domination.

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