

Southern Africa Labour and Development Research Unit

ACCESS TO HEALTH SERVICES IN
THE GREATER CAPE TOWN AREA

Community Health Research Project

Saldru Working Paper No. 55

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This working paper is part of a project researching health services and health needs in three areas: Cape Town, Paarl and the Ciskei. The members of the project, based in the Sociology Department at the University of Cape Town, are: Sue Myrdal and Liz Thomson and, until September 1982, Goolam Aboobaker.

The paper is also a contribution to the second Carnegie Inquiry into Poverty and Development which was launched in April 1982. A number of such papers will be written during the months ahead as part of the preparation for the inquiry. They will be published in the regular series of working papers issued by the Southern Africa Labour and Development Research Unit in the School of Economics at the University of Cape Town.

INTRODUCTION

'South African health care services were as good as those in America, an official of the American Medical Association said in Johannesburg. Dr James H Sammons, executive vice-president of the AMA, said that the world's best medical services were to be found in the US, South Africa, Canada and Australia, with West Germany following closely' (Pretoria News, February 28, 1981).

Such generalizations about the South African health services conceal the fact that there are discrepancies between the health services in urban areas and rural areas and within urban areas themselves. Equitable access to health services would imply that people with the greatest needs in terms of both poor health status and poor socio-economic conditions, the most important determining factors behind much morbidity and mortality in South Africa, would receive the largest share of health services. Research in Britain has shown the reverse to be true. This has been described as the 'inverse care law'¹

'In areas with most sickness and death, general practitioners have more work, larger lists, less hospital support and inherit more clinically ineffective traditions of consultation than in the healthiest areas; and hospital doctors shoulder heavier case loads with less staff and equipment, more obsolete buildings, and suffer recurrent crises in the availability of beds and replacement of staff. These trends can be summed up in the inverse care law: that the availability of good medical care tends to vary inversely with the need of the population served.'

The aim of this paper is to examine how equitable access to health services is in an urban area in South Africa, ie greater Cape Town (01 metropolitan area), by comparing access to health services with health status as defined in terms of mortality and morbidity and also with the socio-economic profile of the various groups concerned. It is necessary first to look at reasons for studying health services since it is widely acknowledged that they are only a minor determinant of health relative to other factors such as: income, housing, water supply, etc. For example, it is well known that in Britain the incidence of TB began to fall long before the introduction of effective chemo-therapy as standards of housing, nutrition and other socio-economic factors began to improve (2, p 56).

However, we would agree with Doyal (2, p26) who writes, 'While a more egalitarian allocation of medical resources could not remove inequalities in morbidity and mortality, it is evident that present inequalities in resource allocation serve to reinforce more fundamental class differences in health and illness'. Although the role played by health services may be a minor one, it may be important in the case of specific disease problems, eg the fall in the infant mortality rates (IMR) for so-called Coloureds in Cape Town has been linked to improvements in health services during the 1970's especially for the treatment of gastro-enteritis.³

Understanding health services in South Africa is also important in understanding health policy in South Africa. Official health policy as laid out in the National Health Services Facilities Plan (NHSFP)⁴ emphasises the provision of services rather than other conditions required for health, eg food, housing, etc. This is confirmed by Dr M H Ross of the Department of Health and Welfare:⁵

'The provision of health services for all is a more tangible goal and a more realistic right of the individual and community than the provision of health which is impractical and can only be subjectively defined.'

Changes have been taking place in health services policy with increasing emphasis being placed on primary health care and community involvement in health. In order to be able to assess whether this does indeed provide for a more equitable distribution of available health services or whether it is providing inferior, cheaper medical services for certain sectors of the population as has been suggested both internationally⁶ and locally,⁷ it is necessary to look at health services, whom they serve and what the health needs of the different sectors of the population are.

Research into health services done in South Africa concentrates mainly on small sectors of the health services, eg polyclinics,⁸ maternity services,^{10,11} primary health care,¹² day hospitals,¹³ etc. With a few exceptions,¹⁴ there has been little attempt to relate health services and their utilisation to either the mortality/morbidity pattern or the socio-economic background of the population they serve.

There has been considerable interest in international health services research in 'the need to study the entire system of health care and its internal structure as well as its external relationship to other systems like the economy and the polity and particularly its relationship to national and international systems of social stratification'.¹⁵ Reviewing health services research¹⁶⁻²¹ shows the common parameters used to describe and compare health services are:

- 1 expenditure
- 2 geographical distribution
- 3 staffing ratios
- 4 utilisation.

The provision of health services has been related to health status using a variety of measures, eg mortality rates, prevalence or incidence morbidity rates, sickness absence rates, restricted activity rates and physique, eg weight and height. Comparisons of the relation of the provision of health services to health status have been made between

- 1 different sectors of the health services, eg curative vs preventive, etc
- 2 different regions. Townsend¹⁵ warns that the 'discussion of inequalities between regions and areas is too often sealed off from discussion of the underlying inequalities of class, income, housing and living conditions'. An illustrative example is the work of Noyce et al²² which showed a positive correlation exists between the resources provided for medical services in a given region and the proportion of professional and managerial workers in that area.
- 3 different social classes. Although some authors²³ have questioned the correlation between social class and inequalities in health services, others (see¹⁵ for review) have shown marked discrepancies. In South Africa and in Cape Town, in particular, it is possible to compare health services by area and race and relate these to health status and socio-economic conditions in the various groups. Statistics are not kept according to occupation and it is therefore difficult to make comparisons by social class although attempts have been made to

extrapolate from race classification to social class classification.²⁴

This paper attempts to explore some of the factors within the area of greater Cape Town (the 01 metropolitan region) which prior research has shown to be relevant to a study of the system of health care. The areas we look at are:

- 1 Socio-economic determinants of health
- 2 Mortality and morbidity
- 3 Access to health services.

When discussing access to health services for individuals or communities a number of parameters have to be taken into account, such as

- (a) Distribution of services, ie the quantity of health services and where they are located. The closer services are to people's homes or places of work the more accessible they are. Two hours travelling time is considered to be a maximum.²¹ Factors such as the safety of transport are also important.
- (b) Affordability. The fee payable for the services will be an important determinant of access. There are other costs involved as well, eg whether or not the person loses a day's wages when attending a clinic, the cost of transport, etc.
- (c) Hours. Many health services operate only during normal working hours, creating serious problems of access for workers.
- (d) Quality of service. This has a subjective component relating to the user's attitude to the service being used, which can only be accurately assessed by surveys of health services users. Objective factors which relate to quality of services and can be assessed from ethnographic and secondary source methods are overcrowding, expenditure on services, staff shortages, etc.

Note: For the benefit of people unfamiliar with the structure and financing of health services in South Africa there are two appendices.

Appendix 1 : The Structure of Health Services in South Africa.

Appendix 2 : The Financing of Public Health Services in South Africa.

THE RELATIONSHIP OF SOCIO-ECONOMIC CONDITIONS IN
THE 01 METROPOLITAN REGION TO HEALTH

INTRODUCTION

The links between socio-economic factors such as housing, income, education and health are widely acknowledged. Particularly useful in this context is the classification of common illness found in urban areas in terms of their underlying causes rather than infective agents, see Table 1.

TABLE 1

Classification of Common Illness in Terms of Underlying Causes
(Adapted from 25 and 26)

Nutritional	Communicable	
	Airborne	Related to Water and Sanitation
Under-nutrition and associated vitamin deficiencies	1 VIRAL Influenza Pneumonia Measles Chickenpox 2 BACTERIAL Whooping cough Meningitis Tuberculosis	1 WATER-BORNE Infective hepatitis Typhoid Cholera 2 WATER-WASHED INFECTIONS a Skin infections, eg scabies, bacterial skin infections, cutaneous fungal infections b Diarrhoeal disease

Airborne: Diseases spread by breathing airborne, respiratory secretions of infected persons, affected by factors such as overcrowding.

Water-borne: Diseases transmitted when pathogen is in water, which is then drunk by the person who may then become infected, affected by the quality of water.

Water-washed: Disease whose prevalence falls when increased quantities of water are used for drinking and hygienic purposes whatever the quality of the water because the infective agent is present, for example, on cooking utensils, hands, etc.

Socio-economic factors are included in the National Health Services Facilities Plan under the heading 'Provisions of Basic Needs'. The plan states that to 'maintain a very basic level of minimal health there are four conditions in order of importance:

- (a) Safe drinking water
- (b) Adequate food for human existence
- (c) Basic sewerage and waste removal
- (d) Reasonable housing.¹

However, in the NHSFP these areas are not seen as the responsibility of the health authorities but of other state departments and the private sector.

A convincing argument for the importance of improvement of socio-economic conditions on health is the work of McKeown.³⁰ He has shown that the mortality rates for diseases such as tuberculosis and measles in Britain began to fall long before the introduction of either immunisation or effective chemotherapy. (see Figures 1 and 2).

FIGURE 1

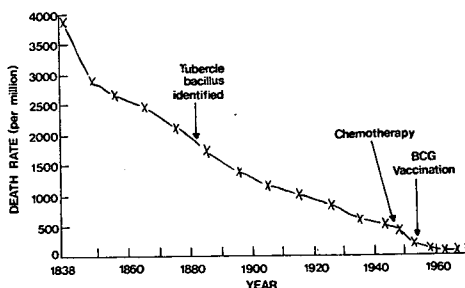


Figure 1: RESPIRATORY TUBERCULOSIS: mean annual death rates (standardized to 1901 population); England and Wales.

FIGURE 2

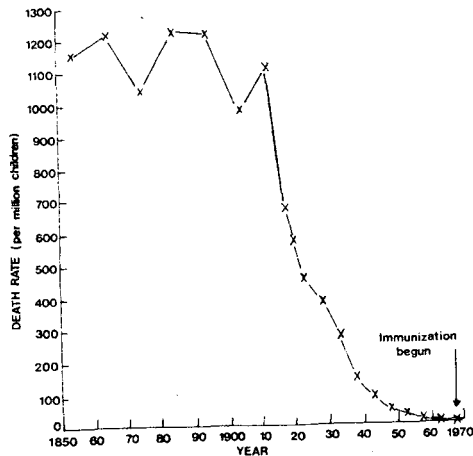


Figure 2: MEASLES: Death rates of children under 15: England and Wales.

He attributes these improvements to improved nutrition and hygienic measures which led to a decline in water- and food-borne diseases.

Lowering the birth rate by means of family planning programmes is often suggested as an important way of improving health. However, family planning programmes alone make little impact.

'Countries that rank well on socio-economic variables and also make substantial program efforts have on average much more fertility decline than do countries that have one or the other'.²⁷ Of particular interest are the findings of Shain and Lane that slow growth rates are a likely result only if the economic benefits accrue to the masses of the people as well as to the elite and children become more of an economic liability than an asset.²⁸

It is important, however, not to look at socio-economic factors in isolation from one another and the structure of the society in which they occur: Doyal,² when discussing class differences in morbidity and mortality, suggests that we take aspects of social and economic relations

such as distribution of income and patterns of work and consumption in order to explain these differences. She suggests that in capitalist societies 'the distribution of ill-health follows the distribution of income. Those with lower incomes tend to have higher rates of morbidity and mortality since income is a major determinant of the standard of housing individuals and families can obtain, of where they live, of their diet and of their ability to remain warm and well-clothed. All of these factors are significant for health. Moreover, the quality of life (and therefore of health) is increasingly influenced by access to the goods and services provided by the state, eg children of unskilled workers are likely to receive an inferior education and therefore go on to low paid jobs themselves.' This has been substantiated in the South African context by Schreier (73). In a study done in Soweto he found that occupational roles are allocated primarily on the basis of educational attainment. The level of educational attainment in turn depends to an important extent on the education and occupation of the head of the household.

In this section we look at the following areas and their relation to health:

- 1 Employment
 - (a) Structure of employment
 - (b) Unemployment
 - (c) Migrant labour
- 2 Income Distribution
- 3 Housing
- 4 Environment
- 5 Education
- 6 Political Structures.

1. EMPLOYMENT(a) Structure of employment

Apart from the direct effect which the nature of his work has on the health of an individual (eg silicosis in gold miners), occupation influences the health of individuals and their families in a number of ways:

- (1) Some occupations are associated with higher standardised mortality ratios (SMR) than others (see Table 2)

Note: SMR expresses the ratio of the number of observed deaths to the number that might have been expected if the group had experienced the same age - and sex-specific death rates as the standard (comparison) group.²⁹ In Table 2 the standard group is the general population.

TABLE 2Occupation and SMR

INDIVIDUAL'S OCCUPATION	STANDARDISED MORTALITY RATIO
University teachers	49
Senior local government officials	57
Company secretaries	60
Senior government officials, ministers, MP's	61
Teachers	66
Doctors	81
Policemen	109
Coal miners	141
Machine tool operators	156
Steel Erectors	164
Fishermen	171
Unskilled workers, labourers in industry	201
Building labourers	274

Source : Inequalities in Health, DHSS 1980, UK.

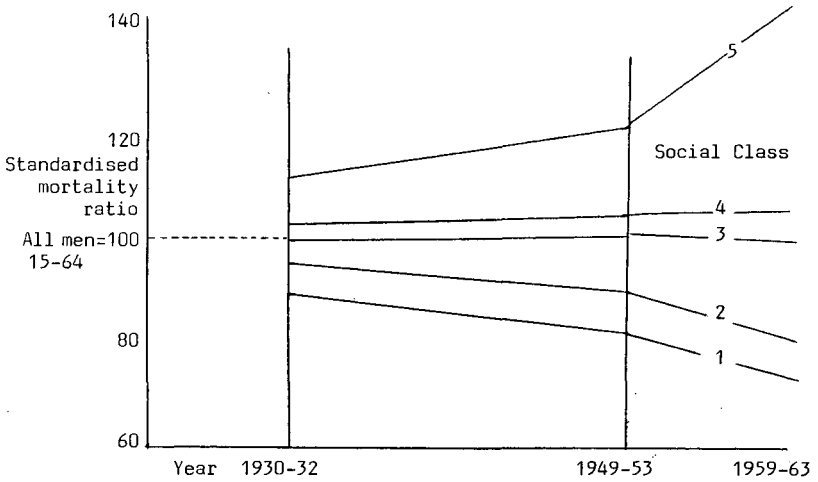
- (ii) Occupation also determines social class and there are clear links between social class and health.^{30,8} See Table 3 for classification of social class.

TABLE 3.

SOCIAL CLASS	COMPOSITION
I	PROFESSIONAL - doctor, lawyer, senior government officials, university teachers, capitalists
II	INTERMEDIATE - schoolteacher, nurse
III _n	SKILLED NON-MANUAL - policemen, clerical worker, shop assistant, secretary
III _m	SKILLED MANUAL - coal face worker, carpenter, butcher
IV	PARTLY SKILLED - machine tool operators, steel erectors, fishermen
V	UNSKILLED - labourers in industry and building, cleaners

An illustration of the links between social class and health is the infant mortality rate in Britain which shows a regular and sharp increase from social class I to V. Also some causes of first year death show much greater social class differentiation than infant mortality as a whole. The death rate from both gastro-enteritis and pneumonia is five times greater in class V than in class I.³⁰ These are both preventable and easily treatable causes which are linked to other factors such as nutrition, education, etc. Table 4 shows changes patterns of mortality by social class in Britain. The differentials between classes are widening with time.

TABLE 4
Changing Patterns of Mortality by Social Class (UK)



Ref: Registrar General's Decennial supplement on
Occupational Mortality 1959-1963

Even diseases usually associated with the 'executive image' such as ulcers and hypertension are commoner in social class V. See Table 5.³⁰

TABLE 5

Standardised Mortality Ratios for Certain Causes by Social Class (men aged 15-64, England and Wales 1959-63)

I.C.D. No.	Cause of Death	Social Class				
		I	II	III	IV	V
	<u>(a) Examples of S.M.R.'s increasing with social class</u>					
001-019	Tuberculosis	40	54	96	108	185
151	Malignant neoplasm of stomach	49	63	101	114	163
154	Malignant neoplasm of rectum	79	89	106	98	120
161	Malignant neoplasm of larynx	47	74	99	100	176
162, 163	Malignant neoplasm of lung, bronchus and trachea	53	72	107	104	148
330-334	Vascular lesions of CNS	86	89	101	98	135
410-416	Chronic rheumatic heart disease	67	69	104	110	146
420	Coronary disease, angina	98	95	106	96	112
440-447	Hypertension	85	96	99	96	138
490-493	Pneumonia	48	54	88	102	196
500-502	Bronchitis	28	50	97	116	194
541	Ulcer of duodenum	48	75	96	107	173
	<u>(b) Examples of S.M.R.'s decreasing with social class</u>					
178	Malignant neoplasm of testes	138	106	101	93	100
190	Melanoma of skin	150	116	100	95	84
451	Aortic aneurysm, non-syphilitic	132	110	105	91	89
584, 585	Cholelithiasis and cholecystitis	123	96	108	89	93

In South Africa statistics are kept by race and not social class. However, there is a close relationship between race and social class. See Table 6.

TABLE 6

Relationship between Race and Class in South Africa

	% OF POPULATION		% WHITES	% 'COLOURED'S'	% AFRICANS
	U K	S A			
CAPITALIST CLASS	5	4	11	0.6	0.5
MIDDLE CLASSES	30	30	60	25	13
WORKING CLASS- SKILLED	38	11	23	13	5
SEMI-SKILLED	18	17	5	29	20
UNSKILLED	9	40	1	33	62

Thus it can be argued that the racial trends in mortality and morbidity (see section on Mortality and Morbidity) are in fact related to the individual's social class. It then becomes clear that the burden of ill-health and poor services is borne by the working class.

(b) Unemployment

Unemployment affects health mainly by influencing factors such as the families' income. Unemployment insurance, when obtained, is usually inadequate to meet basic household needs (see section on Income for relation of income and health). Recent research³¹ has shown that heart disease, obstructive lung disease and bronchitis are commoner among unemployed men than employed men, even when men whose unemployment is due to illness have been excluded.

There have been large increases in unemployment in South Africa as a whole. Unemployment rose from 838 000, ie 11,8% of the workforce in 1970 to 2 million, ie 21,1% in 1981.³² Official figures for the area under consideration are:

1 Number registered unemployed in Cape Town January 1981

Whites	'Coloureds'	Asians	Total
998	2 484	20	3 502

2 Number registered unemployed. Western Cape Administration Board (Blacks)

	<u>31/12/80</u>	<u>30/6/81</u>
Males	4 416	4 053
Females	337	484
Total	4 753	4 537

Official figures tend to be an underestimate of the true picture. A study³³ found unemployment in Bishop Lavis in 1980 to be 13,9%, ie 4,4% higher than the official estimate of 9,5%. The official definition excludes the underemployed, the chronically unemployed (have not looked for a job in the last month) and migrant workers who are unable to accept a job within one week of its becoming available.

(c) Migrant Labour

The effects of migrant labour on health have been discussed by Doyal² in the international context and Seftel³⁴ in the local context. These include an increased incidence of alcoholism, venereal disease, infectious diseases such as pneumonia and meningitis, nutritional diseases such as pellagra and beri-beri, heart disease and mental illness. A large portion of the black male population in the area under consideration are migrant workers (see section on Population).

2 INCOME DISTRIBUTION

As discussed in the introduction to this section, income can be regarded as one of the most important factors affecting health since it often determines other factors which have an influence on health such as nutrition, housing, etc. This has been confirmed by both international and local studies. Davidson³⁵ reviews a number of studies which clearly show the link between income and food consumption. In a study done in Britain between 1930 and 1935, 10 per cent of the population had insufficient money to buy sufficient food for themselves. In another study people moved from a slum housing estate to improved housing showed an increase in death rate compared to their former level and the level of the control group remaining in the slum. The deterioration in health was directly attributed to decreased income resulting from increased rents in the new estate since this was accompanied by a reduction in the amount of money available for buying food. A study in Bonteheuwel, Cape Town³⁶ showed the links between income and illness in children. Children in the lowest income group had poorer nutrition and more episodes of illness than the controls.

There are problems in deciding what level of income to use as a base-line for poverty. One commonly used measure is the household subsistence level (HSL). This is more realistic than the primary household subsistence level which only includes food, clothing, fuel, washing and cleaning materials, since it includes rent and transport. It, however, makes no allowance for education, provision of illness, savings, etc. A wage set at the HSL would be just enough for a family to survive on a day-to-day basis

but is inadequate for long-term physical survival (see ³⁷ for a critique of HSL). The HSL levels for Cape Town are:

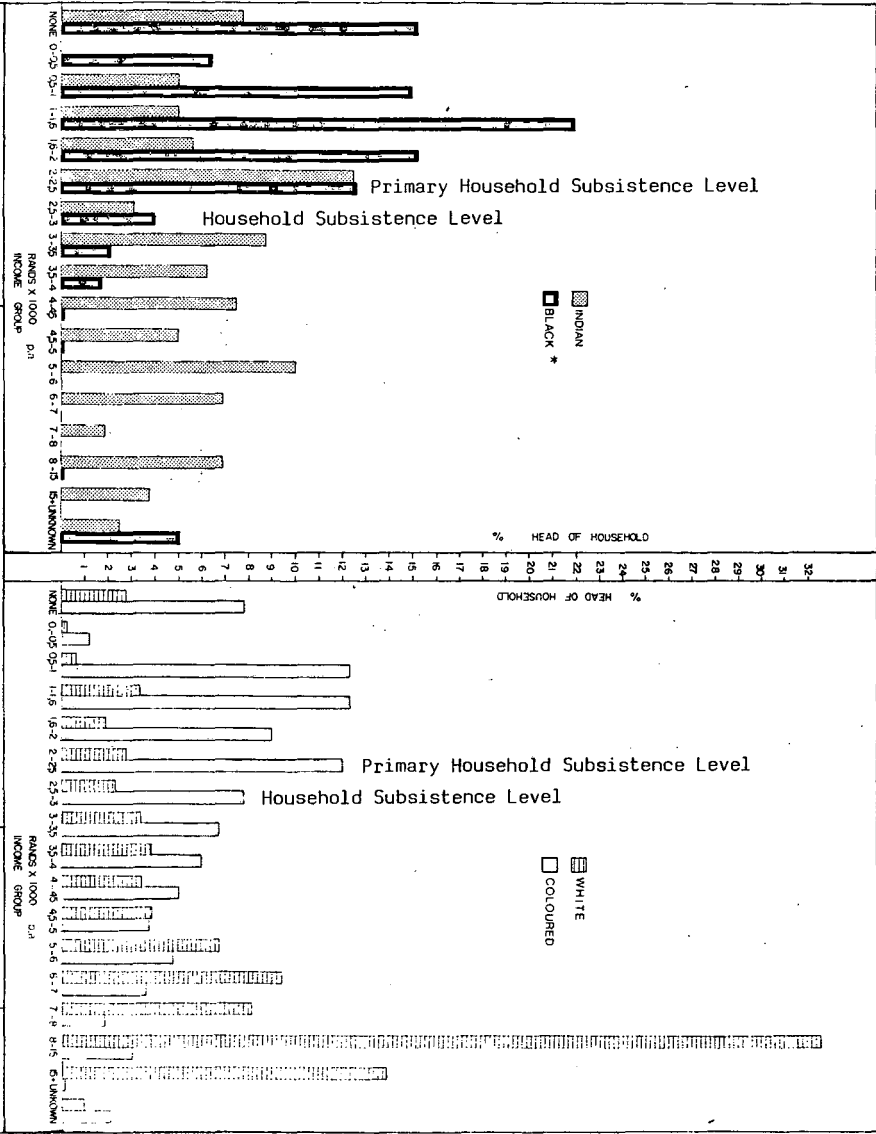
TABLE 7

PHSL and HSL for 'Coloureds' and Blacks in
Cape Town April 1980 ³⁸

	PHSL	HSL
Coloureds	151,08	184,04
Blacks	154,62	179,60

Comparing this to head of household income levels from the 1980 census (Figure 3) it can be seen that 85% of Black heads of household fall below the primary household level, as do 54% of coloureds and 10% of whites. All households concerned are not necessarily dependent solely on the income of the head of household for survival but the alternative strategies like more than one member of the household working are limited by the high rate of unemployment. Keenan,³⁷ in his Soweto study, found that despite factors such as more members of the household (especially woman) going out to work the number of households in his study below the household effective level (HEL = HSL + 50% HSL) had increased from 29,4% in July 1978 to 37,3% in 1980. Thus the data in Table 7 and Figure 3 would seem to support the existence of widespread poverty amongst certain groups in the area under consideration. (See Map 1 for the distribution of mean head of household income per annum.)

Figure 3: (Source: 1980 Census TMS Report No 1 City Engineers Department City of Cape Town 1981)



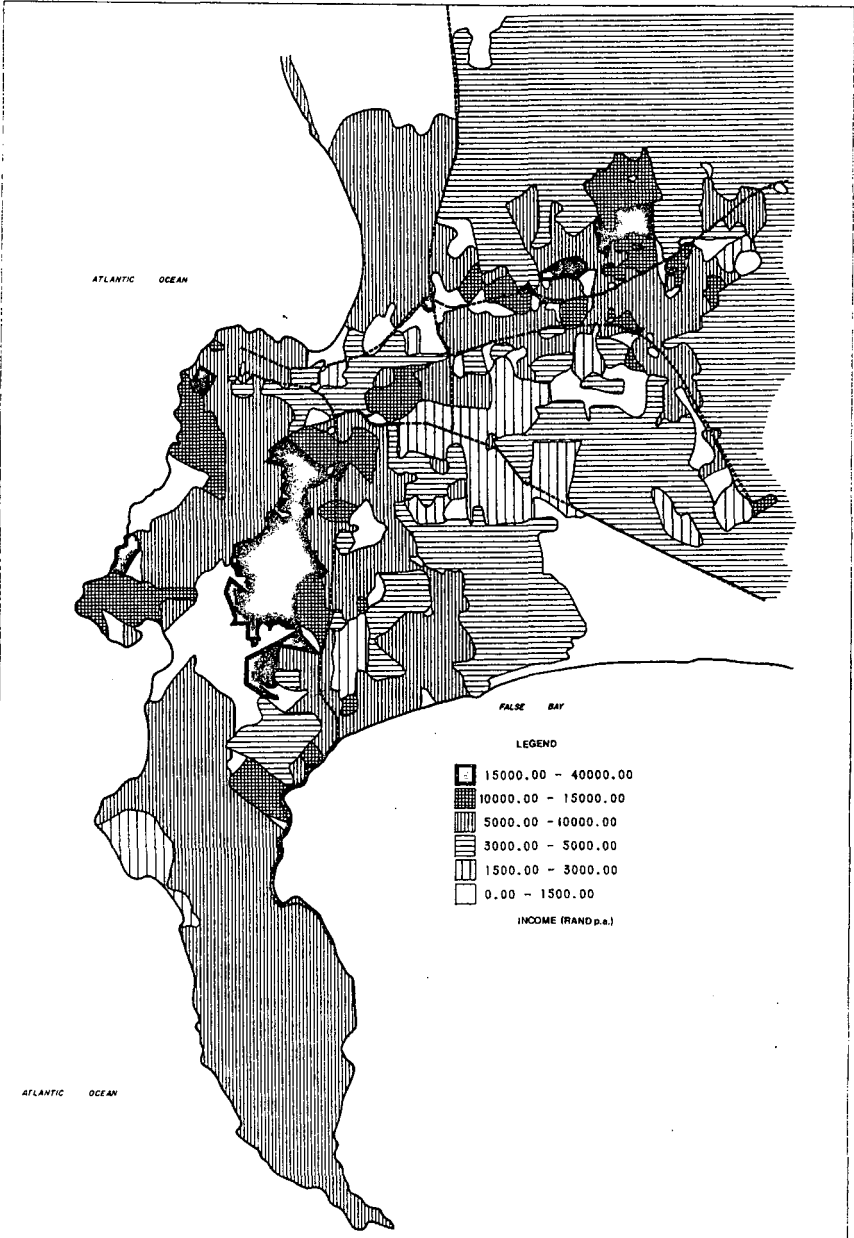
J.D. BRAD
 CITY ENGINEER - STENOGRAPHER
 N.W. RILEY
 DIRECTOR - ELECTRICAL
 TECHNICAL MANAGEMENT SERVICES
 TENDERS ESTIMATORS

CAPE TOWN METROPOLITAN TRANSPORT AREA
 (01 REGION AND KULIS RIVER)
 HEAD OF HOUSEHOLD INCOME BY POPULATION GROUPS

* BLACK INCLUSIVE
 OF ALL OTHERS



MAP 1 (Source: 1980 Census TMS Report No 1 City Engineers Department City of Cape Town 1981)



PRODUCED BY CALFORM

CAPE TOWN METROPOLITAN TRANSPORT AREA
(01 REGION AND KUILS RIVER)
MEAN HEAD OF HOUSEHOLD INCOME
PER ANNUM



3 HOUSING

Housing and Health

Research relating health and housing has often come up with inconclusive results due to problems such as finding appropriate control groups and excluding the effects of other related variables such as income, social class, etc.³⁹ However, when these problems have been overcome, as for example in a Baltimore-based study done in 1966⁴⁰ a number of significant correlations are found between health and housing. Health factors which have been found to be related to housing are:

- the number of episodes of illness which keep people away from work for one week or longer
- tuberculosis (related strongly to overcrowding)
- other chest illnesses such as pneumonia, chronic coughs in children
- other childhood illnesses, eg. ear infections, meningitis, measles, and skin infections
- accidents involving children.

Provision of Housing

Housing in the area under consideration is provided by private enterprise, local authorities and the Administration Board. The majority of the white population lives in housing, either owned or rented, provided by private enterprise. Conditions, on the whole, are satisfactory. The 'Coloured' population is largely dependent on local authorities for housing, although a small proportion of the economically better off population lives in houses which they own, either provided by private enterprise or local authorities. The African population lives in housing provided by the Administration Board.

Housing Statistics

(1) Cape Town City Council (1980):⁴¹ At the end of 1980 the City Council Housing Department had 37 266 housing units under its control. Of these 599 were for whites and 36 667 for 'coloureds'. There were 20 371 'coloured'

families on the waiting list, 1 433 of these being shack dwellers. 51,3% of the 'coloured' families on the waiting list were judged to qualify for economic housing.

During 1980, 740 letting housing units and 4 189 home ownership housing units were built. Of the 4 189 home ownership units built, 12,5% were used to rehouse families resettled under the Group Areas Act. 1 237 families from the waiting list were housed in 1980.

(2) Cape Divisional Council (1980):⁴² By the end of 1980, the Divisional Council housing department had provided 22 136 housing units in both letting and selling schemes. Of the 22 136 housing units 21 089 were for 'coloureds', 1 020 for whites and 27 for Indians. Of the 21 089 housing units for 'coloureds', 5 037 were in selling schemes and 16 052 in letting schemes. Of the latter 8 856 were subeconomic and 7 196 economic units, ie 42% of the housing provided is for the poorest income groups. No actual figures for number of families waiting for houses are given in the Medical Officer of Health's (MOH) report but he refers to the problems of overcrowding, squatters and poor housing, particularly in farming areas such as Phillipi and Constantia.

During 1980, 325 new housing units were provided, 116 subeconomic, 92 economic and 117 for selling schemes.

(3) Peninsula Administration Board: In 1979 the Peninsula Administration Board provided 10 000 family houses in Langa, Guguletu and Nyanga. It also provided 37 888 beds in single quarters within the townships. A further 18 387 beds were available in single quarters outside the townships in compounds and private domestic workers rooms.⁴³

Very few family houses have been built in the African townships since 1972. Between 1972 and 1977 no houses were built. In 1977, building was resumed and by the end of 1981 4 138 houses had been built.

1 884 hostel beds were also provided. At the same time squatter housing at Modderdam and Unibell accomodating 26 000 people was demolished.⁷⁴

Housing Problems

- (1) Overcrowding: The MOH of Cape Town states in his 1980 report:

'The chief factor responsible for slum conditions is the overcrowding caused by the fact that there are not enough houses for the population. Houses suitable for one family and in many cases small even for one large family are occupied by several families, sometimes to the extent of one family per room.'

The mean persons per household size from the 1980 census for the area concerned and including Kuilsriver is ⁴⁴

Whites	2,9
Coloureds	5,7
Blacks	5,9.

In both Coloured and African areas the commonest house-type has three habitable rooms, giving a relatively high occupancy rate/room.

- (2) Inadequate growth of housing stock: As shown above the housing stock is not keeping pace with the housing demand. This is confirmed by the MOH of Cape Town. ⁴¹

'With the enforcement of the Group Areas Act and the displacement of racial groups from one area to another even more housing for the Coloured community must be constructed each year. It is difficult to formulate any figure but it is estimated that at least 20 000 units must be erected so as to make any impression on the present overcrowding that exists.'

- (3) Squatters: There is a large number of squatters in the area under consideration. The 'squattling problem' has been related to a variety of causes such as the housing shortage, the problems of influx control, poor economic opportunities in the homelands, etc. Estimates of the squatter population in the Western Cape area vary. One estimate in 1977 was 200 000 people, 120 000 to 180 000 'coloureds', the rest being Africans. In 1974 there were 26 530 registered shanties for 'coloureds' in the area. This had decreased by 7 800 in September 1981. ⁴⁵ The Divisional Council reported 3 483 registered shanties in June 1981. Crossroads, the largest African squatter camp has between 20 000 and 40 000 residents.

While there is uncertainty about the exact size of the squatter community, the effects on health such as disease resulting from unprotected and contaminated water supplies and inadequate sanitation is acknowledged by the MOHs' concerned.

(4) Quality of housing: Quality of housing available to the lower income groups is generally poor. In general complaints mainly to poor maintenance and lack of electricity in some areas. Writing of housing in Guguletu, Granelli and Levitan⁴³ state

'Most homes in the township do not have ceilings, floors, internal doors, plastering, kitchen sinks and electricity. Nearly all have external bathrooms and toilets. The maintenance of the houses is so minimal as to be virtually non-existent and the condition of the newer buildings deteriorates rapidly so that, after a few years, they are almost indistinguishable from their older counterparts. The inferior finishes used add to this process.'

4 ENVIRONMENT

The importance of the urban environment for health is stressed in the American Public Health Association's Basic Principles of Healthful Housing'.⁴⁶

TABLE 8

Criteria for a Healthy Urban Environment (APHA)

Community or Individual Facilities

1. An approved community water supply, or where not possible, an approved individual water supply.
2. An approved community sanitary sewerage system or, where not possible, an approved individual sewage-disposal system.
3. An approved community refuse collection and disposal system, or, where not possible, arrangements for sanitary storage and disposal.
4. Avoidance of building on land subject to periodic flooding, and adequate provision for surface drainage to protect against flooding and prevent mosquito breeding.
5. Provision of vehicular and pedestrian circulation to provide for freedom of movement and contact with

community residents while adequately separating pedestrian from vehicular traffic.

6. Street, through-highway location, and traffic arrangements to minimize accidents, noise, and air pollution.

7. Provision of such other services and facilities as may be applicable to the particular area, including public transportation, school, police and fire protection, electric power, health, community, and emergency services.

8. Community housekeeping and maintenance services, like street cleaning, tree and parkway maintenance, weed and rubbish control, and other services requisite to a clean and aesthetically satisfactory environment.

Quality of Environment

1. Development controls and incentives to protect and enhance the residential environment.

2. Arrangement, orientation, and spacing of buildings to provide for adequate light, ventilation, and admission of sunlight.

3. Provision of conveniently located space and facilities for off-street storage of vehicles.

4. Provision of useful, well-designed, properly located space for play, relaxation, or recreation and community activities for daytime and evening use in all seasons.

5. Landscaping, planting of trees, and green areas properly arranged and maintained.

6. In communities improved streets, gutters, walks, and access ways.

7. Suitable lighting facilities for streets, walks, and public areas.

Environment Control Programmes

To promote maintenance of a healthful environment necessitates an educational and enforcement programme to:

1. Control sources of air and water pollution, and local sources of ionizing radiation.

2. Control rodent and insect propagation, pests, domestic animals, and livestock.

3. Inspect, educate, and enforce so premises and structures are maintained in such condition and appearance as to not be a blighting influence on the neighbourhood.

4. Control sources of noise and vibration.

The urban environment can affect health by facilitating the spread of infectious diseases due to inadequate sanitation. However, the quality of urban environment is also an important factor affecting health. A study in Copenhagen in 1973⁴⁸ found that 'thriving', an index comprised of factors related to satisfaction with residential environment, was the most important predictor for health out of a series of factors.

In the area under consideration sanitation is generally adequate except in squatter areas. The quality of water is good. There are, however, a number of diseases which are related to quantity of water rather than quality⁴⁷ as discussed earlier. No information exists on the quantity of water available in people's homes. In some areas there are outside toilets and the bucket system is still in operation in a few areas. The main deficiencies in the urban environment relate to the quality of environment and occur in those areas occupied by low income 'Coloured' and Black families. The deficiencies include high crime rates, lack of community facilities, transport difficulties, etc.⁴⁹

5 EDUCATION

Education is considered to be important for health. In Soweto a definite correlation has been found between protein calorie malnutrition and level of education.¹⁴ However, in another nutrition study in a rural area⁵⁰ it was found that a mother's education was irrelevant to her child's nutritional status. 25% of the mothers of the well-nourished children in this study were illiterate, showing that good nutrition is compatible with the absence of formal education. Thus it would seem that education is important, not in terms of formally learnt knowledge about health, but because it is a major determinant of employment of urban Blacks. In rural areas where there are virtually no employment opportunities for black women education becomes irrelevant in relation to an important health parameter like nutrition.

Education levels for area under consideration are given in Table 9⁵¹
It can be seen that marked differences exist between the different

population groups particularly as far as completion of high school and university education are concerned.

TABLE 9
Education Levels in the 01 Metropolitan
Area (1980 census)

GROUP	TOTAL POPULATION	HIGHEST QUALIFICATIONS OBTAINED			
		None and un-specified	Standard 6	Standard 10	Degree
Whites	482 240	66 300 (13,7%)	38 300 (7,9%)	107 120 (22,2%)	24 900 (5,0%)
Coloureds	775 600	180 560 (23,2%)	108 740 (14%)	20 160 (2,6%)	1 980 (0,02%)
Asians	17 420	4 420 (25,3%)	1 760 (10,1)	1 620 (9,2%)	300 (1,7%)
Blacks	183 360	57 400 (31,3%)	19 740 (10,8%)	3 280 (1,8%)	60 (0,03%)

Differences also occur in the amount spent on education for the different population groups (Table 10). Thus education differs both qualitatively and quantitatively.

TABLE 10
Estimated per capita expenditure on education for
1979/1980 (including capital expenditure)
National figures 52

Whites	R1 169,00
Indians	389,66
'Coloureds'	234,00
Africans (in 'White' areas)	91,29

6 POLITICAL STRUCTURES

The relationship between political structures and health is complex, important decisions influencing health are taken at a number of levels of government. These include how public resources are to be spent, both on health services and on factors influencing health such as housing.

Policy and planning decisions are also important, eg the decision to spend R130 million on building a new Groote Schuur Hospital rather than community health centres. African and 'Coloured' people have no say in the bodies controlling health at a provincial or state level. At the level of local government Africans and 'Coloureds' are supposedly represented by community councils or management committees which have advisory powers only. Support for these bodies seems to be small, eg in Cape Town only 8,1% of the 'Coloured' and Indian population are registered voters. Also percentage polls are low. The average percentage poll in management committee elections in Cape Town over the period 1972-1981 was 15% of the registered voters, ie 1,2% of the population voted. At present new constitutional proposals are being debated.

MORTALITY AND MORBIDITY PROFILE OF THE 01 METROPOLITAN AREAINTRODUCTION

One of the indications of health needs of a given population, and of where health resources should best be deployed, is a knowledge of what the major disease problems are. This is based on the analysis of mortality and morbidity patterns. Certain health statistics are used internationally as indicators of the mortality and morbidity patterns of a community or area (see Table 11).

TABLE 11Table of Health Indicators 53

- | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> - Life expectancy at birth - Infant mortality rate - Child mortality rate - Three principal causes of death in order of frequency by age groups 0-4, 5-14, 15-44, and 45 and over (classified by ICD chapters of adaptation of ICD Basic Tabulation List) - Maternal mortality rate - Incidence and/or prevalence of selected communicable diseases of major health importance to the population - List in order of frequency of the 10-15 most commonly reported health problems in the population - Persons with sick days/1 000 and volume of sick days/1 000 during past 14 days (non-institutionalised population) - Persons/1 000 with disability impairments and chronic diseases (non-institutionalised population) - Proportion of population resident in long-term health care institutions - Proportion of low birth weight new borns (under 2 500 grams) - Proportion of children at specified ages less than 80% of index values for weight and height. |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

In South Africa mortality and morbidity information is limited to:

1. Information on notifiable diseases, eg TB.
2. Mortality statistics. These are available for Whites, 'Coloureds' and Indians and for Africans in selected

districts. Analysis of these figures is usually limited by the fact that ICD categories are not always used for classification and age specific death rates are not given. Probably the most accurate and useful figure in urban areas is the IMR.

3. Morbidity studies. These are very seldom community-based and tend to reflect the pattern of admission to hospitals rather than actual morbidity patterns.

Although unsatisfactory in many respects, the above type of statistics can be used to give an indication of the major health problems and who suffers from them. The indicators looked at for the 01 area are:

1. IMR
2. General Mortality
3. Notifiable Diseases
4. Hospital-based Morbidity Figures.

Before looking at these statistics the denominator population of the area is described.

POPULATION

According to the 1980 census the population of the 01 metropolitan region was: ⁵⁴

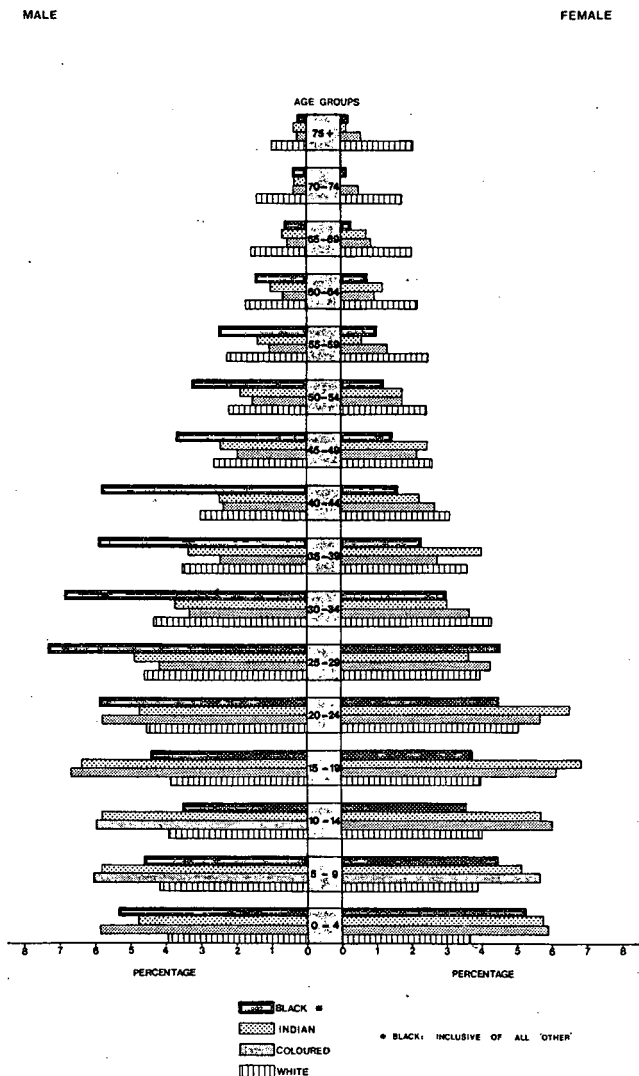
	Whites	'Coloureds'	Asians	Blacks	Total
Bellville	111 744	98 821	3 281	2 849	213 742
Goodwood	61 664	174 085	1 621	732	238 102
Cape Town	124 876	80 748	2 006	6 200	213 830
Simonstown	29 462	17 564	117	1 128	48 271
Wynberg	143 883	430 356	9 066	161 401	744 706
	471 629	801 574	13 198	172 310	1 458 651

The population pyramid is shown in figure 4. ⁴⁴

The birth rate for 1976-1980 is :

FIGURE 4

Population Pyramid (01 region and Kuils River)
 (Source: 1980 Census TMS Report City Engineers Department
 City of Cape Town 1981)



J.G. BRAND
 CITY ENGINEER - STADSINGENIEUR

N.W. RILEY
 DIRECTOR - DIREKTEUR
 TECHNICAL MANAGEMENT SERVICES
 TEGHIESE BESTUURSDIENSTE

CAPE TOWN METROPOLITAN TRANSPORT AREA
 (01 REGION AND KUILS RIVER)
 POPULATION PYRAMID



(1) City of Cape Town: 41

RACE	1976		1977		1978		1979		1980	
	Live Births	Birth Rate	Live Births	Birth Rate	Live Births	Birth Rate	Live Births	Birth Rate	Live Births	Birth Rate
Whites	3 186	12,6	2 875	11,2	2 768	10,6	2 695	10,2	2 727	10,1
Coloureds	12 076	25,3	11 926	24,1	12 155	23,7	12 746	23,9	13 448	24,3
Asians	264	23,9	217	19,1	259	22,2	260	21,7	225	18,3
Blacks	4 115	40,9	3 915	38,0	4 082	37,9	3 999	36,9	3 984	35,8
Total	19 641	23,3	18 933	21,8	19 264	21,5	19 700	21,4	20 384	21,6

(2) Cape Divisional Council Area. 42

RACE	1976		1977		1978		1979		1980	
	Live Births	Birth Rate	Live Births	Birth Rate	Live Births	Birth Rate	Live Births	Birth Rate	Live Births	Birth Rate
Whites							2 924	15,15	3 084	15,58
Coloureds							8 372	27,24	8 877	27,31
Blacks							1 886	34,01	2 453	43,10
Total		NOT								

Certain features of the population structure of Cape Town have implications in terms of health and health services. These are:

1. the presence of a large number of male migrant Black workers in the 25-60 age group. This increases the incidence of alcohol related disease and venereal disease.³⁴ Many migrant workers come from areas with high incidences of TB, eg Ciskei and Transkei, leading to an increase in the number of TB cases in the area.
2. The White group shows a characteristically 'mature' pyramid with relatively low percentages in the younger bands and higher figures for the old 60 plus age band, implying a need for geriatric services in this age group.
3. The 'Coloured' group on the other hand has an 'immature' pyramid with large younger age groups, tailing off rapidly after the age of 40. There is a need for extensive paediatric

services in this group.

4. The high birth rate in the African and 'Coloured' populations implies the need for adequate maternity facilities.

1 Infant Mortality Rate

'From the naked helplessness at his birth to the milestone of his first birthday the human infant is particularly exposed and vulnerable to the hazards of a hostile environment. At few other times of his life is he so insecure and utterly dependent on the benevolence of his family and the generosity of his society. It is generally recognised that the infant mortality rate in any country is an excellent indicator of the level of health of its population and reflects on the quality of its paediatric services'.⁴⁹

The IMR in the areas controlled by the City Council and by the Divisional Council (see Map 2) are as follows:

TABLE 12

Infant Mortality in the 01 Region (1976-1981)

Divisional Council

	1976	1977	1978	1979	1980	1981
Whites	13,70	9,22	11,50	14,36	12,00	12,45
'Coloureds'	63,50	46,07	45,27	32,97	27,94	26,52
Blacks	130,60	108,23	97,78	62,57	56,26	52,98

Source: Annual reports of MOH (Cape Divisional Council)

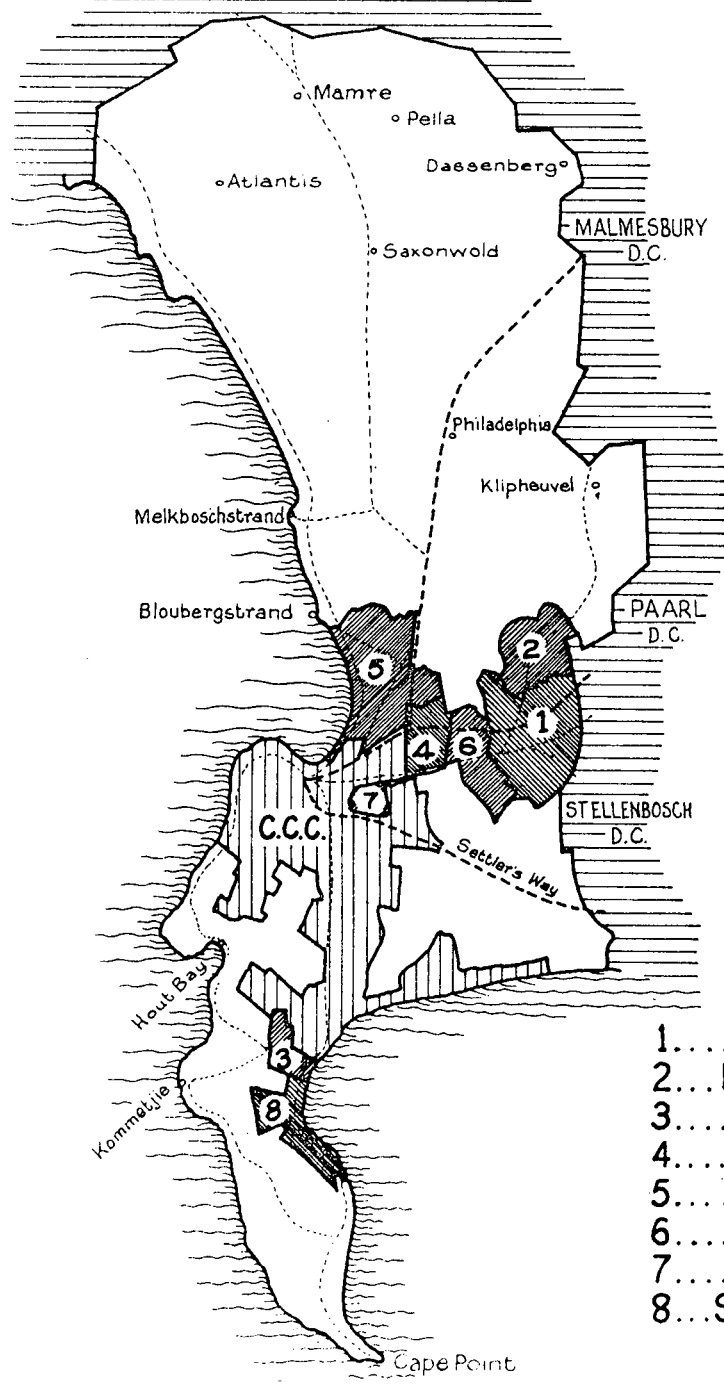
City Council

	1976	1977	1978	1979	1980	1981
Whites	8,5	8,3	13,0	10,4	12,8	9,4
'Coloureds'	31,0	25,9	21,8	19,3	19,8	18,8
Blacks	77,0	66,0	47,3	34,0	38,2	34,6

Source: Annual reports of MOH (Cape Town City Council)

(Source: Annual Report of MOH
Cape Divisional Council 1979)

COMBINED HEALTH CONTROL SCHEME AREA



- 1..... Bellville
- 2... Durbanville
- 3..... Fish Hoek
- 4.... Goodwood
- 5.... Milnerton
- 6..... Parow
- 7.... Pinelands
- 8... Simonstown

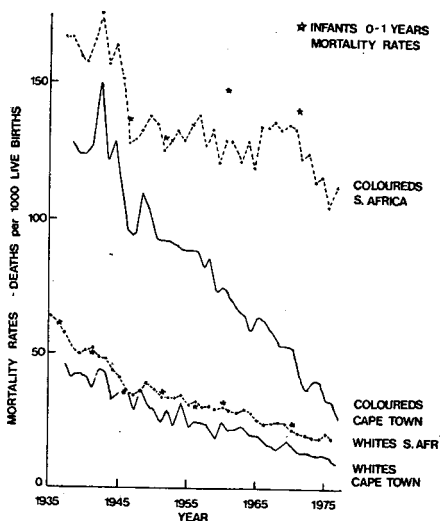
Notes on IMR

1 Comparison with national statistics

IMR's in both City Council and Divisional Council areas are much lower than the national rates for 'Coloureds' (See Figure 5).

FIGURE 5

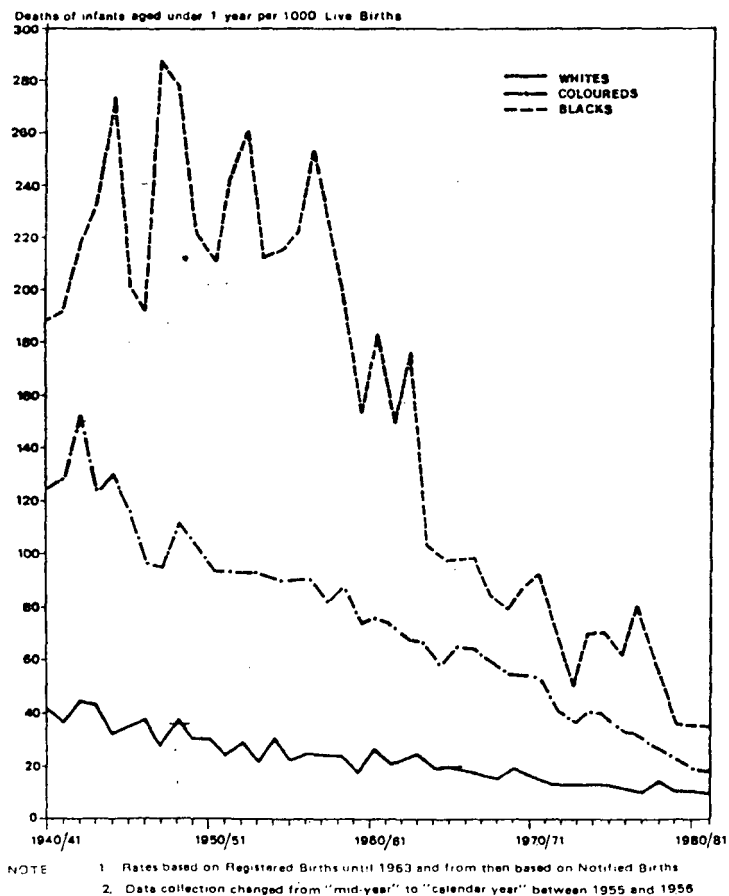
Infant Mortality Rates for Whites and 'Coloureds' in South Africa and Cape Town over the last 40 years ³



Infant mortality rates for Whites and Coloureds in South Africa and Cape Town over the last 40 years.

No accurate figures are available for Africans since statistics are only kept for selected magisterial districts. The improvement in the IMR of 'Coloureds' in City Council areas has been shown to be largely due to the decrease in mortality from gastro-enteritis.³ Despite these improvements the IMR for 'Coloureds' in City Council areas is equivalent to that of Whites in 1965 and for Africans to that of Whites in 1947 (see Figure 6).

FIGURE 6:
Infant Mortality Rates: 1940/41 to 1981



Source: Annual Report of MOH, Cape Town 1981.

2 Causes of IMR (see Table 13)

TABLE 13

Three Commonest Causes of IMR (1980)

DIVISIONAL COUNCIL			CITY COUNCIL		
Cause	No of Deaths	%	Cause	No of Deaths	%
Whites			Whites		
1 Certain conditions originating in the perinatal period	14	38	1 Certain conditions originating in the perinatal period	21	60
2 Congenital abnormalities	14	38	2 Congenital abnormalities	5	14
3 Other diseases of the respiratory system	5	14	3 Other miscellaneous causes	4	11
'Coloureds'			'Coloureds'		
1 Certain conditions originating in the perinatal period	85	34	1 Certain conditions originating in the perinatal period	116	43
2 Other diseases of respiratory system	66	27	2 Other miscellaneous causes	46	17
3 Intestinal infectious diseases	33	13	3 Diseases of the respiratory systems	42	16
Blacks			Blacks		
1 Other diseases of the respiratory system	52	38	1 Certain conditions originating in the perinatal period	55	36
2 Intestinal infectious diseases	32	23	2 Diseases of the respiratory system	39	25
3 Certain conditions originating in the perinatal period	18	13	3 Intestinal infectious diseases	19	13

(a) In the White population group in both areas the greatest proportion of all deaths occur in the neonatal period and can be ascribed to prematurity, congenital abnormalities, etc which are typical of infant mortality in developed communities.

(b) In the 'Coloured' population in both areas the principal cause of IMR is also conditions originating in the perinatal period, eg prematurity but respiratory diseases such as pneumonia and bronchitis still play a significant role (27% of IMR in Divisional Council areas and 16% in City Council areas). Gastro-enteritis is not of major importance in City Council areas but accounts for 13% of 'Coloured' IMR in Divisional Council areas. The preventions of deaths due to respiratory infections and gastro-enteritis would decrease 'Coloured' IMR to 16,4 in City Council areas and 16,7 in Divisional Council areas.

(c) Among the Black population in City Council areas 36% of IMR is attributable to prematurity etc, 38% to mainly pneumonia and gastro-enteritis. If the latter were prevented this would reduce the IMR to 25,8. In Divisional Council areas these conditions account for 61% of IMR and if prevented would lower the IMR to 22,0.

Thus major differences in IMR are due to preventable conditions like gastro-enteritis and pneumonia. Apart from improved socio-economic conditions, improved health services like the development of day hospitals and preventive clinics are thought to have played an important role in the decrease in IMR, especially that due to gastro-enteritis. Whether this improvement can be maintained in view of the overcrowding and lack of expansion of the health services at present remains to be seen. There has been a levelling-off of improvements of the death rate due to gastro-enteritis among Blacks in the City Council area since 1979 (see Figure7).

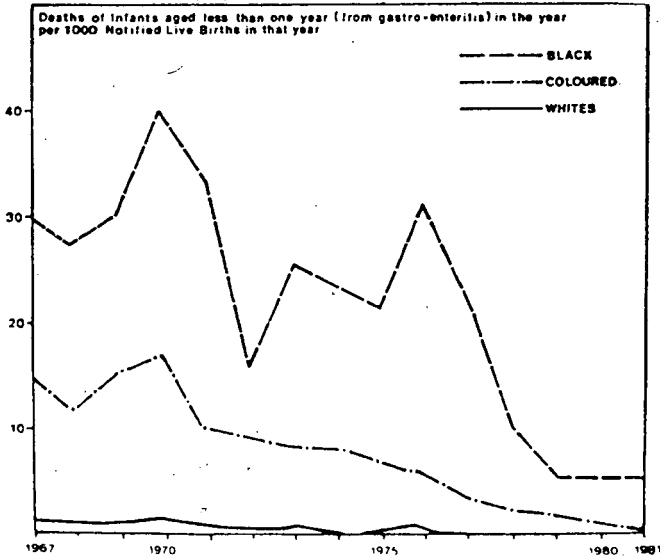
Also of interest is the sharp rise in mortality due to gastro-enteritis in 1976, the year in which health services in the townships were disrupted due to civil unrest.

2 General Mortality

Age specific and cause specific mortality rates are not available for either City Council or Divisional Council areas due to a lack of statistics on the denominator populations in each age group. The age-sex structure of a population has a profound effect on its mortality

Figure 7:

Infant Mortality due to Gastro-Enteritis:
City of Cape Town 1967 to 1981



Source: Annual Report of MOH, Cape Town 1981.

experience and renders crude death rates useless for comparative purposes. This is illustrated by an example given in the 1980 MOH (Cape Town City Council) Report which shows that the crude death rate for White males was 9,6/1 000 while that for 'Coloured' males was 8/1 000. When age standardised rates were used, however, figures for Whites were 11,9/1 000 and those of 'Coloureds' 22,3/1 000.

Total numbers of deaths in the various age groups are given in the MOH's report for the Cape Town City area. The population of the area is known and if it is assumed to have a similar age distribution to that

of the 01 metropolotan area and Kuilsriver (Figure 4) then the following age specific death rates are obtained.

TABLE 14

Age Specific Death Rates for Cape Town (1980)

Age Group	AGE SPECIFIC DEATH RATE		
	Whites	'Coloured'	Black
0-4	1,93	5,14	16,01
5-9	0,24	0,34	1,19
10-14	0,24	0,33	0,68
15-24	0,46	0,86	2,04
25-34	0,89	1,68	3,33
35-44	2,01	4,52	5,86
45-54	5,71	12,04	15,54
55-64	16,45	28,89	29,97
65-74	34,07	46,63	61,15
75 +	126,28	108,75	136,69

It can be seen that in every age range, except 'Coloureds' 75+, the age specific death rate for 'Coloured' and Blacks is greater than for Whites. The 'Coloured' death rate is on average 1,75 times that of Whites while that of Blacks is 3,4 that of Whites. The effects are most marked in children under 5 where 2,6 times more 'Coloured' and 8,3 times more Black children die than White children.

By a similar process age specific death rates can be calculated for the Divisional Council areas. (See Table 15)

A similar trend to that found in the Cape Town area is found in the young age groups, ie up to 24 years. Between 25 and 54 years the Black death rate remains higher than that of Whites but lower than that of 'Coloureds'. At the age of 54 it becomes lower than that of both 'Coloureds' and Whites. Without specific information about the population in Divisional Council areas it is difficult to explain why the trend for Blacks in these areas differs form the national trend and the trend in Cape Town.

TABLE 15

Age Specific Death Rates for Cape Divisional Council (1980)

AGE SPECIFIC DEATH RATE			
Age Group	Whites	Coloureds	Blacks
0-4	3,08	8,15	26,4
5-9	0,32	0,96	1,73
10-14	0,26	0,70	1,35
15-24	1,09	2,75	3,13
25-34	1,15	3,51	2,77
35-44	2,51	6,83	4,31
45-54	6,93	11,70	7,50
55-64	12,42	24,09	10,48
65-74	31,67	53,13	18,73
75 +	92,68	75,77	42,11

The five commonest causes of death by race group in Cape Town City area for 1980 are shown in Table 16 and in the Divisional Council area in Table 17.

TABLE 16

The Five Commonest Causes of Mortality in Cape Town. (using ICD classification)

General Cause	No of Deaths	Proportional Mortality	Specific Causes
Whites			
1 CIRCULATORY	959	42%	Degenerative heart disease (48%) Cerebrovascular (23%)
2 NEOPLASMS	463	20%	Lung cancer (25%)
3 SYMPTOMS, SIGNS AND ILL-DEFINED CAUSES	369	16%	Senility (88%)
4 RESPIRATORY	186	8%	Pneumonia (46%)
5 ACCIDENTS, POISONING AND VIOLENCE	105	5%	MVA's (33%) Suicide (29%)
'Coloureds'			
1 CIRCULATORY	1 013	34%	Degenerative heart disease (32%) Cerebrovascular (32%)
2 NEOPLASMS	519	17%	Lung cancer (25%)
3 RESPIRATORY	363	12%	Pneumonia (46%)
4 SYMPTOMS, SIGNS AND ILL-DEFINED CAUSES	252	8%	Senility (54%) Sudden death, cause unknown (44%)
5 ACCIDENTS, POISONING AND VIOLENCE	248	8%	MVA's (30%) Homicide (26%)
Blacks			
1 CIRCULATORY	194	20%	Cerebrovascular (34%) Other heart disease (30%)
2 NEOPLASMS	163	17%	Desophageal cancer (29%) Lung cancer (23%)
3 INFECTIVE/PARASITIC	138	14%	Pulmonary TB (49%)
4 ACCIDENTS, POISONING AND VIOLENCE	137	14%	Homicide (35%)
5 RESPIRATORY	126	13%	Pneumonia (67%)

Note: The proportional mortality rate above is the annual number of deaths due to a particular cause divided by the total number of annual deaths for a particular population group expressed as a percentage.

As stated previously, without age standardisation it is difficult to interpret these figures. Points of interest are that while circulatory illness is the commonest cause of death among all three groups, in Whites this tends to be predominately degenerative heart disease whereas amongst 'Coloureds' cerebrovascular disease is as common as degenerative heart disease and amongst Blacks it is the commonest circulatory cause of death. The large number of homicides amongst 'Coloureds' and Blacks are also a cause for concern. TB is a cause of 14% of Black deaths whereas it does not feature among the five commonest causes for other groups.

The five commonest Causes of Mortality in the Divisional Council area are shown in Table 17.

TABLE 17

The Five Commonest Causes of Mortality in the Divisional Council Area
(using ICD classification)

General Cause	No of Deaths	Proportional Mortality	Specific Causes
Whites			
1 CIRCULATORY	763	51%	Ischaemic heart disease (65%) Cerebrovascular (25%)
2 NEOPLASMS	258	17%	Cancer of digestive organs and peritoneum (30%) Lung cancer (22%)
3 RESPIRATORY	156	10%	Mainly pneumonia and COPD
4 ACCIDENTS, POISONING AND VIOLENCE	94	6%	MVA's (49%)
5 SYMPTOMS, SIGNS AND ILL-DEFINED CAUSES	82	5%	
'Coloureds'			
1 CIRCULATORY	510	26%	Ischaemic heart disease (64%) Cerebrovascular (34%)
2 ACCIDENTS, POISONING AND VIOLENCE	441	22%	Homicide (56%) MVA's (27%)
3 RESPIRATORY	294	15%	Mainly pneumonia and COPD

General Cause	No of Deaths	Proportional Mortality	Specific Causes
4 SYMPTOMS, SIGNS AND ILL-DEFINED CAUSES	193	10%	
5 NEOPLASMS	189	9%	Lung cancer (26%) Cancer of digestive organs and peritoneum (35%)
Blacks			
1 ACCIDENTS, POISONING AND VIOLENCE	88	23%	Homicide (52%) MVA's (41%)
2 RESPIRATORY	78	20%	Mainly pneumonia and COPD
3 INFECTIVE AND PARASITIC	50	13%	Intestinal infectious disease (70%)
4 SYMPTOMS, SIGNS AND ILL-DEFINED CONDITIONS	39	10%	
5 CIRCULATORY	32	8%	Ischaemic heart disease (63%)

The causes of mortality in the Divisional Council areas are similar to those in the City Council's areas for Whites. For 'Coloureds' and Blacks deaths in the ICD category 'Accidents, poisoning and violence' are proportionally of more importance in the Divisional Council areas than in the City Council areas.

3 Notifiable Disease

Certain diseases are notifiable by law. These figures give some indication of the morbidity due to these diseases. They are, however, underestimated, eg prevalence surveys carried out in South Africa suggest that for TB there are 2-3 times more infectious cases in South Africa than are notified to the Department of Health.⁵⁵ The number of cases of notifiable disease in the area concerned is shown in Table 18.

TABLE 18
Number of Cases of Notifiable Disease (1980)

	NOTIFICATIONS			DEATHS		
	White	'Coloured'	Black	White	'Coloured'	Black
Cape Town City Council Area						
Tuberculosis	42	1 265	1 523	7	70	70
Measles	1	266	337	-	6	13
Cerebrospinal fever	12	230	53	1	24	8
1 ^o Malignancy of bronchus, lungs	114	128	38	114	128	38
Viral hepatitis	40	93	13	1	1	-
Whooping cough	1	20	6	-	1	-
Typhoid	1	3	8	-	1	-
Cape Divisional Council Area						
Tuberculosis	35	1 127	661			
Measles	38	351	225			
Cerebrospinal fever	11	190	27			
1 ^o Malignancy of bronchus, lungs	52	51	4			
Viral hepatitis	54	46	7			
Whooping cough	NOT RECORDED					
Typhoid	1	7	16			

DEATHS NOT RECORDED

NOTES ON NOTIFIABLE DISEASE

1. Tuberculosis

TABLE 19
Notification Rates Per 1000 of the Population for All Forms of TB
(Cape Town City Council Area)

	1976	1977	1978	1979	1980	1981
Whites	0,22	0,26	0,20	0,16	0,15	0,14
'Coloureds'	2,01	2,26	2,05	1,99	2,15	2,46
Blacks	10,02	9,29	8,79	10,90	11,37	11,91

Source: Annual Reports of MOH (Cape Town).

Note: Only local cases included, ie persons resident in the municipal area of Cape Town for at least six months prior to notification as TB cases.

TABLE 20

Notification Rates per 1 000 Population for All
Forms of TB (Divisional Council Area)

	1979	1980	1981	
Whites	0,23	0,18	0,17	
'Coloureds'	3,75	3,47	3,28	
Blacks	13,20	11,67	13,68	

Source : Annual Reports of MOH (Cape Divisional Council).

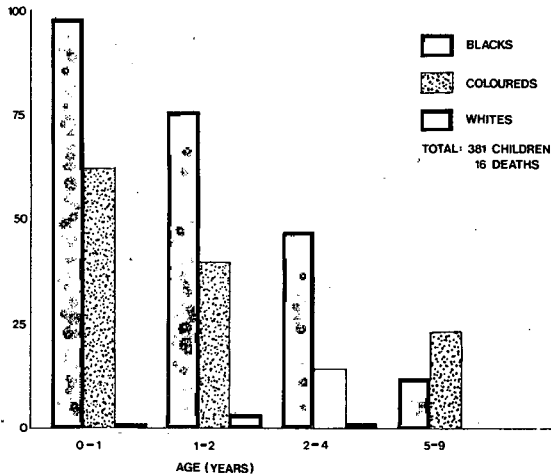
These figures show the rising incidence of TB particularly among Blacks over the period. This is attributed by the MOH of Cape Town to 'socio-economic ills - malnutrition, bad housing, overcrowding and poverty'.

2 Measles

604 cases of measles were notified in the City Council area in 1980 and 614 in the Divisional Council area. These notifications are usually gross underestimations of the true incidence of the disease. In the USA surveys have suggested that only 10% of measles cases are ever notified.⁵⁶ Measles is usually a trivial illness in well-nourished children but much more serious in undernourished children.⁵⁷ Case fatality in measles has been pointed out as an indirect way of assessing the nutritional status of a community.⁵⁹ In the Cape Town area some idea of among whom the severe cases of measles occur can be got by examining the admission for measles to City Hospital (see Figure 8).

Figure 8

Admissions for Measles by Age and Race to
Cape Town City Hospital (1980) 41



There were 19 deaths due to measles (6 'Coloured' and 13 Black) in 1980.

3 Cerebrospinal fever

There were 295 cases of cerebrospinal fever in 1980 in the City Council area and 33 deaths due to this illness. In the Divisional Council area there were 259 cases; the number of deaths is not recorded. 'Improved housing standards are essential to reduce morbidity and mortality from this disease' states the MOH of Cape Town in his 1980 report.

4 Hospital-based morbidity studies

A search of the literature revealed very few hospital-based morbidity studies for the area under consideration. One such study⁵⁸ was done at the Red Cross War Memorial Children's Hospital, which serves largely as a community hospital for children who come from families in the lower socio-economic areas, and as a referral centre for selected patients, regardless of socio-economic status, who require specialised care. In the study 16 838 first attendances in two two-week periods were considered. The majority of first attendances are by people seeking primary health care rather than referrals from other doctors or centres, thus the morbidity profile obtained can be considered to be fairly representative of the community the hospital serves.

Of the 16 838 first attendances 78% of the children were 'Coloured', 15% Black and 7% White. The ratio of 'Coloured' children attending relative to Black children reflects their proportions in the general population, while White children are under-represented reflecting the greater access of Whites to private medical care (see later).

Nutritional status

Table 21 shows the percentage of children suffering from under-nutrition, ie whose weight fell below the third centile.

TABLE 21
Percentage of Children Whose Weight Falls Below
the Third Centile

	1 year	1-2 years	2-6 years	6 years
Whites	*17	3	9	9
'Coloureds'	22,5	24	25	35
Blacks	20	21	20	23,5

* A much higher proportion of Whites than other population groups attending Red Cross are problem cases referred in from other doctors, therefore the figures for low weight babies are likely to be particularly high.

Diagnosis

The commonest systems were the respiratory and alimentary tracts. Table 22 shows the commonest diagnoses recorded in the record cards.

TABLE 22
Commonest Diagnoses in Sample of 16 838 children

DIAGNOSIS	PERCENTAGE OF POPULATION GROUP		
	Coloured	Black	White
Respiratory Tract Infection			
- Upper respiratory tract infections	19,5	19,2	14,2
- Acute pulmonary infections (pneumonia and bronchiolitis)	10,7	13,9	4,9
Allergic Conditions			
- Asthma and acute bronchospasm	6,0	2,7	11,5
Infectious Diseases			
- Measles	1,3	3,3	0,5
Alimentary System			
- Acute diarrhoeal disease	8,9	17,4	4,7
- Worms	2,5	2,4	1,1
Nutrition			
- Protein energy malnutrition	2,6	3,6	0,8
ENI			
- Otitis media	3,2	3,0	2,7
Neurological			
- Epilepsy and convulsions	2,1	3,2	3,3
Trauma			
- Open wounds	3,9	1,7	3,0

The authors conclude that the largest proportion of attendances are by young children, many of whom fall below the third centile for weight and have minor or potentially preventable conditions associated to a great extent with the poor socio-economic conditions of the majority of families served by the hospital.

ACCESS TO HEALTH SERVICES IN THE 01 METROPOLITAN REGION

Health services in the 01 metropolitan region are provided by both the public sector and the private sector. The private sector provides curative services only, whereas the public sector provides both preventative and curative services. Health services have been examined in order to determine access as defined in the introduction, ie distribution, affordability, hours and equality, available to different groups of the population.

The sections are dealt with as follows:

- 1 Private sector
 - (a) Private practitioners
 - (b) Private hospitals
 - (c) Welfare organisations

- 2 Public sector
 - (a) Curative services
 - (i) Provincial hospitals
 - (ii) Day hospitals
 - (b) Preventative services

Note: Psychiatric services have not been included in this study.

1 PRIVATE SECTOR

The private sector consists of:

- (a) private practitioners
- (b) private hospitals
- (c) Welfare organisations, although many of these are state aided.

(a) Private practitioners

The number of private practitioners in the 01 region is shown in Table 23.

TABLE 23

The Number of Private Practitioners in the
01 Region (1980) 61

General Practitioners	539
Physicians	55
Anaesthetists	51
Surgeons	151
Radiologists	26
Pathologists	18
Obstetricians	61
Psychiatrists	12
Paediatricians	23
Total Specialists	397
Total Private Practitioners	936

Using the 1980 census figures as the denominator population this would give a ratio of one private practitioner per 1 558 people, a very favourable ratio considering that the national average number of doctors (private and public service per head of population) was 1 per 1 900 in 1975.⁶²

However, there are marked discrepancies in the geographical distribution of both general practitioners and specialists (see Map 3 and Table 24).

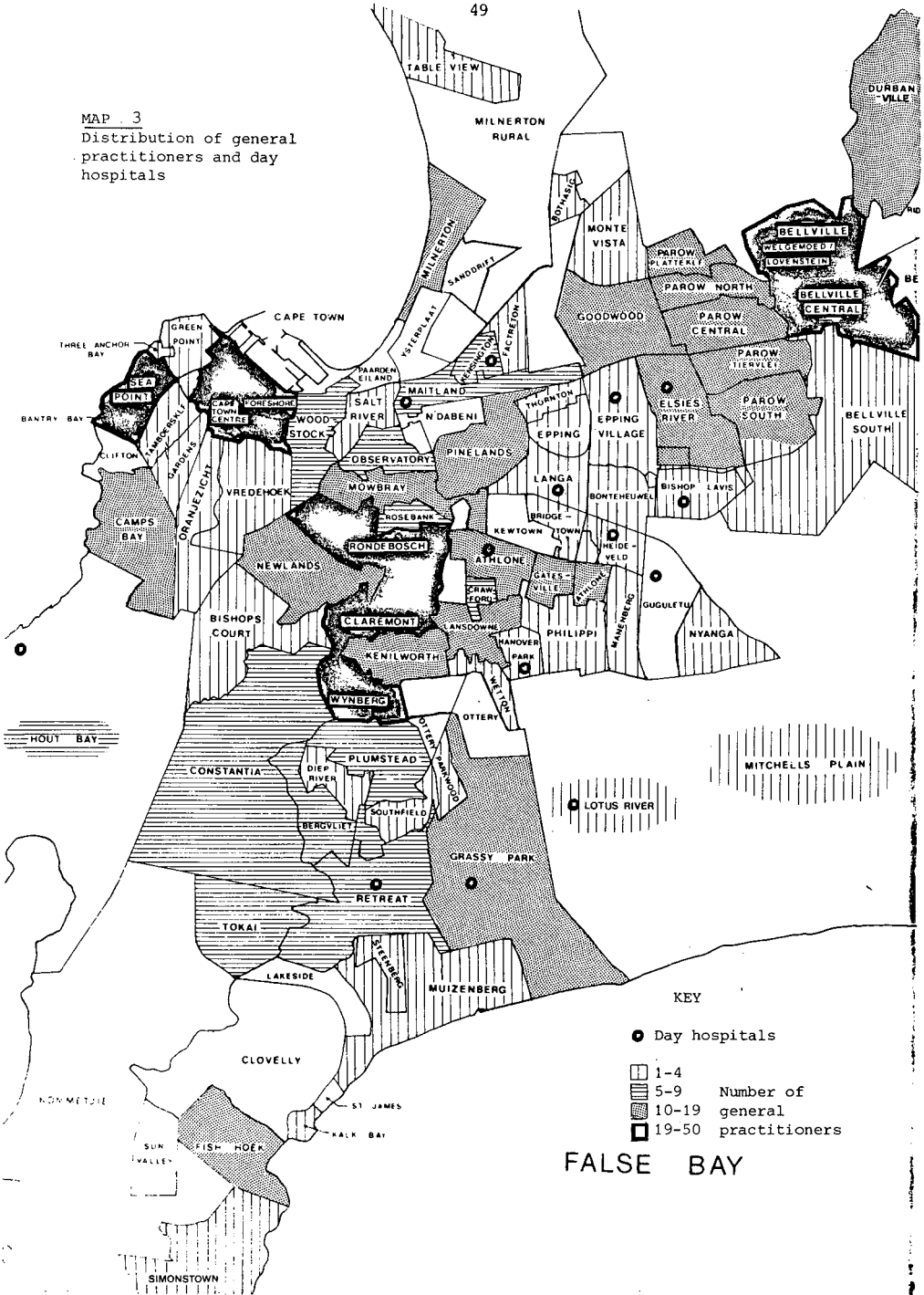
TABLE 24

Location of Specialist Practices 61

Place	Number	Percentage	Cumulative Percentage
Medical Centre (City)	113	23	23
Medipark (City)	111	23	46
Other city buildings	29	6	52
Louis Leipoldt Centre (Bellville)	48	10	62
Jan S Marais Centre (Bellville)	45	9	71
Libertas (Goodwood)	44	9	80
Claremont Medical Centre	40	8	88
Wynberg Medical Centre	32	7	95
Sea Point Clinic	10	2	97
Other Claremont buildings	14	3	100
Total	486		

Note: The total number of specialist practices (486) is greater than the total number of specialists (397) since some specialists have rooms in more than one location.

MAP 3
Distribution of general
practitioners and day
hospitals



The highest concentrations of general practitioners are in the wealthier suburbs, eg Bellville,³¹ Claremont,³⁵ Rondebosch,²⁷ Sea Point,³⁶ Wynberg.³³ Many of the poorer areas have two or fewer general practitioners, eg Bishop Lavis, Facticeon, Gugeletu, Langa, Steenberg, Nyanga, etc. Thus, problems of access are created since people have to undertake inconvenient journeys to reach general practitioners, adding transport costs to the cost of consultation. This is also a problem in the case of specialist referrals since over 50% of the private specialists work in the city centre, the rest working mainly in other medical centres in the wealthier white suburbs.

Of the private practitioners, 397 (42%) are specialists and 151 (38%) of these are surgeons. These figures are not related to the major health problems in the area, ie preventable diseases such as gastroenteritis, pneumonia and undernutrition among children and TB among adults, but to the areas of maximum profitability.

(b) Private Hospitals

The distribution of private hospitals is shown in Map 4 and Table 25.

TABLE 25
Private Hospitals in the 01 Region 60

Name	Location	Beds
General		
Jan S Marais Clinic	Bellville	123
Leeuwendal	Gardens	73
Libertas	Goodwood	150
Louis Leipoldt	Bellville	109
Medipark	City	52
Sea Point Clinic	Sea Point	59
Vincent Pallotti	Pinelands	110
Wynberg Surgical Clinic	Wynberg	39
Maternity		
Kingsbury	Claremont	26
*St Monica's	City	39

TABLE 25 (Cont)

Name	Location	Beds
Geriatric		
Belvedere	Claremont	19
*Booth	Gardens	65
Elizabeth	Oranjezicht	41
Ernerdale	Mowbray	14
Harewood	Plumstead	50
Kinlune-Rosedale	Kenilworth	34
Lady Jean	Plumstead	12
Day Clinics		
Cape Anaesthetic	City	-
Shirmel	City	-
Other		
Maitland Cottage Home	Newlands	-
*Sarah Fox	Athlone	68
Gardens Nursing Home	Gardens	50 (mainly psych- iatric)

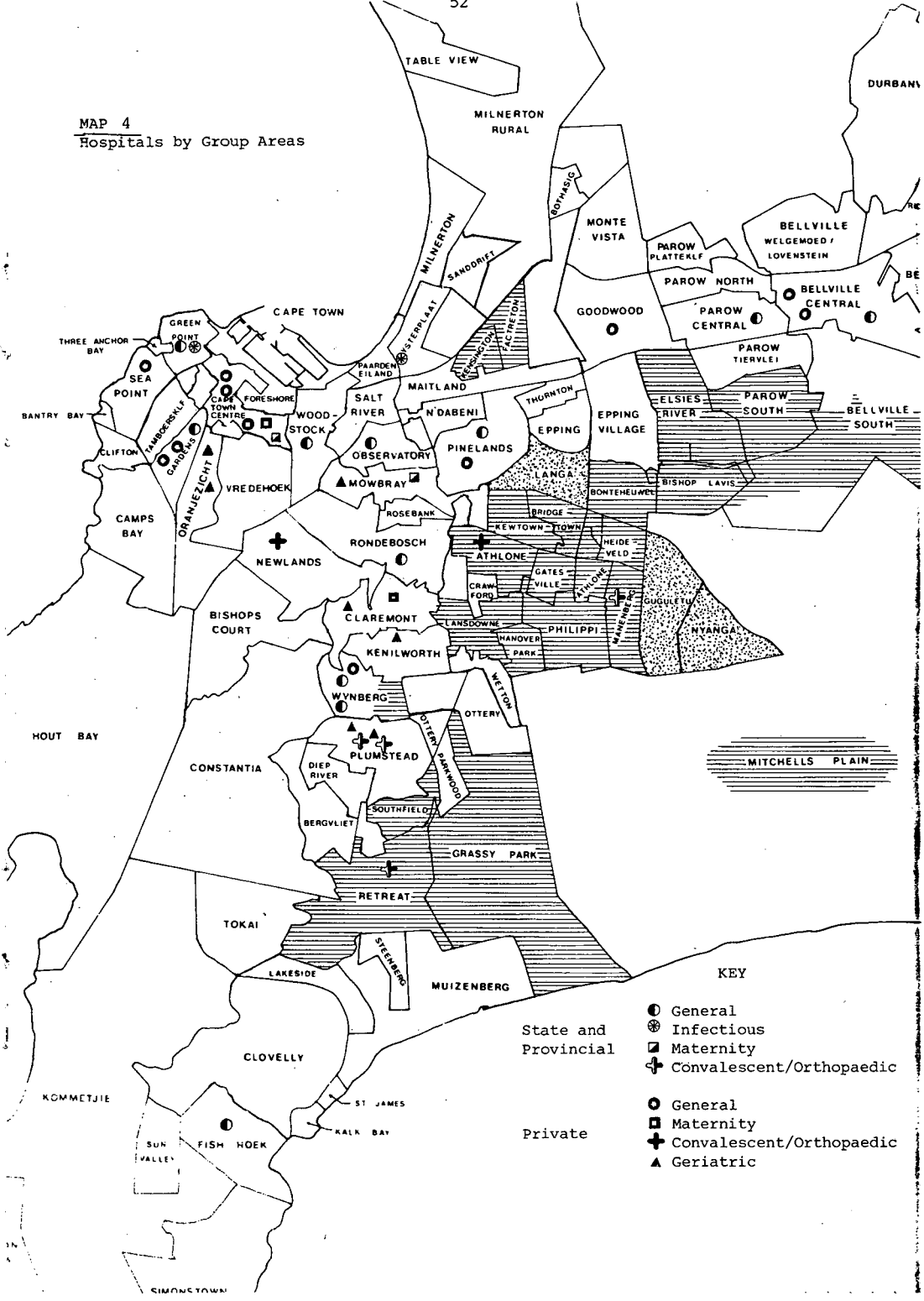
* Provincial aided hospitals

Of the 22 private hospitals three are provincial aided. With the exception of one convalescent home all are situated in the white areas. Of the general hospitals all except one admit black patients. Private hospitals tend to concentrate on surgical cases, devoting 50 to 100% of their beds to these cases.⁶³

(c) Welfare organisations

Most welfare organisations provide mainly supportive and rehabilitative services, eg SANTA, Cripple Care, etc. There is one curative clinic, Empilisweni SACLA clinic, run by church organisations which provides primary health care facilities to a population of approximately 30 000 people in Crossroads.

MAP 4
Hospitals by Group Areas



MITCHELLS PLAIN

- KEY
- General
 - ⊗ Infectious
 - ⊠ Maternity
 - ⊕ Convalescent/Orthopaedic
 - General
 - ⊠ Maternity
 - ⊕ Convalescent/Orthopaedic
 - ▲ Geriatric

Problems of access to private health care

Access to private health care is limited, especially for people living in poorer areas due to:

- 1 distribution. Private health services tend to be concentrated in wealthier white areas.
- 2 affordability. Access to medical aid is limited (see Appendix 1). Transport costs increase the cost of using private health services which are not conveniently located. Many doctors are contracted out of medical aid and the patient has to pay the difference between the medical aid rate and the doctor's fee.
- 3 the nature of services offered. The private sector tends to concentrate on the more profitable types of medical care, ie specialist services especially surgery.

Limited access to the services of general practitioners is a problem particularly for workers since general practitioners, apart from provincial hospital casualty departments, provide the only primary health care services available after working hours. Map 5 shows the distribution of provincial hospitals and general practitioners. The provincial hospitals tend to be located in areas with the greatest number of general practitioners.

2 PUBLIC SECTOR

(a) Curative services. These are provided by provincial hospitals and day hospitals.

- (i) Provincial hospitals' distribution. Table 26 and Map 4 show the distribution of provincial hospitals.

TABLE 26

Table of Provincial Hospitals in the 01 Region showing location and number of beds (1980) 60

Hospital	Location	No of Beds	
		White	Black and 'Coloured'
<u>General</u>			
1 Conradie	Pinelands	269	621
2 False Bay	Fish Hoek	57	52
3 Grootte Schuur	Observatory	528	860
4 Karl Bremer	Bellville	143	134
5 Red Cross (Paediatrics)	Rondebosch	50	199
6 Second Military (military)	Wynberg	190	34
7 Somerset (includes maternity)	Green Point	232	327
8 Tygerberg	Parow	832	1 100
9 Victoria	Wynberg	96	132
10 Volks	Gardens	132	-
11 Woodstock	Woodstock	55	120
<u>Infectious</u>			
1 Brooklyn Chest	Brooklyn	-	300
2 City Hospital	Green Point	449	-
<u>Convalescent and Orthopaedic</u>			
1 Eaton	Plumstead	42	132
2 G J Jooste	Surrey Estate	-	176
3 Lady Michaelis	Plumstead	37	47
4 Princess Alice	Retreat	45	154
<u>Maternity</u>			
1 Mowbray	Mowbray	99	-
2 Peninsula	Walmer Estate	-	76
Total Number of Beds:		7 720	

TABLE 27

The Bed Ratio Per 1 000 Population for the 01 area
(excluding psychiatric and tuberculosis hospitals)

Whites	Provincial and Provincial aided	4,88/1 000
	Private	2,76/1 000
	TOTAL	7,64/1 000
Blacks and 'Coloureds'	Provincial and Provincial aided	3,48/1 000
	Private	0,04/1 000
	TOTAL	3,52/1 000

The provincial hospitals are all located within white group areas, with the exception of one convalescent home and one orthopaedic hospital. This has important consequences for the nature of health care in 'Coloured' and African areas since provincial hospitals provide the main source of treatment for:

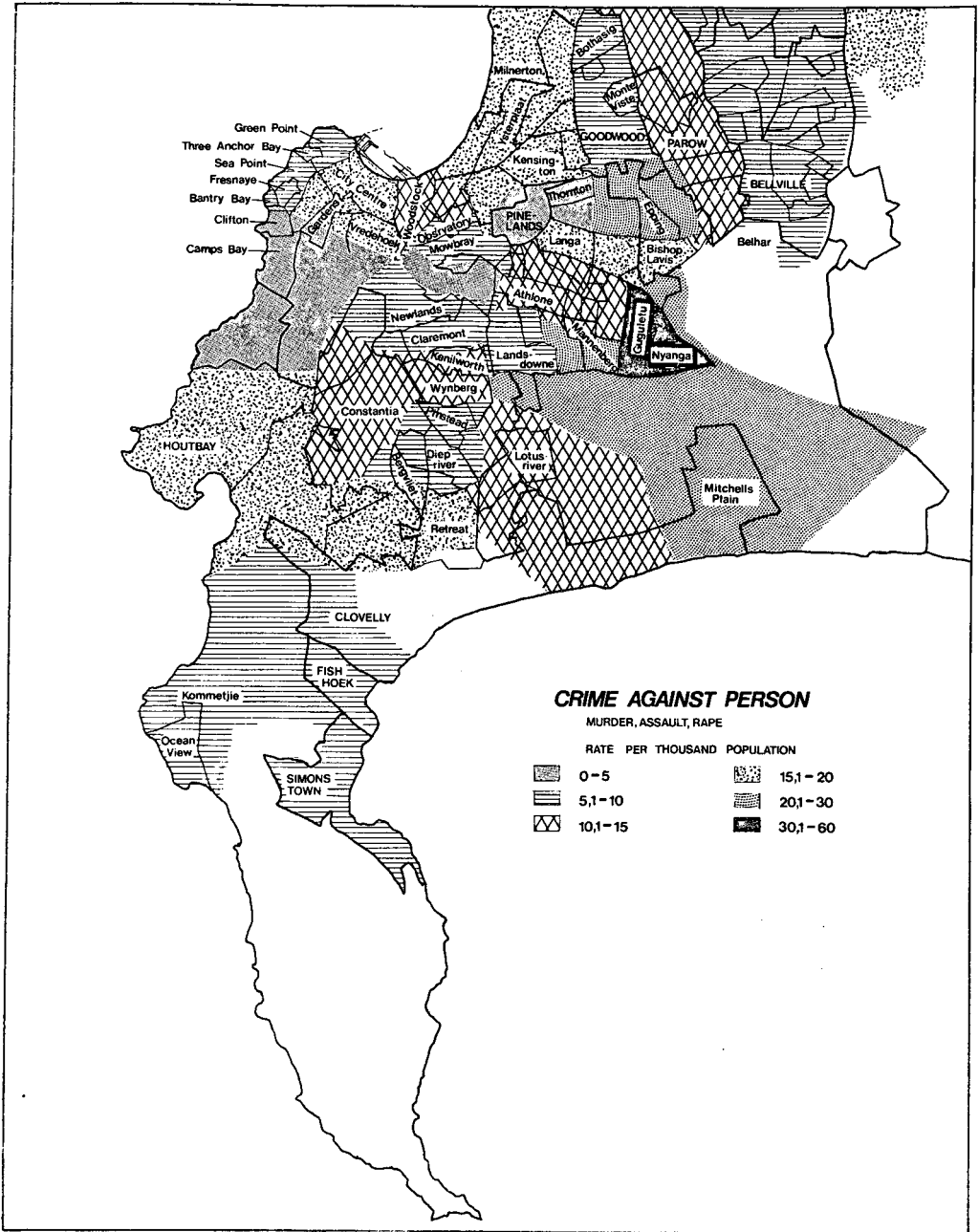
- (i) Trauma. The need for this type of facility as provided by provincial hospital casualty departements is greatest in the 'Coloured' and African areas because of the high crime rate. See Map 6.
- (ii) After-hours services for the working population. Map 5 shows the distribution of provincial hospitals and general practitioners - facilities which provide some form of medical care outside working hours.

Areas with few general practitioners coincide largely with areas where there are no provincial hospitals, creating problems of access to after-hours care.

Affordability

The provincial services (general and day hospitals) are provided free to social pensioners, persons with no income, sufferers of spine bifida, haemophilia, cystic fibrosis, child cancer and pulmonary tuberculosis.

MAP 6: (Source: Providing for Leisure for the City Dweller. Putterill, M S and Bloch, C. Urban Problems Research Unit, University of Cape Town, 1978.)



Outpatients fees have risen sharply since February 1, 1982, and although supposedly no one may be turned away because they cannot pay, it is not clear whether this is always the case.

The schedule for outpatients (and day hospitals) is as follows:

TABLE 28
Outpatients Hospital Fees

Monthly Income	F E E S	
	Teaching Hospitals	Non-teaching Hospitals
0-50	,50	,50
50-100	2,00	2,00
100-200	5,00	4,00
200-300	10,00	8,00
300-400	12,00	9,00
400-500	13,00	10,00
500-600	14,00	11,00
600+	15,00	12,00
Private patients	15,00	12,00

It may be noted that a fee of R2,00 is 4% of an income of R50, whereas a fee of R15,00, while high, is only 2,3% of an income of R600.

Quality of Service

Overcrowding

Long queues in the Outpatients Departments at the pharmacies have always been a serious problem. Figures showing the occupancy of beds indicate overcrowding, but with racial discrepancies. Percentage occupancy in the Groote Schuur region (consisting of Groote Schuur, Mowbray, and Peninsula Maternity Hospitals) is 73% for Whites and 98% for Black and 'Coloureds' with an overall occupancy of 89%, but this average in itself masks the fact that certain hospitals are overcrowded. Occupancy at Mowbray Maternity (mainly white) is 110% (not quite enough beds), and at Peninsula Maternity (all Black) is 148% - 3 people for every 2 beds.

The problem areas (with the exception of the white Mowbray Maternity Hospital (110% occupancy)) were all regarding 'black' beds, ie beds allocated specifically for Africans and 'Coloureds'. The following are the hospitals where black bed occupancy was over 100%.⁶⁴

Tygerberg	109%
Red Cross	122%
False Bay	117%
Lady Michaelis	
Orthopaedic	105%
Victoria	115%

Expenditure

Different amounts are spent per bed per patient day at provincial hospitals in the 01 region.

TABLE 29

Amount Spent per Bed per Patient Day at Provincial Hospitals

Hospital	Amount Spent
Somerset	R37,62
Woodstock	R29,08
Groote Schuur	R57,54
Red Cross	R50,44
Tygerberg	R61,65
Victoria	R39,48

(ii) Day Hospitals (see Table 30)

TABLE 30

Day Hospital	Area
1 Bellville	Bellville
2 Bishop Lavis	Bishop Lavis
3 Dr Abduraham	Athlone
4 Diep River	Diep River
5 Elsie's River	Elsie's River
6 Good Hope	Brooklyn
7 Grassy Park	Grassy Park
8 Guguletu	Guguletu
9 Hanover Park	Hanover Park
10 Heideveld	Heideveld

Table 30 (Cont)

Day Hospital	Area
11 Hout Bay	Hout Bay
12 Kensington	Kensington
13 Langa	Langa
14 Lotus River	Lotus River
15 Maitland	Maitland
16 Ocean View	Ocean View
17 Retreat	Retreat
18 Robbie Nurock	Cape Town Central
19 Ruyterwacht	Epping

The day hospitals were started in 1969 in an attempt to bring primary health care to people in the community. There are 19 day hospitals in the 01 area, generally situated in poorer socio-economic areas and in areas with few general practitioners (see Map 1 and 3). While the day hospitals have been associated with health improvements such as the decrease in hospital admissions for gastro-enteritis¹³ there are a number of problems associated with them:

- (i) Inadequate expenditure especially relative to provincial hospitals.

TABLE 31

Annual Expenditure on Provincial Hospitals
and Day Hospitals⁶⁶

Year	Amount Spent on Provincial Hospitals	Amount Spent on Day Hospitals
1976	R105 342 286	R4 102 944 (3,8%)
1977	R111 320 831	R4 693 307 (4,2%)
1978	R117 910 164	R4 807 420 (4,0%)
1979	R136 528 288	R5 625 644 (4,1%)
1980	R166 472 773	R7 032 309 (4,6%)

- (ii) Lack of expansion of the day hospital system. New day hospitals have been opened in three areas in the last three years, but others have been closed, eg Bonteheuwel after the 1976 unrest, and areas with large populations far from the city like Mitchell's Plain have no day hospitals. The day hospitals in Langa and Guguletu (two areas

with the highest rates of TB and infant mortality) have needed extending for over four years.

(iii) Staff shortages. These are either due to insufficient posts (see Table 32) or to inability to fill posts, eg physiotherapists.

TABLE 32

Day Hospital Staff in Relation to Population
In African Areas in Cape Town 65

Area	Population	Day Hospital Doctors	Day Hospital Nurses
Langa	21 993	3	12
Guguletu & Nyanga	84 914	5	23

(iv) The number of patients is declining despite an increase in the population.

TABLE 33

Number of Patients Attending
Day Hospitals 66

Year	No of Patients
1976	1 299 763
1977	1 358 231
1978	1 584 064
1979	1 528 439
1980	1 518 824
1981	1 516 460

This was attributed in the 1981 Day Hospitals report to the closing of some services such as the district rooms in Bonteheuwel and the shortage of physiotherapists.

(v) Problems of access. The day hospitals are only during working hours (08h00-16h00). However, some of the day hospitals do not take patients who arrive after 10h00 as they have as many as they can cope with for the day.

(vi) The quality of service. Whether the day hospitals provide a service which can be compared to that of private general practitioners has not been studied. Doctors have only 5-6 minutes per patient.⁶⁷ Recently primary health care nurses have been introduced. While these nurses can provide an excellent alternative to doctors, whether they can do so under conditions of overcrowding where doctors do not have adequate time for supervision is open to question.

Midwife Obstetric Units (MOU's)

There are four MOUs attached to day hospitals at Hanover Park, Heideveld, Retreat and Guguletu. These are community-based maternity units which provide ANC and PNC and deliver uncomplicated cases.

A review of maternity services in the 01 area (10) gives details of the relation of MOH's to the referral hospitals.

(b) Preventive services

Preventive services are provided in the 01 area by the Cape City Council and the Cape Divisional Council (see Map 7 and Table 34).

TABLE 34

Preventive Clinics in the 01 Area

1 (Cape Town City Council) Child Health and Family Planning

Brooklyn
Camps Bay
City x 2
Claremont
Elfindale (Diep River)
Ferness Estate (Ottery)
Gardens
Gululetu
Kalk Bay
Kensington*
Lavender Hill (Retreat)
Maitland
Meadowridge (Bergvliet)
Muizenberg
Salt River
Sanddrift
Sea Point x 2
Southfield
Steenberg
Thornton
Tokai
Vredehoek

Total: 24

Child Health = Developmental Screening, Breast Feeding,
Child Health, Immunization

* = Nutrition Clinic also provided

2 (Cape Town City Council) Comprehensive Clinics

Location	CHC	FP	TB	STD	Geriatrics
Athlone	x	x		x	x
Bokmakierie	x	x		x	x
Bonteheuwel	x*	x	x	x	x
City	x	x	x	x	
Guguletu	x*	x	x	x	x
Hanover Park	x*	x	x	x	x
Heideveld	x*	x	x	x	x
Kensington	x*	x	x	x	x
Langa	x*	x	x	x	
Lansdowne	x	x		x	x
Lavender Hill	x	x	x	x	x
Lentegeur	x*	x	x	x	x
Manenberg	x*	x	x	x	x
Newfield Estate	x	x		x	x
Netreg	x*	x	x	x	x
Parkwood	x	x	x	x	x
Retreat	x*	x	x	x	x
Salt River	x	x	x	x	
Silvertown	x	x	x	x	x
Strandfontein	x	x		x	
Valhalla Park	x	x		x	
Westridge	x	x	x	x	x
Wynberg	x	x	x	x	x

CHC = Developmental screening, breast feeding,
child health, immunization

* = Nutrition clinic

FP = Family planning

STD = Sexuality transmitted diseases

3 Cape Divisional Preventive Clinics (comprehensive clinics)

Bellville
Bishop Lavis
Constantia
Durbanville
Elsies River
Epping
Grassy Park
Hout Bay
Kasselsvlei
Matroosfontein
Nyanga
Parow Valley
Phillipi
Pinelands
Ravensmead
Vasco

The Divisional Council also operated a number of satellite and mobile clinics.

1980 CENSUS

Preventive services are well distributed throughout the area making them geographically accessible. Clinics in 'coloured' and black areas are more crowded than those in white areas.

TABLE 35
Number of Patients Attending Preventive Clinic
Sessions at Cape Town City Council Clinics⁶⁸

Mean number of patients/session = 98			
	<u>White</u>	<u>'Coloured'</u>	<u>Black*</u>
Clinics with less than 98 patients/session	15	17	1
Clinics with more than 98 patients/session	0	12	2

* Some clinics are used by Whites, 'Coloureds' and Blacks. The largest population group attending has been chosen.

Some clinics are particularly crowded, eg Bontegeuwel (231 patients/session), Guguletu (208) and Langa (192).

The effectiveness of the preventive services can be measured in a fairly crude way by examining the ratio between the number of children receiving immunisation within the correct time periods in the City Council area and the number of notified births.

TABLE 36

Immunisation	Age	No. Immunised/Notified Births x 100		
		Whites	'Coloureds'	Blacks
Third dose polio	1 yr	98	95	64
Third dose DWT	2 yrs	94	95	72
BCG	6 months	95	99	87
Measles	1 yr	67*	88	68

Note: Measles vaccine is only given to children 1 year old who are 'at risk', ie undernourished, living in crowded circumstances, etc.

While the White and 'Coloured' populations are fairly well covered by immunisation the Black population has relatively unsatisfactory immunisation rates. This is reflected in the admissions to City Hospital for measles in 1980.

TABLE 37
Admissions to City Hospital for Measles (1980)

	Total Admissions	Deaths
Whites	6	0
'Coloured'	142	7
Black	233	9

The preventive services put primary emphasis on family planning. The proportion of the City Council Budget spent on family planning has more than doubled (1,3% to 3,5%) over the period 1976 to 1981.

'Family planning services are being accorded an even higher priority rating as many health problems would be prevented or alleviated if family size was limited to that desired by (and capable of being provided for by) the parents. The central government attaches so much importance to this service that it is subject to a 100% subsidy from that body' (MOH, Cape Town, 1980).

Differences Between Preventive Services in City Council and Divisional Council Areas

The area covered by the Divisional Council differs from that covered by the City Council in the following respects:

1. more rural areas included
2. worse housing conditions including large numbers of squatters
3. poorer employment opportunities with significant numbers of farm workers.

Table 35 shows that while there are higher TB and IMR rates in Divisional Council areas there is less expenditure on health and fewer staff to cope with the problems.

TABLE 38

Comparison of Vital and Health Statistics for areas Served
by Cape Divisional Council (DivCo) and Cape Town City
Council (CC)

	DIVCO		CC	
Population	'Coloured'	325 016	'Coloured'	552 880
	Black	56 920	Black	111 230
	White	197 930	White	268 980
	TOTAL	579 860	TOTAL	945 000
TB Rate	'Coloured'	3,47	'Coloured'	2,15
	Black	11,67	Black	11,37
	White	0,18	White	0,15
IMR	'Coloured'	27,9	'Coloured'	19,8
	Black	56,3	Black	38,2
	White	12,0	White	12,8
Per Capita Expenditure on Health	R4,37		R6,26	
Number of Doctors employed	Fulltime	7	Fulltime	24
	Parttime	5		
Number of Nursing Staff employed	89		251	

Source: MOH reports, 1980.

CONCLUSION

This paper has examined access to health services in the 01 metropolitan region. It has done this with reference to health needs in terms of both ill-health and the socio-economic conditions which lay the foundations for ill-health. What has been found is that areas with the greatest need are areas in which there is least access to health services. Even when services are fairly evenly distributed geographically, eg preventive services, the quality of the service in terms of overcrowding, doctor/patient ratios, expenditure, etc, varies. An example of this is the discrepancy in services between the Divisional Council Areas, where the morbidity and mortality are higher and socio-economic conditions poorer, as compared with the City Council areas (see Table 38).

It must be emphasised that looking at things simply on a geographical basis is inadequate. Within each area, people's access to health services will vary, as will their socio-economic conditions and morbidity and mortality. The more affluent sectors of each community, and particularly those people who, by the nature of their work, have access to medical aid, will have better access to health services. At the same time their need is likely to be less, since their better living conditions predispose to better health.

The aim of this working paper has been primarily to describe access to health care against a health and socio-economic background. It is not intended to analyse here the reasons for the inequalities in access which exist. However, in this regard, it was thought useful to present the broad framework used in the WHO/UNICEF publication 'Alternative Approaches to Meeting Basic Health Needs in Developing Countries'. This framework provides a basis for analysing the obstacles to be overcome in developing systems whereby effective health care can be made accessible and acceptable to the people.

Obstacles to be overcome

1 Problems of broad choices and approaches

- (a) Lack of clear national health policies and poor linkages of health service systems with other components of national development, ie an effective approach needs co-ordinated efforts of all sectors than can contribute directly or indirectly to the promotion of well-being.
- (b) Lack of clear priorities, eg preventive versus curative medicine.
- (c) Opposition to changes in the social aspects of health policy, eg by influential members of the medical profession.
- (d) Inadequate community involvement in providing health care.
- (e) Inappropriate training of health personnel.

2 Problems of resources

- (a) Inadequacy and maldistribution of resources for health services.
- (b) Non-utilisation of actual and potential resources.
- (c) Restricted use of primary health workers.
- (d) Rising cost of health services.

3 Problems of general structure of health services

- (a) Lack of effective planning machinery.
- (b) Weak development of the 'total system' concept, eg fragmentation of the health sector leads to ineffective and inefficient services.

4 Technical weaknesses

- (a) Inadequate health education, noting that to give information dogmatically does not help.
- (b) Lack of basic sanitation, where sanitation is defined as safe water, safe environment, uncontaminated food and a decent place to live.

- (c) Deficiencies in communication and transport.
- (d) Lack of adequate health information, ie the information needed for sound decision-making.

APPENDIX 1THE STRUCTURE OF HEALTH SERVICES IN SOUTH AFRICA

Health services in South Africa consist of a private and a public sector.

PRIVATE SECTOR

This consists largely of curative services offered by general practitioners and specialists in private practice. In the major centres there are also private hospitals. People who have access to the private sector are also able to use services provided by the public service, eg preventive services such as child immunisation, FP and public hospitals. Access to the private sector is largely determined by membership of a medical aid scheme. Most medical schemes are linked to employment, ie membership of a medical scheme is often one of the fringe benefits of a job, with the company paying a portion of the premium. Not all categories of employees at a particular firm are always permitted to join the medical scheme. Often less-skilled or hourly-paid employees are excluded, or receive fewer benefits.

TABLE 39

Personal Expenditure of Health Care by Race
in Selected Areas, 1975 69

Item	White		'Coloured'		Asian		African Urban	
	R	Per Cent	R	Per Cent	R	Per Cent	R	Per Cent
Medical Aid & Insurance	100,83	33	13,49	29	19,44	16	2,26	1,2
Doctors and Dentists	97,11	31	7,15	15	37,23	31	2,55	9
Witch Doctors & Herbalists	-	-	,01	-	,24	-	1,33	5
Nurses & Hospitals	28,49	9	4,95	11	11,53	10	1,89	7
Medicines on Prescription	44,08	14	,47	1	1,19	1	0,11	-
Other Medicines	19,83	6	14,53	31	21,00	18	13,17	49
Dentures & Spectacles, etc	21,10	7	6,22	13	28,33	24	5,66	21
Total Expenditure	311,44	100	44,82	100	119,46	100	26,97	100

Table (Cont)

TABLE 39 (Cont)

Expenditure as a Percentage of Income	3,0	1,5	3,1	1,2
---------------------------------------	-----	-----	-----	-----

* Note : If doctors and dentists are 'contracted out' of medical aid the patient has to pay the difference between medical aid rates and the doctor's fee.

80% of Whites and 20% of 'Coloureds' belong to medical schemes and the number of Africans is also increasing.⁷⁰ However, there are certain differences in the type of medical schemes to which Whites and Blacks belong. Table 40 shows that while the greatest number of Whites (77%) belong to medical aid schemes, most Blacks belong to either medical aid schemes (41%), or exempted medical aid schemes (41%).

TABLE 40

Medical Aid Schemes Members and Dependants (Adapted from Annual Report of the Department of Health and Welfare, 1980)

	Number	Members	% of Population Group	Beneficiaries = Members and Dependants	% of Population Group
A AID					
Whites	208	922 306	77	2 466 418	77
Blacks		134 479	27	455 670	41
B BENEFIT					
Whites	29	118 881	10	351 931	11
Blacks		89 914	18	193 823	17
C EXEMPTED					
Whites	47	150 605	13	393 245	12
Blacks		273 169	56	468 169	41

Exempted medical aid schemes do not have to comply with certain specifications of the Medical Schemes Act, 1967 (Act 72 of 1967). In many cases this means that these schemes are exempted from admitting dependants of members to the schemes or from paying certain minimum benefits as specified by the Act. This is shown in the differences in benefits paid out by the different types of schemes. See Table 41, eg in 1980 medical aid schemes paid out 3,4 times more on medical specialists than did exempted medical schemes. Thus Blacks have less access to private medical care both in terms of members covered and also as a result of the nature of cover by medical schemes.

TABLE 41

Table of the Distribution of Benefits for Medical Aid, Medical Benefit and Exempted Medical Aid Schemes
(Adapted from Annual Report of Department of Health and Welfare 1980)

Type	No	General Practice		Medical Specialist		Dentist		Hospitals		Medicines		Paramedical Services		Other		Total	
		T	T/C	T	T/C	T	T/C	T	T/C	T	T/C	T	T/C	T	T/C	T	T/C
AID	208	80,9	27,8	97,6	33,6	60,8	20,9	63,6	21,9	97,6	33,7	13,3	4,6	10,5	3,6	424,3	145,0
BENEFIT	29	11,0	20,0	9,8	18,1	5,5	10,2	9,3	17,2	18,2	33,7	0,8	1,5	0,5	0,9	55,1	101,0
EXEMPTED	47	13,5	15,6	8,5	9,9	3,6	4,2	4,9	5,7	13,7	15,9	1,2	1,4	2,0	2,3	47,4	55,0

T = Total amount spent in R million

T/C = Amount spent per beneficiary in rand

PUBLIC SECTOR

Responsibility for health services in the public sector is shared between the local authorities, provincial administrations and the Department of Health. How this situation arose is described by Ross: ⁵

'After the merging of the four colonies into the union of South Africa in 1910 no provision was made for a ministry of Health but it was stipulated that the provincial administrations would be responsible for hospitals. After the disastrous influenza epidemic of 1918, the Volksgezondheidswet (No 36 of 1919) led to the creation of a central Department of Public Health which, in conjunction with the country-wide network of local authorities, was allocated certain responsibilities mainly in the preventive and other public health fields. The function of the provinces, namely to provide general hospital services, remained unaffected, and consequently came to be associated with the curative aspect of health services with little involvement or participation in community services. The division of health services between Department of Health, provincial administrations and local authorities caused inefficiency and overlapping. The Health Act (No 6 of 1977) made provision for the co-ordination of services and the determination of health policy on a national basis so that the functions of the three health authorities could be adapted to utilize the available resources to the maximum.'

See Appendix 2 for the functions of the three different authorities.

SOURCES OF EXPENDITURE IN THE PUBLIC HEALTH SERVICES IN SOUTH AFRICA ⁷¹1 Department of Health

The Department of Health receives its finances from a parliamentary vote, the Health vote. This money is used to finance the activities of the Department of Health and also to pay subsidies to local authorities who carry out activities such as TB services and family planning on its behalf.

2 Local Authorities

Certain health services of local authorities are subsidised by the Department of Health. Different services are subsidised to different degrees, eg in Cape Town.

City Hospital for Infectious Diseases	78% subsidy
Family Planning	78% subsidy
Community Health (including nutrition programmes)	59%

Source: City of Cape Town Treasurer's Financial Statement for Year Ended 31.12.81.

Certain health services do bring in revenue. However, the bulk of local authority services are free. The balance between expenditure and Department of Health refund is made up by an allocation from rates and the reserve fund. In Black townships the balance between cost and subsidy is paid by the Bantu Administration Board out of its own revenue sources, eg property rentals, employer rates, etc.

3 Homelands Health Services

Finance for homelands and so-called national states health services is complex and comes from a number of sources including

- 1 Department of Co-operation and Development
- 2 South African Development Trust
- 3 Department of Foreign Affairs
- 4 Treasury grants.

4 Provincial Administrations

The provinces receive a subsidy from the Treasury based on

- (a) the population of the province
- (b) whether or not the province experiences a large influx of visitors during holiday seasons
- (c) the number of specialist services offered by teaching hospitals in the province
- (d) the racial composition of the provincial hospital beds in the province since the refund per patient per day is lower for 'Coloured', Asian and African patients than for Whites.

Actual Provincial expenditure differs slightly from the annual subsidy since a block grant is made by the Treasury for all provincial services. It is the prerogative of the Executive Committee to allocate this block grant as it wishes. In addition to subsidies, the hospital services recovers approximately 10% of its expenditure from patient fees.

Within the subsidy paid are allocations to private provincial-aided hospitals. These are small approved institutions, often in country towns. They are obliged to cover at least 10% of their costs from their own revenue sources whilst the balance is subsidised.

APPENDIX 2THE FUNCTIONS OF THE THREE TIERS OF GOVERNMENT WITH RESPECT OF HEALTH SERVICES

72

1 DEPARTMENT OF HEALTH

- (a) Co-ordination of its services with the services rendered by provincial administration and local authorities.
- (b) If necessary to provide additional services in order to establish a comprehensive health service for the Republic, eg it acts as the local authority in areas where there are no local authorities.
- (c) To establish a national health laboratory service (also vaccine production).
- (d) To promote a safe and healthy environment
 - (i) Vector surveillance
 - (ii) Port health services
 - (iii) Pollution control
 - (iv) Control of consumer goods
 - (v) Environmental health.
- (e) Responsible for the promotion of family planning.
- (f) To provide medico-legal services.
- (g) To facilitate research and undertake research.
- (h) Involved in the control and sometimes treatment of certain infectious diseases
 - (i) To (control and treatment, also refunds LA's)
 - (ii) VD (control and treatment through LA's)
 - (iii) Leprosy (control and treatment)
 - (iv) malaria and bilharzia (control)
 - (v) epidemics, eg cholera, haemorrhagic fever.
- (i) Provides certain other health services
 - (i) Genetic services
 - (ii) Health education
 - (iii) Comprehensive psychiatric services
 - (iv) Dental services
 - (v) Suppression of nutritional diseases
 - (vi) School medical services for Indians, 'Coloureds' and Blacks in White areas.
- (j) Administers various acts.

2 PROVINCIAL ADMINISTRATION

- (a) To provide hospital facilities and services including limited psychiatric services.
- (b) To provide ambulance services.
- (c) To provide facilities for the treatment of patients suffering from acute illness.
- (d) To provide outpatient treatment facilities in hospitals or other places.
- (e) To provide and maintain maternity homes and services.

- (f) To provide personal health services including district nursing services, social services, school medical and dental services.
- (g) To co-ordinate above services with services rendered by Department of Health, local authorities and other provincial administrations.

3 LOCAL AUTHORITIES

- (a) To maintain its district in a clean hygienic condition.
- (b) To prevent the occurrence of
 - (i) any nuisance
 - (ii) any unhygienic condition
 - (iii) any offensive condition
 - (iv) any condition which will or could be harmful or dangerous to health.
- (c) To prevent pollution of water or to purify polluted water.
- (d) To render the following services:
 - (i) prevention of communicable disease
 - (ii) health promotion
 - (iii) rehabilitation of persons cured of any medical condition.
- (e) Other functions as delegated. In carrying out these functions local authorities provided the following services:

Personal services

- Baby clinics
- Immunisation clinics
- VD clinics
- FP clinics
- Geriatric clinics
- Infectious diseases control

Non-personal services

- Water supply and purification
- Sewerage and sewerage disposal
- Disposal of waste
- Smoke pollution control
- Food hygiene
- Housing
- Noise, vermin, radiation control
- Urban planning
- Cemeteries
- Research facilities
- Accident prevention

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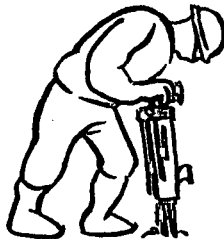
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SOUTHERN AFRICA LABOUR & DEVELOPMENT RESEARCH UNIT

To anybody interested in what is happening in Southern Africa at the present time, it is clear that an understanding of changes taking place in the field of labour is crucial. The whole debate about the political implications of economic growth, for example, revolves very largely around different assessments of the role of black workers in the mines and factories of the Republic. Many of the questions with which people involved in Southern Africa are now concerned relate, in one way or another, to the field generally set aside for labour economists to cultivate. The impact of trade unions; the causes of unemployment; the economic consequences of different educational policies; the determination of wage structures; the economics of discrimination; all these and more are matters with which labour economists have been wrestling over the years in various parts of the world.

At the same time there are many who would argue that these issues are far wider than can be contained within the narrow context of 'labour economics'. These issues, it is pointed out, go to the heart of the whole nature of development. In recent studies, commissioned by the International Labour Office, of development problems in Columbia, Sri Lanka, and Kenya, for example, leading scholars have identified the three crucial issues facing these countries as being poverty, unemployment, and the distribution of income. Thus the distinction between labour and development studies is becoming more blurred as economists come face to face with problems of real life in the Third World.

It is here too that an increasing number of people are coming to see that study of the political economy of South Africa must not be done on the assumption that the problems there are absolutely different from those facing other parts of the world. Indeed it can be argued that far from being an isolated, special case, South Africa is a model of the whole world containing within it all the divisions and tensions (black/white; rich/poor; migrant/nonmigrant; capitalist west/third-world; etc.) that may be seen in global perspective. Be that as it may, the fact remains that the economy of Southern Africa (for the political and economic boundaries are singularly out of line with each other) is one of the most fascinating in the world. It is one on which far more research work needs to be done, and about which further understanding of the forces at work is urgently required. It is in order to attempt to contribute to such an understanding that SALDRU is issuing these working papers.



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Division of Research

School of Economics

University of Cape Town

7700 Rondebosch