Poverty and disease: A case study of diarrhoeal disease

by

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INTRODUCTION

In 1848 Virchow, in studying typhoid, concluded that political disenfranchisement (P.D.P) and economic insecurity lead through a complex web of interactions to a preponderance of illness and early death. He concluded that social change was the only means to health and that the physician should be involved in bringing about social change conducive to health (1).

This study using diarrhoeal disease (D.D.) as an example of disease situated within the present day South African (S.A.) social structure firstly shows that Virchow accurately pointed out the commonest denominators of the bulk of ill health. Secondly, it explores the "complex web" of interactions whereby P.D. leads to poverty and ill health. I do not postulate that universal voting rights will mean the end to poverty and hence disease. One must remember that P.D. is part of a spectrum of individual democracy. Although the right to vote for a series of puppets every so many years is always a step towards democracy for those who were denied this right before, the right to vote in a system of representative democracy does not mean that one has sufficient influence over the social forces governing one's everyday existence to ensure a reasonable level of existence for a reasonable amount of work done. Also, although not all diseases are caused by poverty, undoubtedly all diseases are aggravated by poverty.

In the case of present day S.A., P.D. remains an accurate denominator of those afflicted by the absence of fundamental rights like the right
to vote; to move freely in one's country of birth; to be educated and to seek and maintain work by choice rather than arbitrary allocation.

Although race largely determines the degree of freedom in S.A., race is not used as a denominator in this study in accordance with the author's belief that race has been hopelessly overemphasised as a denominator in the study of human conditions. It is social class and degree of exploitation that are relevant. In a racially segregated society social class will tend to correlate with race but race per se is very infrequently of consequence.

Having accurately documented the extent to which structure influences health, one is left to explain the importance of the medical profession in bringing about a social structure conducive to health despite its knowledge of the causal relationship between poverty, human suffering, and disease. This is briefly attempted.

**METHODOLOGY**

The data for the statistical analysis of D.D. come from a retrospective survey of 115 cases of D.D. in children younger than 3 years, admitted to Cape Town Provincial Hospitals in the period June 1981 to July 1982. (D.D. in children older than 3 years represents rarer and different conditions than those of less than 3). For the purpose of the study D.D. is defined as the passage of abnormal stools (loose consistency and/or increased frequency) of sufficient severity to warrant hospital admission.
The sample consists of two groups:

1. Politically Disenfranchised (D.F.)

This group consists of 60 cases admitted to Somerset Hospital wards designated for those other than white. Although it was attempted to include all the cases admitted in the study period, this was not achieved (due to a lack of time), and this sample represents about two thirds of the total admissions for the period. Some of the cases were admitted from the hospital's own casualty or outpatient department, while others were referred from Red Cross Children's Hospital (RXH).

2. Politically Enfranchised (E).

This group consists of all 46 patients admitted to RXH in the study period.

Bias

Bias in the study data is derived primarily from two sources. Firstly, the data suffers from all the biases inherent in retrospective study. Sufficient to say that because we are dealing with a recurrent and common phenomena rather than a series concerned with an infrequent disease, this source of bias is both easy to measure and eliminate in any future study and is probably of little consequence in terms of its effect on the results of this study. Wherever the original data
recording was obviously directionally influenced, this has been taken into account and pointed out in the discussion of the results.

**Sampling Bias**

Secondly, one cannot claim that the data used is an accurate statistical representative of all conditions of abnormal stool consistency or frequency in children under 3 years; nor of all admissions in a given geographical region for the period of study. However, this is not of consequence in terms of the validity of the study, as the cases in the study are traced back to their respective demographic origins and an effort made to situate them within the greater South African population. Also, in terms of the actual amounts measured in the study, although one cannot claim statistical representation for the whole of the phenomena, the data results remain at least an accurate representative of the conditions at the hospital beds studied at the time of the study. Some may for example argue that had one selected cases from the "Drip Room" at RXH where superficially the bulk of "inpatient" D.D. reaching hospitals in the Cape Town area are treated, the mean duration of admission (DoA) for the D.F. group will be much shorter; even more so if one does not take repeated successive re-admissions into consideration! Although I have much appreciation for the excellent work performed in this and similar treatment set-ups for D.D., the conditions in the "Drip Room" compared to the ideal of care for those with D.D. are so compromised that its length of admission for D.D.(as an example) will be both an inaccurate reflection of the true state of affairs and incomparable to that of
the E. group. This arises from the different treatment facilities available to the groups.

Caveat

Before leaving methodological considerations, a caveat: This study was designed as a pilot study - further, more carefully designed and more extensive studies are required to accurately document that extent of the relationship between degree of exploitation and health.

RESULTS AND DISCUSSION

1. Political Disenfranchisement: Poverty and Extent of Disease

(i) Income

As can be seen from table 1 (vide infra) there is a dramatic difference between the groups. P.D. and poverty certainly go hand in hand. Income is expressed as Rands per Month per Family Member (R/M/FM), taking children younger than 5 as half a family member. For the D.F. group family income was usually recorded on the basis history sheet, while for all cases where this source of information was not available, the figures used were from income declarations to determine treatment fees. This means that for many of the cases in group E. the recorded income was a code (R999 or R399) indicating the upper limit of income to which maximum hospital fees are charged (this was the
case in only one case in sample D.F.). This code was used as an actual value and hence the mean value for group E. represents the smallest possible estimate of the true income for this group. Despite this, there is a greater than six fold difference in income between the groups!

One cannot expect health at R36.50 per month per person.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>STATISTICS</th>
<th>INCOME (R/PC)</th>
<th>%EW</th>
<th>N/P/R</th>
<th>DoA</th>
<th>DoD</th>
<th>No.CI</th>
<th>Hb</th>
<th>KWAS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISEN-</td>
<td>n</td>
<td>63</td>
<td>68</td>
<td>46</td>
<td>67</td>
<td>65</td>
<td>67</td>
<td>35</td>
<td>53</td>
</tr>
<tr>
<td>FRANC-</td>
<td>m</td>
<td>36.5</td>
<td>82.6</td>
<td>3.6</td>
<td>27.3</td>
<td>17.8</td>
<td>2.0</td>
<td>35</td>
<td>16</td>
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<tr>
<td>HISED</td>
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<td></td>
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</tr>
<tr>
<td>ENFRAN</td>
<td>n</td>
<td>43</td>
<td>41</td>
<td>-</td>
<td>44</td>
<td>44</td>
<td>46</td>
<td>35</td>
<td>46</td>
</tr>
<tr>
<td>CHISED</td>
<td>m</td>
<td>&gt;241</td>
<td>97.2</td>
<td>-</td>
<td>6.36</td>
<td>4.3</td>
<td>0.52</td>
<td>107</td>
<td>0</td>
</tr>
</tbody>
</table>

TABLE 1. Means(m) and numbers(n) for study variables. See DISCUSSION and AGENDA.

(iii) **Percentage of Expected Weight (%EW)**

This value is derived by expressing each case's weight as a percentage of the mean expected weight for that age using a standard weight for age table. Weight was taken as the child's weight after adequate re-hydration, as weight on admission in the D.F. group is often 5 to 10% less than the child's usual weight due to dehydration. The %EW of group D.F. (88.6%) falls close to the third centile, i.e. at the lower limit of "normality", while that of group E. (97.2%) is just below
"normal", which will be 100%. Table 2 provides a breakdown of cases in each region of the weight for age graph. Just over half of group D.F. (52%), compared to 9% of group E, weigh less than the lower limit of "normality" for their age, i.e. is starved. In virtually all the cases this starvation is due to food deprivation and not a consequence of their illnesses.

<table>
<thead>
<tr>
<th>CENTILE INTERVALS</th>
<th>DF</th>
<th>E</th>
</tr>
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<tbody>
<tr>
<td>WEIGHT &gt; 50TH</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>WEIGHT 3RD-50TH</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>WEIGHT 60%EW-3RD</td>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>WEIGHT &lt; 60%EW</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>TOTALS:</td>
<td>58</td>
<td>41</td>
</tr>
</tbody>
</table>

**TABLE 2.** Frequency & percentage(%) of percentile intervals for weight.

(iii) **Number of People per Room (N/P/R)**

The number of people per room (N/P/R) for the D.F. group is an appalling 3.6. This figure is derived by taking the total number of people living in the dwelling and dividing this figure by the number of rooms other than kitchen and bathroom, but including living room in the dwelling. For group E, the number of rooms was so infrequently recorded in the basic history sheet that no figure is calculable, but this figure will almost certainly be less than one. Knowing
the size of the rooms it is difficult to conceptualise how more than three people can live within such little space.

(iv) Duration of Admission (DoA)

The mean period spent in hospital, is more than four times greater for group D.F. (27.9 days) compared to group E. (6.4 days). Apart from the large difference in the mean duration of admission, one has to also consider the deleterious effects of prolonged hospitalisation in children younger than 3 years. Irrespective of the quality of care offered, the hospital can never offer the equivalent of a mother and home in providing adequate care.

(v) Duration of Diarrhoeal Disease (DoD)

DoD is likewise four times greater in group D.F. than group E. The large discrepancy between DoD and DoA for group D.F. is firstly due to the nature of concomitant disease which are diagnosed during the admission which requires hospitalisation (e.g. T.B.), and secondly due to social reasons, making discharge impossible. An example of this phenomena is case 22, whose mother was jailed and deported to the Transkel while her child was in hospital.

(vi) Number of Complicating Illnesses (No CI)
The mean No CI for the exploited (2.0) is also four times greater compared to group E (0.5). Under complicating illnesses only significant illnesses were included, excluding benign conditions like a cold and oral thrush. Direct complications of D.D. were likewise excluded (e.g. Electrolyte disturbances).

A mean of two complicating illnesses per child in group D.F. is a reflection of the severe state of ill health prevailing amongst the disenfranchised.

(vii) Haemoglobin (Hb)

Hb similar to % EW is expressed as a percentage of the mean normal value for the child's age using standard haematological tablets.

The mean Hb of group E is above the mean normal value while that of Group DF is significantly below normal. Recent work correlating iron deficiency (the commonest cause of a low Hb is this age group), with mental development scores documented the deleterious effect of iron deficiency on mental development. This makes this low value all the more sinister.(2)

(viii) Kwashiorkhor (Kwas)
Lastly study indicates that P.D. and its associated extreme poverty are prerequisites for the development of Kwashiorkhor.

Perhaps it is time to remind ourselves that the occurrence of Kwashiorkhor and marasmus (together 24 out of 69 cases in total) is completely unacceptable. It not only represents the extreme of social neglect but reflects a total failure of preventative medicine.

(ix) Conclusion

Political disenfranchisement and poverty correlate closely. There are only 4 cases in group DF with an income of greater than R100 per month per family member with only 7 cases with an income of greater than R50/m/fm.

The extent of poverty is outrageous.

The consequent ill health is disparingly gross. The difference in the means of the two groups are so great that statistical tests of significance becomes superfluous with repeated significance levels of << 0.1.
2. Social Structure and Disease

1. Social Structure Defined

Social Structure can be defined as recurrent regularised interactions between different social units. Social structure is determined by the prevailing:

(i) values (beliefs which legitimize the existence and importance of specific social structures);
(ii) norms (standards which regulate the interactions amongst individuals);
(iii) Sanctions (rewards, deprivation and coercion)

Undoubtedly the most important determinant of social structure for the disenfranchised is the oppressive legislation governing their lives. The historical development of the present day social structure adds much to our understanding of the status quo.

2. Historical Development

(i) The segregation of the peasantry
Descriptions by travellers and shipwreck survivors in the early part of the nineteenth century frequently remarked on the good health and abundant food of the indigenous population. Colonisation in the mid-nineteenth century stimulated the development of a flourishing peasantry which not only met subsistance requirements but "a healthy surplus for the market".

(ii) Hut Taxation

By the late nineteenth century both mining magnates and white farmers required a labour force. In his speech on the Glen Grey Bill introducing hut taxation in 1894, mining magnate Cecil Rhodes said:

"We want to get hold of these young men and make them go out of work, and the only way to do this is to compel them to pay a certain labour tax. It must be brought home to them that in future nine-tenths of them will have to spend their lives in daily labour, in physical work, in manual labour."

Taxation was not sufficient to destroy the self-sufficiency of the people to the extent required to meet the labour demands of capital. Apart from the increasing labour demand white farmers were increasingly complaining that blacks
"would outfarm the (white) farmers. Africans were gradually becoming richer than whites" (5)

(iii) The Dispossession of Land

"The peasantry was affected in the most vulnerable way for an agriculturalist - the land". (3) Successive land "appropriations" were commenced culminating in the 1913 Land Act which confined 80% of the population to 13% of the land.

(iv) Migrant Labour

We find that on the one hand the means of subsistence of the majority of the population were destroyed while on the other a powerful economy developed dependant on the exploitation of rightless migrant labourers.

Bundy points out that the "embedding of migrant labour in the economic structure conferred benefits on all the major interests which had a political voice in the State. For urban employers, it means that labour was kept cheap, unorganized, and rightless, that overhead costs were kept to a minimum, ...for white workers, it provided the security of membership in a labour elite... For white farmers, it meant that low wages and the impermanence of compound life kept the labour force closer at hand..."
those without a political voice in the state it meant no alternative to poverty wages, the total disruption of social life and the exclusion of "all alternatives to increasingly unequal development" (6)

How do these historical considerations relate to the present?

3. Present Day Structure

(i) General

Approximately 80% of South Africa's 28 odd million population is politically disenfranchised. The country is divided into what is called the "Republic" and a number of Bantustans in various stages of alleged independance. The state, while gladly supporting and partaking in migrant labour, accept no responsibility for those from alleged independant homelands, those who have been allocated to a given Bantustan who lose their citizenship when these become "independant".

The ratio of 80% to 13% of the land has changed little.

Despite the fact that, accelerating rural impoverishment and overcrowding has been recorded by the Tomlinson Commission in 1952, the state has persevered with its policies of
Bantustans and apartheid. Recent years have witnessed numerous changes in official nomenclature but none in the structure.

To create, (by positive financial sanctions to certain individuals who may have some vague historical claim to leadership) within such an impoverished community, a ruling bourgeoisie to further its aims, was not difficult for the state. It is amazing how many influential friends you can subsidize for a relatively small amount every month. It is in the light of this that we have to view the statements of Vilabazi; Mongany and Adams (vide infra).

(ii) Forced removal and relocation

The last ten years has witnessed an increase in the extent of forced removals and relocations. More than 2.5 million people have been forcibly uprooted and moved in the past ten years. Removals can be divided into:

1. Clearance of "Black Spots". The continuation of the process of land dispossession into the 1980's.

2. Relocation due to the abolition of the labour tenant system and squatting on white owned farms.
3. Relocation through the operation of influx control.
   (Vide infra).

4. Urban Relocation. All blacks in urban areas not productive or "necessary in the white economy" including wives, children, the ill, unemployed and vendors in black townships are liable to relocation to Bantustans under legislation governing "urban rights". (27) This is irrespective of where they were born.

5. Relocation for strategic or infrastructural schemes.

Legislation governing the abolition of the labour tenant system for example allows white farmers to have any unwanted black people removed from their farms. As examples or where surplus labourers are settled on site Ngutu and Nondweni:

"The Tomlinson commission recommended a population of 13,000 for the Ngutu area, and that meant that even then (the early 1950s) some 5,000 families would have had to be absorbed elsewhere."

"At the same time the population has increased tremendously due to forced relocation." In 1979 the estimated population was 200,000. Already in 1978 30% of the householders had no land at all to cultivate. There are indications that the government are planning to move a further 20,000 families to Ngutu.
The following are extracts from Mare's notes on the Nondweni district:

"Once a progressive community, these people were pastoral peasant farmers and each had more than 200 goats. Now they are living in a rural slum". (Natal Mercury, 17/5/72)

"In July, 1979, the population was just over 4 000... Taps were installed but the pump supplying the reservoir broke down. The author was told in July, 1979, that the pump had been out of action for several months. People were seen to scoop water out of a polluted donga below the camp... People were moved (here) on trucks and excess possessions had to be left behind... the "fletcraft" rooms were allocated regardless of family size (sometimes ten people in one room); the pit toilets filled up with water because the ground is not sufficiently porous... The closest stores are about 10 km away... The only official trading activity is in the Nondweni Bottle Store - owned by the Kwa Zulu Legislative Assembly member of Nquta... The Kwa Zulu Government however does not accept responsibility for the settlement as it is on Bantu Trust land..."

"Since then matters have not improved."(7)

The government's attitude to those whose land was seized from them is clear from the attitude of Mr. D.J.F. Hidge (Chief Commissioner for the Dept. of Plural Relations - as it was then
known in Queenstown) who showed scant concern that there were no jobs in the place where he intended to resettle people whose land had been seized from them under the "clearance of black spots".

"That is not my problem. We will provide the necessary infrastructure of water and toilets in the camp. Where the people work is not my business. It is like any other area. In the rural areas there are no jobs either - the people are migrant workers. The provision of jobs has nothing to do with me". (Sunday Tribune, 8/10/78)

Those who studied exploitation, Mare (1988); Desmond (1978) and Baldwin (1975), all came to the same conclusion as to the function of relocation: "The critical aspect of this whole policy (of mass removals) is the turning of the black labour force into rightless, powerless migrants". "...while there are other functions to reserves (the relocation areas), the consistent one is that of control". (7)

As Adam (1979) (10) pointed out: "Critics who constantly ridicule the Bantustans as economically unviable and internationally unrecognized fictions of dreaming Afrikaner minds, ignore the success of the policy in the form of retribalized nationalism with vested interests of a growing administrative class of civil servants, professionals, petty traders, and market-producing peasants". (p18)
Both Vilakazi (1962) and Manganyi (1973) have pointed out that the white recognised African leaders are not considered legitimate leaders but merely government puppets by the majority of the people. Like their white counterparts the African ruling and middle class have no real concern with the majority of this country's population.

(iii) Influx Control; Work Allocation and Unemployment

There is no freedom of movement for the majority of the D.F. group. Under influx control legislation "a range of penalties applies to those designated as "idle" (or more correct, to those who are African and unemployed, or African with the wrong job and/or in the wrong place)."

"In a way those left out of (rather than removed from) the urban areas through the operation of these measures, also figure in an examination of relocation of people. These are the people who cannot afford the penalties(...)

attached to being caught as " illegals" in urban areas—especially those who are " illegally" in the urban areas while looking for work."

For an example of the extent of this form of control Maré gives the following: "...a report in the Sunday Express (1/4/79), for example, is headed "Conveyor Belt Cases Take"
Minutes to Clear". Two months later the Sunday Express reporters followed up their investigations:

"Justice is still being dispensed with lightening speed in Johannesburg pass courts - more than 100 cases were heard in a couple of hours last week... the rate at which blacks were being prosecuted last Friday in three courts averaged one case every two minutes - but in Court C magistrate Mr H. Wendeborn heard 33 cases in a breathtaking 33 minutes. The fines imposed ranged from R12 - R68. (Mr Wendeborn "netted" between R396 and R1 988 in 35 minutes from people living below subsistance levels).

Most if not all disenfranchised South Africans who come to cities do so as a consequence of starvation either pending - in dependants or self experienced. Consequently they are usually jailed, because they are unable to pay financial penalties. Due to overcrowding of jails "offenders" are often trucked back to their assigned "homeland".

Aninka Claasens in a brilliant study on self help projects in the Transkei, clearly showed the Bantustans' non-viability in providing a means of subsistance. Self help projects under such overcrowded conditions where there is no infrastructure; virtually no capital and a markedly segregated society simply don't work. (4)
In the development of capitalism, increasing capital intensive production causes increasing unemployment. Despite the fact that the extent of starvation in the Bantustans is well recognised, the state's and capital's solution, as reflected in the recommendations of the RieKert Commission (1979), is to "repatriate" the unemployed to Bantustans. The commission in accepting the policy of "black states" does not only not consider the desperate plight of those confined inside the Bantustans, but it tries to "solve" the problems arising from increasing unemployment, by increasing the Bantustans population!

If the starving were to "stay in the towns they would constitute a threat to the appearance that the system is running smoothly. As Bob Marly once said - "A hungry mob is an angry mob". (25) Through the myriad of legislation governing the movement of blacks the government has ensured that those who are starving will not be seen to be starving.

The choice of a migrant labourer's (virtually all true labour in SA is migrant labour) work is not his own: In applying for work one is arbitrarily assigned to a specific job category eg. mining, manufacturing etc. and one has to await a vacancy within the job category you have been placed in. The recently "independent" Ciskei has
each job applicant on computer—any involvement in industrial dispute guarantees no future employment. Coupled with the fact that black trade unions are not recognised by authorities, wage labour under these circumstances means slave labour.

(iv) Economics

(i) General

The exclusion of the majority of South Africans' people from the benefits of the economy is adequately reflected in the distribution of total income: the top 20% receive 75% and the lowest 40% receive 6% (11). Of 90 countries surveyed by the World Bank, South Africa shows the most inequitable distribution of income. (11)

(ii) Wages and Trade Unions

In 1979 the mines employed approximately 700,000 migrant labourers earning an average wage of R146 per month(12). According to government figures 85% of farm labourers earn R34.70 (+/- 11.42) per month(12). Widespread beating of farm workers, caning and torture by
electricity has only recently become apparent (25). Maize farm labourers earn R12.00 per month (26).

Low wages such as this is obviously severely insufficient if one considers the number of dependants which migrant labourers have. This is reflected in the study data. As Table 3 shows the mean income of those from the Bantustans (15.4) in R/M/FM is not only extremely low but significantly lower than that of the rest of the D.F. group.

The "claimed average household incomes" in Rands per month for blacks in 1988 was R136.00 about 50% lower than Potgieter's HEL, the "breadline" for the five major urban centres (13).

With highly evolved and specific legislation to exclude the majority of the population from the central economy the degree of exploitation comes as no surprise.

Democratic black trade unions are not recognised by the authorities, only white established puppet bodies and management committees are recognised by the state. Worker demonstration usually relatively peaceful is usually promptly met by police gunfire!
(v) Farming

In stark contrast to the D.F., South Africa's 21 commodity control boards administer the marketing of the vast bulk of the country's R4,000m a year agricultural production; cost R22m a year to run, and employs staff exceeding 3,000 who earn R5m per year(18).

In 1981 there was a very large "surplus of maize": approximately 8.6 Mt (19) most of which was exported at a direct loss of R270m(20). This incredible loss stems from the fact that farmers are paid more for their maize than the price it can be sold for on the international maize market. The local population has to pay more for maize to help subsidise export in order to allow farmers to maintain their profit.

This can only arise in a value system where the farmers' profit takes preference over the ability of the people to sustain a livelihood. This also shows that the belief that an increase in the Gross National Product is beneficial for all the people, is a total fallacy.

(vi) Education

Malherbe (1979)(28) points out that: "The best indication of the growth in the quality of education provided for the
different racial groups, since Union was formed, is the amount of money spent by the State per head of the population in each racial group).

"In 1980 the government spent R71.28 on each black child's education and R724 on each white child's education". Consistent with previous years there is a greater than ten fold difference. Not only has any alternative means of production for Africans - alternatives to selling their labour force for white profit - been removed, the necessary institutions were also created to ensure their continuous deprivation.

(vii) Health

(i) General

Table 3 clearly shows the influence of vigorously enforced regional deprivation on the health of the bulk of the population. The variables are all included in the discussion of table 1 and the reader is invited to consider the difference in means himself.
TABLE 3. Means (m) & number (n) for selected variables according to Social Disposition.

What needs emphasis is that within the broader context (vide supra) the mothers of the unfortunate cases from the Bantustans were liable to severe prosecution in bringing their dying children to the city. This sub-group of obviously severely ill children, probably even in terms of those seen in the Bantustans, especially if one considers the sanctions not to bring one's starving children to an Urban area, all arrived without any referral.

What about those who never reach the city due to fear, prosecution, or non-availability of transport fares?
Indeed one can begin to appreciate the extent of ill health prevailing in the Bantustans.

(ii) Starvation

Estimates of how many children die per hour of starvation in South Africa varies from 3 to 45. (14;15 & 16). The fact that no accurate figures are available is a telling commentary on the state of health of the majority of South Africa's children.

Deaths from starvation is said to represent less than 2% of those affected by starvation (17). This means that according to recent estimates there are between 2 1/2 million (15) and 20 million (16) children under 5 starving in South Africa.

The proportion of black children older than one year with "nutritional dwarfism" i.e. physical and mental stunting due to starvation, in most recent studies in S.A. ranges from 30-66% (17), yet none of the studies were done in the most hard hit areas. Surveys carried out in the Ciskei in 1980 showed 78% of urban black children and 83% of rural children to be suffering from starvation (21).

(iii) Other
Common conditions affecting the exploited such as tuberculosis and occupational disease will undoubtedly be considered in great depth during the conference and there is little point in discussing these here.

Sufficient to say that it is clear that in dealing with health crises in the D.F. group the motivation of the state is political and not to ensure adequate treatment. It is clear that for the majority there are no true preventative measures at all.

**SCATTERGRAM**

**INCOME**

**vs**

**DoA**

\[ r = -0.74 \]

SCATTERGRAM: DoA as function of income in R/M/FM. See agenda.
Conclusion

The deliberate destruction of the self sufficiency of the people was the only means to force them to enter the labour market. A large exploitable labour force was created by the enforcement of tax laws, numerous land proclamations and the Land Act, thus laying the foundation for increasing starvation.

Although the gross inequality in the distribution of land remains the fundamental determinant of starvation, the continued virtually complete exclusion of the majority of the population from any real benefit from their labour, ensures no amelioration for those without the means of production. The coercive methods whereby labourers are controlled in the face of increasing unemployment, and consequent rural overcrowding with declining rural agricultural production, probably means that the already rocketing rate of starvation is still increasing.

It should be clear that in a country exporting 28% of its agricultural production (22) starvation is not the consequence of inadequate total production, but rather the consequence of a structure which oppresses and exploits to the extent of frank starvation.
Any amelioration in starvation in SA and any positive change in the health status of the mass of South Africans can only be brought about by a radical restructuring of the prevailing values, norms and sanctions.

The Health Professional's Importance

(1) The Social Base Superstructure Dialectic

The material conditions of life is the fundamental determinant of one's thought processes. Those in control of the medical profession and medical education belongs to the ruling elite of society and their superstructure (thoughts; sets of values and accepted norms) with by virtue of their common social base with ruling class lie closely aligned with that of the ruling class.

Goodenough has adequately summarised the profession's situation: "The medical profession consists of members of the privileged power group in our complex society. The profession is supported by other members of this same group so that it can take care of the group members' personal medical needs and problems... All of us are trying to figure out ways in which we, as members of the privileged power group, can somehow manage the exportation of medical services to those parts of society that are not members without damaging our own positions in any way. The students
are graduating to serve their own class... They end up there because that is what pays them". (23)

Segall in a brilliant account of the commodity nature of health care convincingly shows how the medical professional and medical profession obey the laws of commodity producers; commodity production and distribution. He points out "the health workers are not behaving differently from other commodity producers. They are not especially wicked but nor are they angels. They are merely obeying the social laws of the economy.

(ii) The Gluckman Commission

The Gluckman Commission in 1942 investigated the health conditions of South Africa and arrived at far-reaching and, especially for that period, radical recommendations for a national health system, advanced even when compared to present systems. However, the then newly elected white nationalist government rejected all the recommendations of the commission.

It is noteworthy that the Medical Association of South Africa (MASA) also opposed the recommendations insisting that private practice was the way in which medicine should be practised in South Africa.
The above considerations explain some of the determinants of the medical professions' importance in opposing the health denying social structures. The majority of doctors it seems are satisfied by the present social structure by virtue of their situation within this structure.

Although the profession as a whole is presently severely capitalist orientated, there undoubtedly is a role for the committed medical professional to, within existing demographic structures, assist in bringing about a social structure which makes the attainment of health for all possible.

The recent development of a medical society with this aim at heart will hopefully mark increased commitment on the part of doctors, to the struggle for democracy in South Africa.

Conclusion

Political disenfranchisement leads to poverty which, due to its extent and the associated coercion to maintain it within an affluent society, leads to an extreme degree of lack of health and basic health care.
The only solution to the severe ill health so prevalent in South Africa, is a radical restructuring of society. Not only is this a prerequisite for the attainment of health, but also for the establishment of a comprehensive health system.

Health professionals in general, because of their class alignment, have been disinterested in bringing about a health promoting structure. The MASA rejected and actively opposed recommendations for a truly national health system designed to provide adequate care for all. The MASA however, has been successful in ensuring continued increases in doctors' salaries and fees.

Medical professionals can be of some value in bringing about social change and appropriately educated health workers will be required in the establishment and maintenance of a truly preventative health system.

A newly formed progressive society for health professionals raises the possibility of more organised opposition to apartheid.
Agenda: Statistical Notes

1. The standard deviations are not included in the tables. They are available on request.

2. Three cases were excluded from the study (they are not included in the totals). Two of these developed mild D.D. while in the wards for other disease processes. Both cases were not admitted for D.D. and their D.D. was mild—certainly not of sufficient severity that these cases would have required admission for their D.D. The remaining case was excluded because both its DoA and DoD fell more than 15 times outside the sample’s standard deviation mean!

3. The numbers in Table 3 are smaller for group D.F. compared to Table 1. Being a pilot study, social status was not recorded for the first 26 cases of group D.F.

4. The scattergram is a plot of the natural logarithm of Income and DoA. Because both these samples of figures form Poisson distributions they can only be timeously correlated by using their log e conversion.
This materially excludes cases with an income equal to zero. It is remarkable that the correlation coefficient \( r \) is so large despite the inaccuracies noted in the income figures.

5. The statistics was done on a Sharp PC 1500 hand held computer and X-7 plotter. The software was developed by the author using standard statistical formulae and application.

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References


5. Quoted from Monica Wilson in 4 above.


1980. SAIRR


13. Trends, 5, 1 March 1982. This figure is based on informant claims taken from NRS, Radio Bantu and AMPS surveys.

14. Cape Times 18/7/81

15. The SAIRR estimated that 50,000 children died of starvation in 1982.

16. World Vision of South Africa estimated that 400,000 children will die of starvation in 1982, as quoted in Star 7/7/82.

17. SAMJ 13/5/81
18. Rand Daily Mail 19/2/80

19. Financial Mail 12/6/81

21. Cape Times 10/7/81

22. Financial Mail 12/6/81
These papers constitute the preliminary findings of the Second Carnegie Inquiry into Poverty and Development in Southern Africa, and were prepared for presentation at a Conference at the University of Cape Town from 13-19 April, 1984.

The Second Carnegie Inquiry into Poverty and Development in Southern Africa was launched in April 1982, and is scheduled to run until June 1985.

Quoting (in context) from these preliminary papers with due acknowledgement is of course allowed, but for permission to reprint any material, or for further information about the Inquiry, please write to:

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