



The Pholela Health Centre: A Progress Report

FOLLOWING the Report of the National Health Services Commission in 1944, the government decided to establish Health Centres in various parts of South Africa. . . .

Medical Officers and other staff appointed to the various newly created Health Centres were first sent to Pholela to gain experience in Health Centre practice and to study the methods evolved there.

THE NATURE AND EXTENT OF THE SERVICE

The essential features which have developed include care of the sick and prevention of illness by the doctor and nurse, associated with a programme of health education carried out by specially trained "health assistants" acting under the direction of the doctor. The result has been a very closely integrated curative, preventive and promotive health service in which there is an ever-increasing appreciation of the community's health needs and an understanding of the various families served.

The Health Centre's practice consists of a general service and a more defined family health and medical care programme.

1. *The General Service.* This is available to all who wish to use it regardless of their domicile. It includes out-patient treatment of the sick and special sessions for the care of the expectant mother and the mother with her baby. . . .

In addition, Health Centre staff are often asked to assist in the control of outbreaks of epidemic diseases in neighboring districts.

2. *The Family Health and Medical Care Programme.* This relatively intensive service was started in 1942, including 130 families with a total population of a little less than 900 persons. By gradually extending the area of this service the Centre now provides a family health and medical care programme for a population of some 8,500 people in the district of Pholela. . . .

By means of home visiting, group discussion and practical demonstration, an intensive educational programme for better health is carried out. . . . This

persistent personal health education of men, women and children is directed towards the following objects:

(a) Reduction of the high incidence of preventable communicable diseases by explaining the nature of these diseases and their spread. . . .

(b) Improvement in the state of nutrition through improvement in the diet. . . .

(c) An appreciation of the value of periodic health examinations and the need for treatment of disease in its early stages. . . .

THE CONTROL OF COMMUNICABLE DISEASES

Since the introduction of this combined preventive and curative service no epidemic of various major communicable diseases, such as typhoid and typhus fever, smallpox and diphtheria, has occurred in the expanding defined area. . . . Strenuous efforts on the part of the health assistants to interest the families in improved home and environmental cleanliness and in

Sidney L. Kark, MD, and John Cassel, MD. Reprinted courtesy of the *South African Medical Journal*. 1952; 26:101-104, 131-136.

personal cleanliness have met with a good deal of success over the years. Over 150 families now have compost pits in which their household refuse is deposited and some 100 to 120 families have co-operated in buying material to protect their water supplies. The labour for this purpose is provided by the people themselves; the Health Centre, having stimulated the desire, then provided the necessary technical advice. In this way also a number of pit latrines have been built and improved methods of food storage introduced. The progress is slow but each year the momentum increases. . .

SYPHILIS

It is difficult to give an exact figure for the incidence of syphilis in this community, as most male migrant labourers do not attend the Centre on their brief visits home from town. . . . Because of the common occurrence of the disease in the community, and more especially its very high incidence in the expectant mothers and babies, attempts to raise the standard of health of the people have included an intensive educational programme related to the early treatment and prevention of syphilis.

Early diagnosis of infection and case finding is an essential

part of this programme, and the Wassermann test is routine in all health examinations. Of more importance in the control of the disease is the extent to which infected persons and their immediate contacts appreciate the need for full and adequate treatment. To achieve this, doctors and nurses spend much time explaining the nature of the disease and the need for treatment to individual patients. At the same time a community health education programme is carried out, in which the spread of the disease, its effect in the child, and its natural history are discussed. This education has always to take into consideration prevailing concepts

Sidney Kark and John Cassel

Social Medicine

Pioneers and South

African Emigrés

WIDELY RECOGNIZED AS ONE of the 20th century's most original, inspirational, and influential leaders in social medicine, Sidney Kark was born in 1911 in Johannesburg, South Africa, to which his family had emigrated from Lithuania in the 1880s.¹ After graduating from high school, Kark entered the medical school at Witwatersrand University in 1929 but was forced to abandon his studies in the early 1930s because of the economic depression. He later returned to medical school and graduated in 1936. While in medical school, Kark was active in a variety of progressive student organizations, including the National Union of South African Students and its affiliated Labor Party.

Several liberal faculty members active in the interracial South Africa Institute of Race Relations influenced Kark, as did a history professor, W.M. MacMillan, whose analysis of South African history highlighted reasons for the poverty and deprivation

of the native African populations, and Eustace Cluver, a lecturer in public health.

In 1938, when Cluver was appointed secretary of health of South Africa, he chose Kark as the clinical medical officer for a year-long survey of the health and nutritional state of South African children. After this assign-



Dr. Sidney and Emily Kark, Pholela, Natal, circa 1940. Courtesy of Dr. Jeremy D. Kark.

ment, he appointed Kark head of a pioneering health unit at Pholela in rural Natal Province. The Health Ministry intended this to be a model for health centers across the country. Sidney Kark and his new wife, Emily, who was also a physician, went to Pholela in 1940. During the 6

years they spent there, they began to develop the concepts, methods, and programs of applied social medicine for which they would later become famous.

In 1946, Kark moved to the city of Durban to direct the newly created Institute of Family and Community Health (IFCH), whose mission was to train personnel for the large network of health centers on the Pholela model, as projected in the recently released Gluckman Report of the National Health Services Commission.² Students were trained at Pholela and at 6 new urban health centers, whose populations lived in municipal housing projects, urban slums, and shack settlements. In 1951, a medical school admitting only "Black, Indian, and colored students" was created in Durban.

In 1952, reactionary changes in the national government prevented the growth of the planned health centers and threatened the existence of the IFCH. With the help of the dean of the Durban Medical School and a grant

of the people in regard to the disease and the relationship of these concepts to culturally accepted theories on etiology and methods of spread of illness. . . . Sixty-five percent of the patients advised to have daily penicillin injections completed their course in spite of the long distances they had to walk over mountainous country, while a further 16% had 8 or more injections. . . .

TUBERCULOSIS

Tuberculosis is a serious public health problem in this community. In a survey carried out in one section of the district, consisting of 150 homes, no fewer

than 26 (17.3%) were found in which there was, or had recently been, an active case of tuberculosis. The known case incidence in the defined family service area is 15.7 per 1,000 population. This figure is probably an understatement. . . .

i. *The Adult.* As soon as a diagnosis of active pulmonary tuberculosis is made, the patient and his family are met by doctor and nurse concerned and the nature of the disease is discussed. . . . If hospitalization is refused, as it often is, the patient and his family are then shown how isolation can best be maintained in the home. The sleeping arrangements, disposal of sputum and

ventilation of the hut are discussed, and arrangements made for regular attendance at the Health Centre of all other members of the family. In addition, attempts are made to improve the diet of the patient. . . .

ii. *The Infant and Child.* The main approach consists of attempts to remove the child from the active source of infection and to improve his nutritional state. . . .

The family is then urged to take advantage of the Health Centre's nutrition programme to improve the dietary resources of the home. Regular attendance at the Centre ensures, among other things, regular therapeutic supplements of dried skim milk powder.

from the Rockefeller Foundation, the IFCH was moved into the Medical School and integrated with the clinical educational curriculum. Kark became professor of family practice and social medicine, and the 7 health centers became teaching sites for Durban medical students.

Given the political climate of the 1950s, Kark and his colleagues at the IFCH realized that their days were numbered and began leaving for posts in other countries. The Karks spent time in Jerusalem and a year in the School of Public Health in Chapel Hill, NC. In 1959, they returned to Jerusalem, initially as part of a 3-year World Health Organization-Israel project to establish a Department of Social Medicine at the Hebrew University Hadassah Medical School. There Kark became professor and head of the Department of Social Medicine, where he served until his retirement in 1980. During this period, he further developed the ideas he had come to call "community-

oriented primary care."^{3,4} Sidney Kark died in 1998.

John Cassel's career was closely intertwined with Kark's but developed in its own unique direction in the field of social epidemiology.⁵ Like Kark, Cassel was born in Johannesburg, in 1921. He received his medical education, also like Kark, at Witwatersrand. In 1947, he joined the staff of the Durban IFCH and received training at 2 of its health centers. He was then appointed medical officer in charge of the Pholela center, a post he held until 1953. That year, he left for the United States, to study for a master of public health degree at the University of North Carolina at Chapel Hill. He was subsequently asked to join the faculty and became chair of the Department of Epidemiology in 1958.

Building on the ideas to which he had been exposed in South Africa, Cassel became especially interested in the significance of the social environment as a determinant of health in populations. In his teaching and re-

search, he emphasized the importance of social, cultural, and psychological factors. He used North Carolina as a laboratory for epidemiological studies of the impact of change from rural agrarian ways of life to urban industrial living. He then generalized his findings to a model in which "stress factors" were important in the genesis of physical disease whereas social support networks exercised a protective effect. Cassel synthesized many of his most original ideas in a paper entitled "The Contribution of the Social Environment to Host Resistance," presented as the fourth Wade Hampton Frost Lecture in 1976, the year of his terminal illness and death.⁶ ■

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Dr. John Cassel examining a child at the Springfield Health Center, Durban, South Africa, 1948. Courtesy of Margaret Cassel.

der, vitaminized oil and vegetables from the Health Centre demonstration garden. . . .

Control of tuberculosis is at present dependent upon the nutritional state of the people being vastly improved, mainly through soil conservation (a national problem), the reduction of the numbers of migrant labourers (another national problem), the provision of adequate diagnostic and isolation facilities, and the education of the community about the nature of the disease and methods of prevention and treatment.

THE NUTRITION PROGRAMME

Adequate nutrition is never the concern of a health service only. In a community such as that of Pholela it is an agricultural and general economic prob-

lem as well as the concern of sociologists and health workers.

The Health Centre's programme is thus a contribution to what should be a broadly based community development plan, and it is in this light that the following description of the Health Centre's nutrition work must be read.

Clinical nutrition studies have revealed that over 80% of the population exhibits obvious and often gross stigmata of malnutrition. Dietary surveys have indicated that the diet is on the whole monotonous, often insufficient in amount and always lacking in milk and milk products, animal tissues, fresh vegetables and fruit. . . . In the early days of the Health Centre this resulted in the relatively frequent occurrences of such gross instances of nutritional failure as classical pellagra in

adults and infantile pellagra (malignant malnutrition, kwashi-orkor) in children. . . .

(a) *The Family.* By home visits and group education people have gradually begun to realize the importance of diet in health. This teaching has been associated with attempts to encourage families to start their own home vegetable gardens, and to modify some of the food taboos.

Various methods have been used to increase the consumption of vegetables, e.g. the establishment of a demonstration vegetable garden at the Health Centre, from which vegetables are prescribed for patients; the establishment of a daily market (run by the people themselves aided by members of the Health Centre) at which surplus vegetables can be bought and sold; various cooking demonstrations using vegetables, and the creation of a very successful seed-buying co-operative society. In addition, periodic vegetable garden competitions have created a great deal of interest in gardens. . . .

(b) *The Mother and Infant.* Expectant and nursing mothers with their infants have been singled out by the Health Centre as the groups most in need of an improved diet. At the ante-natal sessions expectant mothers learn what particular foods are necessary for their own health and that of the unborn child. Special cooking demonstrations show them how to prepare these foods. When necessary, therapeutic supplements of dried skimmed milk, powder, vitaminized oil, iodized salt and vegetables are prescribed. The attendances at these sessions have risen from a negligible number in 1942 to 90% of the pregnant women in the area in 1950. . . .

DISCUSSION

While the progress towards better health which has been achieved by the people in association with the Health Centre's programme has been most encouraging, there are aspects of life in Pholela which militate against the attainment of health. These include important adverse influences on which the Health Centre service in itself has little effect. Among the most significant is the accelerated soil erosion which is obvious to the most unskilled observer, and the system of migrant labour whereby a very large proportion of able-bodied men spend a large part of their lives working in the towns while their homes remain in Pholela. . . .

Soil erosion and migrant labour have resulted in:

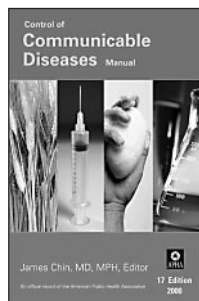
(a) Failure to produce sufficient food for the needs of the community, with evidence of gross malnutrition in plant and animal life as well as in the people.

(b) An instability in family life and maladjustment in family relationships, associated with a high incidence of emotional disturbances. . . .

(c) The continuous introduction of fresh foci of infection by these returning from work in the towns. A high incidence of tuberculosis and syphilis is maintained by this process.

Malnutrition, maladjustment and diseases like tuberculosis and syphilis are features in the vast majority of the patients who seek medical care at the Health Centre. By means of this clinical and health education programme the Centre has been able to make a significant contribution to improved health. However, the fact that these diseases are so closely related to soil erosion and

migrant labour indicates the need for a broader programme of development. A family health and medical care service of the kind described in this progress report should be a feature of this development plan, functioning in close liaison with other services concerned with the general welfare of the community. It would seem that the effective liaison of such health service with services concerned with agricultural improvements, soil conservation, industry and education offers an opportunity for improving the health of the people, for increasing the productivity of the area and at the same time conserving the soil for future generations. ■



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