

and women may be enabled to tackle the problems they present.

In native schools within the municipal area of Johannesburg (excluding Alexandra Township) there are enrolled at present 7,000 pupils (3,000 boys and 4,000 girls). In native schools on the West Rand, that is, within a distance of 30 miles from Johannesburg, there are an additional 3,000 pupils (1,400 boys and 1,600 girls). In the whole of the South-Western Circuit—which constitutes the writer's inspection area and which extends from Christiania in the south to the confluence of the Marico and Limpopo Rivers in the north—there are altogether 25,000 pupils (10,000 boys and 15,000 girls). For practical purposes and because of their easy accessibility, the 7,000 pupils in Johannesburg provide the most promising material for investigation, though the 3,000 pupils of the West Rand are quite easy of access, while for a certain class of research the additional 15,000 pupils in country towns, rural areas and native reserves, will possess undoubted value and are readily available.

The possibilities for research work are boundless. Accurate means for judging age and reliable age-norms are needed. There is the fundamental investigation, mentioned above, of vision, hearing, nose and throat, teeth, nutrition, and the incidence of hook-worm and syphilis. Tables of age, height, and weight of Bantu boys and girls are lacking. Pupils at present in native schools range from the age of four years to over 20 years, so that there is ample material for studying the *Bodily Habitus in the Bantu female* or *Physical Education in Industrialized Centres* (vide *The Leech*, Vol. VI, No. 1, May 1935).

The field is wide open.

It would be a fitting corollary to the *Wugma* of 1925, if the Medical School of the Witwatersrand University were to conduct the *Wumebs* (Witwatersrand University Medical Examination of Bantu Scholars) in 1935.

"The Auricle," October, 1935, Page 2, "Doctors and Vets," line 5.

Owing to an unfortunate error the word "**Parliament**" was omitted and the erroneous impression may have been conveyed that we had broken away from N.U.S.A.S. The sentence concerned should read: "It was a wise decision to break away from N.U.S.A.S. parliament . . ." It is well known that the S.M.C. are amongst the staunchest supporters of N.U.S.A.S.

AN INSTITUTE FOR THE STUDY OF MEDICAL CONDITIONS AMONG THE BANTU IN NATAL.

A. BROOMBERG.

The native problem in South Africa has in recent years assumed an importance fully warranted by the complexity of the position which it occupies. It is ever with us and as the years go by, becomes ever graver and more pressing for a solution. Every aspect of it has engaged attention and provoked endless discussion, both inside and outside gubernatory circles. Yet one facet has remained relatively and surprisingly neglected; that is a detailed scientific research and investigation into the peculiarities of health and disease, generally and specifically, in the town-dwelling native and the kraal-dwelling aborigine.

A certain amount of work in this direction has been and is being done, but only on a small scale and by private individuals or small societies. There has never yet been any large ambitious organized effort to deal with such research among the Bantu tribes of S. Africa, and it is precisely in such a field that there lies what must necessarily be an immense region of unexplored scientific wealth.

Are there any differences between the types of disease commonly seen in the European and those affecting the native? If there are any, what are they? Wherein are they peculiar? What are the causes direct or remote which account for these peculiarities? What is the etiology and pathology, and how far can our findings be applied to prevention and treatment? Or can they be of use in applying the natives' peculiarities to the treatment of disease in his European neighbours?

Questions such as these arise continually. In the course of several years of practice among the Zulus in Natal, these problems have confronted me daily in all their perplexity, and I feel that we are faced here with a unique and virgin field whose exploration would prove of inestimable benefit to the whole of medical science and knowledge.

That definite differences do exist is undoubted and obvious to any observer who has had experience of natives in health and disease, but the reason for these anomalies is not nearly so clear. And it is precisely in the unravelling of these reasons that there lies that vast hinterland, the opening up of which

may provide us with new and important conceptions of morbid states.

The obstetrical sphere is one instance of an extremely perplexing problem. What is the normal foetal lie in the Zulu female? We know that in the European woman, the commonest position of the foetus in utero is the left occipito-anterior. Any pronounced departure from this position is regarded as unusual and in most instances actually pathological. The left anterior occipital lie is the normal. In the Zulu, however, a surprising situation is found. With a regularity which amounts to almost 70% of cases, that is of normal cases, the foetal back and heart sounds are found on the right-hand side. That is to say, the Zulu woman presents as a normal constantly occurring phenomenon a right occipito-anterior lie. This I have found to be the case in fully 70% of about a thousand Zulu women whom I have had occasion to examine ante-natally, and it has struck me so forcibly that I now look upon an L.O.A. position in these women in the same way as the opposite is generally regarded in the European—an unusual and uncommon presentation. The reason for this strange difference is puzzling. Is it due to the pelvic configuration—the figures in the Zulu female average 19cms. intercrystal and 24cms. interspinous diameters—or can it be caused by the condition of the large bowel? The native does not allow herself to suffer from constipation, and hence the caecum is seldom overloaded. Many theories arise and the problem is one whose solution would prove extremely interesting.

Apart from the actual prenatal foetal lies, prenatal diseases are not common. Albuminuria is seldom found, oedema very seldom indeed, and a case of eclampsia only rarely. During labour, complications, such as great prolongation of the first stage, occur quite frequently, as also delay in the second stage. Both of these are usually due to inertia and not in my experience to contraction of the pelvis.

Puerperal sepsis is relatively uncommon in spite of the absence of the most elementary aseptic or antiseptic precautions. I have removed a stinking placenta piecemeal from a uterus where it had been retained for a week and the patient made an uninterrupted recovery. What is the reason? Is it due to a different vaginal flora, or to a natural immunity? If the latter is the underlying

factor, the possibility arises of treating sepsis in the European woman with normal serum from the pregnant native woman. This is one aspect in which a solution of this question might be of inestimable benefit. If due to the vaginal flora, what is the nature of this flora and its secretions? The whole problem of immunity in the native not only in this respect, but also in relation to the acute specific infections, is of tremendous importance and significance.

Similar problems arise in considering the prevalence of carcinoma and malignancy generally. Carcinoma of the stomach is rare. I have not yet seen a case. And yet carcinoma of the liver is relatively common. Carcinoma of the breast and cervix is not often seen but fibroids of the uterus and ovarian tumors are extremely common. Generally speaking, I have found in my own experience that malignancy is an exceptional cause of death in the Zulu and, when compared with its incidence in Europeans, it may even be said to be comparatively rare. Sarcomata are occasionally seen but also not very often. Here again is a significant problem, the investigation of which could and must aid the solution of the problem of the etiology of malignant disease generally, and might perhaps throw some light on its cure. What, for example, are the peculiarities of the gastric contents and gastric physiology in the native which render gastric carcinoma so rare a condition? Are the constituents of the blood peculiar? And if so, are there any specific constituents in the Bantu plasma which are absent from the European or *vice versa*? What is the normal hydrogen-ion (pH) concentration of the blood of the native? Is it inclined towards an acid or alkaline reaction and what bearing has this on the prevalence of cancer? Dietary habits, bowel habits, native drugs, and a thousand and one other questions arise and clamour for an answer.

Although classified statistics are not available, inquiry seems to reveal that surgical conditions such as peptic ulcer and gallstone troubles, acute appendicitis and acute abdominal conditions generally are not as frequent in their occurrence as one would expect. Oral sepsis too, is not nearly as often seen as it is in other races, and diseases of metabolism, apart from scurvy, are seldom met with, as for example, diabetes mellitus.

These few examples of the more obvious phenomena which can be readily observed in

the course of general practice, all point to one conclusion. In the native races we have a field for research unequalled anywhere in the world.

The problems and their solutions lie at our doors and in our own hands. The material surrounds us on every side and we are slow, tragically slow, to take advantage of the secrets which nature presents for our unravelling.

Durban, the hub of Natal, is the centre towards which are drawn hundreds of thousands of natives monthly. In the immediate vicinity of the city are large reserves, where tens of thousands of Zulus live in their own native manner, untouched by the habits of civilization. In other words, Durban would make the ideal centre whence extensive and intensive research work could be conducted. No institution exists as yet where such a project could be undertaken. Facilities for pathological, anthropological and general medical research are non-existent or else strictly limited. A vast field exists whence could be extracted knowledge of inestimable value. That must be granted. But where are the facilities offered to make this work possible?

What is absolutely essential is the establishment of a medical research institute for this purpose, in which and from which it would be possible to conduct the multifarious investigations which are so necessary and so essential. I feel optimistic enough to hope that the Government, once its attention were drawn to the position, as I have endeavoured to outline it here, would see its way clear to the establishment of such an institute in Natal. Its importance cannot be over-estimated.

Provided the facilities are created on the spot, and in Durban, we are in the midst of one of the largest native populations in South Africa, students and research workers from all over the country, and even from other lands would very soon be attracted to what must prove to be one of the most important and fascinating problems of medical science in this country.

Such a research institute can only be financed and controlled by the Government of the country in collaboration with the two medical schools of South Africa. It would be beyond the means of any private body.

The problems it will tackle are national problems. The answers to these problems

will prove to be a national asset and although it is difficult to prophesy what the ultimate results will be, I feel confident that certain lines of investigation will yield knowledge, which will prove of great etiological, sociological and therapeutic value, not only for our native neighbours, but also for the science of medicine in general, all over the world.

To the anthropologist the possibilities have long been known, and excellent and valuable work has already been done. But only the fringe of the problem has been touched, and much has still to be done. To the sociologist and psychologist, the native mind is still almost a closed book. And to the scientists, pathologists and medical investigators of this country, there opens up a vista of tremendous possibilities. Once a centralised research institute is established, every observer and man of science must interest himself, and I feel convinced that the Government of South Africa would be sympathetically inclined to entertain the founding of what must inevitably prove to be one of South Africa's most important scientific laboratories.

The field is rich. It lies before us and around us. No one is more ideally suited for its investigation than the South African born and South African educated student and it behoves the South African people to foster this work, for the results obtained will, I am convinced, repay the time, energy and money invested.

PROBLEMS OF NATIONAL HEALTH.

SIDNEY L. KARK.

“Surely the time will come when humanity will refuse to be diseased any longer.

“This list of filthy and hideous complaints—too filthy to be calmly spoken of: these smallpoxes, typhoids, choleras, cancers, tumors, tubercles—dropsy, diabetes, uraemia—all preventible, and easy enough to prevent;

“And yet—incredible though it seems—men and women still tolerating and condoning them;

“Men and women who pride themselves on their culture, refinement, punctiliousness of nose, and so forth—and who would turn up the latter at the sight of a pig and a few fowls in an Irishman's cabin—actually tolerating in their own persons the perpetual presence of the most disgusting organisms;