

THE MEDICAL SERVICES OF BASUTOLAND, BECHUANALAND AND NORTHERN RHODESIA.

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Basutoland.

Basutoland is a small country some 200 by 100 miles, situated to the east of the Orange Free State. The Drakensberg forms a great mountain ridge running from North to South along its Eastern boundary. Most of the Government stations are situated on the Western boundary from whence the country rises in a series of foothills to the magnificent Maluti mountains in the East. There are few trees, and the rolling grasslands are profusely stocked by the cattle and sheep of the native farmers, Europeans being forbidden to settle in the country. The young Basuto men enrich the family coffers by working on the Witwatersrand Goldfields.

The country which is purely a native territory is controlled by the Colonial Office and is administered from the Government headquarters in Maseru. A joint Council of Europeans and native chiefs is held periodically. The Paramount Chief, although deprived of much of his former glory, still exercises considerable influence over his people.

The easy life in Basutoland is a great contrast to the rush of Johannesburg. There is ample time every day for sport—golf, tennis, riding or polo, and the close of the day is usually celebrated quietly and enjoyably at the Officers' Mess or at a friend's house. The social life is the social life of small government communities and is very pleasant.

The Medical Service consists of a Principal Medical Officer and about 10 medical officers, two of whom are stationed permanently at the Leper Settlement. There are five general hospitals in the country. Apart from Maseru there is one medical officer in each of the important Government stations. He has charge of the hospital and dispensary and the Public Health and Sanitation Departments. He receives a salary of £550 with annual increments to £800. The P.M.O. is usually selected from the Senior Medical Officers and receives a salary of £850 with £150 allowances. Medical Officers are allowed private practice which consists mainly of examination of recruits for the Rand Mines at one shilling

per head and as many as 600 boys may be examined a month.

The Basuto is subject to all the ills of mankind and the Medical Officer finds ample material to exercise his interest and skill. Of the major medical diseases, pneumonia, typhoid and typhus, claim particular attention, although typhus is rapidly being controlled. The surgeon will have ample practice at decompressions and pelvic adhesions following salpingitis. Huge myomata requiring hysterectomy are very common, and large keloids of the lobe of the ear frequently must be removed for cosmetic reasons.

Not a small part of the work of the Medical Department is the isolation and treatment of leprosy. Leprosy was introduced into Basutoland about 100 years ago. It spread slowly but steadily throughout the country. A vigorous attempt was made in the early part of the century to check the scourge and a large settlement was established four miles from Maseru. Native health visitors were trained to recognise the disease in its early stages and were sent to all kraals of the country. The native chief is now held responsible for sending all suspected cases to the nearest doctor. Before being transferred to the settlement, the patient must be examined and certified by two doctors and then he is ordered by the local assistant commissioner to be detained in the settlement, where about 900 lepers are allowed to live as far as possible their normal lives on one of the richest farms in the country. They build their huts and are given a piece of land to till so that they help to support themselves. They get ample good food as this is an essential part of the treatment. Treatment by drugs is voluntary, and it says much for the faith the doctors have inspired that in this protracted disease the natives come in large numbers for their Chaulmoogra oil and local treatments. Twice a year, a board of three doctors sits to examine cured cases and to discharge them if it thinks fit. About 15 to 20 are discharged each year as cured.

The control of typhus has been a difficult problem. It is endemic but becomes serious in time of drought. The Basuto people are naturally clean but in times of drought, water for washing is scarce and long grass for thatching is impossible to obtain. The incidence of typhus therefore fluctuates and in times of drought when the rivers are dry

and food is scarce typhus gets a grip on the nation that is difficult to shake off. Propaganda and health visitors to the various kraals have helped to decrease the scourge. The cases are treated where possible in a hospital and as soon as a case is reported, the M.O. visits the village, isolates and disinfects the hut. With these energetic measures, great strides have been made in the control of the disease.

The Government has endeavoured to train the natives to administer their own country, and some very well educated and capable men have been produced and they have a respect for the white man that is rarely seen outside their country. All the minor posts in the Government are filled by trained natives. All the dispensers are natives. All the clerks in the Government offices are natives, and even the Public Prosecutor is a native. When the doctor steps into the witness box he is cross-examined by a native trained in law. The hospitals are run by a European matron and staff of trained sisters, the nurses being native girls of the better classes.

In Basutoland, as in other native territories, there is a strong objection to maternity treatment in the hospital. Very few normal confinements are done in the hospitals and ante-natal welfare clinics are unknown. Difficult cases are brought to hospital only after all the ancient midwives in the village have done their bit towards making the doctor's task more difficult. One woman was brought to me with a 'piece of meat' between her legs. The 'piece of meat' turned out to be the woman's extroverted uterus. The relatives were good enough to point out that a dead child had been born, but of course there had been no violence on the part of the gentle-handed midwife! This objection to hospital treatment is confined to maternity cases which the wise women regard as their special preserve.

The Basuto is proud of looking fat and prosperous and two chiefs, for a long time, rivalled each other in girth, until one developed dropsy and soon left his rival far behind. He was too big to get into the dispensary door so I examined this mountain of sodden flesh on his ox wagon and admitted him to hospital. He broke the springs of one bed, so a double bed was procured and reinforced. He was levered out of the first bed and deposited in state on his double bed. Never before, had

he been in such a magnificent bed and regally he sat in bed and issued orders to his secretaries. Life was splendid for him and he decided to remain where he was. It took two months of diplomatic negotiations and the gift of the bed by the Government, to persuade the gentleman that he was better and that he could go home.

Hysteria is not unknown among the natives. A girl was admitted to hospital who had been unable to move her arms or legs for six months and had to be fed by her relations. Careful examination revealed no signs of an organic lesion but for two months she never moved a limb, nor spoke, and had to be fed and nursed. The Medical Officer then introduced to her the punishment of Tantalus. Every meal time her food was placed before her and removed after half an hour. For three days she starved and then a groping hand found the bowl of mealie meal and she began to eat, and gradually she recovered.

Acute appendicitis is not common but occurs occasionally. From the post mortems I did there, I came to the conclusion that chronic appendicitis in the native is not so rare as is generally believed.

I saw one man die from a ruptured empyema of the gall bladder, and at the post mortem, numerous small stones were found.

The medical officer has to perform his own post mortems as well as any post mortems ordered by the magistrate. He is also forced by law, to be present at official hangings and this is the least enviable of all his varied duties.

The outpatient has to pay one shilling when he attends the Outpatient Department and this covers any medicine which is prescribed. This is necessary to prevent the curious coming to see if they are sick. Venereal disease is treated free and the ludicrous position often arises of natives claiming to have venereal disease in order to avoid payment of their shilling. Weekly clinics are held for venereal diseases and they are well attended.

Basutoland owes a great debt to her efficient medical service, which has conquered the natives' distrust of the white man's medicine, and has raised the standard of health throughout the country. Except in the fastnesses of the mountain, the witch doctor has lost his power and such is the confidence the medical service has inspired in the nation, that it is always easy to get the co-operation of the natives.

The Basutoland Medical Service offers an excellent opportunity to a young doctor who, having finished his hospital course, is anxious to get a salaried position which is pensionable. To one who is willing to work hard, play hard, and mix well, is ready to shoulder responsibility and wifhal wants to live a tranquil, easy life, Basutoland will appeal so strongly that he will regret having to leave the country when the time comes for him to take his pension.

Bechuanaland Protectorate.

Bechuanaland Protectorate is a vast native territory extending from Mafeking, in the South, to the Okavanga swamps in the North, and from the Transvaal in the East, to S.W.A. in the West. It has a fertile strip of country along the Crocodile river which is a European concession. A large part of the country comprises the Kalahari desert, the home of locusts and the Bushmen. For the most part, the country is flat—so flat is it, that one river in the north, fed by the Okavanga swamps, sometimes flows East and sometimes flows West. The scheme of the late Professor Schwartz, of Capetown, to flood the Kalahari with water from the swamp, is regarded as impracticable, as the surveyors found a fall of 20 feet in 70 miles of country.

Bechuanaland Protectorate is administered in the same way as Basutoland by the Colonial Office. The Headquarters of the Government is situated in the Imperial Reserve at Mafeking, which is actually a few miles outside the border of the country.

The Medical Service of the country is different from that in Basutoland, in that various Missionary Societies subsidised by the Government help to supply the medical needs of the people. There are four missionary hospitals. The Government hospitals are situated at Lobatsi and Francistown on the railway, and at Serowe, 32 miles from Palapye Road. In addition to this, there are four travelling dispensaries, two of which are on the railway and two fitted up in motor lorries which make trips into the Kalahari.

There are eight Medical Officers and one P.M.O. Permission has recently been granted by the secretary of State to raise the salaries of Medical Officers to £600 rising by annual increments to £900. Private practice is allowed, but there is very little of it, as the country is poor and there is very little recruiting for the mines.

The type of work is somewhat different from that in Basutoland. Typhus and typhoid are practically unknown, while malaria is very common. Bechuanaland has a similar system of hospital administration as Basutoland, and on the eastern boundary where the hospitals are situated, the confidence of the natives has already been gained, but in the western and northern areas where doctors seldom penetrate, the witch-doctors still hold enormous power over the superstitious natives. The Government is constantly trying to trap them, but they are wily creatures and usually elude the arm of the law. I have seen one young woman driven to madness and murder by the hypnotic powers of a witch doctor, but he played his cards so cleverly that the case against him failed, while the madness he had engendered in the girl, alone saved her from the hangman's rope.

Leprosy occurs in a few cases in the Bechuanaland Protectorate, but as there is no leper settlement, the infected cases are sent back to their kraals. The task of inculcating the elements of public health in the B.P. is a difficult one and very little has successfully been accomplished in this direction. The Public Health department is a small one and much more could be done in this direction. Very little has been done in anti-malarial measures and as these are nearly always expensive it is unlikely that much will be done in the near future.

Each M.O., in turn, has charge of the travelling dispensaries and this duty lasting about five months takes him many miles into the heart of the country. Bechuanaland will appeal to the man who loves the wilds, its vast stretches of uncultivated country and the strangely interesting people who live there. There are no bioscopes, restaurants, or dance halls, and entertainment takes the form of old-fashioned parties. The Bechuanaland doctor is often called upon to travel hundreds of miles into the desert. One never worries about roads in the Protectorate. The wand-like Mopani trees, 12-15 feet high, bend down in front of the car or lorry and spring up again when the car moves on and nothing but a few broken twigs indicate that he has passed that way. While travelling in the desert, the doctor will have to spend many nights in the open. It is often cold at night, and to sit round a camp fire after a long day's travelling and to hear the

roaring of lions disturb for a moment the solitude of the Kalahari is an experience worth remembering.

Northern Bechuanaland is the hunter's paradise, everything from elephants to bush-buck being found there in great numbers.

Northern Rhodesia.

Northern Rhodesia is a vast tropical country, extremely fertile with large forests, but tropical diseases such as malaria and sleeping sickness have so far successfully defied the efforts of ardent farmers to extract the undoubted riches of the soil. A Government medical service under the Colonial Office attends to the medical needs of the natives and the Government officials. The mines at Broken Hill and on the Copper belt have their own medical services. There are two or three private practitioners. Medical officers in the Government Service start at £600, with annual increments to £920 and are given a free house and car allowance. They obtain about six months leave every 2½ to 3 years, with their boat passage paid.

The largest towns are on the Copper belt, just near the Belgian Congo Border. Each of the mines has a P.M.O. and two or three assistant M.O's.. There is no fixed scale of pay, but the average medical officer gets £. 40 per annum, and a free car and petrol, and other privileges. The work mainly consists of dealing with tropical diseases and traumatic surgery. Each mine has a well equipped Native and European Hospital.

The Medical Service in Mufulira, Northern Rhodesia, as well as those on the other Copper mines, are very proud of their record, not so much of their successes in curing disease, but of their success in preventing it. The task of preventing the spread of disease is often a thankless one, and the success of one's efforts depends on ceaseless vigilance and the co-operation of all the inhabitants. In Mufulira the success of prophylactic medicine has been made possible by the absolute autocratic control of the mine manager. All inhabitants of the township reside on mine property and are subject to his orders. Thousands of pounds have been spent on draining swamps, on the building of screened houses, and the installation of water borne sewerage. Every week, the medical officer inspects the drained dambos (swamps) and every year, during the winter, the grass is burned down and every

square foot of ground within the drained area is inspected and all hollows are filled, so that there is no collection of water which may breed mosquitos during the rainy season. A number of grass huts scattered over this area act as catching stations and every week a reliable boy catches all the mosquitos in these shelters. The mosquitos are classified and the numbers recorded. By this means, it is possible to work out the direction from which the mosquitos enter the camp.

Every month each native working on the mine is examined by the medical officer. He is weighed and examined for an enlarged spleen, and if he has one, he is treated daily with quinine.

All the houses are periodically examined for cleanliness and for screening, and if any defect of the screening is found, and if any stagnant water is found in the grounds, the owner is prosecuted. In the rainy months a trained boy pours oil on all puddles of water. The medical officer must inspect every servant before he is allowed to work in domestic service, and if house-holders engage a servant without a medical certificate they must pay full hospital fees for him if he should report sick.

These measures have been so effective that in a camp of 800 Europeans, only 15 cases of malaria occur per month during the malarial season and about two per month in the dry season.

There is ample sport—golf, tennis, rugby football, and other games being played every day. Bioscopes and dances also enliven the social life of the Copper belt. Money is made easily and spent readily.

The mining camps on the Copper Belt are well drained and the life there is healthy. Taking reasonable precautions and not relying on prophylactic quinine, one may live there for years and never develop malaria or any other tropical disease.

Only by the rigid observance of apparently over careful rules, has the medical service of the Copper belt managed to keep their camps as healthy, if not more healthy, than mining camps in more salubrious districts.

As an example of the meticulous care and almost exaggerated measures adopted, I will quote how an epidemic of influenza is treated.

Last year influenza was introduced from the South. We knew it was coming and as soon as it struck the camp, every boy with

the first symptoms of it was put into hospital. Some stayed for two days, and some stayed longer, but the epidemic was dead in a week and only a hundred boys had contracted it.

Every boy admitted to hospital has a blood slide taken and his stool examined. Forty-five per cent of the natives are infected with hookworm when they are engaged, and it says much for the underground sanitation that the percentage of infected underground boys is not increased.

Consider the strange routine of the doctor who examines several hundred healthy boys before breakfast; does his ward rounds at 8.30 a.m.; sees his Outpatients; walks several miles looking for possible mosquito breeding places, and gets quite a thrill when he finds one; inspects the back premises of the butcher; examines the pasturisation of the milk; goes underground to inspect the sanitary arrangements; inspects the killing of meat and, withal, finds time for a round of golf every afternoon.

A post on the mines of Northern Rhodesia is an excellent one for the graduate who has done a few years of general medicine and who wishes to specialise in tropical medicine.

There is a strange call of the Central African bush that is difficult to analyse, but is none the less strong for its bonds being invisible, and few who have lived in the country for any length of time, wish to leave it.

DOCTOR AND CHEMIST

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In the issue of the *South African Medical Journal* of 25th April, there appeared an article on "Unfair Competition in General Practice." An extract from this was published in the *Sunday Times* and daily newspapers. It is unfortunate that contributions of this nature should appear in the public press, as usually an altogether false impression is conveyed to the layman. As an example, one may quote "Intestinal Obstruction" published in the May, 1935 issue of *The Leech*. A letter to a local newspaper giving a garbled version of this article, has left some members of the public under the delusion that the primary occupation of students at the Medical School is the feeding of pieces of knotted string to cats, and other similar cruelties.

The writer in the *S.A.M.J.* under his first heading, *viz.*, "Unfair Competition by Unqualified Persons" attacks the practice of counter prescribing by chemists, of which, he alleges, they do more, than the actual dispensing of prescriptions. Let us look at the question from a broader point of view and try to discover what the attitude of chemist and doctor should be towards one another.

First it will be necessary to consider the training which each undergoes, and for what this training fits him.

The Pharmacist is required to serve an apprenticeship of three years duration in a retail chemist shop, where part of his training consists of dispensing under the supervision of a qualified Chemist and Druggist. At the same time, he is required to attend Evening Classes at an Institution recognised by the Pharmacy Board in preparation for the Preliminary Examination. The subjects for this Examination are Physics, Botany and Chemistry I (Theoretical and Practical) covering a syllabus comparable with that of the 1st year Medicine. At the conclusion of the apprenticeship and provided the age of 21 has been reached, the Preliminary Examination passed, and the required number of hours of study at a recognised institution have been attended, the candidate is permitted to enter for the Final Examination. This consists of Chemistry II (Practical and Theoretical), Pharmacognosy (Oral and Theoretical), Pharmacy (Oral and Theoretical) and Dispensing (Practical). The percentages required to pass are 50% in the first three subjects and 60% in Dispensing. As an indication of the standard required it may be mentioned that only about 1% of candidates are successful at both Preliminary and Final examinations at the first attempt, and few persons are able to qualify in less than four years. For what then does this training fit a chemist? First and foremost, it is calculated to fit him for dispensing, and to provide a comprehensive knowledge of possible incompatibilities and dangerous doses of poisons. At the same time a certain knowledge of the action of the drugs dispensed is gained. The Chemist is expected by the public to have a knowledge of anything which he may sell and this, of course, includes the drugs which he dispenses. If suffering from a headache or bilious attack, Mr. Jones expects the chemist to be able to supply a remedy which will