windows, 2 doors 2 ft. in height. The roof is covered either with kerosene tins or thatched. People cook, sleep and do everything in these huts. Even some are confined in these. They are back-to-back houses with filthy drains running in front. The people themselves are so dirty and filthy and don't care how they live. If I advise them, they just answer me and say they are living in these huts since 10 or 12 years, and nothing has happened. Their caste is *adhi dravida*. They are very superstitious and still carry on some of their old habits. I come across so many cases of angular stomatitis in this locality. Their staple food grain is polished rice. They eat very little vegetables. Milk is not consumed, because it's expensive. This is all I can write about my work at present.

Yours sincerely, S. CHINNAYYA, H. V. L. 22.

THE MEN NURSES' SECTION

Danish Mission Dispensary, Vadakanandal

By MR. DANIEL, T. N. A. I. 44
Danish Mission, Vadakanandal, Kachrapalayam P. O., Kallakurichi, S. Arcot District

Vadakanandal is a village on the western border of South Arcot District in Madras Presidency. But for its natural beauty there is nothing worth to mention, neither religious nor historical importance attached to this place. On turning to the west one would easily see rows of high hills, covered with green plants and trees. It is a reserved forest. The old inhabitants are still occupying the hill. They are a set of people without any civilization and the Government has no direct control over this people. On all other sides there are dry and wet lands with plenty of palm trees and a good number of artificial lakes for the purpose of irrigation.

This place is poor in health, wealth, and education. Only a small percentage can read and write. Untouchability is at its highest. Ignorance, illiteracy, superstition and poverty are the main causes for the spreading of disease, and these remain like giants to be fought with. Most of the houses are single-storied, thatched with hay, without any windows and if at all there is one, it is too small for any useful purpose. It is not uncommon in a good number of houses the human members and animal members having the same room to sleep. Throughout the day people are out in the fields and only for the part of the night at home. This village is extremely filthy. For sanitary conveniences the villagers have the back-yards, roads, and fields. Their principal scavangers are the sun, pigs, and rain. Just outside the village we come upon a collection of pits about a foot deep in which are piled refuse and manure and garbage of every description; the wind stirs and carries particles of filth and infection through the village. In the wet weather stagnant pools are allowed to collect in the village street, to serve as a breeding ground for the death-dealing mosquito.

There is no hospital nearby and the nearest one is 8 miles away from this place. There are a good number of quacks who are so-called native physicians, most of them are without any qualification whatsoever. Malaria, venerial disease, leprosy and tuberculosis are very common. There are a good number of villages around this place with same or worse conditions.

In January 1938 a dispensary was opened by the Danish Mission and a nurse was appointed in charge of the dispensary. A doctor from the Danish

Mission Hospital, Thirukoilur (main hospital) visited the dispensary once in a week and gave directions to the nurse about new and old patients. There was a bright beginning and the work was encouraging. But after a month or so the nurse who was in charge of the dispensary resigned her post and the authorities had to close the dispensary. Within this short time she was able to give medical aid to about 850 patients new and old, of various disease.

In March 1938 I was appointed as a nurse in the above dispensary. We may have to undergo several difficulties which we may not come across when we are working in well-equipped hospitals, under or with experienced and responsible hands. That so soon after finishing my training, to begin a new life, to work among strange people in a strange place and strange customs I never thought that it was possible for me to stay here even this short time. The work in a place like this is a bit responsible and at the same time the individual should not abuse the privilege which she or he is given. There are occasions when one has to use his discretion, at the same time should not give any room for others to criticise nor degrade the nursing profession.

Only very few people around here have belief in or have experienced the efficiency of foreign drugs. The patients turn to the dispensary when they have found all other means a failure. A good number of quacks are still active in doing propaganda against foreign drugs. They say that foreign medicine is incompatible to Indian body and if one has taken it, Indian drugs will not act on them.

I hope it may not be out of place if I write about some cases which I have come across during my short stay here. One evening a male child, about one year old, was brought in by his parents along with a native physician. When I saw the child his pulse was almost imperceptible, and keeping high temperature. Respirations laboured and fast and there was difficulty in swallowing. Tongue was thickly coated and mouth ulcerated. Glands around ear, neck and axilla were swollen, tender and red. Eyelids of both eyes also swollen and closed. One could see the eyeball only with great difficulty, which was without shape and there was foul odour from them.

When I asked the parents how it happened they told that the child was vaccinated some days ago. The ulcer after vacination remained without healing. The glands around the neck began to swell. Afterwards they noticed some scratches around the eyes and on the face. The child soon got high temperature and the eyes were affected. At this stage they took the child to a quack who advised to have continuous eye wash with certain plant juice which was caustic. They continued the continuous wash for two days. The man who treated the child never returned to the patient after seeing the eyes. So the parents took the child to another quack who treated for one day. Afterwards he advised them to take the child to the dispensary. Without my saying that this is not a case to be treated in a dispensary like this, and after cleaning the mouth and ulcers, and eyes dressed, the parents were advised to take the child to the nearest hospital for efficient and proper medical aid. Though the parents consented to do so they never went to any hospital and I received information that after two days the unfortunate parents lost their only male child for ever. If there had been some one who could have taken care of the child in the early stage of the disease or to direct them to a hospital, one could have saved the life of the child.

The hill near this place is highly malarial and there is a general belief that it is due to the anger of the hill god. There are people who will not treat for malaria but try to please the god by offering animal sacrifice. Once I happened to go to a village two miles away from this place, there I saw a

man about thirty-five, almost turned to skin and bone. He was in bed for more than two months. He was getting fever with chill every third day for some time. When I saw him he was semi-conscious and his condition was very poor. His relatives were sitting around him and cursing his fate and making the last request to hill god to have mercy and save the man. They had already made several animal sacrifices without any good effect. Because they were so sure about the cause of the disease and hence the appropriate treatment—to please the hill god, they never wanted to treat the patient by any other means. Finally they consulted one sorcerer who told that nothing would save the patient and it was written on his forehead that he should die like this. The patient expired after a day and it was more or less a human sacrifice.

Very recently an old man came to the dispensary with his right eye swollen and ulcerated. His eye was injured a few days ago and was treated with blood from a fowl's leg and ginger ground in milk. Every one can expect the result. Though the ulcer healed, the poor man lost his right eye.

A man was bitten by a scorpion. A tight knot was put above the site of bite and actually burned the area. The result was gangrene of the finger and he was lucky enough to save his left hand and even life itself.

It is very common fresh wounds and ulcers are treated with cowdung, ash, charcoal and so on.

There are ever so many such examples to be told. These people do so, simply because of their ignorance about the causes of disease and its complications. They do not know whether these diseases can be prevented and also can be cured if treated properly.

The day's work is begun after reading a portion from the Bible followed by a short prayer. Then things for dressings and anything else to be sterilized are done. After this, new and old patients are seen and dressings and dispensing done alternately. There is not much dispensing but there are a good number of patients with ulcers of different kinds and ears and eyes to be taken care of. Morning work is over at about 12 a.m. and again from 4 p.m. till all the patients who come are treated. Farmers and coolies return only after 6 p.m. and they come later for treatment.

I am neither supposed to, nor do undertake any serious case for regular treatment but direct the patient directly to the nearest hospital for efficient treatment. If it is a case which needs first aid or stimulant I do it from the nursing point of view. Cases which are not serious are attended. With regard to old patients I have directions from the doctor. Whenever it is possible I try to explain the cause of disease as far as I have known, and its complications and treatment or the care that the patient himself can do, such as by regulating the diet, exercise and general hygiene. Then something is given or done to relieve the patient. This work is purely a medical propaganda, neither for personal gain nor for competition. Whenever there is time to spare, people are seen in their houses especially patients who are treated who need any instruction and care.

To be in a place like this one has to sacrifice personal conveniences and also undergo several difficulties, which he could never expect if he were to be in a town or city. Medical propaganda in villages should be encouraged with proper directions and supervision for the relief of thousands of suffering humanity. At present the hospitals are touching only the fringe of the need and suffering of the villages. It is especially on the women's side that the need is the greatest. The one who engages in medical work in India is likely to find himself or herself asked to make the hardest of all sacrifices—that of his professional pride and of his professional ambition. It is gratifying to learn that in some provinces vigorous medical propaganda is done in the

rural areas. The life of India is in the villages. Unless villages are clean, healthy, educated and of good character, there cannot be any redemption to this great land of India with it seven millions of villages and 355 millions of people.

ELECTROCARDIOGRAM

By Mr. S. A DAVID, II YEAR STUDENT MAN NURSE
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An electrocardiograph is a machine which is used in finding the condition of the heart in certain diseased conditions, in order to make a correct diagnosis in heart disease. It is an important aid in the study of heart disease of any kind.

Electrocardiogram is of much value in three ways :—

1. It tells us more clearly than any other procedure about the condition of the heart muscle.

2. It clearly points out and differentiates abnormal rhythms such as Auricular Fibrillation, Auricular Flutter, Ventricular Tachycardia, when these cannot be diagnosed by physical examination. Electrocardiogram does a great deal in understanding and treating these conditions of the heart.

3. It is a valuable aid in several specific dieases, namely, Coronory Occlusion, Acute Rheumatic heart disease, Arterio-scleorosis of the coronory arteries, Pulmonary Embolism, Pericarditis, Heart Disease associated with hypertension, Congenital heart disease and Digitalis poisoning.

Main principles in operating the machine :—

First of all the patient who is to be examined, should be placed in a desired position. The electric wires which are called leads, are usually attached to the left arm, right arm, left leg and over the apex of the heart. A satisfactory contact between the wire and the skin is ensured by scrubbing and coating the skin with a good conductor, such as aline jelly or pads wet with normal saline. These are strapped in place and a metal electrode to which the wire is attached, is applied over them. These preparations should be done by the person who is operating the machine. When the patient is ready the operator puts on the electric switch. The currents are thus carried to the machine where they place a tightly stretched silver-coated glass string to move backwards and forwards. In the magnetic field, according to the beatings of the heart the movements of the glass string are photographed by a camera on a moving film. The rate of the movements of the string are marked. This will be done for one full minute.

When the heart muscle contracts, changes occur which result in the production of electric current which passes first through the auricles and then through the ventricles during each heart beat. The record obtained by their operation will vary with the condition of the heart muscle. A diseased condition in the heart muscle will often interfere with the passage of the electrical impulse and result in an abnormal record. Abnormalities of rhythm can be found out by the various kind of waves.

This sort of graphic method can help the nurse to understand what the physician is seeking to discover through the electrocardiogram.

It deserves special mention in conclusion, that though the electrocardiogram is of great value to the physician, yet it is used only as an aid for diagnostic purposes and a guide in treatment. It is a method of thoroughly examining the heart, which reveals changes often not to be detected in any other way. But it must be fitted into the clinical picture as defined by the history and physical examination.

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