Tuberculosis

Domiciliary Care

By

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What is meant by Domiciliary Care?

"Domiciliary" means 'pertaining to the home'. "Care" covers more than the word cure or treatment. It is something more than a mere Home Treatment. We might try to answer a few simple questions:

1. Why Home Treatment in TB?
2. What is the content of the total programme?
3. What is the organisation for such a scheme?
4. Is it effective?
5. Is it safe?
6. What is its place in the total control programme?

1. Why Home Treatment in T.B.

It is calculated that we have in our country nearly 25 lakhs of persons suffering from tuberculosis needing isolation and treatment, and we have at present about 20 thousand beds in various sanatoria and hospitals—roughly one bed for every 120 patients, i.e., if one person is admitted, 119 will be helplessly, disappointedly and meaninglessly waiting for their turn. With some luck, some may get well, but others may die even before their turn comes. Unless something is done to help them they will be marching on swift feet to the grave and in their journey may collect comrades to follow in their turn the same path to the same end. The tubercular patient does not know which friends and relatives he may collect, and they would not know who are being entrapped in this snare of death and misery. They are likely to be near relations, friends and neighbours.

Tuberculosis—Domiciliary Care

These articles by Dr. Sikand and Mrs. M. Paul are two of the four papers presented through a symposium at the TNAI Conference, Lucknow.—Ed.

The neighbourhood increases with the movement of the infected individual. With today's fast movements and modern social structure one can imagine how wide the distribution of infection can be. We have to fight such a situation.

All infectious diseases are caused by germs. In control, one has to "find, isolate and treat, educate and rehabilitate tubercular patients", both known and unknown. The problem of isolation education and rehabilitation will be dealt with by other speakers so I shall try to confine myself to the problem of 'finding' and 'treating' patients.

From the point of view of control, it is not enough to treat a few selected cases in hospitals, to show feats of medical and surgical skill, but an attempt has to be made to provide a mass approach to the millions of infectious foci. If hospital facilities are not possible or at least till they are possible, it is essential to provide for as many patients as possible. The necessary preventive care wherever the patients are, i.e., in their homes. This reduces their misery and helps to eliminate the foci of infection. This takes us to the home for mass treatment and for health education of the patient and the family. A preventive approach has to be a mass approach, and if it cannot be provided from an indoor institution, it has to be
provided from T.B. clinics. Tuberculosis primarily being a family disease, the home has to be focus of attention in any case.

2. **What is the content of the Total Programme?**

   This approach is not a simple handing out of antibiotics and mixtures; it has to be properly organised. We in our Indian parlance call it the **Organised Home Treatment Scheme**. It is a plan and a scheme. What do we organise? It must attempt to cover all aspects of a proper control programme. Each item has a contribution to make to prevention and include:

   1. Organised search for infected patients.
   3. Organised preventive measures.
   4. Organised social relief and rehabilitation.

   The place of all these in a **Domiciliary Service** is shown in the accompanying diagram.

3. **What is the organisation for such a scheme?**

   The details of the organisation are shown in the diagram. It needs a well integrated team of doctors, public health nurses, health visitors, medical social workers and “Care” Committees; all working in unison for the common object of meeting the medical and social needs of the patient and the family.

4. **Is it effective?**

   The question posed is what can be
done with, and for, the mass of tuberculous patients, who are discovered by modern diagnostic measures?

Modern science has discovered specific and effective antibiotics against tuberculosis. Treatment is mainly and can be wholly medicinal, if all cases are diagnosed early. It is the sequel of late diagnosis, which have to be corrected by surgery. Many patients who in the past needed surgery are now easily and effectively controlled by medical treatment. If antibiotics fail to complete the cure, they prepare the patients for surgery and provide an effective cover for safe surgery. Such is the progress of medicine in relation to tuberculosis. Antibiotics are as effective in a hospital as in a hut—what matters is the amount of antibiotics given, not where. When talking of the hut, I wish to convey that minimum provision for isolation to organise prevention effectively is needed, as well as enough food to keep life adequately supported. The need for expensive and highly nutritious diets of the sanatoria regime, have now, with the specific drugs been, to a great extent reduced to an average balanced diet. Nobody can live without food, the tuberculous patient is no exception, and everybody needs to have an adequate and a varied diet. These are human problems and not necessarily specific to tuberculosis.

For example, we know that in Delhi 65% of the people live in one room, ill-ventilated tenements; satisfactory isolation is possible in about 20% only, that the total family income is less than Rs. 200 per month in about 90%, and less than Rs. 100 in about 75%. Such is the socio-economic atmosphere, which is shared equally by the tuberculous and non-tuberculous citizen in the capital. Therefore social relief is an essential part of the control programme. Without going into details I can say that one has to canalise all resources till social relief becomes a right of the individual, as in the Western countries.

Is the effort worthwhile? The result will provide the answer.

In an analysis as patients treated from our Domiciliary Service, we find that nearly 50% of those registered for admission became non-infectious and needed no hospitalisation by the time their turn came. I must tell you, that in Delhi the number of beds available per 1,000 of the population is the largest in India, yet the waiting period is 8—10 months. Nearly 80% of the patients are treated entirely in their homes; the remaining 20% get admission for a short period only, and of these nearly 80% of the total disability period, is spent in their homes. It is in this context that you judge what credit you can give the home treatment as conducted from a clinic.

(a) Overall sputum conversion is 80%, but considering those who completed the treatment as advised, it was nearly 90%. 60% conversion took place during the first three months—this emphasises the value of the treatment as a preventive measure.

(b) Overall cavity closure, which is one of the main criteria for the control of the disease, is 61% but taking into account those who complete the treatment as advised, it was nearly 75%.

(c) An analysis of the working status at the end of the year of those treated under Domiciliary Care was 60% working (52%, with, and 8% against advice), 25% still needing rest, and 13% not yet completed 3 months treatment. Under 2% of the patients diet.

(d) Regarding the stability of the result of treatment—relapses during observation from 6 months to 3 years was 17%.

(e) Deaths amongst those completing treatment is 0.5% as against 15% in those who left the treatment incomplete, and at least 50% in those who had no treatment at all.

Further results of those who were, and those who were not hospitalised, were highly comparable. Some patients would necessarily need hospitalisation to meet specific surgical needs, but all need not go on waiting helplessly and disappointedly for a bed that may not materialise. These results are a pointer to what can be done through an organised scheme of Home Treatment.
5. Is it Safe?

(a) The answer is yes—if the minimum conditions are met. A tuberculous patient is dangerous to the family while infectious—the rate of conversion represents the effect of treatment on prevention.

(b) A careful tuberculous patient is not dangerous to live with. It will depend how much and how effectively they cooperate in following preventive advice.

(c) The effect can be judged from secondary cases in the homes—2% of the contacts are found to have inactive disease at the initial examination which is a markedly low figure. A good index is the discovery of miliary and meningitis cases amongst contacts of known cases. Our analysis shows this to be rare.

6. What is its place in the total control programme?

If this much can be achieved, is there any scope for doubt? Appreciation and courage is needed. Patients know it by experience, and they even teach the doctors. In countries with a large number of sanatoria beds, patients today prefer domiciliary treatment, and beds are lying vacant. We started Home Treatment 17 years ago and we were considered to be out of tune and time, but home treatment of the tuberculous patient is the fashion today and we are in good company! It has been our approach for a number of years, and we can now advocate with confidence. I have tried to convince people that this situation is no mere index of lack of resources, but is also conditioned by the success it can bring for the individual and the community. It is based on successful results and is in keeping with trends in other countries where mass approach is the aim and objective. Home Treatment has the moral and social advantage of not interfering with the family life in the home and is comparatively inexpensive; you can treat 3-4 patients for the cost of treating one in a hospital bed. With the limited resources, both financial and technical, we have to cut the cost according to our cloth. Thus our national control programme lays down the following priorities (1) B.C.G. (2) Domiciliary Service (3) Training Centres (4) Isolation beds for infectious cases (5) Research. You can see how high the Home Treatment stands in this picture of priorities.

Domiciliary Nursing Care

With Emphasis on Disposal of Sputum

By

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Domiciliary Treatment and why it is the main plank of our National Tuberculosis Programme, has already been discussed by Dr. Sikand. The chief advantage of sanatorium (at least in these days of anti-microbial treatment when majority of patients can be treated effectively from the O.P.D. also) is isolation and thus prevention of spread of infection to the rest of the family and other contacts. Therefore home-treatment, if it is to be as effective as sanatorium treatment from the community’s point of view (rather than the individual patient’s