Role of Nursing Personnel in the National Tuberculosis Programme

II—The Re-orientation of the Teaching Programme in Tuberculosis

By

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The last 15 years have seen great changes in the treatment of tuberculosis. These have necessarily affected our approach to preventive aspects. No definite treatment for tuberculosis was available before 1948. Cure was slow and uncertain. Many lingered and progressed slowly towards death. Alarming and dangerous complications, rare now, were very common then.

Infective period of the patient was prolonged. Living conditions being poor, isolation was not possible even in 25 per cent. of the known infectious cases. Therefore the activities of a Health worker were mainly preventive advice in the homes e.g. care of sputum and teaching elementary home nursing to the patient and family etc. Knowledge of home nursing was essential as the disability of the patient continued for a long time.

The advent of modern antimicrobials has ushered in an almost revolutionary change in the outlook for a tuberculosis patient. With effective treatment the symptoms disappear quickly. Cough is alleviated early. Sputum is reduced in quantity and converted from positive to negative in 60 to 80 per cent. patients in about 6 months time. The infective period thus is very short. Patients are no longer very ill. Hospitalisation is no more considered essential for every patient.

Madras Chemotherapy Centre studies have shown that household contacts of poor patients treated in their homes with virtually no facilities for isolation, developed disease no more than the contacts of

the patients isolated in hospital soon after diagnosis, provided the patient in the home got effective treatment. Field studies in some centres like ours, and animal experiments in USA also corroborate that if good treatment is provided and regularly taken, isolation may not matter.

In fact, in underdeveloped countries like ours, hospitalisation today is necessary only for failures of domiciliary treatment, for cases needing surgical treatment or where bacilli have become resistant and when complications arise which cannot be treated in the home or the patient is homeless and helpless. These far reaching changes must lead to re-orientation of the training programmes for different categories of trainees. I will deal with the subject under three headings:

1. Training of nurses working in General Hospitals.
2. Training of personnel working in generalised Public Health Field (Public Health other than T.B.).
3. Training of Public Health Nurses and Health Visitors working in T.B.

1. Suggested Syllabus for Nurses working in General Hospitals.

Since the emphasis in underdeveloped countries at present is on domiciliary treatment of tuberculosis and only some T.B patients are admitted in hospitals for a short period, and most for specific indications already mentioned, it is desirable that the training should devote greater attention to domiciliary treatment than at present. Since the symptoms disappear quickly, a T.B. patient does not require any elaborate nursing even in the hospital, except in post-operative and very advanced or dying cases. It is therefore felt that one month’s training in tuberculosis should be enough for nurses in general. This one month’s training should include 12 to 16 theoretical lectures on various aspects of tuberculosis e.g. causation, spread, management, including pre-operative and post-operative care and prevention etc. to provide the necessary background for practical training.

Practical training must include:

(a) Two weeks posting in a T.B. Clinic where they can get conversant with diagnostic procedures, BCG vaccination, contact examination, home visiting, care of sputum, preventive work in the homes, supervision of drug taking to ensure regularity and the influence of social and economic factors.

(b) For the remaining two weeks, the students may be posted in T.B. hospitals or sanatoria where they can be taught nursing techniques, diet, value of diversional therapy, pre-operative and post-operative care etc.

Such a comprehensive training will enable them to work even in tuberculosis institutions if called upon to do so, after completing the general nursing training.

We must also impress upon our
student nurses that working in tuberculosis institution involves no undue hazards to nursing staff or to any category of staff. If all patients are made to cover the mouth while coughing, they are safe. Wearing of mask by the nursing staff is practically useless and gives a false sense of complacency. X-ray examination of staff is essential every three months in a tuberculosis institution and yearly in general hospitals. This, along with general care of health and diet should provide adequate protection to the nursing staff.

2. Personnel working in General Public Health Field. (Public Health other than Tuberculosis.)

It is desirable that Health Visitors and Public Health Nurses working in Maternity and Child Welfare Centres, General and Specialised hospitals, School Health Service, Family Planning and V.D. Centres etc. should have elementary knowledge of tuberculosis control measures also, because:

(a) Public Health cannot be divided into watertight compartments.

(b) Integration of tuberculosis with general public health is very essential.

(c) In rural areas it is not possible to have specialised health visitors in different fields of public health e.g., Maternity and Child Welfare, Tuberculosis, School Health, V.D. etc. A health visitor therefore should be given some training in all disciplines of public health to enable her to look after all types of health needs of the rural communities. These poly-valent health visitors based in primary health centres can then help in tuberculosis control programme also.

About 10 to 12 lectures and two weeks posting in a TB Clinic for practical training in domiciliary treatment and prevention in the homes should be included in the basic training of all public health personnel. These categories of students need not have hospital experience as they are not likely to be required to look after indoor patients in hospitals.


The syllabus in tuberculosis training is almost identical for health visitors and public health nurses but the public health nurses have more comprehensive knowledge and background and will therefore require a shorter period of training than health visitors. The public health nurses moreover have to train other personnel like health visitors, but the health visitors can only carry out the preventive work in the homes.

For public health nurses, 12-16 lectures and 3 months, practical training in home visiting and orientation in different departments of a tuberculosis clinic should be enough. For health visitors apart from lectures on tuberculosis, it is essential to give them some idea of all aspects of public health.

The health visitor’s course in New Delhi TB Centre at present lasts for one year. During the first two months, two students are posted in the Nursing College to study Anatomy and Physiology, First Aid, Nursing Arts with special reference to Home Nursing. The next five and a half months are spent in the TB Centre where in addition to about 40 lectures on tuberculosis, they get 4 to 10 lectures each on Personal Hygiene, General Hygiene, Communicable Diseases, Social Welfare, Mental Health, Dietetics, Public Health Administration, Economics, School Hygiene, Household Management and Maternity and Child Health. Observation visits and field trips are arranged to different places like Water Works, Sewage Disposal Plant etc.

Emphasis in lectures on tuberculosis is mostly on good treatment (treatment being the most important and effective tool of prevention) and care of sputum (including droplet nuclei). Other activities of a health visitor are examination of contacts, BCG vaccination, health education, motivation of patients at the Centre helping in case finding programmes i.e., to advise X-ray of persons having cough of more than one month duration. They also work as field social workers by arranging economic assistance and social adjustments wherever required in consultation with the qualified medical social worker (if there is one on the staff) or by mobilising voluntary agencies like the Care and After Care Committees.

They go for home visiting practically every morning during the five and a half months' posting at the Centre. After two weeks posting in a Maternity and Child Welfare Centre, they are posted for one month in Lady Linsithgow Sanatorium, Kasauli. This nine months’ training is followed by an examination. The last 3 months they work as interns, making independent home visits under the supervision of staff health visitors. Thus by the time they complete their training, they have an adequate knowledge both theoretical and practical and are capable of taking up their duties independently in TB Clinics.

Finally, realising that facilities for domiciliary treatment are expected to expand considerably during the next few years and sufficiently large number of trained health visitors (who are key personnel for domiciliary treatment) may not be available, we have recently started an experiment in New Delhi T.B. Centre, whereby matriculants are given 3 months on-the-job training. These aids can then effectively discharge some of the routine duties of health visitors.

With the two types of personnel available, we have divided the duties according to their training:

Fully trained health visitors make the initial visits, keep the record of antimicrobial treatment, and are responsible for arranging social-economic help and other responsible duties. The main activities of the aids are to prevent drug default and to call patients to the Centre for miscellaneous purposes like completing of investigations etc., which do not require the technical training of health visitors. This experiment has been going on now for nearly two years and I think is very successful. By providing two such aids to one qualified health visitor, we can cover a larger population more effectively and yet cheaply. I would certainly recommend this experiment to the other institutions concerned with training of TB Health Visitors.

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