Role of Nursing Personnel in National Tuberculosis Control Programme

By

Dr. D. R. Nagpaul,
Director, National Tuberculosis Institute, Bangalore.

In recent years there have been several anxious enquiries about the role of nurses and nursing personnel in National Tuberculosis Control Programme. These appear to arise from a growing feeling that the advances in knowledge about tuberculosis and its control have so changed the importance of nursing in it that the traditional role of nurses needs to be redefined.

Traditional role

As a profession, nursing is concerned primarily with the care of the sick: to bring them back as healthy, productive members of the community, as quickly as possible. Till lately, treatment of tuberculosis patients was carried out in tuberculosis hospitals and sanatoria on the basis of rest in bed, good food and careful nursing, and special measures like A.P., P.P., or surgery. For successful treatment, nursing was considered very important and special training courses in "tuberculosis nursing" were organised because of the infectious nature of the disease and the necessary prolonged stay of patients in sanatoria to complete their treatment. Then, advent of potent anti-microbial drugs started the shift away from surgical therapeutic measures, after 1945. The treatment and the care of TB patients became somewhat simpler. But, nursing and bed rest continued to enjoy undisputed influence as essential factors in the treatment of tuberculosis for another decade or so. The inadequacy of tuberculosis beds in the country and the favourable possibility of carrying out chemotherapy in the homes of patients gradually led to the development of domiciliary treatment from TB clinics. Home treatment, however, was regarded second-rate: to be resorted to when admission into sanatoria could not be arranged. Attempts were made to introduce as much as possible, isolation, sputum disposal, bed rest and good nursing into "home treatment". This brought the public health nurse and TB health visitor to the forefront. Working together, they tried to ensure that treatment was taken regularly; that contacts were sent for examination and that patients attended the clinics for regular periodic check up. The public health nurse and the TB health visitor became almost as important as the medical staff in TB clinics or the TB nurses in sanatoria.

Recent advances

After 1960, the Tuberculosis Chemotherapy Centre at Madras in a series of researches has come forward with convincing evidence that:

(i) home treatment is as good as institutional treatment and not a second-rate treatment;

(ii) general measures like bed rest, good food and nursing exert very little influence compared to the overpowering effect of the modern anti-tuberculosis drugs;

(iii) as high as 90 per cent. good results (quiescence) can be achieved with institutional or domiciliary chemotherapy; given regular drug taking, in the prescribed doses, and for a minimum period of one year; and

(iv) the spread of infection to "contacts" after the diagnosis is very little if adequate chemotherapy can be ensured.

In other words, proper "treatment organisation" has now become the most crucial factor in the treatment of tuberculosis; replacing the earlier principles of bed rest, careful nursing and good food. It would appear that for organising treatment properly one would require a person who has been specially trained in the organisational aspects of chemotherapy of tuberculosis; has the necessary mobility to reach TB patients from the "treatment centre" and has the capacity and the "status" to win the confidence of the patients. In so far as institutional treatment is concerned, with the decreasing acceptance of surgery by patients admitted to sanatoria and the scarcity of newer secondary type of drugs under cover of which drug resistant cases can be treated wherever effective domiciliary treatment services have been organised, sanatoria and TB hospitals have lost the "traditional" waiting lists and their importance as centres providing the "choice treatment".

Since 1950, the National Tuberculosis Control Programme has been under development. During the first five year plan, only the mass BCG vaccination scheme was given the status of a national programme. It was obvious that the requisite number of medical officers or nurses could not be made available for the BCG programme, on the pattern of the campaigns carried out in the Western countries. Matriculate boys were, therefore, selected and given brief intensive practical training in tuberculin testing and BCG
vaccination. They were made to work under supervision of medical officers. Their success opened up a new vista: that large public health programmes would succeed if sufficiently numerous para-medical staff could be trained to do a particular job and employed under well-trained nurses or medical officers afterwards. Since the Second Five Year Plan, the establishment of TB clinics and expansion of domiciliary treatment services, inter alia, has been made a part of the National Tuberculosis Programme. One of the problems that arose was how the experience, as was obtained during the BCG campaign, could be harnessed to implement the community-wide tuberculosis case-finding and domiciliary treatment, visualised under the National Tuberculosis Control Programme, as the problems of staff and training were similar. Another, how case-finding and treatment services could be extended to the rural areas. The contribution made by the National Tuberculosis Institute, Bangalore in this respect has been to show that a reasonable, practically and economically feasible, and logical way to implement the community-wide tuberculosis control programme is to integrate it with the general health services. In the rural areas (representing over 80 per cent. of the country’s population) it is the only way since a specialised tuberculosis domiciliary treatment service is impossible (nor considered desirable by some) in the foreseeable future. We have, therefore, to discuss what category of workers is best suited to take up “treatment organisation” in rural and urban areas? Could he or she be a nurse?

For urban areas, the method of employing T. B. Home Visitors, working under a medical officer or a public health nurse or a senior home visitor, has been well tried under the relatively older concept of home visiting where every TB patient had to be visited periodically. It is a matter of opinion how successful this methodology proved. Generally speaking, public health nurses were difficult to get and employ, medical officers seldom found time to supervise home visitors’ work in the field or even examine their ‘diaries’ critically; and the number of home visitors that could be employed was often too inadequate for the visits expected to be made. Now emphasis has shifted to the rural public notice: attention has to be focussed entirely on “treatment default”. Only those who fail to collect their medicines from the clinic or whenever they fail to do so need be visited and reminded to collect their drugs. Others, who are known to collect their drugs regularly but somehow do not take their drugs (if this can be found out easily), also would need to be supervised and educated. In cities, where specialised TB clinics exist, a suitable type of worker could be employed by them to achieve this end. For rural areas, this solution does not present itself for obvious reasons and we have to think of an available person who could fill the requirements to the largest extent. The question boils down to this: are public health nurses and home visitors (both categories being highly qualified) really the right type of personnel for this purpose?

The National Tuberculosis Institute has gathered some experiences which are very relevant to the above consideration. Firstly, if tuberculosis case-finding and treatment have to be integrated with general health services in the districts (or work in as close a collaboration as possible with general hospitals and dispensaries in the cities) then “treatment organisation” has to be entrusted to the staff employed by these services and not to any specialised staff that the TB programme can provide. Secondly, the intensity of symptoms or the “suffering” in individual patients before the start of their treatment appears to be a far greater insurance against “treatment default” than what could be achieved so far by routine motivations or home visits. Thirdly, the main achievement of home visits, under the newer concept, where defaulters only are visited, appears to be a reminder service to patients to collect their drugs. This purpose could be gained to a considerable extent by sending them only a post card, in a survey in a rural area under the District Tuberculosis Programme, it was found that of those who did not come to collect their drugs and were reminded by a post card; 5 per cent. were dead, 33 per cent. got the letters and responded, 27 per cent. did not get the letters as the address (at the clinic) was incomplete or incorrect, 20 per cent. were known to have migrated and 10 per cent. could not be traced, and only 5 per cent. got the letters but did not respond. Of these small numbers - who purposely fail to come up for drug collection a large proportion are those who have failed to derive any benefit from the treatment (reasons cannot be discussed here) and a trained home visitor or a public health nurse could possibly retrieve for treatment only a few among them.

The New Role

Whether one likes it or not, the inability of treatment centres to generate confidence in their patients appears to be a greater factor leading to “treatment default” than the lack of trained home visitors for domiciliary service. We have found that compared to where a public health nurse was in charge of domiciliary visits there was no greater regularity in drug collection than where only post cards or reminders through persons living in the same village were made use of. Until we can understand this complex question of “effective treatment organisation” under the National Tuberculosis Programme better, it is difficult to say definitely whether nurses or nursing personnel will have any important role to play in it or not. Two factors seem to suggest that nursing personnel should continue to play a role in treatment organisation for tuberculosis. Firstly, the crucial importance of health centres winning the confidence of the people has been mentioned. The principal role in this has to be played by the Medical Officer in charge of the dispensary or health centre but the nursing personnel (of the general health services) can render considerable assistance in that direction. Next to the Medical Officer, they are the people who contribute most to relieve the suffering of patients. Confidence winning is likely to be a very difficult and exacting requirement and for success it appears necessary that all the health needs of the community and not tuberculosis alone must be attended to properly by the health centres. Secondly, the auxiliary nurse-midwife (A.N.M.) is destined to become the peripheral-most nursing staff who would be in most intimate touch with families for their health.