

EDITORIAL

PLANNING THE DERMATOLOGIC SERVICES IN A COUNTRY(I)

Four decades after attaining independence and planned medical services, it is time to review our achievements and failures. In a series of articles therefore, an attempt will be made to describe an outline of the strategy which could or should have been adopted, so that the readers can evaluate whether and where we have gone off-course. This may also serve as a guideline for future strategies.

The medical profession has got to bear in mind that their most important function is to alleviate human suffering, and to achieve this, the profession has to have, (1) information about the type and extent of diseases that occur in the country i.e. medical surveys, (2) the means to deal with such diseases i.e. therapeutic facilities, and (3) the experts to undertake curative and/or control measures, i.e. trained staff. In the first article therefore, let us evaluate how far we know about the type and the extent of the dermato-venereologic diseases that occur in our country.

The over-all situation in this respect in our country is neither too good, nor too bad. For instance, we do know that scabies, pediculosis, pyoderma, fungal and other infections still constitute a large proportion of our patients. It is also well-known that certain diseases are endemic in specific areas of our country. For instance, a special type of tinea capitis called favus caused by *Trichophyton schonleinii* is specially common and limited to the Kashmir valley, cutaneous leishmaniasis caused by *Leishmania tropica* occurs in the north western parts of India especially Rajasthan, Kala-azar and post kala-azar dermal leishmaniasis caused by *Leishmania donovani* is prevalent in

north eastern parts such as Bengal, Bihar, Orissa and eastern UP, leprosy is most highly prevalent in Tamil Nadu and Andhra Pradesh, while piedra is so common in Kerala.

We also have some idea of the prevalence rates of other dermato-venereal diseases, but if one wants to be more critical and accurate, the presumptive element in our data becomes quite obvious. Taking the example of leprosy data, it is often quoted that we have 4 million leprosy patients in India, but in the absence of actual surveys, it is at best a rough guess. The same thing can be said about most of the other reports dealing with prevalence rates.

The most ideal method of collecting this type of data would be to examine each and every individual (total population survey) and enlist the diseases that they suffer from. In a limited population this may be possible, but considering the numbers involved in India, this would be almost impossible. A compromise therefore, consists of sample surveys in which all the individuals in a limited geographic area are surveyed. Even in such surveys there are always some individuals who do not submit themselves for examination, and others who are out of the house, town or even country for some reason and thus remain beyond the purview of the survey. Further still, if the data is not based on actually examining every individual, there may be many who suffer from an asymptomatic disease, and thus fail to bring it to the notice of surveyer especially when the disease is not located on a cosmetically important area of the body, or when the disease carries a social stigma. The professional ability of the examiner for

accurate diagnosis is another factor which can falsify the data. Most population surveys are able to cover only 90-95% of the individuals, and in my own experience, actual examination of all the individuals during the survey has made a tremendous difference in bringing out the high incidence of certain diseases. It is also important to note that the diagnostic ability during the survey camps is much lower compared to that in the hospitals when the laboratory support is easily available.

The second approach for medical surveys is to examine specified groups of individuals, such as school children, industrial workers or the like. While analysing the data obtained from school surveys, it must be borne in mind that the survey group belongs to a particular age group only. Therefore, all such diseases such as warts, molluscum contagiosum, boils etc which occur in this age group are likely to be over-represented, while diseases which are commoner or more frequent in the older people may be under-represented. The economic strata of the people to which the school caters may also influence the occurrence of certain diseases which are based on hygienic and nutritional influences. Schools which provide boarding and lodging facilities especially the dormitory type of accommodation, may have a higher incidence of communicable diseases.

The industrial workers on the other hand, belong to a higher age group, while children and old people are not represented. Moreover, the industrial workers generally belong to an economically poorer strata of society and thus diseases associated with poverty may be found in greater abundance. Thirdly, increased exposure to certain chemicals/environments during work predisposes the industrial workers to develop specific dermatoses collectively called as industrial dermatoses. The author has often encountered a large number of cases of a particular dermatosis in an industrial house which are only rarely seen in the general population. Thus the prevalence rates of such diseases can be exceptionally high in

these groups.

The easiest and the most commonly employed approach for determining the incidence of various diseases is, to collect the data from the dermatology departments of various hospitals, clinics and dispensaries. This approach suffers from two draw-backs. Firstly, this approach accounts for only those cases who come to seek medical advice and thus ignores all such cases who either do not seek medical advice at all or have preference for the alternative systems of medicine. Minor diseases are therefore likely to be under-represented. Secondly, when a patient is suffering from a chronic recurrent disease, the same patient is likely to attend more than one hospital/dispensary, and thus chronic and recurrent diseases are likely to be over-represented. In spite of these draw-backs, most of our information about the prevalence and endemicity of various diseases is based on the data available from hospital records.

Apart from the surveys carried out for finding out the prevalence rates of all diseases, sometimes surveys are also undertaken to look for a particular disease. Such surveys may be carried out in the form of population surveys or hospital surveys, but more often such surveys are undertaken on a particular group of individuals called the vulnerable population or the risk group. Surveys on the industrial workers to look for contact dermatitis due to an industrial chemical, or surveys of the prostitutes for VD are examples of this type of surveys. While undertaking surveys for industrial dermatoses one has to be particularly careful to avoid initiating claims for compensation and industrial disputes. It is therefore preferable to have camps for all dermatological complaints rather than for industrial dermatoses only. Secondly, it is ethical to submit a complete report of the findings to the management and advise them about the measures needed to protect the workers, but avoid discussing the findings with the workers themselves. And thirdly, the causal

relationship of the dermatosis to the occupational work must be confirmed as far as possible by the criteria enunciated by us earlier.

Motivation of the individuals for the survey is another important factor, because the individual may not submit himself/herself for examination for various reasons. Motivation can be increased substantially if a provision is made to supply free medicines for the treatment of the diseases discovered. A previous, well-planned propaganda campaign announcing the exact dates, well in advance and the motives of the survey also help in making the largest number of individuals available for the survey. For venereal disease surveys however, secrecy is the most important factor.

Two other problems need attention while analysing the data. Firstly, several dermatologic diseases are influenced by the season and the weather. Thus, patients having psoriasis or ichthyosis may be in complete remission if the survey is conducted during summer while the incidence of tinea cruris, tinea pedis, and miliaria is likely to be high, and vice versa. Secondly, there are likely to be profound regional variations depending upon the ethnic groups inhabiting the area, endemicity of certain infectious agents and social customs.

Before the surveys are undertaken, therefore, it is important to, (1) plan the survey

well in advance in consultation with the local authorities, (2) make arrangement for the supply of medicines to the patients, (3) use a well prepared proforma for recording the results, (4) adequately expose every individual under appropriate privacy and look for certain specified asymptomatic diseases as well, (5) employ appropriate tests as far as possible, to confirm the diagnosis, and (6) record the results properly. While reporting the results, mention must be made of the, (1) geographical characteristics of the place including the weather, and the time of the year of conducting the survey, (2) the special social customs of the individuals if these are likely to have a bearing on the occurrence of certain diseases, and (3) the age, the sex and the ethnic distribution of the population surveyed in comparison to those found to have the diseases.

Simultaneous surveys conducted in different regions of the country, in a more or less uniform manner, would provide an adequate idea of the problems that exist in the country.

Lastly, the pattern of diseases is likely to change with time depending upon the measures taken by the health authorities. Repetition of surveys at specified intervals therefore, would be useful to evaluate the effectiveness of the control measures.

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