

SPECIAL ARTICLE

MEDICAL STATISTICS IN DERMATO-VENEREOLOGY*

By

N. KRISHNAMURTHI, M. A., M. B. B. S., D. V., M. P. H. & T. M. (USA)
Associate Professor of Dermato-Venereology, Karnatak Medical College
and Hospital, Hubli

I am standing in front of you, all erudite scholars, to tell of a few things of so called medical statistics. I do not intend taking you to the realm of research and the finer points of the science of statistics as I am sure all of you are aware of the so called significant tests, prospective and retrospective studies. This day I wish to confine myself to the elements of medical statistics as a tool, a public health tool in dermato-venereology. In a few words I can dispose of the section of venereology since every one who is trained now in venereology knows the value of proper recording, follow-up etc. Contact tracing could have been slow during arsenotherapy but with the rapidly acting druglike penicillin contact tracing has to be quick. This is in identity with hurried life of the decade and actually compares well with the discovery of highly destructive weapons. A nation will have to gather all its resources in a short time if it is to withstand the attack. One has to be alert and quick. This is the same thing in the control of VD. There is little use in delay however good the programme may be for either the patient has left the place or has communicated to others or the disease has changed its character and morphology due to the hurried use of antibiotics. Therefore in this new era the statistics are still necessary but the machinery must be quick. This means the personnel must be welltrained, efficient and quick if the aim of control is to be achieved.

Let us just look into the speciality of dermatology. Every one gives the statistics say (1) Scabies (2) Impetigo (3) Fungus I wish to know how many of these so called cases of scabies did really have the *acarus scabiei* on their body, how many of the impetigo cases showed pyogenic organisms and how many of these fungus cases showed fungus in the smears and cultures? This is exactly the difference in the speciality of dermatology from venereology in India. Dermatology is neglected. Though there are possibilities of accuracy it is not insisted. It is not an exaggeration if I say I have always tried to demonstrate the organism and I have succeeded in a few. If Dr Mellanby could demonstrate the *acarus* in his cases I do not know why we should not do so? I can tell you that a case which simulated scabies had *pediculus corporis*. Similarly it will be a revelation for you if I can say that the patients of scabies were treated for 2 to 3 months. Contrary to the existing idea that it can be treated in one day I have had to answer to a patient who attended for 2 months and so his claim for leave.

Time and again we come across many cases of so called pyoderma. We do not know the organism nor do we know the depth of site of infection. None of these

* Paper read at the 4th All India Conference of Dermatologists & Venereologists 1962.

cases are properly recorded for follow up. Whether these diseases lead to more serious diseases like nephritis or rheumatism? Patients think light of these diseases and so the doctors. Dermatology has become an arm chair speciality.

I met a young man who had come out of training recently. He would like to dispose of 60 cases in 1 hour, and so he will say there is no work for the other 3 hours of duty. His diagnosis *tenia corporis* is by look. If this happens in places where laboratory diagnosis is possible you can just think of the veracity in the statistics presented without mentioned criteria for diagnosis. It is necessary to lay down the criteria before collecting the numbers. The comparison should not be done if the fundamental criteria are different.

We speak again and again pigmentary abnormalities as the most common disorder. In one hospital only 370 cases of Vitiligo are recorded out of 20785 cases i.e. 8%. (Probably it is more of an annoying condition.) Enormous amount of antibiotics are used for so called cases of pyoderma, many of which could be cured by cleansing with normal saline. We relieve the nurse and waste the antibiotics. May be we will develop the resistant strains in India also.

If one thinks of collecting numbers, one should think of improving the quality of the statistics. This one aim will probably contribute much to improve the methods of diagnosis, proper appraisal of the subject and appropriate treatment and also create dermatological laboratories.

Let me show you some numbers. Karnatak Medical college, Hubli and King Edward Memorial Hospital, Bombay in a certain period have seen cases of Vitiligo and Fissures of feet. (Table I) By studying these two diseases it becomes clear that the problem of these is reverse in these two places. It becomes known that Vitiligo is an Urban disease and Fissures is a rural disease since Hubli caters mostly to villagers and tillers of land where as Bombay caters to people who work in some industry or other. People of Hubli probably wear no foot wear and walk in the sand and uncouth roads.

This brings me to the malady of the rural people 'Fissures of the feet.' On a study of a series of cases I have excluded fungus, contact dermatitis and mycobacterial and spirochetal infection. After excluding all these specific conditions there still remain an appreciable percentage of 'Non specific Fissures'. I find these people walk either barefoot or wear the Indian type of sandals which do not cover the sides of the feet.

Some of them who have bad sandals demonstrate a condition similar to Keratoma Plantar Sulcatum—a condition common among the natives (corroboree dancers) of Australia. Thus I wish to say the fissures of feet suffered by Indian labourers and farmers are due to exposure and may be called as Exposure Keratoma Plantare of Indians and this may be styled as a nonspecific disease like the Tropical

Ulcer. Thus ladies and gentlemen, comparative statistics has lead me to understand the peculiar disease and I wish to submit to you a proposal to christen a disease common only to our country and not mentioned as a separate entity in text books of dermatology.

Disease:— Exposure Keratoma Plantare.

Epidemiology:— Common in rural parts of India. Occurs in both sexes, men among labourers and farmers, Women of all status. Usually common in adults. Cause is repeated mild injury due to exposure to bad roads and terrain.

Symptoms and Signs:— Pain, bleeding and disability to walk. Fissures sides of feet and heels—some of them going deep and causing severe pain due to exposure of nerve endings.

Prognosis:— Lot of morbidity. Very difficult to cure.

Treatment:— Prophylaxis—To cover the feet with shoes while at work and avoiding exposure of bare skin. Curative—Soothing and keratolytic agents.

In conclusion let me say that to-day I have tried to impress you on the necessity of collecting statistics and improving the quality of statistics. Like the philosopher who says 'love is not enough, urge to understand and persistence to improve is necessary' I wish to say zeal for statistics is good but that is not enough. Zeal to improve the quality of collection is necessary to improve and enhance our knowledge.

TABLE I

Comparison of Statistice of Vitiligo and Fissures Soles.

| | <i>Vitiligo</i> | <i>Fissures</i> |
|-------------------|------------------------|-----------------|
| KEM, Bombay | No. of cases : 370 | 126 |
| (IJD & V-1961) | %of total 20785: 1.8 % | 0.6% |
| | Ratio. 3 : | 1 |
| KMC, Hubli | No. of cases : 6 | 17 |
| (similiar period) | %of total 448: 1.4 % | 4 % |
| | Ratio. 1 : | 3. |