

The prevalence of skin diseases in Sri Lanka

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The prevalence of skin diseases would quantify the burden of skin diseases in the community and provide a methodological framework for planning dermatological services and designing and interpreting clinical dermatological research.

A number of studies from Sri Lanka refer to the patterns of skin diseases, in the specialized skin clinics, of some of the provincial and general hospitals¹⁻⁴. In all these dermatitis/eczemas constituted the largest group (42.6% - 32.3%). Superficial fungal diseases (22.4% - 12.2%), bacterial infections of the skin (10.6% - 6.4%), viral infections (5.6% - 3%), pigmentary disorders (6.3% - 2.3%) and psoriasis (6.3 - 2.3%) were the other disease groups commonly encountered.

Most series from developed countries show low figures for cutaneous infections, other than viral. For example, a series from London in 1957⁵ had only percentages of 2.3% for fungal, 3.2% for bacterial and 0.9% for parasitic infections. However a Study from London in 1903⁶ shows very similar figures to studies from Sri Lanka in terms of cutaneous infections; 13%, 10.4% and 11.9%, for fungal, bacterial and parasitic infections respectively. This probably shows the effects of socio economic conditions on the patterns of cutaneous infections. Scabies was diagnosed in a large number of patients in Jaffna in 1971 (9%)³ and in Galle 1972-1974 (11%)⁴. However, these figures dropped markedly in the later studies in Kandy 1982-1986 (2.4%)² in Matara 1992 (0.88%)¹. The drops in the clinic patterns of scabies between the years 1971 and 1992 was indeed interesting and probably show a true drop in the incidence of scabies, either through improved living conditions, or a greater awareness and early treatment of scabies.

Malignant diseases of the skin were hardly seen in all the studies. This is in marked contrast to clinic patterns in countries like the UK (3 - 4.5%)⁵ and Perth, Australia (25.3%)⁷, where figures of

10.3% and 15.3% were recorded for malignant skin tumours and solar keratosis respectively.

Two studies considered the patterns of skin diseases in the elderly and the children at the Galle general hospital⁴. Impetigo, scabies and atopic dermatitis were significantly commoner in the 1-5 year age group. In addition to these, viral infections, verruca vulgaris and molluscum contagiosum became commoner in the 6-10 year age group. Pruritus, eczemas, especially of the hands and varicose eczemas, leg ulcers, erythrodermas and chronic paronychia were all more common in the elderly above 60 years. These results were as expected.

A major survey on the morbidity patterns at the primary health care level in Sri Lanka, conducted in 12 health centers in the 3 administrative districts of Anuradhapura, Puttalam and Ratnapura in 1988, involved 158,699 patients in 170,942 treatment episodes⁸. The analysis of these treatment episodes, showed that bacterial skin infections accounted for 7.7%, scabies 1.85%, fungal skin infections 0.73, allergic skin reactions 2.4%, and eczema/dermatitis 0.4%. Thus 13.2% of all treatment episodes were for a dermatological problem.

The prevalence of skin diseases in the community however needs population surveys. Studies of clinic patterns are subject to many variations and do not reflect the true prevalence of skin diseases. Only a very few studies are available, in the entire world literature, on the prevalence of skin diseases in the general population. These are, a stratified sample of 2180 adults in Lambeth, UK⁹, the Hanes study involving a population sample of 20,788 people from across the USA¹⁰, and studies from Mexico¹¹, Faroe islands¹², and rural communities in Tanzania^{13,14} and Ethiopia¹⁵. Other studies have targeted special groups such as school children^{16,17}.

Two prevalence studies of skin diseases in a semi urban community, in Piliyandala¹⁸, and an urban poor dwelling community¹⁹ in Kirillapone were conducted in Sri Lanka 1988 and 1999. The 2 studies together should give an indication of the true prevalence of skin diseases in Sri Lanka. Both studies used trained medical students to visit households and screen all in the household present for any cutaneous disease. In the Piliyandala study the houses were selected on an accepted random basis, while in the urban community in Kirillapone all houses in the small-congested complex were included in the study. Thus 418 houses, with 1807 people in the semi urban survey and 362 houses with 1556 people in the urban survey, were included in the studies.

Skin diseases were common in both studies, 47.6% and 32.9% in the semi urban and the urban studies respectively. This figure compares well with the other studies worldwide. 50% of people in the UK study and 49% in the Tanzanian study had evidence of a detectable skin disease. Thus skin diseases are very common. The difference in the prevalence of skin disease in the 2 series could not be explained fully, but it was thought that the proximity of the urban group to a general hospital, and the ease of access to treatment might be one of the reasons.

Fungal infections, were common, being seen in 14.5% and 11.4%, in the semi urban and urban studies respectively. Dermatophyte infections constituted 4% in both studies. Pityriasis versicolor was commoner in the semi urban study, 10.5% as compared to 6.3% in the urban series. The Eczema/dermatitis group occurred in 7.5% of the urban study and 9.6% of the semi urban study. There were more atopic dermatitis patients (1.1%) in the urban study than in the semi urban study. (0.17%). Possible contact dermatitis was also commoner in the urban study. Plantar hyperkeratosis was commoner in the semi urban community (3.8%) as compared to the urban community (0.7%). Walking barefoot more often could be a contributory factor.

The most significant difference between the 2 studies was in the prevalence of parasitic infec-

tions. Pediculosis was very common (6.7%) in the crowded living conditions of the urban poor and rather uncommon in the semi urban (0.22%) community. Scabies was also marginally more common in the urban study. Papular urticaria due mainly to mosquito bites showed a prevalence of 2% in both series.

The prevalence of psoriasis was around 0.4% and of vitiligo 1% in both studies. The higher hospital figures for these diseases was probably due to patients with these unsightly diseases seeking treatment at the hospital skin clinics. Acne was present in 5.9% of the suburban study and 2.2% of the urban study. No cutaneous malignancies were found in either study.

Fungal and parasitic infections were commoner in the studies from Sri Lanka, compared to those from the UK, and the USA. However the figures for these diseases from Tanzania and Ethiopia were far higher. Only 50% of persons affected by skin diseases had sought any treatment. This was true of the studies from UK and the USA also. Knowledge of this large section of people with skin disease is important as small changes in the population's perception of the need for medical help can have large effects on the delivery of health care.

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