# **Malaysian Psoriasis Registry**

GANGARAM HEMANDAS, CHANG CHOONG CHOR Department of Dermatology, Hospital Kuala Lumpur.

#### **Background**

There are not many registries which are successful in Malaysia. Preliminary work on the Malaysian Psoriasis Registry started in the year 1998 by a group of dermatologists which culminated in the First Malaysian Psoriasis Symposium on the 17 May 1998. The only successful registry at that time in Malaysia was the Renal Transplant Registry.

## **Objectives**

The reasons for setting up a Psoriasis Registry were so that we could obtain more accurate data on various aspects of psoriasis in Malaysia which was seriously lacking, and secondly, the data could be used to plan for services provided for patients with psoriasis, for the different types of treatment and equipment required, for manpower and training, for research and development, to help in overall budgeting, and ultimately to provide better care for the patients.

## Methodology

A questionnaire was prepared which focused on the following aspects of psoriasis - demography, family history, precipitating and aggravating factors, types and sites of psoriasis, severity, nail and joint involvement, and choices of treatment. From a 8-page questionnaire, it was finally trimmed down to 2 pages so as to make it easier for dermatologists in both government and private practice to report.

Data collection started as a pilot project in March 2000 where the questionnaire was sent to all the dermatologists in Malaysia. They were initially asked to fill 10 questionnaires each and evaluated for any problems.

Members were requested to send their completed forms to the Department of Dermatology, Hospital Kuala Lumpur (HKL), which formed the secretariat. The secretariat for some reason went from HKL to Johore Bahru, Malacca and back finally to HKL.

### Results

The total number of forms received from March 2000 till July 2005 was 2237. More than 95% of the forms came from Government dermatologists and only about 5% from the private dermatologists. Majority of the forms from the government dermatology clinics came from Malacca, followed by Kelantan, Penang, Selangor, Kuala Lumpur, Perak, Perlis, Kedah, Pahang, and Negeri Sembilan. The private contribution came mainly from Kuala Lumpur and Malacca.

The male to female ratio was 3:2. Worldwide there is no sexual predilection. The ethnic distribution was Malays (59.2%), Chinese (21.5%), Indians (17.2%), and others (1.7%). This reflects the attendance of patients to a government clinic. Majority of the patients had the onset of their disease during the 3rd to the 4th decade (42.8%).

Only about 9.8% of the patients reported a family history of psoriasis. About 9.7% reported ever being admitted to hospital during the last 5 years.

35.8% reported having one or more precipitating and/or aggravating factors (Figure 1). The most common was stress (15.6%), followed by sunlight (6.8%), infection (3.3%), medication (3.0%), trauma (1.8%), topical treatment (1.2%) and others, 4.1%. Some of medications reported by the patients included NSAIDS, anti-hypertensives (atenolol, timolol eye drops), prednisolone, and traditional medication. The topical medicaments included tar preparations, steroids, dithranol, calcipotriol, cetavlon, and homeopathic drugs. The 'others' category was more interesting and included smoking, food (chicken, beef, groundnut, beans, seafood), pregnancy, menstruation, and heat.

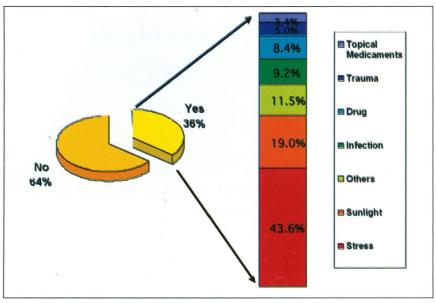


Figure 1. Precipitating / Aggravating Factors

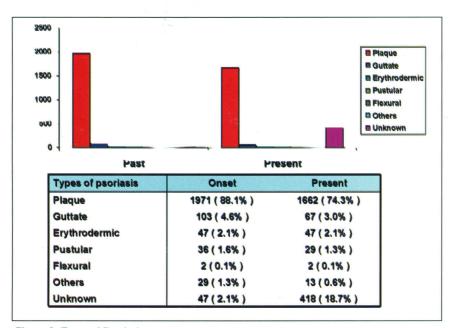


Figure 2. Types of Psoriasis

The most frequent type of psoriasis reported was plaque (74.3%), followed by guttate (3%), erythrodermic (2.1%), pustular (1.3%), flexural (0.1%), and others (0.6%). 18.7% did not report any type of psoriasis **(Figure 2)**.

The most common sites affected were the scalp followed by the trunk, lower limbs, upper limbs, face, hands and feet, and genitalia (Figure 3).

Sites Affected -	No. Of Patients	
	Past	Present
Scalp	1769	1412
Trunk	1406	1253
Lower Limbs	1238	1141
Upper Limbs	1128	1046
Face	521	459
Hands / Feet	423	447
Genitalia	97	89
Others	23	9

Figure 3. Sites affected

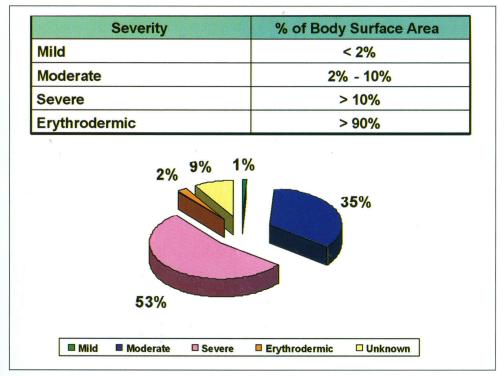


Figure 4. Extent of skin involvement

In terms of body surface area (BSA) affected, 0.9% had less than 2% BSA involved, 34.5% between 2–10%, 53.5% more than 10%, 2.1% were erythrodermic and 9.0% unknown (**Figure 4**). Therefore, the majority had moderate to severe psoriasis.

37.3% reported nail changes. Other authors report a range from 10 to 55% (de Jong & van de Kerhkof, 1996). The majority had pitting (67.5%), followed by onycholysis (51.3%), discolouration (17.2%), subungual hyperkeratosis (12.5%) and total nail dystrophy (7.5%) (**Figure 5**).

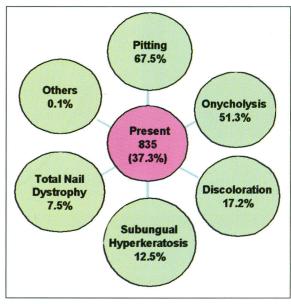


Figure 5. Nail changes

9.2% had joint involvement. Other authors have generally reported it as being approximately 7% (Blumberg et al, 1964). The most common was oligo and or monoarticular arthropathy (54.9%), followed by rheumatoid type (19.9%), distal type (14.6%), spondylitic type (4.4%), arthritis mutilans (2.9%) and unknown (3.4%) (**Figure 6**).

In terms of treatment, in the past, patients on topical medication only, accounted for the majority (80%), systemic only (0.36%), and phototherapy only (0.13%). The at present figures, have changed to 54.1%, 1.92% and 0.31% respectively. It appears as though the psoriasis has become more severe and more now require systemic and or phototherapy.

For topical therapy at present, the majority were on coal tar (51.3%), followed by steroids (49.4%), calcipotriol (10.9%), and dithranol (2.7%).

For phototherapy at present, the majority were on broadband UVB (78.3%), followed by narrow band UVB (19.6%), and PUVA (0%). Previously, 14.8% of

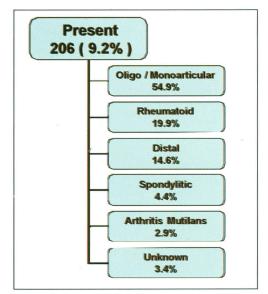


Figure 6. Psoriatic arthropathy

patients on phototherapy were on PUVA. This trend will probably change in the future when more and more patients will be prescribed narrow-band UVB.

For systemic therapy at present, the majority were on methotrexate (60.8%), followed by retinoids (32.7%), sulphasalazine (2.0%), and cyclosporine (1.6%) (Figure 7).

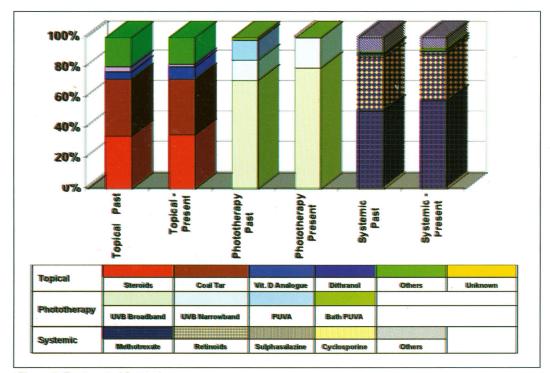


Figure 7. Treatment of Psoriasis

#### Conclusions

A number of problems were faced by the subcommittee in overseeing the smooth running of the registry. Some of them included absence of a stable secretariat which made it difficult for members to know who to send their forms to and secondly, absence of a permanent subcommittee which made it difficult to ensure the smooth implementation of the project. We need to continue to encourage all dermatologists to report, especially the dermatologists in private practice, so that we can obtain a better overall picture of psoriasis in Malaysia. Some of the limitations of this questionnaire is the absence of any data on quality of life measurement as well as any data on the economic burden on the individual.

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