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- **Describe the pattern of dermatological disease/illness in Singapore in the context of global health.**

The pattern of skin disease seen in the multicultural population of Singapore is mainly comprised of disease common to those of Asian descent. The majority of the Singaporean population is of Chinese descent, Indian descent and Malay descent respectively, therefore skin disease that is common to these groups tends to present more commonly to dermatological clinics in Singapore, such as The National Skin Centre.

Having observed dermatology both in Singapore and the UK, it is clear that common skin disease presentations contrast between Asian skin types compared to Caucasian and Black skin types.

Skin cancer in Asia is uncommon, whereas in Caucasian skin, dermatological malignancy including basal cell carcinoma, squamous cell carcinoma and melanoma is a more common presentation.

Although rare in Asian skin, skin malignancy when found, can be associated with significant morbidity and mortality mainly due to the atypical presentation. Melanomas in Asian skin for example, tend to involve areas not usually exposed to the sun such as those of the acral lentiginous subtype, involving the palmoplantar areas of the skin, under the nails and mucosal surfaces. There also tends to be lower levels of suspicion, due to the rare nature of the malignancy, amongst both medical professionals and the Asian population in general, leading to delayed diagnosis and so potentially a worse prognosis.

Skin disease that tends to be more common in Asian skin in comparison to those of Caucasian skin, are those of more cosmetic concern such as melasma, postinflammatory pigmentation and keloid scar formation. Some skin diseases are equally prevalent in both Caucasian and Asian skin types, these include, acne vulgaris, infections, dermatitis and psoriasis.

A survey was carried out in Singapore over a 2 year period to identify the most common dermatological diagnoses across different Asian populations living in Singapore ie Chinese, Indians and Malays (1). The survey identified more cases of urticaria in the Chinese, more psoriasis and alopecia in the Indians and more post inflammatory hyperpigmentation in the Malays and Indians. Although this survey was carried out many years ago, it highlights the fact that skin disease presentations vary even within different Asian ethnic groups.

- **Describe the pattern of health provision in Singapore contrasting this with the UK**

As in the UK, the health system in Singapore is split broadly into primary and secondary healthcare. Primary healthcare is composed of public polyclinics as well as the private medical clinics. The private medical clinics make up the majority (80%) of primary healthcare available to patients, and a small charge is made to most patients for a consultation at one of the national polyclinics. This is a major difference to UK health provision, where the majority of primary healthcare is government funded and, apart from prescription charges, there is no charge for an NHS consultation. Primary care in both the UK and Singapore have similar objectives; to provide primary medical treatment, aim to prevent disease and to provide public health education. In Singapore a patient can choose to see the Specialist doctor directly, however in the UK, the patient must be referred to a Specialist by a NHS General Practitioner.

Secondary healthcare in Singapore includes the hospitals (both public and the smaller private hospitals) as well as national specialty centres, including The National Skin Centre, which provides specialist outpatient dermatological treatment. In contrast to primary care, the majority of hospitals (80%) are government run and the private hospitals are a minority.

Treatment at public hospitals however is tiered according to the patient's choice and ability to finance the cost of treatment. For example as an inpatient the patient can choose to stay in either A class, B class (B1 and B2) or C class wards. The government heavily subsidise both B2 and C class wards, provides 20% subsidy for B1 class wards and no subsidy for A class wards. Outpatient care, for example at The National Skin Centre, also tiers the cost of healthcare provision.

NHS funded hospitals provide the same healthcare to all patients, regardless of choice, and their ability to pay. There is no tiered system within these hospitals, but patients have the ability to choose private health care if they prefer, but are required to finance the cost personally or obtain private health insurance.

Having experienced Medicine at The National Skin Centre, it is also apparent that Dermatology in Singapore encompasses Sexual Health. Sexual Health in the UK, in contrast, comes under the Genito-Urinary Medicine (GUM) medical subspecialty and although clearly there can be a cross over between the two specialties, the majority of sexual healthcare is provided by GUM rather than Dermatology.

- **Explore the various attitudes to public health in relation to skin care**

Not only do the skin types vary between the Caucasian and Asian races but also the attitude to skin care varies due to cosmetic reasons. In Asia, the tendency is for the population to use 'skin whitening' products and to avoid sun exposure altogether. The Caucasian inclination is to purposefully expose the skin to UV radiation in order to darken the skin for cosmetic reasons. This increased exposure to UV radiation is a risk factor for skin malignancy.



As the Chinese form the population majority in Singapore, there is prevalent patient use of Traditional Chinese Medicine (TCM). Indeed the use of these medicines is recognized by the Ministry of Health, which provides a regulatory body to ensure that those dealing in TCM have an appropriate license.

Despite this, I have observed that some patients use certain Traditional Chinese Medicines and other holistic medication, against medical advice. This can have detrimental effects particularly in Dermatology where TCM can result in severe cutaneous drug reactions or lead to exacerbation of dermatological disease such as eczema or psoriasis. There is a particular tendency to seek TCM treatment in chronic diseases such as eczema or psoriasis, where there is no medical cure on offer in Western Medicine, only an ability to control the disease. These patients are vulnerable to adverse drug reactions or an aggravation of their condition, unless expert advice is given.

- **Aim to learn and understand more about the pattern of disease across different cultures as well as enhancing communication with patients from other cultures**

Having observed Dermatology both in Singapore and the UK, it is now apparent to me how different the pattern of dermatological disease is in both countries. I have realized how important it is to expose myself to and to understand these particular patterns of disease and different attitudes to skin disease across different cultures. This will be especially relevant when practicing Medicine in London where patients from a diverse range of cultures seek medical advice.

Having spent time living and experiencing Medicine in Singapore, I now understand which ethnic groups most commonly populate the City and have more of an understanding about the pattern of skin disease across these cultures. I also have more of an understanding about various common cultural beliefs and attitudes, including the use of non-Western medicines and the complications that can ensue. Having experienced this, I hope I will now be able to communicate more effectively with patients of Asian backgrounds living in London – giving me the ability to tailor Medicine towards their particular health requirements.

1. Chua-Ty G, Goh CL, Koh SL. Pattern of skin diseases at the National Skin Centre (Singapore) from 1989-1990. Int J Dermatol 1992; 31: 555-9