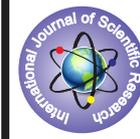


## REFERRALS IN DERMATOLOGY- WHERE WE ARE AND OTHERS - ORIGINAL RESEARCH ARTICLE



### Dermatology

**KEYWORDS:** Referrals, demand for dermatological care, Dermatologist's opinion

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### ABSTRACT

**Aim & Objectives:** Majority of the dermatological consultations takes place on an outpatient basis. Most of these patients consult either general practitioners or other specialists where they are treated with various drugs without proper diagnosis. Skin not only has the credit of being the largest organ of the body but it is a mirror reflecting assaults from various underlying disorders and hence the role of dermatologist in patient care is increasing. This study is done to find out the common causes of referrals to a dermatologist and the source of these referrals. **Methods:** This descriptive study on 1000 referrals was conducted in a 1260 bedded Rajah Muthiah Medical College and Hospital was analyzed over a period of 3 years. **Results:** Dermatological consultations were sought for common skin problems. Most referrals were not in order. In 13% of referrals the dermatologists were able to suggest a better treatment on the basis of dermatological diagnosis. Interestingly even systemic diseases, like diabetes was picked up for the first time in some cases only after dermatologist's suspicion. **Conclusion:** Our study revealed the importance of dermatologist's opinion and the necessity to establish a relationship between the need, awareness of common dermatological problems and demand for dermatological care with improvisation of approach.

**Introduction:** Dermatological consultation takes place on an outpatient basis and they represent fairly stable proportion of patients attending the outpatient clinic in any hospital. Skin problems tend to occur independently of other systemic diseases and there are less referral confined to dermatology. The variation in referral rates among the primary care physician have implications on the cost and the quality of health care given to the patients. General practitioners and the physicians who treat the skin lesions treat the dermatoses without any specific diagnosis. Their misdiagnosis and mismanagement may lead to complications.<sup>1</sup> Physicians who practice and teach primary care medicine had little training in dermatology.<sup>2-4</sup> This retrospective and prospective, descriptive study was under taken to assess the pattern of dermatological diagnosis made by non dermatologist residents and thereby to stress that referral process is a critical component of a quality healthcare.

**Aim & Objectives:** This study is done to find out the common causes of referrals to a dermatologist and the source of these referrals.

**Materials and methods:** A descriptive study of 1000 referrals was conducted at Rajah Muthiah Medical College and Hospital between the period 2012-2015 in the department of dermatology, venereology and leprosy. This included a retrospective study of 400 referrals during the year 2012-14 and a prospective study on 424 outpatients and 176 in patient's referrals during the period 2013-14. The referrals were sent from all departments.

Six parameters like - demographic details, provisional diagnosis, dermatological investigations done, specialties requiring consultation, referrals with underlying systemic disorders and relevant dermatological treatment given were studied.

**Results:** Analysis of 1000 referrals revealed majority of referrals were between 30-59 years of age and there were more number of males than females. Among 349 pediatric referrals there were 144 referrals in the 1-4 years group. Medicine and pediatrics departments together referred 675 patients in the study period. A least number of 8 referrals were from ophthalmology department. Among 1000

referrals, 822 referrals were without a dermatological diagnosis by the referring consultant. Comparison of various departments with proper diagnosis was shown in Table 1.

In 70% of referrals proper description of skin lesions was available. Dermatological diagnosis correlated with our diagnosis in 60% of referrals from medicine department and in 49% from pediatric department (table-2). Infectious diseases top the list of the cause of referrals in 40% followed by allergic disorders in 21% (table-3).

Diabetes mellitus was diagnosed for the first time among patients with superficial fungal infections and acanthosis nigricans. Similarly carcinoma breast was diagnosed in a patient with seborrheic keratosis. Systemic lupus erythematosus was diagnosed in a patient with recurrent oral ulcers. One patient presented with varicella with swelling on the thigh. Necrotizing fasciitis due to varicella was diagnosed and prompt treatment was instituted which saved the patient's life.

In our study population, 82% were referred without any dermatological diagnosis and in 14% of cases there was a lack of proper documentation of facts.

**Discussion:** The present study helped us to assess the prevalence of dermatological conditions among the referrals from various specialties, to establish the relationship between need, awareness of common dermatological problems, demand for dermatological care and to find the association of underlying systemic disorders among the referrals.

Majority of the referrals were between the age group of 30 to 59 years. This could be because of increased prevalence of common dermatological problems in middle aged and elderly. Only 14% of geriatric patients were referred to dermatologists in our study in contrast to the study by Fernandes<sup>5</sup> where it was found to be about 35%. The reason for the variation might be due to increased geriatric care given in western countries, whereas our patients in geriatric age

do not seek treatment so commonly. Patients in this age group usually consult dermatologist for pruritus whereas other dermatological problems are not given due importance.

Referrals from pediatrics were sought more often than other departments. Infectious dermatoses are commonly prevalent in pediatric population, which could have resulted in more referrals. Referrals from psychiatrists constituted 4% in our study which was similar to the study by Walia.<sup>6</sup> In both studies psychocutaneous disorders were common, which could be attributed to the increased stress at home and at work spot.

In our study referrals from gynaecologists was only 3% which was in contrast with the study conducted by Walia<sup>6</sup> where he reported more of vaginal discharge and pruritus vulvae. We found pregnancy related dermatoses were the common cause of referrals in our setting.

Among the referrals in our study 39.2% were referred for infectious causes followed by eczemas and papulosquamous disorders. Out of the 39.2% of the infectious causes 20.9% were due to fungal infections. Another frequent observation was the development of fixed drug eruption in 3% of the patients, which was due to frequent intake of sulfonamides available as over the counter in our country. We emphasize that drug eruption has to be considered while treating patients with multiple co morbidities.

Pigmentary disorders constituted 7.6%. This was similar to observation by Walia.<sup>6</sup> Autoimmune disorders constituted only 0.9% of consultations, which was in contrast to the study by Fernandes<sup>5</sup> where 2.9% of referrals had autoimmune disease. Sexually transmitted infections (STI) constituted only 0.8% of the referrals which was mainly for genital ulcers and infections. These cases were referred by surgeons. Most of them were males similar to the study by Walia.<sup>6</sup> Patients requesting STI care is very less because of the social stigma of being identified in these clinics. A large number of such patients were being treated by unqualified health workers.

Diabetes was the most common systemic disease which was suspected and diagnosed for the first time in patients with superficial fungal infections and acanthosis nigricans. Similarly, HIV infection was picked up in a patient with fever and rash. Another patient with seborrheic keratosis had underlying carcinoma of breast, and necrotizing fasciitis in a patient with varicella. In all these patients, the suspicion and confirmation by dermatologists changed the course of further treatment.

Out of the 1000 referrals analyzed, only 17.8% were referred with correct diagnosis. However, referrals with proper morphological description were available in 70.1%. In nearly 30% of referrals there was no clarity of note content. All these findings were similar to the study by Gandhi.<sup>7</sup> A study conducted by Newton et al<sup>8</sup> had focused on the content of referral letters which helped both referring and referred specialists. In our study, we found lack of adequate referral note, lack of clarity of reasons for referral, and lack of proper follow-up plans could be responsible for the poor quality of referrals.

**Conclusion:** We conclude that referring specialties often missed common dermatological diagnosis and they were often unrecognized or misdiagnosed by non dermatologists. Referring junior residents missed common dermatological conditions with established treatment. Most of the referrals were without diagnosis. Hence an integrated modular teaching can be an effective adjuvant in imparting knowledge to the residents.

Dermatology knowledge is being imparted in our country only at the undergraduate level. Medical council recommends 30 days of clinical postings and 20 hours of lecture classes. As there is no examination in dermatology like pediatrics, orthopaedics, ENT or ophthalmology, undergraduate students pay less attention in learning dermatological conditions. Knowledge at the resident level is also not satisfactory which is evident from their referral letters and

dermatological diagnosis. To add to misery, dermatology is only an elective posting during compulsory resident ship.<sup>9</sup> Proper dermatology referral improves interdisciplinary treatment and thus have an impact on the quality of treatment and facilitate management of diseases that are potentially life threatening.

Thus, improving communication through proper referral can result in a better patient outcome, patient satisfaction and resource utilization. Systems that facilitate proper referral letters make the process more effective for physicians as well as patients. It should be stressed among residents that writing a good consultation is a "blend of art and science".

**Table No: 1 Specialties requesting dermatological referral.**

Referring speciality	No	%
Paediatrics	349	34.9
Medicine	326	32.6
Surgery	125	12.5
Orthopaedics	51	5.1
ICU/ Casualty	45	4.5
Psychiatry	40	4.0
Obstetrics & Gynaecology	30	3.0
ENT	26	2.6
Ophthalmology	8	0.8

**Table No 2: Classification of dermatological disorders for which referral was sought based on the provisional diagnosis and description of morphology.**

Dermatological disorders	No	%
Infections	392	39.2
Allergic/ vascular	206	20.6
Papulo squamous	156	15.6
Autoimmune	19	1.9
Developmental/ metabolic/ nutritional	49	4.9
Pigmentary	61	6.1
Acne and appendageal	33	3.3
Pregnancy related dermatoses	10	1.0
STD	8	0.8
Leprosy	10	1.0
Others	56	5.6

**Table No 3: Referring specialties with correct, incorrect & doubtful diagnosis**

Referring speciality	No	Correct diagnosis	%	Incorrect diagnosis	%	Doubtful diagnosis	%
Medicine	25	15	60	4	16%	6	24
Paediatrics	107	52	48.6	23	21.5	32	30
Psychiatry	5	3	60	2	40	0	0
ICU/Casualty	4	1	25	2	50	1	25
Surgery	29	18	62.1	9	31.1	2	6.9
Orthopaedics	3	3	100	0	0%	0	0
ENT	1	0	0%	1	100	0	0
Ophthal	1	1	100	0	0	0	0
Gynaecology	3	2	66.7	0	0	1	33.3

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