

# A review of a paediatric dermatology clinic in Malta

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## Abstract

A review of a Paediatric Dermatology clinic set up in 2009 at the Department of Dermatology and Venereology, Sir Paul Boffa Hospital, was carried out in 2011. The aim of the exercise was to identify the main conditions being seen in this clinic and to analyse management and referral patterns. Data was collected on a total of 130 patients (80 new and 50 follow-up). Of the patients attending, 86 (66%) were males and 44 (34%) were females. Overall, the commonest conditions seen were acne, eczema, naevi, fungal infections and psoriasis. General practitioners accounted for 69% of referrals whereas paediatricians and other specialists accounted for the other 31%. Of the 80 new patients seen, 55% were given a follow-up appointment in the Paediatric Dermatology clinic, 30% were discharged and 15% were given an appointment for further therapy e.g. skin surgery, laser treatment or cryotherapy. Parents/carers accompanying children to the clinic all stated that Saturday was the best day of the week for them to attend.

## Keywords

Paediatric Dermatology outpatients, Sir Paul Boffa Hospital, case management, service planning, Malta

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## Introduction

A once-monthly Paediatric Dermatology clinic in the Department of Dermatology and Venereology at Sir Paul Boffa Hospital was started in January 2009. Prior to this date, paediatric dermatology cases were all seen in dermatology clinics together with adult patients. It was decided to have the clinic on Saturday mornings to allow children to attend without having to miss school. It was also envisaged that the clinic would provide an opportunity for teaching and research. Patients aged 16 years or less referred for a routine appointment to the Department of Dermatology and Venereology are eligible for booking into the clinic by the appointments clerks. Referral notes are vetted and cases that are deemed to require a more urgent appointment are slotted into other clinics. When the Paediatric Dermatology clinic was set up patients were seen by one consultant dermatologist (MJB). The service was later upgraded to a once-weekly clinic through the involvement of a second consultant dermatologist. At the time of the study a consultant paediatrician (CS) was also attending regularly (with MJB) and served as a valuable liaison with the Department of Paediatrics for patients requiring paediatric input including venesection. General Practice trainees and medical students also attend regularly.

There is a lack of documented data on paediatric dermatology cases seen in Malta and the establishment of the Paediatric Dermatology clinic provided an opportunity to study this area. It was decided to review the clinic to obtain baseline information regarding patients seen in 2011.

We aimed to identify the conditions being seen in this clinic and to analyse management and referral patterns in the expectation that this information would be useful for future planning and provision of Paediatric Dermatology services in Malta.

## Methods

The study was carried out from January 2011 to December 2011. For each patient attending the Paediatric Dermatology clinic run by MJB the following information was collected: age, gender, source of referral, reason for referral, whether it was a new case or follow-up visit, diagnosis and disposal. For new cases, when a diagnosis was offered in the referral letter, this was compared to the diagnosis made by the dermatologist. After the consultation parents or carers were asked whether they were satisfied with the service provided in the clinic and whether they preferred a Saturday appointment to one on Monday to Friday. They were also asked for suggestions to improve the service. A simple proforma was used to document the required information and was filled in during the consultation.

## Results

### Patients

During the study period, there were 11 sessions with a total of 156 patients booked in. Twenty-six of these patients did not attend, leaving a study population of 130 patients. Of these, 80 (61.5%) were new and 50 (38.5%) were follow-up cases; 86 (66%) were males and 44 (34%) were females. The age of patients seen ranged from 7 weeks to 16 years.

### Source of new case referrals

The source of referral of new cases seen in the clinic is shown in Table 1.

Speciality	Referrals	Referrals offering diagnosis	Correct diagnoses
	No (%)	No	No. (%)
General Practice (Private)	28 (35%)	26	24 (92.3%)
General Practice (Health Centre)	27 (34%)	24	20 (83.3%)
Paediatrics			
• Childrens Out Patients	10		
• Child Development Assessment Unit	2		
• Community Paediatrics & Disability Services	3		
• Private Paediatricians	3		
➤ Total:	18 (23%)	17	16 (94.1%)
Others:			
• Paediatric surgery	2		
• Gynaecology	2		
• Accident & Emergency	2		
• Dermatology	1		
➤ Total:	7 (8%)	7	6 (85.7%)
Total (all specialities)	80	74 (92.5%)	66 (89.2%)

**Table 1.** Source of referral and percentage agreement between the referring doctor's offered diagnosis and that made by the dermatologist [correct diagnosis].

Fifty-five patients were referred by general practitioners, 28 were referred by private general practitioners and 27 by Health Centre general practitioners. Twenty-five patients were referred from other specialist sources including Childrens' Out Patients, Private Paediatricians, Community Paediatrics & Disability Services, Child Development & Assessment Unit, Paediatric Surgical Out-Patients and other specialists. General practitioners thus accounted for almost two-thirds, while paediatricians and other specialists accounted for approximately one-third of the total referrals.

### Diagnoses of patients

The diagnoses of new and follow-up cases attending the clinic are shown in Tables 2 & 3 respectively. The commonest diagnoses were, respectively, acne, eczema, naevi, fungal infections and psoriasis in new patients and acne, eczema, fungal infections, psoriasis and haemangiomas in follow-up patients. A diagnosis was offered in 92.5% of referral notes, more frequently in the case of referrals from private as compared to Health Centre general practitioners (odds ratio 1.63; 95% CI 0.2 - 15.5). Of the referral notes with a tentative diagnosis, 89.2% had a diagnosis matching the one by the dermatologist at the patient's first visit. While the difference in results between referrals from private general practitioners, Health Centre general practitioners, paediatricians and other specialists was not statistically significant, further studies could evaluate this difference further.

Diagnosis	Number of cases (n= 80)	% of total
Acne	25	31.3
Eczema	15	18.8
Naevi	10	12.5
Fungal infections	8	10
Psoriasis	6	7.5
Keloids	3	3.8
Urticaria	2	2.5
Epidermal cysts	2	2.5
Others	9	11.3
Total	80	100

**Table 2.** Diagnoses of new cases

### Outcome of new cases

Of the new patients seen, 44 (55%) were given a follow-up appointment in the Paediatric Dermatology Clinic, 24 (30%) were discharged and 12 (15%) were given an appointment for further therapy e.g. skin surgery, laser treatment or cryotherapy in other clinics.

### Parental satisfaction

Parents/carers who were interviewed all stated that they were satisfied with the medical service provided in the clinic and that they preferred a Saturday appointment to one on Monday to Friday. Many commented that Saturday was the best day of the week for a paediatric clinic because it was easier for them to accompany their children to the clinic as they were off work and the children could attend without missing school. On the other hand several parents lamented the physical environment and, particularly, the lack of a dedicated waiting area for children in the Department of Dermatology & Venereology at Sir Paul Boffa Hospital. Some parents also complained that their appointment time was not kept and they had to wait for a long time in the waiting area before being called to be seen in the clinic.

Diagnosis	Number of cases (n= 50)	% of total
Acne	15	30
Eczema	10	20
Fungal infections	6	12
Psoriasis	5	10
Haemangiomas	4	8
Warts	1	2
Vitiligo	2	4
Acanthosis nigricans	1	2
Portwine stain	1	2
Urticaria pigmentosa	1	2
Poliosis	1	2
Keloids	2	4
Drug eruption	1	2
<b>Total</b>	<b>50</b>	<b>100</b>

**Table 3.** Diagnoses of follow-up cases

### Discussion

To our knowledge, this is the first study of a paediatric Dermatology clinic in Malta. A previous study of Dermatology outpatients in Malta that was carried out in 2002/2003 (before the Paediatric Dermatology clinic was set up) included patients of all ages seen by a consultant dermatologist in all his clinics over four one-week periods throughout the year<sup>1</sup>. Comparison with this study allows a number of observations.

Overall, the commonest conditions seen in our Paediatric Dermatology clinic were acne, eczema, naevi, fungal infections and psoriasis. The frequency of these diagnoses in our patients likely reflects the prevalence of the conditions in our paediatric population and are markedly different from those seen in the Dermatology outpatients study in which the commonest diagnoses overall were leg ulcers, psoriasis, viral warts, other skin infections, seborrhoeic keratoses, melanocytic naevi and non-melanoma skin cancers<sup>1</sup>. Although viral warts are common in children we had none as new cases in the Paediatric Dermatology clinic, probably because such cases are normally booked into the existing separate 'Wart clinic'.

The mix of diagnoses in our Paediatric Dermatology clinic was comparable to cases reported in other studies in Europe<sup>2,3</sup> although the proportion of acne cases was higher in our case. In contrast, the commonest diagnosis in a study of children up to 15 years of age attending a paediatric dermatology service in Pakistan was scabies followed by atopic dermatitis, fungal infections, urticaria and bacterial infections.<sup>4</sup>

As expected, the majority of referrals to the Paediatric Dermatology clinic were from general practitioners however a significant proportion (almost one-third) were from other specialists. The proportion of specialist referrals in the Paediatric clinic was much higher than that seen in the Dermatology Outpatient study<sup>1</sup> in which the proportion of referrals from doctors other than general practitioners was around 8%. Almost three-quarters of the specialist referrals in our study were from paediatricians.

This high proportion likely reflects paediatricians' significant interest in dermatology and their frequent involvement in the care of dermatological problems in children, although the numbers in our study are too small to allow definite conclusions.

At the same time the relatively high rate of referrals by paediatricians to our clinic could be an indicator of the perceived value of paediatric dermatology services run by dermatologists for management of more complex paediatric dermatology cases.

In 89.2% of the cases referred to our clinic with a suggested diagnosis, the diagnosis offered by the referring doctor matched that made by the dermatologist. This compares with 43% in the Dermatology Outpatient study<sup>1</sup> suggesting that most of the referrals to the Paediatric Dermatology clinic were for management rather than diagnostic purposes. It was noted that in many cases seen in our clinic no

treatment had been attempted by the referring doctor. This was particularly seen in cases referred by general practitioners and was evident even for common conditions such as acne and eczema. This is disappointing as one would expect that patients in the paediatric age group with such conditions would only be referred to a specialised dermatology clinic if resistant to first-line treatment. In this regard the recently-introduced vocational training scheme for general practice trainees, including exposure of trainees to the Paediatric Dermatology clinic, provides an opportunity for improving knowledge of dermatology amongst future general practitioners. It is hoped that, in the long run, this could reduce unnecessary referral of cases that could be tackled at primary care level.

Parents/carers attending the Paediatric Dermatology clinic appeared to be generally satisfied with the medical service provided and appreciated the convenience of the clinic being held on a Saturday, allowing children to attend without missing school. Indeed, Saturday appears to be the most convenient day of the week for children to attend Outpatients and it would appear to make sense to keep this in mind, where possible, when planning services.

On the other hand, we were not surprised by the generally negative comments regarding the physical environment in the Department of Dermatology & Venereology at Sir Paul Boffa Hospital, particularly the lack of a dedicated waiting area for children. The hospital building is old and rather unattractive for children and the present waiting area is a single large room for adults and kids alike with no stimulus for children waiting for their appointment. In this regard, it is hoped that when the department is transferred to Mater Dei Hospital this issue will be taken into account and appropriate adaptations are planned and incorporated in the new unit. The complaint by some parents regarding excessive waiting time to be called into the clinic has been addressed. Whereas at the time of the survey new patient appointments were being booked at 5-minute intervals, which was clearly inadequate time for most cases resulting in backlog of patients and excessive waiting time, new patients are now being given a more realistic 10-minute time slot for their appointment.

One weakness of our study is that it did not include inpatients. Although Dermatology is mainly an outpatient specialty, occasional cases (e.g. severe infected eczema and extensive psoriasis) sometimes do require hospital admission.

Because of the lack of facilities to admit paediatric patients to the Dermatology ward at Sir Paul Boffa Hospital, at present such patients are admitted to a paediatric ward at Mater Dei Hospital under the joint care of a dermatologist and paediatrician. The presence of a

paediatrician in the Paediatric Dermatology clinic facilitated communication with the Paediatric Department and proved particularly helpful for such cases and also for others attending outpatient paediatric clinics.

The importance of adequate dermatology services for the paediatric population is increasingly recognised. A recent audit<sup>5</sup> of the provision of dermatology services in secondary care in the United Kingdom with a focus on the care of people with psoriasis, commissioned by the British Association of Dermatologists, found that 40% of units had no dedicated area for young persons and 64% of specialist outpatient services had no paediatric-trained nurses and concluded that paediatric dermatology facilities should be enhanced. In our case we have no paediatric-trained nurses in our department and it is hoped that this need can be addressed in future. Other important areas for development include clinical psychology services that are so important for dealing with emotional implications of chronic skin conditions in children and support for prescribing of new therapies such as biologics that are likely to play an increasingly important role in the management of chronic inflammatory skin diseases, even in paediatric patients, in future.

Data collection as in our study is an important first step to be able to make valid recommendations about a service. It is hoped that the results of this exercise will be found useful to improve the provision of dermatological care to the paediatric population in Malta.

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