ORIGINAL ARTICLE

Hype or vile? Perception, Awareness & Practice attitudes of general practitioners about Pediatric dermatology a national survey

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ABSTRACT

Objective: To study whether there is early referral of pediatric dermatology cases that fall outside expertise of general practitioners and their perception about the need of pediatric dermatologist.

Study design: Online Cross sectional survey

Place and duration of study: Nationwide, March 2024 to August 2024.

Materials and Methods: A 13- questions' anonymous survey was sent to practicing primary care physicians and general practitioners in Punjab electronically through Google form. Questions were about the role of pediatric dermatologists, their need in tertiary care hospital, curb side consultation and to specify who can perform minor cutaneous surgical procedures. P value ≤0.05 was considered statistically significant.

Results: Response rate was 38%. There were 646 responses. 74% of respondents favored pediatric dermatologist to treat pediatric dermatosis (33% responses).77% were unfamiliar with curbside consultation. 61% respondents preferred pediatric surgeon to do minor procedures rather than pediatric dermatologist. 92% agreed that pediatric dermatologist is a growing need of every tertiary care hospital. **Conclusion:** General practitioners agreed about the need of pediatric dermatology as an expanding speciality. Proper dermatological referral or curbside consultations is needed.

Key Words: *Pediatric dermatology, General Practitioners, Referral and consultation, practice, Attitudes, Pakistan*.

INTRODUCTION

Pediatric dermatology involves a diverse array of skin disorders, and children with previously unrecognized dermatologic conditions commonly present first to general practitioners[1].

The evaluation and treatment of pediatric skin diseases can be challenging for general practitioners because of limited exposure to dermatopathology, particularly in complex disorders such as

genodermatosis and in conditions that demand accurate, weight-based medication dosing.[2]

The number of registered medical practitioners in Pakistan has reached approximately 194,265 and continues to grow steadily[3]. However, the strategies used by these physicians when encountering pediatric dermatologic conditions such as reliance on textbooks, informal peer consultation, or referral to specialized care and the destinations of such referrals have not been well documented.

This study was therefore designed to evaluate general practitioners' understanding and perceptions of pediatric dermatology, along with their clinical approaches to managing pediatric skin disorders that lie outside their area of expertise.

MATERIAL AND METHODS

Anonymous Cross-Sectional Survey Was Conducted from March 2024 To August 2024 Using A Questionnaire Administered Through Google Forms, Employing A Convenience Sampling Method. It was sent to 1700 general practitioners across Pakistan working at various private and public setups. Online consent was taken at the start of form. To get maximum participation, resources like SMS, WhatsApp, e-mails, pharma representatives and database of society of general practitioners were utilized. Survey gathered demographic information, place of practice, experience in dermatology. Survey explored their perception about need of pediatric dermatologist in hospitals, percentage of pediatric dermatosis encountered in monthly practice, confidence to deal with patients of pediatric skin disease, referral practices if needed. They were also inquired about curb side consultation and willingness or interest to improve their knowledge through online education.

RESULTS

Response rate was 38%, There were 646/1700 responses. Gender distribution showed 53% females and 47% males. Most of the general practitioners (57%) encountered pediatric dermatology cases around 30% of their monthly cases. (Table. 1) 92% agreed that pediatric dermatology is growing need of every tertiary care hospital and previous work experience of dermatology was seen in 40% of the general practitioners and their experience caused a remarkable impact on confidence to treat pediatric dermatosis. 60.2 % were not confident to diagnose and treat common pediatric dermatosis themselves.

Referral of patients of skin disease was done to dermatologist in 57% general practitioners as compared to pediatric dermatologist by 30.1% and this referral pattern was seen more in case of GPs having less than 5 year experience but gender did not has any significant impact of such referral pattern (P value = 0.177, Chi Square statistic= 4.92, DF =3)

Table 1: Demographic and practice variables

Variables	Description n (%)
Age	
≤30 years	24% (155)
31-50 years	42% (271)
51-70 years	23% (149)
>70 years	11% (71)
Gender	
Male	47% (304)
Female	53% (342)
Region of practice	
Lahore City	48 % (310)
Outside Lahore	36% (233)
Outside Punjab	16% (103)
Level of Health care	
Primary	30% (194)
Secondary	12% (77)
Tertiary	58% (375)
Previous experience in working in Dermatology Setup	
Yes	40% (258)
No	60% (388)

Figure 1: Perception about 'Who should deal with cases of pediatric dermatosurgery'

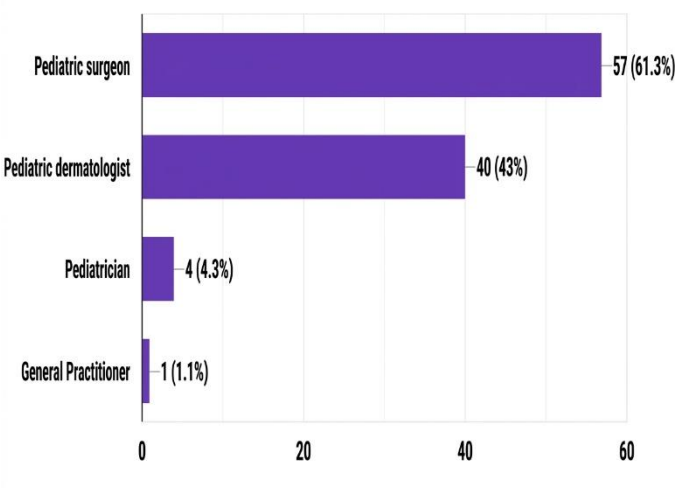
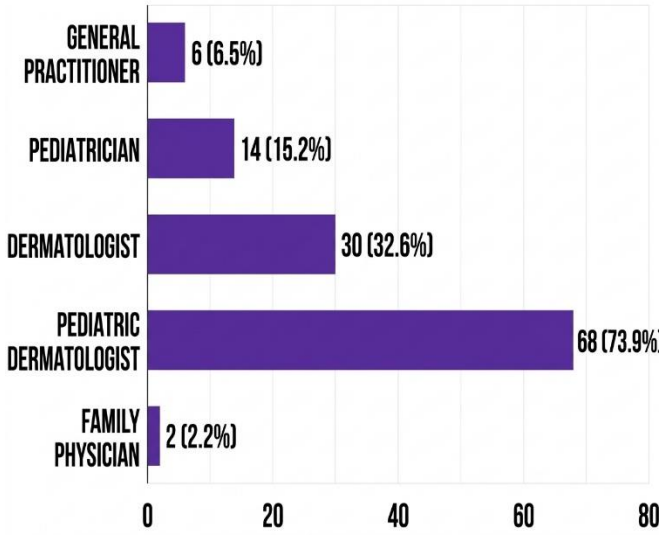


Figure 2: Perception about 'Who can manage pediatric skin problems properly'



When asked about ability to deal with pediatric dermatosurgery case like removal of cysts or benign tumor, skin biopsy, nail surgery; response in various specialities the was mostly in favor of pediatric surgeon as compared to pediatric dermatologist. (Figure 1) but most of practitioners preferred to refer pediatric patients having various dermatosis to pediatric dermatologist than a dermatologist (Figure 2).

77% of respondents were unfamiliar of curb side consultation and have never done it in their practice ever. 78% were willing to update their knowledge through various online resources like dermnet, continuing medical education (CME) courses, webinars and consultation with dermatologists.

DISCUSSION

Pediatric dermatology encompasses a diverse range of cutaneous disorders, extending from commonly seen conditions such as eczema and acne to rare, multisystem diseases including genodermatosis and inherited metabolic abnormalities.[9,13] Children with skin complaints are frequently first evaluated by general practitioners, placing them in a key position for initial assessment and management of pediatric dermatoses.[4] The attitudes and perceptions of general practitioners toward pediatric dermatology play a crucial role in determining patient outcomes, particularly by influencing decisions related to timely referral and appropriate therapeutic management.[5,10]

This article discusses the findings of a perception survey conducted among GPs, shedding light on their experiences, challenges and needs in managing pediatric skin diseases.

The survey revealed that most GPs encounter pediatric dermatological cases regularly, with some seeing such conditions daily or weekly. However, the level of training in dermatology varied significantly among respondents. While a small proportion had formal dermatological training, the majority relied on their general medical education, highlighting a potential gap in specialized knowledge.

Clinical experience was found to influence confidence levels, with more experienced practitioners reporting greater ease in managing pediatric dermatologic conditions compared with those early in practice. When respondents were asked about their ability to independently diagnose and treat common pediatric skin disorders, 40%

reported a lack of confidence. This finding compares favorably with data from European practitioners, where 64% were reported to have below-average confidence in diagnosing and managing pediatric eczema, as described in a study by Tripto et al.[6]

The survey also explored their ability to identify serious conditions requiring specialist referral. While most practitioners rated themselves as moderately confident, a notable proportion expressed uncertainty, particularly in distinguishing between benign and urgent cases.

As far as comparison of our results with other national and international studies is concerned, pediatric dermatology practice in united states of America showed that out of a total of 85,217,557 pediatric patients, 70.7% were seen and managed by non-dermatology providers and 29.3% were evaluated by dermatologists.[7, 8]

Whereas a national study in Karachi highlighted similar results that despite thriving practices, GPs lack knowledge about basic diseases and drugs; family medicine, as a post-graduate specialty is still a nascent program. There is a need of empowerment of existing GPs through CME to update their knowledge to improve quality of care at the mass level.[3]

Pediatric dermatology e-consultation services have been shown to shorten waiting times for specialist review, facilitate appropriate triage for outpatient assessment, decrease unnecessary follow-up visits, and potentially lower healthcare costs for patients. [12] The findings of this survey also pointed towards practical approaches for improving access to pediatric dermatology care. General practitioners identified tele dermatology as an effective means of addressing geographic and logistical constraints by enabling timely specialist input. Furthermore, structured collaboration through joint workshops and case-based discussions with dermatologists was suggested as a means to strengthen clinical knowledge and enhance patient management. Many respondents also indicated a strong interest in continuing medical education programs aimed at improving the diagnosis and treatment of both common and complex pediatric skin disorders. Similarly, curbside consultations in pediatric dermatology are common. They increase access, promote collaboration among various clinical specialities and can be used for educational gain.[12] Most of our general practitioners (77%) were unaware of curbside consultation in which one healthcare provider seeks advice from another specialist without initiating formal consultation process. Efforts should be made to promote and standardize this practice for early and proper management of pediatric dermatology cases in remote and rural areas.

CONCLUSION

Our general practitioners perceive pediatric dermatology an absolute need as 60% of GPs are not confident to treat pediatric dermatosis which could lead to undiagnosed/misdiagnosed cases and 78% of practitioners want to improve their knowledge about it.

RECOMMENDATIONS

Understanding the perceptions of general practitioners enables pediatric dermatologists to offer targeted education and training, optimize tele dermatology services, streamline referral pathways, and promote appropriate curbside consultations. Dermatologists can further support primary care providers by organizing workshops and case-based discussions to enhance knowledge and management of pediatric dermatologic conditions.

Future studies should explore the impact of targeted interventions, such as CME programs and tele dermatology, on GP confidence and patient outcomes, ensuring that all children receive timely and effective dermatological care.

LIMITATIONS

Causes of various challenges faced in managing pediatric cases and factors affecting their referral and practice pattern were not inquired in detail - needs further qualitative study.

Pediatricians doing general practice were not included because most may have second fellowship training which may lead to bias.

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Author's Contribution

Dr. Uzma Amin: Proposed topic, basic study design, methodology and manuscript writing
Prof. Sehrish Ashraf: Statistical analysis and interpretation of results etc.
Dr. Alina Abbas: Literature review & referencing and quality insurer
Dr. Faria Asad: Manuscript review and final approval
Dr. Faisal Feroz: Data collection

All the authors have approved the final manuscript draft and accept the responsibility of research integrity.