

# Skin of Colour Dermatology: A National Study on the Confidence of Irish Primary Care providers

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#### Abstract

#### Introduction

In recent years, there has been a significant focus on racial disparity in dermatology and increased efforts to diversify education and training. Previous surveys have demonstrated low confidence amongst dermatologists managing dermatoses in patients with skin of colour(SOC). Dermatological presentations make up a considerable proportion of a general practitioner(GP)'s workload, many of which are managed in the community. Our aim was to assess the confidence of Irish GPs in treating dermatoses in SOC.

## Methods

This was an anonymous, cross-sectional study. An online questionnaire was distributed to GP's through GPbuddy.ie, an online platform widely used by GPs in Ireland.

#### Results

There were 121 responses. 95.9% (116) were White-Irish. Regarding diagnosis, 65.5% (79) were not confident diagnosing dermatoses in SOC. Similarly, regarding management, 55.2% (67) were not confident in SOC. Lack of exposure, followed by lack of training were cited as the greatest challenges to managing dermatoses in patients with SOC.

## Discussion

To promote health equity, famililarity and confidence in the management of dermatoses in SOC is paramount. Recently, there has been a welcome focus on SOC representation in dermatology education. Given the volume of dermatological presentations managed by GPs, and often long waiting times to see dermatologists, GPs are an important group to include in this education.

## Introduction



The specialty of Dermatology originated in Europe in the early 19<sup>th</sup> century, resulting in many textbooks and clinical atlases focusing on dermatological conditions in lighter skin tones<sup>1</sup>. Skin of colour (SOC), a term originating in North America, is an umbrella term used to describe individuals with 'non' white (Fitzpatrick IV-VI) skin types. In recent years, there has rightly been a significant focus on racial disparity within medicine and there has been a push to diversify dermatology education and training. Several surveys in Western countries, including Ireland have demonstrated low confidence levels amongst dermatologists in managing dermatoses in patients with SOC1. Valuable strides have been made in improving inclusivity and representation in dermatology training, however further improvements are needed. Optimisation has thus far, focused on improving education for dermatologists. However, skin issues make up a considerable proportion of a general practitioner (GP)'s workload, the majority which are managed in the community. According to the 2022 Census, 6.5% of people living in Ireland have SOC<sup>2</sup>, a number that is continuing to increase. GPs often receive limited dermatology training, and almost no specific training on SOC. Our aim was to assess the confidence of Irish GPs in managing dermatoses in patients with SOC, and to identify opportunities to enhance training in dermatology and SOC.

## Methods

This was a national, anonymised, cross-sectional study conducted over a two month period from January to February 2024. An online questionnaire was distributed to GP's through GPbuddy.ie, an online platform and directory widely used by GPs in Ireland.

Data was collected regarding demographic data, an individual's confidence in treating SOC and confidence on specific dermatoses frequently managed in primary care. The questionnaire was hosted by smartsurvey.co.uk (Appendix 1). Analysis was performed using coded data transferred from Microsoft Excel to SPSS. Ethical approval was granted by the HSE Mid-West Research Ethics committee.

# **Results**

## **Demographics**

There were 121 responses to the questionnaire. Most respondents (95.9%) were Caucasian Irish or European. Half (47.1%) have been working for over 15 years. Sixteen (13.2%) respondents have held a dermatology hospital post and 31 (25.6%) have an additional dermatology qualification. Of these, 45% (n=14) are Professional Certificates, 52% (n=16) are Diplomas and 3% (n=1) are Masters. Half (49.6%) have worked overseas, including four in Africa and two in the Middle East. A fifth (19%) of respondents have a patient cohort where more than 10% of patients have SOC.



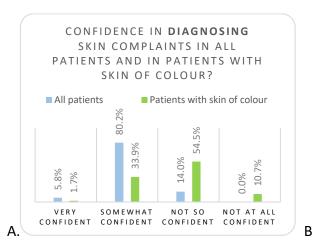
Table 1	Respondent characteristics
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Table 1 Respondent characteristics	
	% (n)
Gender	
Male	43.8 (53)
Female	56.2 (68)
Age, years	
< 30	5 (6)
30 - 45	47.1 (57)
46 - 55	19.8 (24)
> 55	28.1 (34)
Years working	
< 5	8.3 (10)
5 – 15	44.7 (54)
16 - 25	16.5 (20)
> 25	30.6 (37)
Ethnicity	
White Irish / British / European	95.9 (116)
White – other background	1.65 (2)
Indian or Irish / British Indian	1.65 (2)
Black / Black Irish	0.8 (1)
Estimated patients with SOC in practice	
< 5%	50.4 (61)
5-10%	30.6 (37)
> 10%	19 (23)
Worked in medicine overseas	
No	50.4 (61)
Yes -	49.6 (60)
UK / mainland Europe (Hungary / Greece)	1.6 (2)
Australia / New Zealand	27 (33)
Middle East (Iraq, Saudi Arabia)	1.6 (2)
North America (Canada, USA)	4 (5)
South America (Iraq, Saudi Arabia)	1.6 (2)
Africa (Kenya, Zimbabwe, Botswana, Guyana)	3.3 (4)
Held a hospital dermatology post	
Yes, > 3 months	3.3 (4)
Yes, ≤ 3 months	9.9 (12)
No	86.8 (105)
Dermatology qualifications	
Yes, Certificate	11.6 (14)
Yes, Diploma	13.2 (16)
Yes, Masters	0.8 (1)

# GP confidence

Overall, respondents were less confident managing dermatoses in patients with skin of colour. In terms of diagnosis, 65.5% of GPs were 'not confident' or 'not at all confident' for dermatoses in SOC compared to 14% for all skin tones. Similarly, regarding management, 55.2% of GPs were 'not confident' or 'not at all confident' for SOC vs 13.2% for all skin tones.





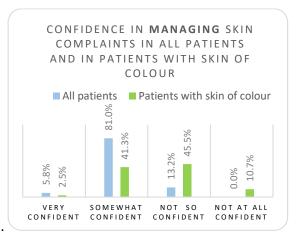
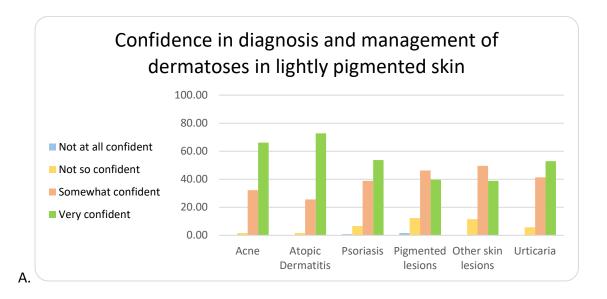


Fig. 1. Confidence levels of Irish GPs in the diagnosis (A) and management (B) of dermatoses in all patients (blue) and patients with skin of colour (green).

Confidence levels amongst GPs were higher in the diagnosis and management of common dermatoses, including acne, atopic dermatitis, psoriasis, skin lesions and urticaria, in lightly pigmented skin compared to SOC (*fig. 2*), which is not an unexpected finding.

Regarding the management of acne and atopic dermatitis, 29% of GPs were not confident' or 'not at all confident' compared to 1.6% not confident in lighter skin tones. For psoriasis, 33% and 7.4% were 'not confident' or 'not at all confident' in diagnosis and management in SOC and white skin respectively. Similarly, for urticaria, 38% vs 5.8% were not confident in SOC vs lighter skin. Confidence levels were particularly low for skin lesions in SOC. 70.2% stated were not confident in the diagnosis of pigmented lesions and 61.3% were not confident for other skin lesions. There was no significant difference in confidence levels in people who had worked abroad.





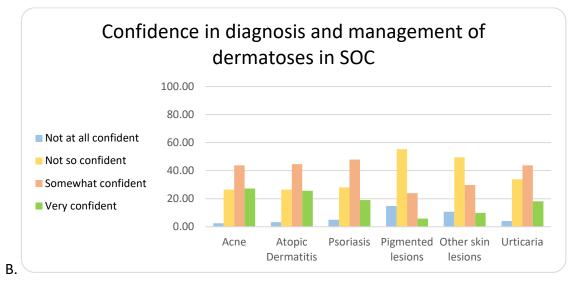


Fig 2. Confidence levels of Irish GPs in the management of common dermatoses in lightly pigmented skin (A) & SOC (B).

In our cohort, lack of exposure, followed closely by lack of training were cited as the greatest challenges to managing patients with SOC. Online resources, education webinars, dedicated study days and teaching clinics were all cited as possible strategies to improve confidence.

Themes identified in free text responses included lack of dermatology training in general, but particularly for SOC, difficulty accessing / long waiting times for dermatology and a need for more training on SOC to ensure all patients can access high quality care.

## Discussion

This study shows that Irish GPs have low confidence in diagnosing and managing dermatoses in people with SOC, including common dermatoses frequently managed in primary care. Many surveys in Western countries including Ireland, the UK, USA & Australia have demonstrated low confidence amongst dermatologists and dermatology trainees in the diagnosis and management of dermatoses in SOC. To our knowledge, this is the first study looking at the confidence of GPs. In our study, confidence was lower than the confidence of dermatologists in similar studies, with only 35.6% of GPs confident in diagnosing and 43.8% confident in managing dermatoses in SOC. In a recent survey of Irish dermatologists, only 50% were confident in diagnosing and 66.1% confident in managing dermatoses in patients with SOC¹. Similarly, in a study of Australian dermatologists, only 56% were confident in diagnosing and 75% confident in managing common dermatoses in patients with SOC³. This consistent disparity in confidence between skin tones is important as patients with darker skin tones are more likely to have negative outcomes from dermatological conditions, including melanoma⁴.



In recent years, there has been significant focus on racial disparities in dermatology and considerable gains have been made in increasing awareness, training, and education in SOC dermatology. Dedicated textbooks and online resources on SOC dermatology are available, and many SOC educational events and conferences have been held, including through primary care societies.

Our study had several limitations including a small sample size and potential response bias. Survey studies are susceptible to responder bias and it was not possible to calculate a response rate for this survey as it was impossible to assess how many doctors had seen the study posted on GPbuddy.ie.

To promote health equity, famililarity and confidence in the management of patients with skin of colour is paramount. In recent years, there has been a heightened focus on SOC representation in dermatology education. Given the volume of dermatological complaints managed by GPs, and often long waiting times to see dermatologists, GPs are an important group to include in this movement.

#### **Declarations of Conflicts of Interest:**

None declared.

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