

Application and how a Dermatologist can aid Non-Dermatologic professionals using the application

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Application and how a Dermatologist can aid Non-Dermatologic professionals using the application

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Abstract

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Title: *Figure 1* Application and how a Dermatologist can aid Non-Dermatologic professionals using the application

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To the editor:

INTRODUCTION

Figure 1 is a mobile application where thousands of health professionals share and discuss medical cases in real-time. *Figure 1* provides a platform of medical education and collaboration available in close to 100 countries. The application works in a similar way to facebook or instagram; images are posted with captions consisting of relevant patient information and other users offer diagnostic and treatment advice by posting in the comments section. Social media is a ubiquitous part of modern life, and the use of applications like *Figure 1* to obtain medical knowledge and insight has become very popular [1]. Based on a study conducted by

Ranpariya et al., only 4% of dermatologic content on social media is produced by a board-certified dermatologist [2]. Therefore, the purpose of this letter is to analyze content within the *Figure 1* application in regards to diagnostic agreement of non-dermatological healthcare professionals and discuss the advantageous role a dermatologist can play in the use of the application in daily medicine.

METHODS

Recruitment

300 dermatologic cases posted on the main feed of *Figure 1* application were collected and examined between June 2023 and August 2023 using Microsoft Excel. The data was organized and totaled by the specialty of each case's author and reason for the post.

Statistical Analysis

Aggregate data of both provider training and role (i.e. Physician, Nurse Practitioner, Physician Assistant, Registered nurse, etc.) and specialty training were cumulatively added and represented as percentages of the total 300 dermatologic cases.

RESULTS

Of the 300 cases analyzed, 151 cases were presented by non-dermatologic physicians, eight cases were from dermatologists, and the remaining 141 cases were posted by Nurse Practitioners, Physician Assistants, and Registered Nurses with no specialty indicated. The specialties that had the most case presentations of the 151 that were non-dermatologic were internal medicine (43%), family medicine (35%), and emergency medicine (22%). All cases were seeking assistance in rash/lesion identification and future treatments.

DISCUSSION

Principal Results

Of the 300 cases assessed, 292 were presented by non-dermatologic healthcare professionals seeking further assistance in rash and lesion identification. The data we gathered from this application prompts us to consider if Primary care physicians (PCPs) and non-dermatological health professionals are receiving adequate education regarding appropriate treatment and criteria of common cutaneous ailments for referral.

Comparison with Prior Work

In a study conducted by Patro et al., the overall agreement between diagnoses made by a PCP and a dermatologist was 56% with poor diagnostic agreement seen most in psoriasis and eczema [3]. If dermatologists and non-dermatologic health professionals can only agree 56% of the time and only eight of the 300 cases were done by a dermatologist (2.66%) as seen in *Figure 1*, then there is concern for inaccuracies and spread of misinformation.

Conclusion

PCPs are usually a patient's first contact regarding their health. In this way, PCPs have a unique opportunity to recognize and treat common dermatological diseases including benign skin lesions, fungal infections, acne and atopic dermatitis. Knowledge and skills training should be equipped to prepare PCPs for management of certain conditions like skin cancer, due to its impact. Additionally, it is important for users to be aware that virtual consultations such as these should not take the place of formal evaluation by board certified dermatologists. However, the larger number of cases that were presented by healthcare professionals without formal dermatologic training displays a void that can be filled by trained dermatologists. Dermatologists can utilize *Figure 1* to aid non-dermatological trained professionals by providing knowledge, bridging diagnostic gaps regarding common cutaneous conditions and preventing the spread of misinformation and misdiagnoses pertaining to the skin.

Limitations

Reporting errors of *Figure 1* application users should be considered when stating provider role and case

presentation. The strength of the study can be further developed by increasing the sample size used by expanding the length of time of data collection and should be considered for future research.

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