

Awareness and Practices about Skin Care among Medical Students: A Cross-sectional Study

HENIL UPADHYAY¹, CHARMY PARIKH², PRAGYA ASHOK NAIR³

ABSTRACT

Introduction: Skin care is defined as practices that help in maintaining the structural and functional integrity of the skin. Routine skin care focuses on keeping it clean, balanced, protected and free from irritation. This can be achieved with a simple regimen including gentle cleansing, moisturising and protecting the skin from UV rays.

Aim: To evaluate the awareness and practices regarding skin care among medical students.

Materials and Methods: This was a cross-sectional study involving medical students studying at a medical college in Western India. A questionnaire consisting of close-ended questions regarding skin care awareness and practices was used as study tool. Data was analysed using the STATA14 software.

Results: The study group comprised of 300 participants of which 201 (67%) were females and the rest 99 (33%) were males. The age of participants ranged from 17 to 23 years. Ninety-three (31%) felt that ideally face should be washed twice in a day,

while 153 (51%) students were having the awareness regarding makeup removal before sleep. The ideal sunscreen SPF was not known by 211 (70.3%) students while 47 (15.7%) knew that it should be 30-50. Awareness regarding physical exercise, yoga and meditation improving the skin health was seen in 201 (67%) and 235 (78.3%), respectively. Awareness regarding adequate sleep and healthy diet necessary for healthy skin was reported by 261 (87%) and 250 (83.3%) students, respectively.

Total 129 (43%) students used Over-The-Counter (OTC) products or face wash to wash their face, 167 (55.7%) used some or other cosmetic products, 226 (75.3%) students didn't share their cosmetic products with others while 277 (92.3%) students didn't use sunscreen routinely.

Conclusion: Medical students need to be aware about skin care practices, so that they can educate the general public about its importance particularly in country like India where most of the general population is under the influence of advertisements in newspaper and television about routine skin care.

Keywords: Cleansing, Dermatology, Medical college, Moisturising

INTRODUCTION

The skin is the largest organ of the body that helps in maintaining the integrity of the host and at the same time, allows the host to communicate with the outside world [1]. It acts as an interface between the internal milieu and the external environment, thus providing many functions that are essential for human survival like protection from dehydration and excessive water influx, maintenance of electrolyte homeostasis, thermoregulation, tactile sensation, antimicrobial defense, and protection from environmental toxins, trauma and Ultraviolet (UV) radiation [2].

Skin care is defined as practices that help in maintaining the structural and functional integrity of the skin. Routine skin care focuses on keeping it clean, balanced, protected and free from irritation. These can be achieved with a simple regimen including gentle cleansing, moisturising and protecting the skin from UV rays. Common practices include showering with or without cleaning products, and application of leave-on products such as lotions, creams or ointments [3]. Skin care also extends to protection from harmful UV rays, protecting the skin from all impurities, hand hygiene, and following healthy lifestyle practices. It is an essential part of personal hygiene and well-being as unclean skin favours the development of pathogenic organisms and infections [4]. Daily skincare increases skin regeneration, elasticity, smoothness and thus, temporarily changes the skin condition [5]. There are scarcity of studies regarding skin care awareness and practices among medical students in India. Hence, this study was carried out with the objective to evaluate the awareness and practices regarding skin care among medical students.

MATERIALS AND METHODS

A cross-sectional study was conducted at a medical college in Western India. After obtaining permission (IEC/HMPCMCE/105/Faculty/2/54/19) from the Institutional Ethics Committee, the participants were enrolled in the study. Prior informed consent was obtained from all participants.

Inclusion criteria: Medical students studying at a medical college in Western India.

Exclusion criteria: Students who were not willing to participate in the study.

All information collected during the course of this study was kept confidential and was used for research purposes only. Information sheet in which all details about the project, the participant's rights, and the researcher's statement were enclosed, accompanied the questionnaire.

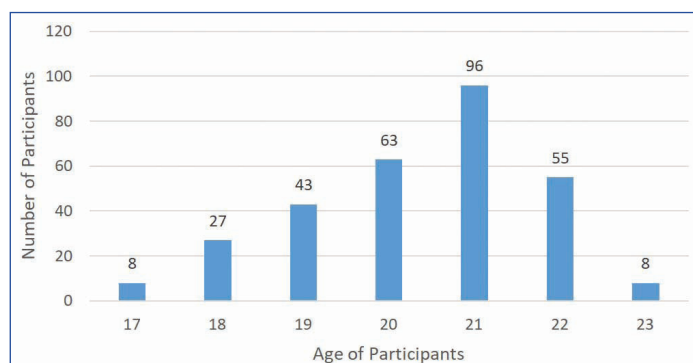
Questionnaire design: The questionnaire was developed by a senior dermatologist at the hospital. Pilot study was performed with a group of students representing the study population and feedback was taken from the participants of the pilot study. First, demographic data of the participants was obtained relating to age and gender. The questionnaire consisted of close-ended questions divided into two sections i.e., awareness regarding skin care and skin care practices. To keep the questionnaire brief, seven questions were included in skin care awareness and four questions in skin care practices. Google forms platform was used to collect the data from the participants.

STATISTICAL ANALYSIS

Data was collected and analysed using the STATA14 software.

RESULTS

The study group comprised of 300 undergraduate medical students of which 201 (67%) were females and the rest 99 (33%) were males. The age of participants ranged from 17 to 23 years [Table/Fig-1].



[Table/Fig-1]: Age Distribution of the study group.

The response of participants regarding skin care awareness consisted of seven questions on various aspects such as ideal frequency of face washing, removing makeup before sleeping, awareness on sunscreen, relation of skin health with physical exercise, yoga and meditation, sleep and dietary practices. Maximum i.e., 93 (31%) felt that ideally face should be washed twice in a day. Total 153 (51%) students were aware that makeup should be removed before going to sleep. The ideal SPF which should be used in sunscreen was not known by 211 (70.3%) students while 47 (15.7%) knew that it should be 30-50. Awareness that physical exercise and yoga/meditation improves the skin health was seen in 201 (67%) and 235 (78.3%), respectively. Similarly, proper six-hour sleep and healthy diet necessary for healthy skin was reported by 261 (87%) and 250 (83.3%) students, respectively [Table/Fig-2].

Questions	Response	Frequency (%)
How often should you wash your face ideally?	Once a day	34 (11.3)
	Twice a day	93 (31)
	3 times a day	88 (29.3)
	More than 3 times a day	85 (28.4)
Do you think that removing make up from skin is necessary before sleep?	Yes	153 (51)
	No	147 (49)
What should be the SPF (sun protection factor) of an ideal sunscreen in India?	Below 30	27 (9)
	30-50	47 (15.7)
	More than 50	15 (5)
	Don't know	211 (70.3)
Do you think that physical exercise improves skin health?	Yes	201 (67)
	No	99 (33)
Do you think that yoga and meditation improve skin health?	Yes	235 (78.3)
	No	65 (21.7)
Do you believe that an average sleep of 6 hours daily improves skin health?	Yes	261 (87)
	No	39 (13)
Do you believe that healthy dietary practices can improve your skin health?	Yes	250 (83.3)
	No	50 (16.7)

[Table/Fig-2]: Awareness among participants regarding skin care.

Skin care practices among medical students were explored which shows maximum 129 (43%) students used Over-The-Counter (OTC) products or face wash to wash their face, 167 (55.7%) used some or other cosmetic products, 226 (75.3%) students didn't share their cosmetic products with others while 277 (92.3%) students didn't use sunscreen routinely [Table/Fig-3].

DISCUSSION

Regarding awareness on skin care, present study showed that majority of the students i.e., 31% believed that face should be

Questions	Response	Frequency (%)
What do you use for washing your face?	Medicated face wash	69 (23)
	Medicated soap	41 (13.7)
	OTC face wash	129 (43)
	OTC soap	47 (15.7)
	Only water	14 (4.6)
Do you use any cosmetic products?	Yes	167 (55.7)
	No	133 (44.3)
Do you share your cosmetic products with other people?	Yes	74 (24.7)
	No	226 (75.3)
Do you apply sunscreen regularly?	Yes	23 (7.7)
	No	277 (92.3)

[Table/Fig-3]: Skin care practices among the participants.
OTC: Over-the-counter

washed only twice a day which is in line with recommendation from majority of the dermatologists while 11.3% students believed that they should wash face only once a day; about 29% students believed that face washing must be done three times in a day. Excessive washing with soap can lead to dryness of the skin, thus use of mild soap and reduction in number of washing to once or twice will minimise the drying effects [6]. In regards to the relation of skin health with sleep and dietary practices, 87% and 83% students believed that average six hours of daily sleep and healthy dietary practices will improve skin health respectively. It is proven that healthy dietary changes can lead to positive skin changes in just a few weeks [6]. Lack of sleep cause stress hormone cortisol to be released which encourages inflammation of skin while good sleep releases human growth hormone, a necessary ingredient for collagen production which in turn improves the quality of skin [7].

In present study, 67% of students believed that physical exercise improves skin health and 78.3% of students believed that yoga and meditation would improve skin health. It has been proved that physical exercise increases the blood circulation, thus can help deliver oxygen uptake and nutrients to skin. It promotes collagen synthesis which in turn improves the glow in skin and prevents aging. Meditation also increases the oxygen, rejuvenates the skin and thus, delays aging [8]. Choosing the right ingredient of skin product for each skin type is essential, as various skin care preparations may induce skin irritation. Increasing knowledge and awareness about the benefits and optimal use of skin products is important for the students as they are the common age group who are under the influence of advertisement for trying various types of skin products. Regarding make up use, 51% students agreed that one should remove make up before sleeping. Removing make-up products before sleeping is essential as they can accumulate in skin creases and on surface of skin giving rise to poor complexion and increases the chances of acneform eruptions [9].

Skin cancer has increased steadily during the past four decades, and it accounts for one out of three cancer cases worldwide [10]. A significant amount of a person's total sun exposure occurs during childhood and adolescence [11]. Individual risk of skin cancer is also strongly related to skin types, the risk being higher among people who burn easily and tan poorly, i.e., type (II), rather than Indian skin which is type (III) or type (IV) [12]. Avoidance of sun exposure is considered to be an effective and safe tool for prevention against skin cancer and photoaging. According to the current recommendations, Indians should use sunscreen with SPF more than 30 and in present study 20.7% students agreed with that whereas about 70% participants didn't know about the recommended SPF criteria [13]. Only 7.7% students were regularly using sun screen whereas the rest (92.3%) were not using sun

screen regularly. Thus, this study indicates a low rate of knowledge about the hazards of sun exposure and the use of sunscreen with its recommended SPF.

In this study, majority of the students (43%) used OTC face wash, 23% medicated face wash, 15.7% OTC soap, 13.7% used medicated soaps and 4.6% used only water for washing face. This might be due to extensive advertising of OTC face washes by the media. There are studies where 23.3% students use regular facials as a routine or even 100% using various skin care products in a study by Xu S et al., [1,14]. Cosmetic products have become everybody's daily grooming habit, particularly in students who study in higher institutions. It is been proved that cosmetics use is highly related with self-confidence. Adverse effects from cosmetics can happen immediately after application or on long-term usage [15]. In present study, 55.7% participants were using cosmetic products and 24.7% students were sharing cosmetic products with others. In a study by Dibaba H et al., reported that nearly half (48.6%) of the respondents shared cosmetics with their friends [15]. Sharing had a statistically significant association with the occurrence of adverse reactions, which is known to make cosmetic products prone to microbial contamination, which in turn causes acne and other infections [16].

Limitation(s)

One of the limitation of this study was that the sample was considerably small i.e., 300 patients. Also, the questionnaire consisted of many closed ended questions in which the participants were not able to express their opinions.

CONCLUSION(S)

Medical students need to be aware about the skin care practices, so that they can educate the general public about its importance particularly in country like India where most of the general population is under the influence of advertisements in newspaper and television about routine skin care.

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PARTICULARS OF CONTRIBUTORS:

1. Intern, Department of Dermatology, Pramukhswami Medical College, Karamsad, Anand, Gujarat, India.
2. Intern, Department of Dermatology, Pramukhswami Medical College, Karamsad, Anand, Gujarat, India.
3. Professor and Head, Department of Dermatology, Pramukhswami Medical College, Karamsad, Anand, Gujarat, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Pragya Ashok Nair,
10, Vadhi Bunglows, Opp. Shantaba Park, Nana Bazar, V V Nagar,
Anand-388120, Gujarat, India.
E-mail: drpragash2000@yahoo.com

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