

The darker perspective behind skin lightening practices and its effect on mental health

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ABSTRACT

BACKGROUND & OBJECTIVE: In Pakistan, individuals seem to have a strong preference for a light skin tone due to it being one of the criteria that defines “beauty” universally. There is a plethora of research that has investigated the implications of darker skin color and the role media and culture has played in it. The current study aims to find out the reasons people seek fairer skin tones as well as the prevalence of stress, anxiety, and depression among them in Pakistan.

METHODOLOGY: The study was conducted over a period of 6 months in the dermatology OPD of Fatima Hospital Baqai Medical University, Karachi where 250 individuals participated (196 = females, 54 = males) by non-probability purposive sampling. Just over 60% (172 individuals) of the sample size indicated that they fell in the dark skin color category. The results suggest that anxiety, depression, and stress have a significant association with skin tone (p-value < 0.05).

RESULTS: The reasons for adopting skin-lightening treatments were diverse; 90(36%) of participants reported that they are using the treatment for fairness because of their own will, 87(35) indicated media, and 73(29) selected relatives/friends/husbands. They were also asked to fill DASS-21 scale to determine the levels of stress, anxiety, and depression that come with the pressure of seeking fair treatments.

CONCLUSION: This study highlighted that skin tone is an important determinant of mental health and impacts the lives of women and men individuals with darker skin face more anxiety, depression, and stress due to sociocultural pressure.

KEYWORDS: Anxiety, Depression, Mental Health.

INTRODUCTION

The color of our skin is given immense importance around the globe. Low levels of satisfaction are noted in darker skin tones from multiple backgrounds which has given rise to lightening procedures in both men and women [1]. Studies suggest that 25% to 96% of the female population uses skin-lightening products in Sub-Saharan Africa [2], 25% of females in Mali, 67% of the female population in other parts of Africa [3], and 35% in black communities [4].

As per the survey, around 80% of males from India used skin-lightening products with an annual increase of 18% [5]. WHO reported that using artificial means of skin whitening methods can be dangerous to individuals' health and lead to fatal complications [6]. The models and individuals presented on the internet and media encourage unrealistic beauty standards of society

due to which people are constantly struggling to alter their appearances and look “perfect”. Individuals use Skin Lightening Drugs (SLDs) and Image Enhancing Drugs (IED) as they are advertised to be easily available in the market and without any side effects [7]. However, these can be very harmful as they contain hidden ingredients that can cause skin damage, allergic reactions, mercury poisoning, and more [8,9].

The advertisements of these products promise extreme results with visual aids that lead people to believe them and use them without any medical consultation. Research conducted in Jordan reported that 77% of the participants indicated that women use SLDs by getting influenced by TV commercials [10].

The consumption of skin whitening products and practices despite its ramifications is fueled by diverse cultural beliefs from South America, Asia, and the Middle East [11].

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One of the reasons for a lighter skin tone is to make oneself more desirable for the opposite gender and it is believed that having a fair skin tone will lead a girl to marry into an economically strong family [12]. Deeper skin tones, even in the same racial group are subject to criticism and inferiority, which may be due to the link of darker skin tones to low economic class in a society since the British times [13]. The adverse effects of skin whitening practices are becoming a tremendous challenge as well as affecting individuals' mental health immensely [14].

The constant focus on the ideal beauty image is promoted by the media and indicates an increased dissatisfaction with individuals' body image, especially women [15]. Findings suggest that 40% of the beauty products sold in Asia are skin-lightening agents [16].

The constant persistence of whiter skin is increasing mental health issues like depression, anxiety, distress, and perceived discrimination [17]. Mental health problems associated with skin lightening are new in focus and body image disruptions and mental disorders in individuals i.e., body dysmorphic disorder and trauma as a result [18]. Studies indicate that there is discrimination against people with darker skin tones in a culture that leads to depression and decreased self-esteem [19].

In the Pakistani population, almost half of the population is women. They make up a significant number of skin-lightening product consumers as they are first and mostly judged by their looks and feel the need to spend a significant amount of money on enhancing their physical beauty [20]. In the Pakistani socio-cultural milieu, light skin is associated with status, education, competency, and wealth [21]. The cultural values and social pressure have created a preoccupation with fair skin tone which has resulted in low self-esteem and body dissatisfaction [22].

This encourages women to resort to skin-lightening agents and treatments without realizing the side effects and more harm is done than good which can further increase stress, anxiety, depression, and other psychological stressors. Also, the media influences how people perceive things, their actions, beliefs, and how they respond to and handle social situations [23] which has led to women obsessing over the perfect image of women. Even though, The shade of one's skin remains a crucial contextual factor that impacts the way the dark skin tone is perceived and felt. Research conducted in Malaysia and other countries suggests that despite women knowing the side effects and harmful risks of skin bleaching products they still use them to better their self-image [23].

Multiple adverse effects have been indicated due to these products which result in individuals rushing to the dermatologists, which has become an enormous challenge. Conclusively, there is a lack of collaboration between mental health practitioners and dermatologists on this growing public concern. Therefore, the current research aims to study the relationship between mental health and the desire for fair skin so that effective interventions can be developed for this and to manage psychological stressors caused by it.

METHODOLOGY

The present research is a descriptive, cross-sectional study that was conducted in the outpatient department of Dermatology, Fatima Hospital; Baqai Medical University (BMU), Karachi. The study was conducted from September 2022 – February 2023. The target population was all the individuals coming in dermatology OPD to get treatments to improve their skin tone or get a fair skin color. A sample size of 250 and non-probability, purposive sampling method was employed. The inclusion criteria consist of all the individuals that presented to dermatology OPD for advice for lighter skin tone, both genders were to be given equal chance and all individuals must be aged 13 and above. Individuals with known psychiatric illnesses, on any antipsychotic medications, or having co-morbidities such as diabetes mellitus, hypertension, chronic liver disease, and chronic renal disease were excluded from the sample. The study was started after approval from the ethics committee, at Baqai Medical University (Ref: BMU-EC/04-2022).

Approval of the ethical review committee of the institution was taken before the data collection. The study included individuals who came to dermatology OPD for advice on lighter skin tone and fulfilled the inclusion and exclusion criteria. Before inclusion, the purpose and benefits of the study were explained, and informed consent was taken from individuals or legal caretakers regarding their participation in the study. Demographic and clinical characteristics, such as age (years), weight (kg), height (cm), and gender were recorded.

All the collected data was recorded by a predesigned proforma and the DASS-21 scale was employed to measure psychological stressors. Confounding variables and bias were controlled by strictly following inclusion and exclusion criteria. Patient information was kept secured and accessible to authorized persons only. After the scoring of DASS-21, the data from the scale and demographic form was entered and tabulated through SPSS-21 software. Frequency and percentages of demographic variables, reasons for seeking fairness treatment, skin color categories, and stress, anxiety, and depression were calculated by SPSS-21 which are elaborated in the tables given below. Association of categorical variables calculated through Chi-Square test, p -value < 0.05 considered significant.

*Ref: <http://www.openepi.com/samplesize/ssproper.htm> to calculate sample size from computer program "OpenEpi Version2"

RESULTS

A total of 250 individuals participated in the current study. The results were computed through SPSS 21. Table-I outlines the frequency of the demographic variables i.e., gender, marital status, age, education, socio-economic status, residence, and occupation. The majority of the participants were females (N=196) mostly in their undergraduate from

middle class living in urban areas. The frequency reasons of why people seek fairness treatment is indicated in Figure-I; 90(36%) of the participants informed themselves, 87(35%) indicated media, and 73(29%) attributed to relatives/friends or significant other as a reason to engage in lightening skin tone practices.

Table-I: Demographic Information (n=250).

Variables	Categories	n%
Gender	Male	54 (21.6)
	Female	196 (78.4)
Marital Status	Single	179 (71.6)
	Married	58 (23.2)
	Widow	8(3.2)
	Divorced	5(2)
Age	<20	101(40.4)
	20-30	99(39.6)
	>30	50(20)
Education	Primary	61(24.4)
	Secondary	12(4.8)
	Undergraduate	123(49.2)
	Graduate	52(20.8)
	Postgraduate	2(0.8)
Socioeconomic status	Upper class	5(2)
	Middle class	169(67.8)
	Lower class	76(30.4)
Residence	Urban	201(80.4)
	Rural	49(19.6)
Occupation	Private job	62(24.8)
	Not working	85(34)
	Student	103(41.2)
	Total	250

In the present research, 3 different categories of skin tones were included (according to Fitzpatrick skin phototype classification grade 4-6) as shown in Figure-II, results indicate among the participants, and it was seen that 31.2% (78 individuals) have light skin tone, 28.2%(71 individuals) have light brown and the prevalence of dark brown skin tone is higher than other i.e.40.4% (101 individuals).

Table-II shows the bivariate analysis of the association between stress, anxiety, and depression with their skin tone among study participants and it was seen that anxiety, depression, and stress have a significant association with skin tone (p-value< 0.05). In this context, individuals with dark skin tone have 58(57.4%) mild and 15(14.9%) moderate anxiety levels, light brown skin tone 38(53.5%) normal levels while 18(26.8%) moderate anxiety level, light skin tone 43(55.1%) are normal. Similarly, for stress levels, 17(16.8%) have mild, and 23(22.8%) have moderate stress levels whose dark brown skin tone. Whereas, depression levels were high 46(45.5%) moderate in dark brown skin tone, while 38(53.5%) were normal in light brown skin tone.

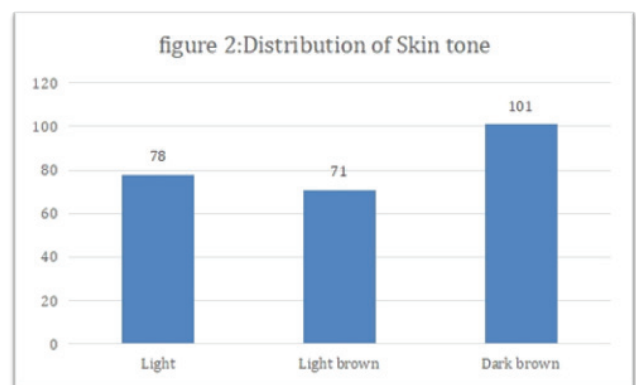
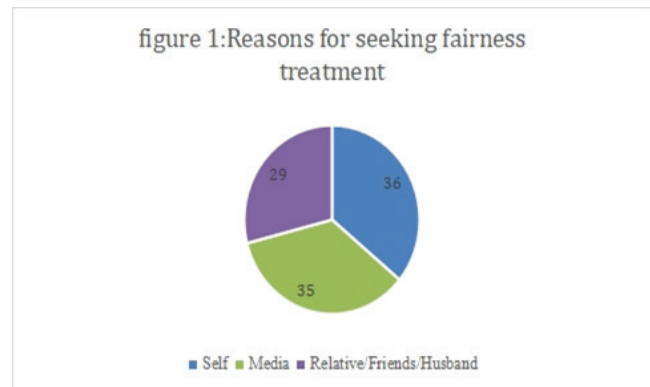


Table-II: Association of skin tone with stress, anxiety and depression.

Parameter	Categories	Skin Tone			P-value
		Light n=78	Light Brown n=71	Dark Brown n=101	
Anxiety	Normal	43(55.1)	38(53.5)	28(27.7)	≤0.001
	Mild	19(24.4)	14(19.7)	58(57.4)	
	Moderate	16(20.5)	19(26.8)	15(14.9)	
Depression	Normal	59(75.6)	38(53.5)	38(37.6)	≤0.001
	Mild	12(15.6)	16(22.5)	17(16.8)	
	Moderate	7(9.0)	17(23.9)	46(45.5)	
Stress	Normal	62(79.5)	55(77.5)	61(60.4)	0.03
	Mild	8(10.3)	5(7.0)	17(16.8)	
	Moderate	8(10.3)	11(15.5)	23(22.8)	

DISCUSSION

The purpose of the study was to explore the dark side of obsession with fair color in the culture of Pakistan in terms of the reasons why people participate in it as well as anxiety, depression, and stress in individuals aiming for lighter skin tone. For this purpose, DASS-21 was administered with consent to the individuals coming in dermatology OPD of Fatima Hospital – BMU for fairer skin color. The results presented multiple reasons why people want to lighten their skin color and indicated mild and moderate levels of anxiety and depression in the participants related to skin tone.

Results are indicative of a positive association between preoccupations with fair skin tone. As per the statistics, dark skin and light brown skin have a significant positive correlation with anxiety and depression i.e., 0.365, and 0.736 respectively. The study reports self, media, and relatives/friends/husband as the motivating factors and presence of depression, anxiety, and stress.

Approximately 17% and 9% of the individuals feel some kind of anxiety and depression related to their skin tone. The above findings are aligned with the results of previous literature on the factors promoting lighter skin color and its relationship with mental health especially the Asian's constant desire to be fairer especially advertised by the media. Being white is one of the most important aspects of becoming the ideal beauty in Asian cultures and it leads to an individual achieving a superior rank in the society as compared to people with darker complexion. Findings suggest that in South Asian cultures, girls with darker skin tones face challenges in getting married, better jobs, and gaining equal respect and appreciation as compared to fair-tone girls. A survey conducted in India where 1000 males and females participated suggests that both genders wanted to marry fairer partners than them and believed they would be good people [24].

As noticed in the present study, friends, family, and partners are a significant factor i.e., 29% of the people seeking fair skin. People in these cultures judge a person's internal and external beauty on how fair they are and believe that they become better partners and family members as compared

to someone with a darker skin tone. Media has also played a significant role in injecting the people with message of desirable women being very fair and extremely thin. In the present study, 35% of individuals reported that they are seeking fair treatment because of media (Table-III). Research done in South Asian countries indicates that 53% of young girls feel it's okay to be sad about their looks and darker skin – tone, and 42% think fairness merchandise causes them to feel anxious and below-par about their looks and to be accepted socially one has to have a fair complexion [24]. Advertisements and media commercials in Pakistan often depict girls with darker skin tones struggling to get married or succeed professionally leading people to resort to artificial treatments to alleviate their skin color.

In Hong Kong, 60% of the total skin-care products are skin-lightening items, and one-third of the female population has used some of these products for some of their lives [25]. It was reported that 78% of the female would prefer to be at least 2 shades lighter to feel beautiful and self-assured [25].

In the current research, 36% of the population indicated that they were seeking fairness practices and products on their own which is mostly because they believed in the notion of the “fair is beautiful and successful”. To boost their self-esteem and confidence they have to strive for physical beauty prescribed by society and the media. This includes males however; they usually prefer not to share. This phenomenon can be explained by Social Comparison theory which suggests that people persistently compare themselves with other individuals. A specifically upward comparison is when individuals compare themselves with others and evaluate the characteristics they are lacking in. This type of comparative practice also leads people to feel depressed, anxious, and stressed which can result in further mental health issues.

A review reported that females with darker skin tones are made fun of and bullied by their friends, are rejected by their families as brides for their sons, and struggle in employment too; this leads to girls developing low self-esteem and an inferiority complex as they feel they have to make extra efforts to compensate and look presentable.

The majority of the literature is focused on women as this phenomenon is most commonly found in them and they are reported to go through more troubles as compared to men. In the current study, as well, almost 77% of the participants are females. This can be because even though males do not prefer to share such details due to the stigma in society as well as because they are ashamed and feel it is some kind of threat to their masculinity. Women have expressed in many types of research that a lighter skin tone would have made them feel more confident and less anxious. A Pakistani cross-sectional study conducted in rural areas with 400 women reports skin color as a significant predictor of self-esteem and affected their both physical and mental well-being.

So much pressure on fairer skin color by our associations, media, and community and its consequences have created an adverse effect on well-being and day-to-day functioning. Similarly, sensitivity towards colorism on comparing African American/Black students against students of other races as a group shows that colorism still affects Black students more than other racial groups [26]. Further, another study revealing variations in the association between skin color and psychological functioning based on ethnicity suggests that Black individuals with skin tones irrespective of their ethnicity tend to have mental health outcomes. However, the impact varies among groups and specific mental health conditions. Caribbean Blacks show a connection between skin tone and certain mental disorders while African Americans with skin tones are particularly at risk [27].

Additionally, research conducted on Latinx adolescents emphasizes the impacts of colorism showing its link to lower academic performance and self-worth as well as its connection to feelings of depression and substance abuse [28]. The current research's results also show the presence of stress, depression, and anxiety in individuals seeking lighter complexion. A positive relationship is depicted between fairer skin color and psychological stressors on DASS-21. Hence these findings emphasize the need to recognize the diversity within the community and take ethnicity into account when studying health disparities to create personalized interventions and policies.

CONCLUSION

As per the findings of current research; individuals desiring lighter skin color due to others, self, or mass media can develop psychological issues which include depression, anxiety, and stress. The cultural belief as well as the media has exploited this phenomenon and led women to believe that to have a successful life they need to be fair and only white is beautiful. Mental health practitioners and health professionals need to understand this trend so that they can develop appropriate therapeutic interventions, be better equipped to deal with such individuals and prevent them from facing serious consequences in terms of mental and physical well-being.

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Authors' Contribution:

Nadia Farooq: Substantial contributions to the conception and design of the work.

Azra Shaheen: The acquisition and analysis of data for the work.

Naseem Amin Dhedi: Interpretation of data for the work.

Tayyaba Iqbal: Drafting the work and reviewing it critically for important intellectual content.

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