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PREVALENCE OF SKIN BLEACHING AND ITS ASSOCIATED FACTORS AMONG FEMALE STUDENTS OF BOSSASO UNIVERSITY-GROWE CITY, SOMALIA, 2024

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OUTLINES

- **Background & Study Problem**
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INTRODUCTION

Research Background

- ❑ Skin lightening for cosmetic reasons is associated with profound negative impacts on well-being, and 52 adverse effects on the skin (Charles, 2003), resulting in immense challenges for dermatologists.
- ❑ People are continuously attempting to lighten the skin or provide an even skin color by reducing the melanin concentration in the skin (Juliano, 2022).
- ❑ Despite current rules and regulations, lightening agents continue to dominate the cosmetic industry.

INTRODUCTION

Research Background

- ❖ Consequently, individuals claim that lighter skin make them attractive and increase their career opportunities (Dlova et al, 2015; Yusuf et al, 2019).
- ❖ In Africa, skin bleaching became a popular cosmetic practice in many African countries in the 1950s (Sagoe et al, 2019).
- ❖ It is estimated that up to 75% of women in Nigeria (Dlova et al, 2015; Dadzie and Petit, 2009), 60% in Senegal (Blay, 2011),
- ❖ 50% in Mali (Baxter, 2000), and 30% in Ghana use bleaching creams regularly, with similar rates in other African countries (Lartey et al, 2017; Mckinley, 2001).

INTRODUCTION

Research Background

- ❖ In the Middle East with estimates of 43.3% of Saudi women, over 60% of Jordanians and
- ❖ possibly higher usages of skin lightening products in other Middle Eastern countries (Alrayyes et al, 2020), the demand continues to increase in the Middle East.
- ❖ Skin whiteners can help achieve lighter skin tones, but many of them contain harmful ingredients:
- ❖ like the steroid clobetasol propionate, inorganic mercury, glutathione, and the organic compound hydroquinone (Juliano, 2022).

INTRODUCTION

Research Background

- ❖ In Somalia the use of skin lightening products among women of reproductive age is a norm.
- ❖ Somalia women perceive a lighter skin to be more beautiful as compared to a dark skin (Adawe & Oberg, 2013; Ndiritu et al., 2022).
- ❖ Furthermore, Somalia women have confessed to use skin lightening products with the aim of removing dark spots after pregnancy.
- ❖ There is however scanty information regarding the rates of use of skin lightening products among women in Somalia (Ndiritu et al., 2022).

STUDY AIM AND OBJECTIVES

- The study aimed to determine the prevalence of skin bleaching and associated factors among university students in the study region (Garowe).
- This study is an attempt by us, as researchers in the field of the healthcare sector, to raise the level of awareness among members of the local community in Garowe city.
- To draw the attention of the specialized authorities in the region to the serious health risks and threats resulting from the use of skin bleaches.
- To develop effective solutions to this problem, it was necessary for us to knock on the door and shed light on the situation in our region.

METHODS AND MATERIALS

- A cross-sectional study was conducted involving three hundred and twenty-two female students at the University of Bosaso, Garowe City campus, who were selected using a systematic random sampling technique and included in this study.
- To collect data, a structured questionnaire and basic information on sociodemographic characteristics, knowledge, attitude, associated factors, brand of skin care products used, and reasons for use were sought.
- Data was analyzed using SPSS 20.0. This investigation was carried out in the period between First of January 2024 to eighth of April 2024 during the second semester of 2023/2024 academic year.

METHODS AND MATERIALS

Ethical Consideration

- Approval letter was shown to respondents to prove eligibility of the study.
- Therefore, privacy and confidentiality towards respondents were addressed individually.
- In addition, names and other identifying information were not used in the study.
- Moreover, the researchers were not used the finding of others without acknowledging the authors and researchers.

RESULTS & DISCUSSION

Table 1. List of skin bleaching creams used by the University of Bosaso female students (both body & face creams) in Garowe City.

No.	Brand Name	Active Depigmenting Agent	Price (USD)
1	White Express	Clobetasol	3
2	Moovate Cream	Clobetasol	3
3	Dermoquin 2% cream	Hydroquinone	2
4	Carotone	Hydroquinone	2.5
5	Faiza Beauty Cream	Kojic acid, vitamin A, zinc oxide	4
6	Perfect White	Alpha hydroxy acid, kojic acid, titanium dioxide	3.5
7	Aneeza Gold Beauty Cream	None listed	2
8	Noor herbal Beauty Cream	Arbutin, kojic acid, licorice extract, vitamin A	2
9	Layla Beauty Cream	Kojic acid, titanium dioxide	2
10	Fairness Cream – Paris collection	Niacinamide, methoxycinnamate	3
11	Fair and Lovely	Titanium dioxide	1.5
12	Natural Face Beauty Cream	Ascorbic acid, vitamin A	3
13	Chandni Whitening Cream	None listed	3
14	Brown Cream face	Unknown*	2
15	Golden	Unknown*	3
16	Derma glow	L-Glutathione, alpha-lipoic acid, grape seed and vitamin C.	5
17	Diamond white	Aqua (Water), Glyceryl Stearate, Mineral Oil	3
18	Bio Carrol	Pure carrot oil, extracts of carrot seed	2.5
19	Miss white	Mineral Oil, Glycerin, Glyceryl Stearate SE, Stearic, Acid, Palmitic Acid	3
20	Abuwalled cream	Wheat flour, sugar, non- hydrogenated vegetable oil	5
21	Defacto whitening cream	Vitamin Extracts, Alpha Arbutin, Licorice Extract, Sodium	3.5

RESULTS & DISCUSSION

- ❑ As shown in **Table 2**, participants' which were all female students age ranged 18–28 years with mean age of 23 (SD: 3.3) years.
- ❑ Most of the respondents were aged 21–24 years (36.3%).
- ❑ Majority of the respondents were single (46.3%), light skin complexion (55.9%), urban dweller (64.9%) and most of them were in year four (n=133, 41.3) and from Faculty of Health Sciences (n= 109, 33.9%).
- ❑ Majority of the participants on the average earned 300-400 USD monthly (n=150; 46.6%).

RESULTS & DISCUSSION

Table 2. Sociodemographic characteristics of respondents in University of Bossaso, Garowe City, 2024 (N=322)

No.	Characteristics	Frequency, n=322	Percentage %
1	Age (Years)		
	≤20	104	32.3
	21-24	117	36.3
	25-30	101	31.4
2	Marital status		
	Single	149	46.3
	Married	105	32.6
	Others	68	21.1
3	College classification		
	Health Science	109	33.9
	Computer Science	88	27.3
	Social Work	88	27.3
	Public Administration	37	11.5
4	Skin tone		
	Light skinned	180	55.9
	Dark skinned	142	44.1
5	Original location of respondents		
	Urban	209	64.9
	Rural	113	35.1

RESULTS & DISCUSSION

Knowledge of Skin Bleaching

- All respondents were aware of skin bleaching with the source of first information on skin bleaching from friends (n=122, 37.9%).
- The majority of respondents were knowledgeable in skin bleaching (n=262, 81.4%).
- About 53.1% of respondents said that skin bleaching involved changing human color, while about 23.9% said that it involved making the skin smooth.
- A higher proportion of the respondents (91.0%) indicated that skin cancer and (89.4%) stretch marks are largely caused by skin bleaching (Table 3.).

RESULTS & DISCUSSION

Table: 3. Awareness and knowledge of skin bleaching among student (respondents) of University of Bossaso, Garowe City, 2024 (N=322).

No.	Characteristics	Frequency, n=322	Percentage %
1	Heard about skin bleaching		
	Yes	302	93.8
	No	20	6.2
2	First source of information on bleaching		
	Friends	122	37.9
	Family member	77	23.99
	Media /tv /radio	88	27.3
	Teacher /literature	35	10.9
3	Knowledge about skin bleaching		
	Yes	262	81.4
	No	60	18.6
4	What does skin bleaching means to you?		
	Change human color	171	53.1
	Using chemical on the skin	74	23.0
	Making the skin smooth	77	23.9
5	Skin bleaching causes stretch marks		
	Yes	288	89.4
	No	34	10.6
6	Skin bleaching causes cancer		
	Yes	293	91.0

RESULTS & DISCUSSION

Prevalence of Skin Bleaching Products

- ❖ As clearly shown in **Table 4**. Self-reported use of skin bleaching products was 95.3% with majority (67.1%) using more than two skin bleaching products.
- ❖ Users of skin bleaching products preferred international brand skin toning products (74.9%).
- ❖ Major factors considered in the selection of the skin products comprised friend recommendation (97.4%) effectiveness of product (57.9%), affordability (52.7%), ingredients and brand of the product (28.6%).
- ❖ Majority of the respondents (90.4%) had knowledge of the dangers of skin bleaching or toning products.

RESULTS & DISCUSSION

Table 4. Prevalence and use of skin bleaching product among female students of University of Bossaso, Garowe City, 2024 (N=322)

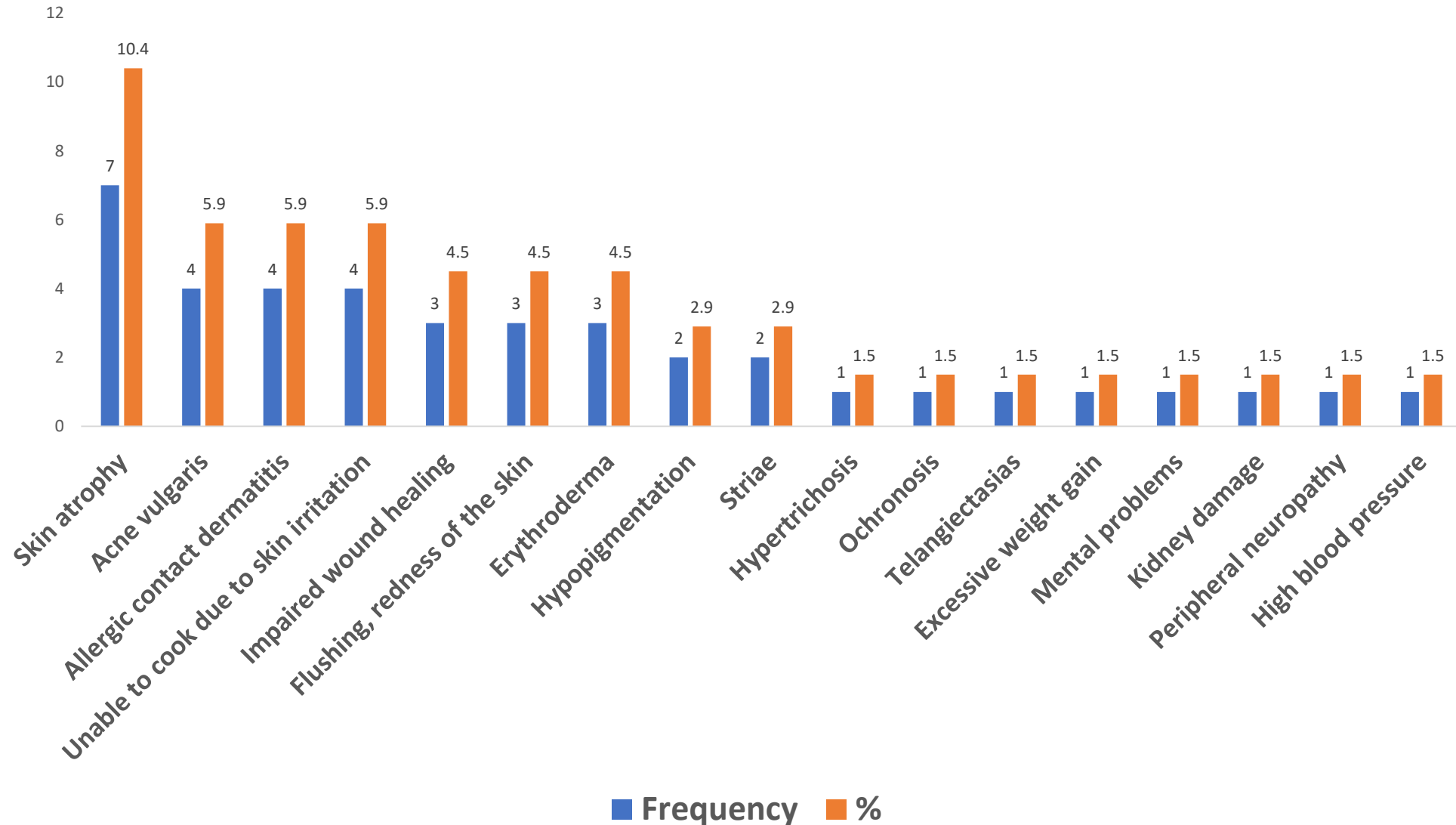
No.	Responses/Answers	Frequency	Percent %
1	Have you used skin bleaching?		
	Yes	307	95.3
	No	15	4.7
2	Number of Skin toning product used last 12 months*		
	=2	101	32.9
	>2	206	67.1
3	Preferred skin toning product*		
	Local	61	19.8
	International	230	74.9
	Both	16	5.0
4	Factors you consider in choosing bleaching product**		
	Friends' recommendation	299	97.4
	Affordability	162	52.7
	Effectiveness of product	178	57.9
	Ingredients	88	28.6
5	Do you know danger of using skin bleaching toning product?		
	Yes	291	90.4
	No	31	9.6
6	Danger of skin bleaching**		
	Skin cancer	125	38.8
	Loss of life	61	18.9
	Easy cut	45	14
	Multi color skin	81	25.1

RESULTS & DISCUSSION

- The common dangers identified by respondents include skin cancer (38.8%), multi-color skin (25.1%), loss of life (18.9%) and easy cut of skin (14%).
- Most of the respondents had knowledge of the ingredients used in the bleaching products (90.3%), and checked the expiry date before buying (78.2%).
- Reasons attributed to skin bleaching included enhance beauty and healthy skin (97.3%), show higher social class (27.7%), and treatment of skin disorders (24.1%).

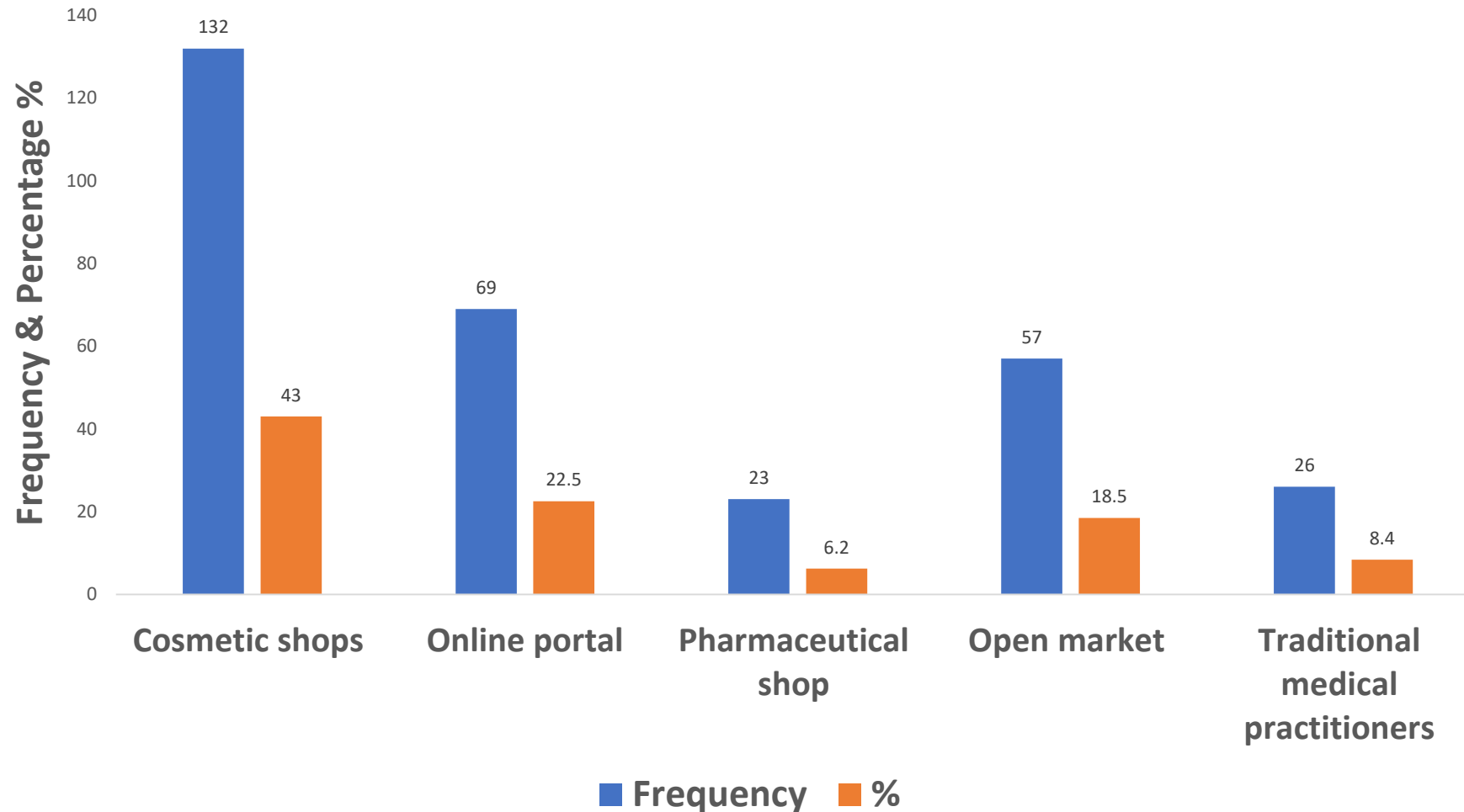
RESULTS & DISCUSSION

- **Figure 1. Side effects (adverse reactions) said by respondents upon use of the different skin bleaching products (soaps and creams). n = 67 out of 307 students.**



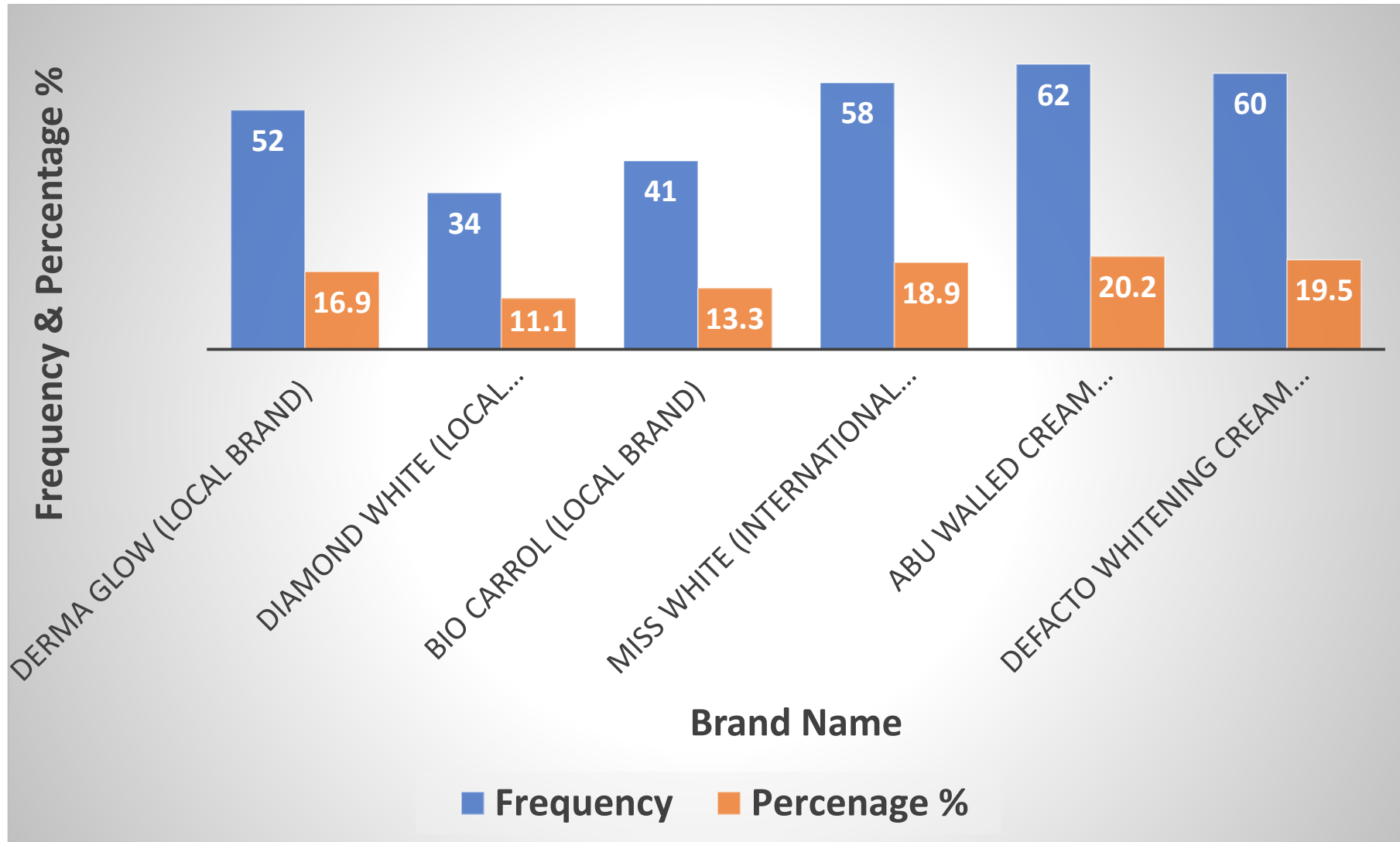
RESULTS & DISCUSSION

Figure 2. Variation in sources of getting the skin bleaching tonic products among female students of University of Bosaso-Garowe campus, n= 322.



RESULTS & DISCUSSION

Figure 3. The most commonly available and used skin bleaching cosmetics (local and international brands) among female students of University of Bosaso-Garowe campus.



DISCUSSIONS

- Despite the ban on skin bleaching creams and products, our study recorded relatively higher usage among respondents.
- Other studies reported higher prevalence in Somalia (Yusuf et al., 2019).
- With inter-African trade agreements, Somalia may continue to witness influx of skin bleaching products and agents due to the nature of our porous inland borders.

DISCUSSIONS

- It is therefore important to strengthen Somalia's borders against importation of skin bleaching products (Yusuf et al., 2019).
- Consistent with other studies (Lartey, 2017, Owolabi et al., 2020) our respondents indicated knowledge on the risk of using skin bleaching products, including skin cancer and wrinkled skins in old age.
- Equally, important insights from the present study included significant differences between marital status, skin complexion, location of respondents (rural/urban), average monthly income and skin bleaching products use.

DISCUSSIONS

- ❖ Occupation and average monthly income were associated with the use of skin bleaching products.
- ❖ Being unemployed was positively associated with the use of skin bleaching products.
- ❖ According to (Owusu-Agyei et al., 2020), users of skin bleaching products spend almost 4% of their total monthly income on skin bleaching products.

CONCLUSION

- Skin bleaching seems to be a common practice among students in Somali universities and has a potential of posing serious threats to the health of this important sector of the local community.
- The practice seems to be rooted in colorism. The cosmetic industry is capitalizing on that colorism, producing skin bleaching products which promise the consumers the revered light skin though hiding the potential dangers which result from these products.
- However, the study was only preliminary but it sets a base for future studies on the adverse reactions and side effects which can explore more on the subject and can be more representative for comprehensive strategies to minimize the use of skin bleaching products.

RECOMMENDATIONS

- ✓ Because the use of skin bleaching products was fairly high among respondents and was mainly predictable by some sociodemographic factors.
- ✓ It is recommended that, one needs to carefully read the contents label of creams and soaps before using or buying them to reduce side effects.
- ✓ The study findings highlight the need for continuous application of the State Government Laws and regulations (SGLR) on the trading and use of skin bleaching products.
- ✓ And public health educational interventions on the harmful effects of skin bleaching through public lectures and seminars to increase awareness.

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THANK YOU