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Face Powder Problems Perception Survey

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ABSTRACT*: Cosmetics are products which are intended to be used for cleaning, perfume or enhancing appearance. The face foundations and face powder has a very high consumption rate. However, cosmetics composed of different chemical materials which may interact together and become harmful to the skin.*

The current survey is focusing onto a possible problems might be encountered throughout the use of face powders in Tripoli areas, Libya. This perception and assessment survey has been applied using closed end questionnaire. The sample of study was circulated over 170 female participants and 91.8% percent of them provided clear and obvious participation. The results showed over 66.6% of participants suffered from problems as a result of applying a face powder. Problems appeared was dryness is 56.7%, irritation is 29.8%, Acne is 26.9% and Spots is 16.3%. The market screening at Tripoli showed more than 25 brands of face powder from different origins, the most popularly used were Nibo, Pupa, Max Factor and Deborah. The four mentioned problems appeared with Nibo and Pupa, dryness and spots appeared with Deborah, and just dryness appeared with Max Factor.

In conclusion our results, although give information on many health problems encountered during the use of face powder from different sources on what the participants responses, and due to the relative large incidence of problems mentioned, the need of a system able to report, evaluate, withdraw of harmful cosmetics partially or totally cannot be ignored.

KEYWORDS*: Cosmetics, Face powder, Survey, Dryness, Acne, Irritation*

I. INTRODUCTION

Cosmetics are products which are intended to be used for cleaning, perfume or enhancing appearance, and the use of cosmetics preparations all over the world become a part of the personal daily routine particularly for women [1].

Face powder is a cosmetic product used to provide a special touch on the skin, to control oil and combat shines, or, in addition to provide a matt finishing effect on the skin. This matt effect, combined with the high transparency of the powder can develop a special soft focus effect on the skin, blurring the appearance of wrinkles and lines as well as reducing the visibility of discoloration to enhance skin appearance [2, 3].

Cosmetics are mixtures of some surfactants, oils and other ingredients [4]. They are required to be effective, long lasting, stable and last not least safe to human use. Most cosmetics are complex mixtures containing perfumes, preservatives, stabilizers, various lipids, higher alcohols and other substances [5]. These chemicals in cosmetics may produce primary irritant reactions, allergic dermatitis, photosensitivity and breakage of hair and nails [6, 7].

Cosmetics contain mineralic or metallic and nonmetallic additives. For example in sunscreens titanium and zinc are used as sun blockers. The color of makeup is determined by the concentration and the ratio of black or red iron oxide, titanium dioxide and/or zinc oxide [8]. Metal dyes are used in finger nail polish and also the use and concentration of heavy metals play an important role in cosmetics production [9, 7].

Like all processes producing goods that get ingested or can otherwise reach into human bodies the manufacturing of cosmetics is under strict regulations and legislations and thus needs continuous control and monitoring [10].

Accurate trace element analysis is becoming increasingly important for many reasons, among them the process control associated with cost savings, minimizing and controlling contamination and environmental pollution, quality control of products and pure research.

Skin is the subject of vigorous research among both dermatologists who treat skin problems and cosmetic chemists who formulate specialty skin care products [11, 12].

The cosmetics become widely used in the daily world [13, 14, 5], therefore the current study is focusing onto a health concern during its excessive use and problems may be caused to the skin by daily using of cosmetics. The choosing the face powder as a kind of cosmetics due to it is directly contacted with the face, and as any negative change as a result of such powder could have bad impact onto health, psychological, economical and social life [15, 16].

The daily use of cosmetics preparations has an important impact on the people health and economy, therefore, achieving effective use and increasing the public awareness about using the face powder is one of our goals in the current study.

Although it is a little bit difficult to analyze the effectiveness and performance of wide range cosmetic preparations [17], it is believed spotting the highest influencing trade mark of face powder in the Libyan market will help tracing some of the problems may be encountered. Moreover, variable types of such powder with their frequency number of use could also reflect the growth in use. The recognizing of the most problems may be encountered during the applying of face powder and finding out the most popular powder brands in our market and which of them are safe for use are vital consideration in the current survey.

II. PRESENTATION OF DATA

The instrument used for the collection of data was specially constructed questionnaire, and accordingly to the instrument design the outcomes were mainly quantitative in nature [18, 19]. After the questionnaire design was agreed, the time was right to begin distributing the questionnaire. The questionnaire contains a cover letter was supplied by a number of means; some participants were contacted personally by our project group, and the rest received the questionnaire by assistant staff.

The questionnaire contained the following questions:

Part A: personal information

P1: what is your employment?
P2: to which of the following period of age, you are belonging?
P3: what is your skin type?

Part B: Subject's information

S1: Do you apply face powder daily?
S2: What is your purpose of applying face powder?
S3a: what is your powder name?
S3b: what is the name of your powder manufacturing country?
S3c: what is the price of your powder?
S3d: Do you use any other powder?
S4: What is your powder kind?
S5: From when do you apply face powder?
S6: Do you clean your face before applying the powder?
S7: Do you clean your face after applying the powder?
S8: What is the kind of your face cleaner?
S9: Do you apply the powder and foundation cream together
S10: Do you apply the powder with any other cream?
S11: Have you ever been suffer from any skin problems during applying face powder?
S12: If you answer yes, what is this problem?
S13: What do you do if one of these problems occurs?
S14: Have you ever been suffering from one of these problems and a change this powder?
S15: Do the problems occur in the winter differ from those occur in the summer?
S16: What is your powder applying tool?
S17: Do you clean this tool?
S18: Do you have any comments?

III. RESULTS AND FIGURES

The questionnaire was the project instrument for collecting the data; the completed questionnaires were numbered and coded [20, 21]. Descriptive statistics were used to analyze the responses in Tripoli areas using face powder all 156 out of 170 questionnaires. Quantitative data yielded from the questionnaire were analyzed using SPSS for Windows and Microsoft Excel. According to the number of collected questionnaires, most of the targeted questionnaires were received, 156 out of 170 females who already using face powder replied which is 91.8% percent, and nine of them did not provide obvious reply, while five retained them back blank.

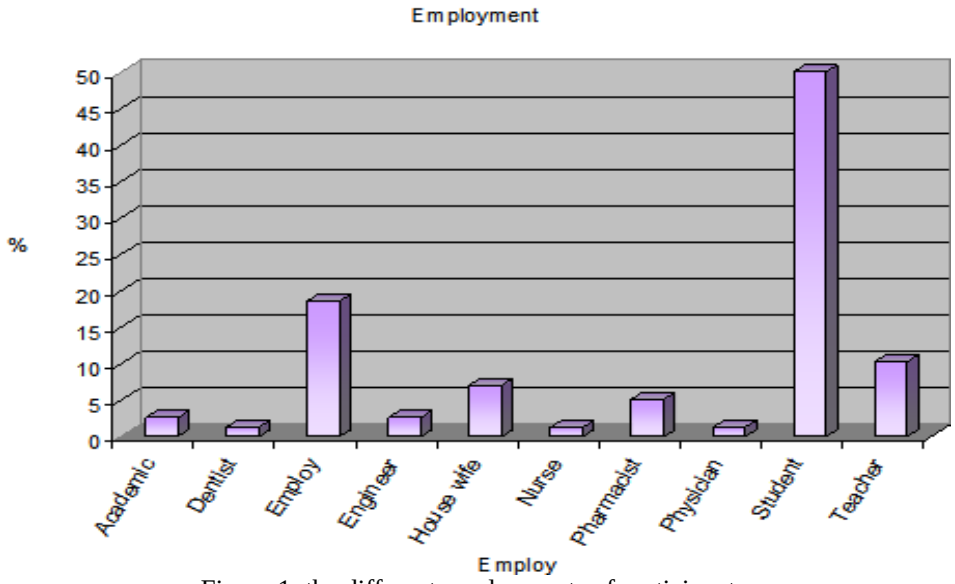

Figure 1: the different employments of participants.

Fifty percent of female participants were students and the second was employ which was 18.5 percent; however the rest of female participants were lower than 10 percent as introduced in the figure 1.

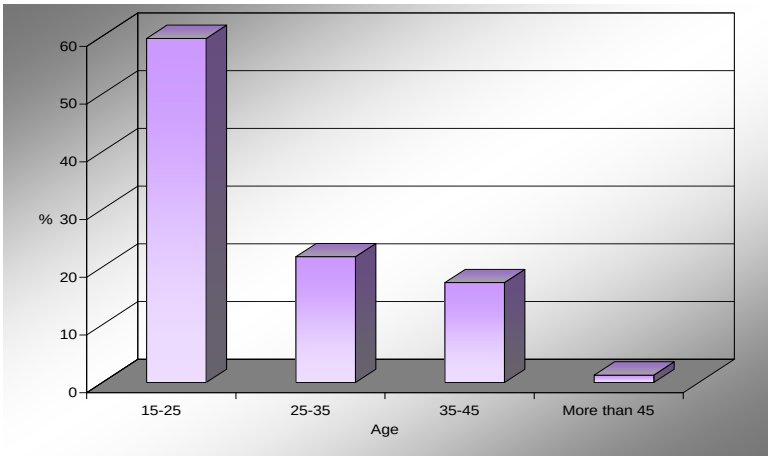

Figure 2: age of participants

59.6 percent of female participants were between 15-25 years old, and as age increased the participants was decreased (fig. 2).

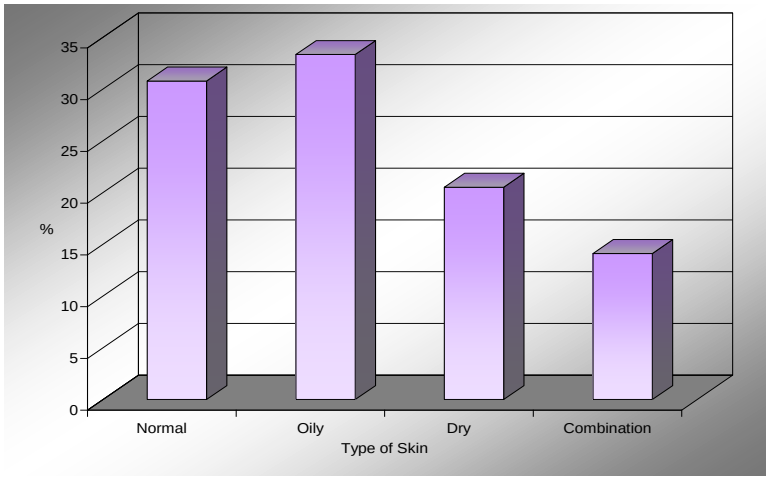

Figure 3: skin types of participants

The participants with oily skin were 33.3 percent, a normal skin were 30.7 however 20.5 percent a dry skin 14.1 percent had a combination skin characters within less than 20 percent (Fig. 3).

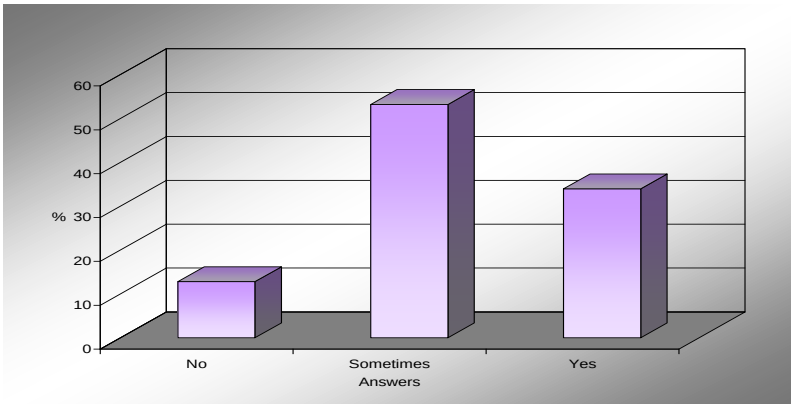

Figure 4: the percentage of face powder daily use

53.2 percent of participants are using face powder sometimes (ρ=0.11); the second are using face powder daily 33.9 percent (ρ=0.10) and the rest do not use it daily were 12.8 percent (ρ=0.11) (fig. 4).

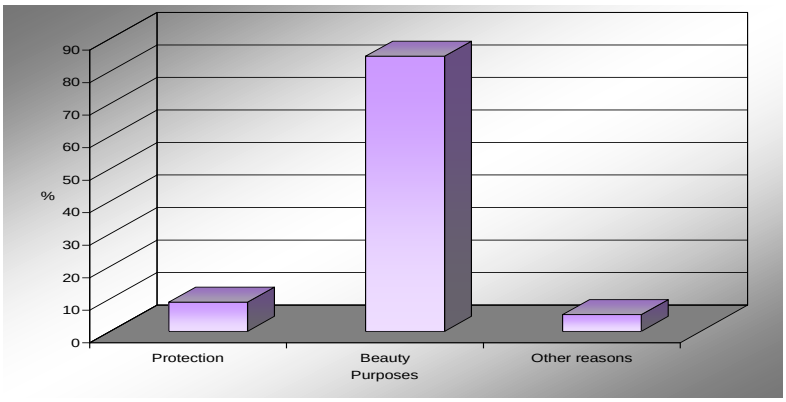

Figure 5: why do participants use face powder?

84.6 percent of the participants are using face powder for beauty, and 8.9 percent for protection and 5.1 percent for other reasons (fig. 5).

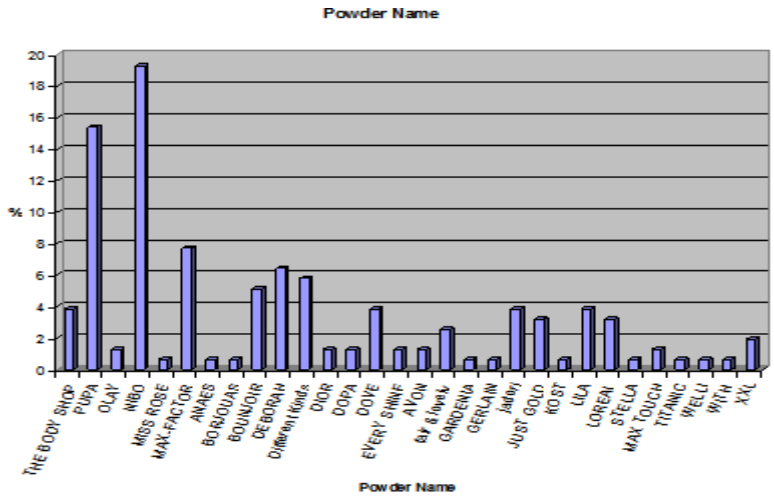

Figure 6: the used brands by participants

19.2 percent of participants are using Nibo, followed by Pupa about 15.3 percent, then Max Factor in the third about 7.6 % and Deborah about 6.4% (fig6).

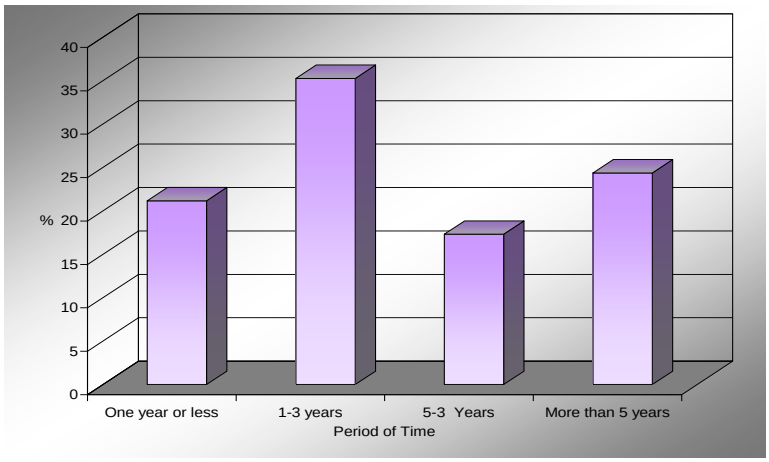

Figure 7: For how long participants began to apply face powder

35.2 percent of participants begin to apply face powder from 1-3 years, and 24.3 percent from more than five years, and then 21.1percent from one year, and the rest of participants from 3-5 years were 17.3 percent (fig. 7).

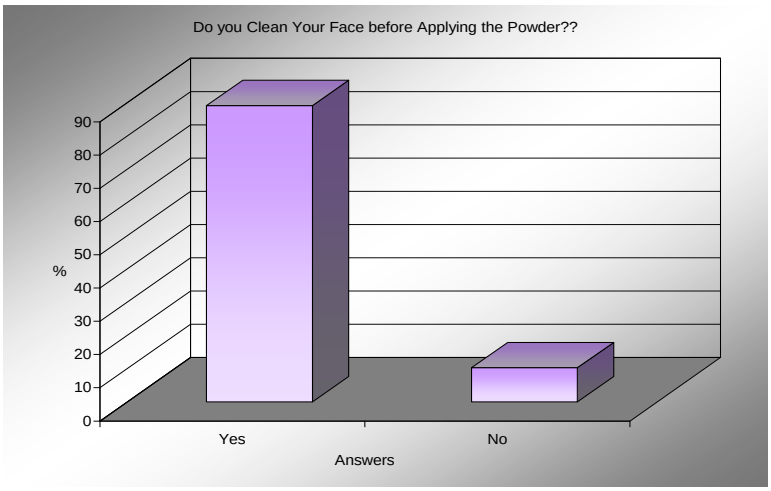

Figure 8: the participants whose clean the face before applying the powder

89.1 percent of female participants clean their face before applying the powder (fig. 8).

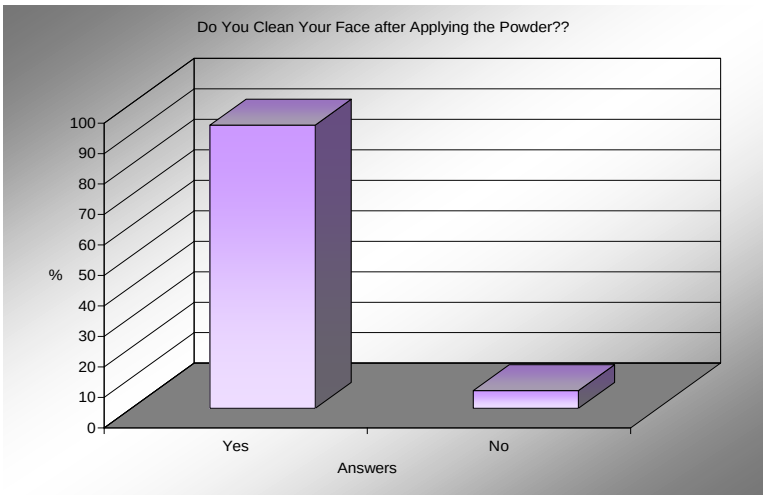

Figure 9: the participants whose clean the face after removing the powder

More than 92.2percent from participants clean their face after applying the powder (fig.9).

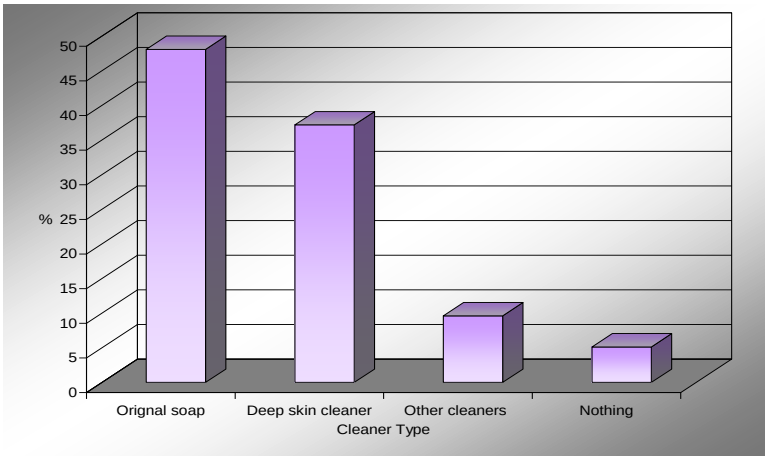

Figure 10: the different skin cleaners used by participants

48 percent from participants clean their face using original soap, 37.1 percent clean their face using deep skin cleaner (fig. 10).

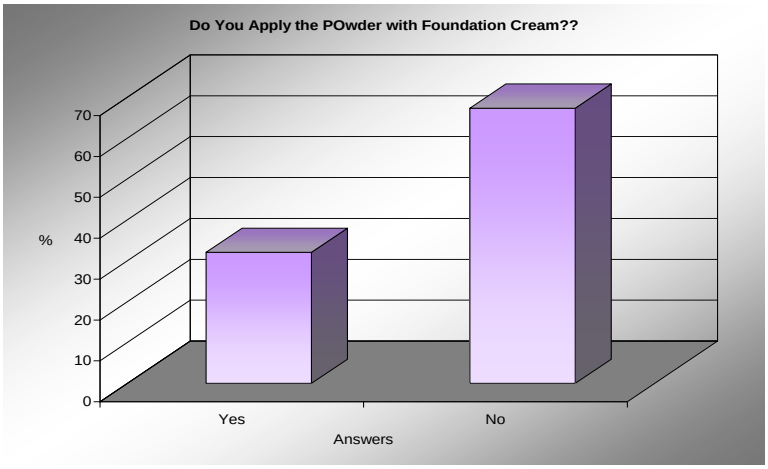

Figure 11: the participants whose apply the powder with foundation cream

67.3 percent of female participants were applying the powder only without foundation cream, and the rest are applying powder with foundation cream (fig. 11).

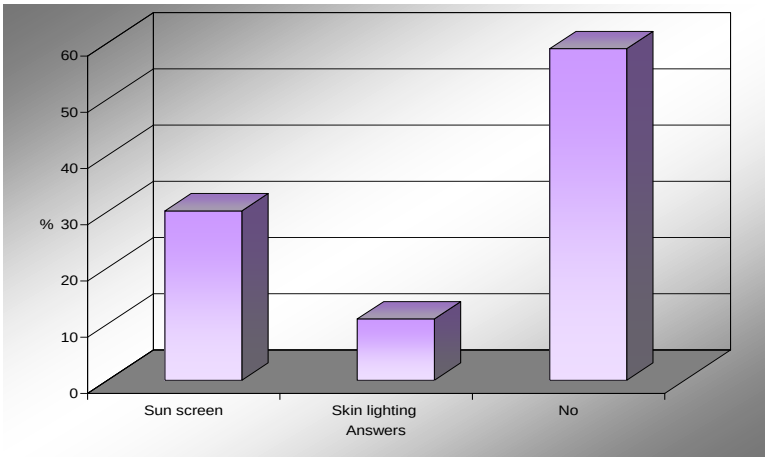

Figure 12: the different types of creams or cosmetics in use

58.9 percent of female participants were not using any other creams, and about 30.1 percent of females participants were using sun screen cream, and the rest of them were using skin lighting (fig. 12).

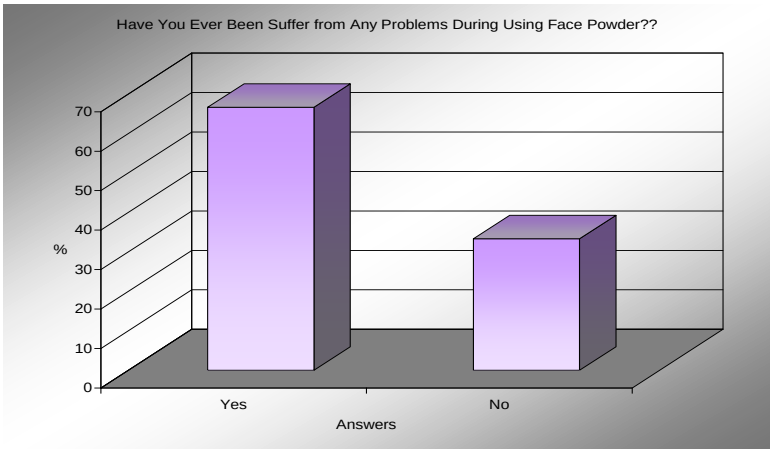

Figure 13: the participants whose suffer from problems

66.6 percent of female participants were suffering from problems during using of face powder (fig. 13).

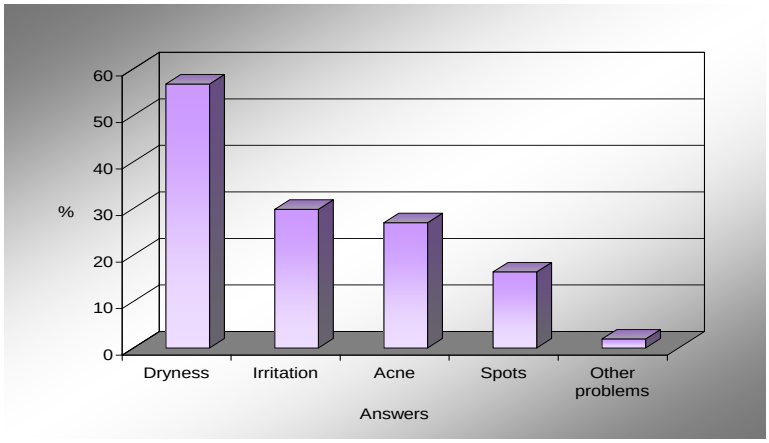

Figure 14: the different problems or symptoms participants suffered

56.7 percent of female participants were suffer from dryness symptoms, 29.8 percent of female participants suffer from irritation, and 26.9 percent suffer from acne and the rest of them suffer from spots and other problems (fig. 14).

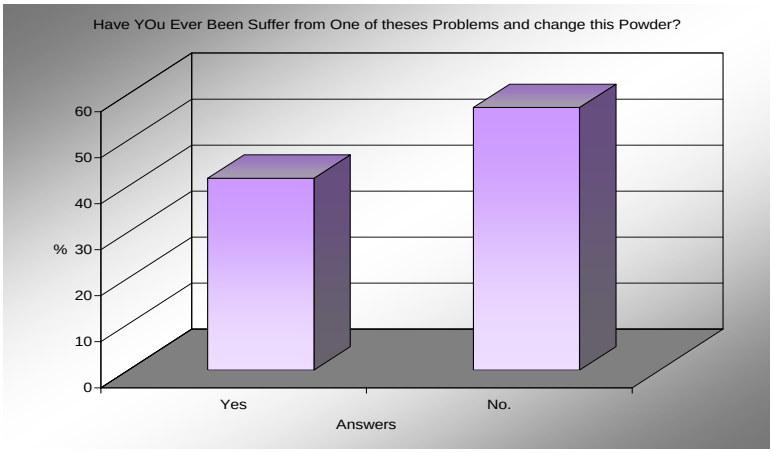

Figure 15: who has changed the powder brand as a result of problem

37 percent of participants change their powder as a result of skin problems, but most of them were not change their powder (Fig. 15).

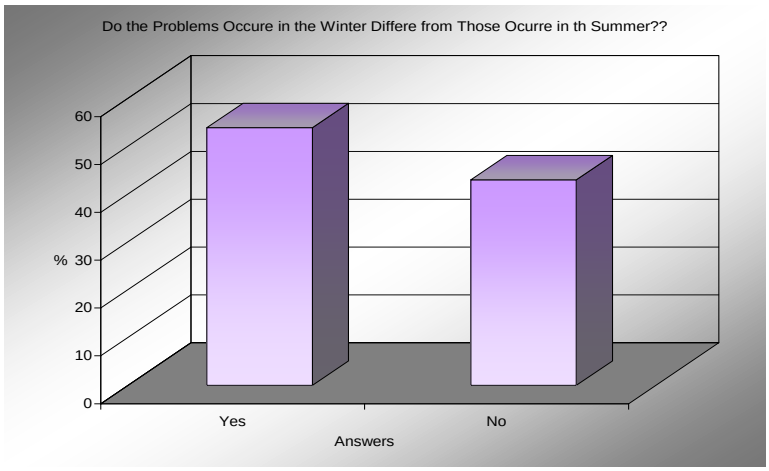

Figure 16: Do the season has effect on the skin powder

53.8percents from those suffering from problems, their problems different from winter to summer (fig. 16).

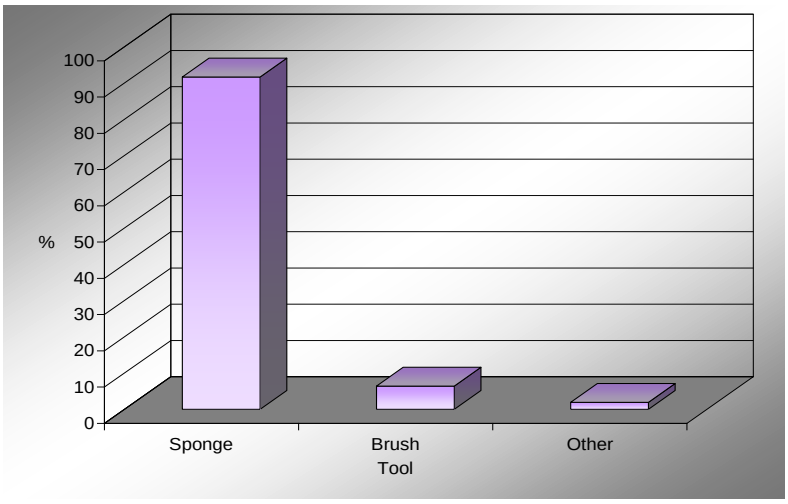

Figure 17: the participants applying tool

91.9 percent of female participants were using sponge to applying the powder and the rest of them applying the brush and other tools (fig. 17).

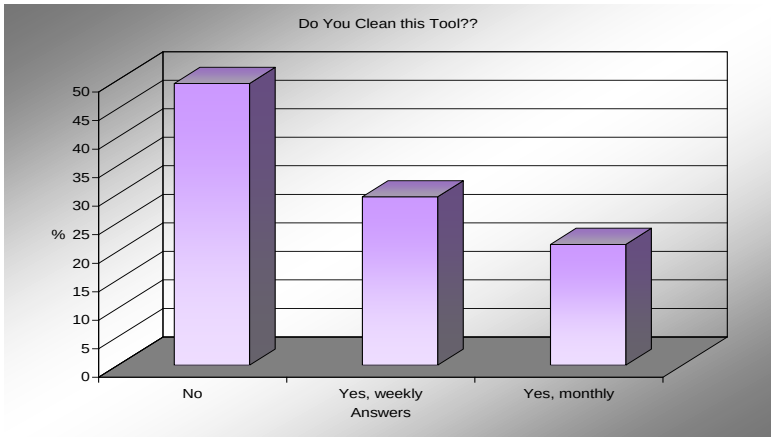

Figure 18: do participants clean their applying tool

49.3percent of female participants were not clean their tool, 29.4 percent of them clean their tool weakly and 21.1 percent of them clean their tool monthly (fig. 18).

IV. DESCUSSION AND CONCLUSION

The survey has fulfilled its aim through the exploring and perception of the face skin problems may be encountered as a result of applying the face powder.

The analysis of the findings based on the aims of the study, which were shown earlier. However, the authors, novice researchers are now aware of the need to rewrite the data as presented in the previous section. Therefore the intention is to focus on principles and areas for future study. This section will dip into a number of issues raised by participants and extracting useful data for discussion.

The results showed that the response rate was about 92 percent. This may be considered an excellent response rate for a voluntary questionnaire by a group of respondents who, as research culture premature of different jobs personnel, are considered to be elusive groups of subjects.

Currently, the majority of participants were students; therefore it is essential to consider the analysis will be based upon those at all stages of analysis, and it will reflect mainly their opinion and age. There were many reasons for this highest percent participation, among them are:

- The current research is conducting by a final year team of students.
- It is quite common these days that students use a make-up and cosmetics preparations in the university days, however, such use was not accepted by the family and the conservative society few years ago.

Table 1: Problems occur with the most trademarks used by participants.

Powder name/problems	Dryness	Acne	Imitation	Spots	other
Nibo	46.6%	30%	26.6%	16.6%	-
Pupa	29.1%	12.5%	16.6%	12.5%	-
Max Factor	50%	-	-	-	-
Deborah	30%	-	-	10%	10%

- From the table we observed that the four expected problems mentioned in the questionnaire were been found out and recurrently happened with Nibo (ρ=0.44) and Pupa (ρ=0.05). However, dryness, spots and others appeared with Deborah (ρ=0.36) while, just Dryness occur with Max Factor (ρ=0.42).
- From the above results we finally conclude that acne [22], irritation and spots problems are altered by both skin type and powder trade name, Nevertheless dryness problems are altered by the type of the powder trade name only not as the expected .

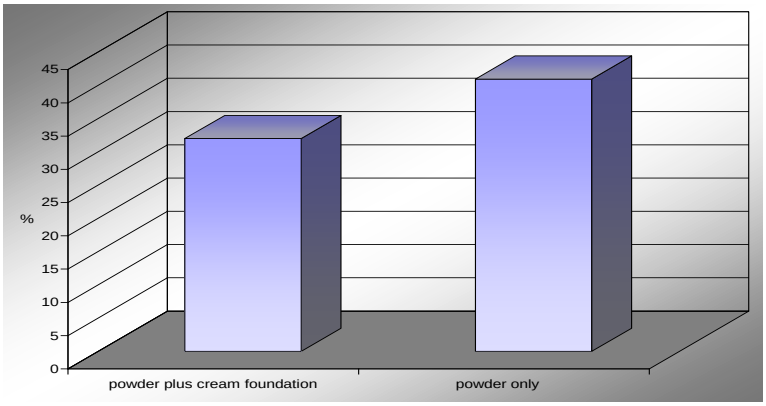

Figure 19: the relation between dryness and applying the powder only without foundation cream

32 percent from those using the powder and foundation cream together suffer from dryness, while 43percent of those using face powder only suffer from dryness (fig. 19).

Finally, from the result we found that more than 60% of participants suffer from skin problems as a result of applying face powder.

Most types of skin problems were dryness, irritation, acne followed by spots. Dryness appears in a less percent with those using foundation cream with face powder and what it was not expected that it appears in participants who have a normal and oily skin respectively. Irritation appears in a high percent with those having a dry skin and acne appear clearly with those having an oily skin. Spots appear with those have a normal skin.

Further research needs to be carried out to explore and investigate the specific cause of the problems may be observed during the use of face powders.

In conclusion our results, although give information on many health problems encountered during the use of face powder from different sources on what the participants responses, and make the users of cosmetics think about the safety, and due to the relative large incidence of problems mentioned, the need of a system and control able to report, evaluate, withdraw of harmful cosmetics partially or totally cannot be ignored.

V. CONFLICT OF INTEREST

The authors have no conflict of interest directly relevant to the contents of this study.

VI. ACKNOWLEDGEMENTS

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