

University of Kerbala

College of Medicine

Department of Family and Community Medicine

Knowledge, Attitude and Practice of Facial Cosmetic Procedure among Sample of Females in Kerbala Governorate, 2023

A thesis submitted to the Council of College of Medicine at the University of Kerbala in partial fulfillment of the requirements for high diploma degree

By

Yusur Samir kadhim M.B.CH.B

Supervised by

Asst. Prof. Dr. Shahrazad S. Al Jobori

Community medicine specialist M.B.Ch.B., F.I.B.M.S(CM) Lecture Dr. Zahraa Sattar Moneum

Plastic surgery specialist M.B.Ch.B., F.I.B.M.S

2024 A.D

1446 A.H

بسم الله الرحمن الرحيم

القُلْ هَلْ يَسْتَوِي الَّذِينَ يَعْلَمُونَ وَالَّذِينَ لَا يَعْلَمُونَ إِنَّمَا يَتَذَكَّرُ أُوْلُوا الْأَلْبَابِ

صدق الله العلي العظيم

(سورة الزمر9)

Certification of the Supervisors

we certify that this thesis entitled "Knowledge, Attitude and Practice of Facial Cosmetic Procedure Among Females in Karbala Governorate, 2022-2023 "

which was prepared by Yusur Samir Kadhim under our supervision at the department of Family and Community medicine, College of Medicine / University of Kerbala, as a partial fulfillment of the requirement for the degree of High Diploma (2 calendar years) in Family Medicine.

Shaha Zl

Shahrazad S. Al Jobori Community medicine specialist M.B.Ch.B., F.I.B.M.S(CM)

Lecture Dr.

Zahraa Sattar Moneum Plastic surgery specialist M.B.Ch.B., F.I.B.M.S

Shahrow

Dr. Shahrazad S. Al-Jobori

Head of Family and Community Medicine Department College of Medicine-University of Kerbala

Committee Certificate

We, the examining committee, certify that we have read this thesis and we have examined the student (Yusur Samir Kadhim) in its content and, in our opinion, it is adequate as a thesis for the degree of Higher Diploma (2 calendar years) in Family Medicine.

Asst. Prof. Dr. Saad Ibrahim Al-Ghabban College of Medicine University of Al-Ameed

(Member) Shappon

Asst. Prof. Dr. Shahrazad S. Al Jobori College of Medicine University of Kerbala (Supervisor/Member) Prof. Dr. Ameer Kadhim Hussain College of Medicine University of Babylon (Member)

Specialist Dr. Zahraa Sattar Moneum College of Medicine University of Kerbala (Supervisor Member)

Al-Ale Tre

Ali Abdulridha Abutiheen Family medicine specialist College of Medicine University of Kerbala (Chairman)

Approved by

College of Medicine / University of Kerbala As a thesis for the degree of Higher Diploma in Family Medicine

Prof. Dr. Riyadh Dheyhood Al-Zubaidy

Dean of

College of Medicine / University of Kerbala

Dedication

To my family, whose unconditional love and unwavering support have been my source of strength ------(thanks and acknowledgment)

to my dear son, whose presence in my life has enriched every moment with love and motivation. ------(love and thanks)

To my supervisors, whose expertise, guidance, and unwavering support have been the cornerstone of this research endeavor-----(Dedication and sincerity).

Acknowledgments

At the outset. I thank the Creator God for his abundant blessings and for granting me success.

I would like to express my deep thanks, deepest gratitude, and sincere indebtedness to **Dr. Shahrazad S. Al-Jobori** and **Dr. Zahraa Sattar** for supervising this research and for their efforts to put the research work in the wright way.

I want to express my profound gratitude to professor **Dr. Ali Abdulridha** Abotiheen for his guidance and important advices and to **Dr. Naiem** Ubaid Al Mashhadany for his efforts in statistics.

Also, I extend my deepest gratitude to all the participants who generously shared their experiences and insights, making this study possible.

I want to extend my profound gratitude and appreciation to my family for their support throughout every stage of my life.

List of contents

Headlines	
Dedication	Ι
Acknowledgments	Π
List of contents	III
List of Tables	V
List of Figures	VI
Abstract	VII
Chapter One	
Introduction	1
Rationale of the study	12
Objective of the study	13
Chapter Two	
2.Subjects and Methods	14
2.1. Study design, setting, and time	14
2.2. Sample and sampling technique	14
2.2.1. Inclusion criteria	15
2.2.2. Exclusion criteria	15
2.3. Pilot study	15
2.4. Data collection	15
2.4.1. Scoring system	17
2.5. Statistical analysis	18
2.6. Ethical consideration	18
Chapter Three	
3.Results	20
3.1. Socio-demographic characteristics	20
3.2. Knowledge of the study participants about facial cosmetic	21
procedures	
3.3. Attitude of the study participants about facial cosmetic procedures	24
3.4. Practice of the study participants of facial cosmetic	26
procedures.	20
3.5. Association between variables and the knowledge score about facial cosmetic procedures	34

3.6. Association between variables and the attitude score about facial cosmetic procedures.	35
Chapter Four	
4.Disscussion	36
Chapter Five	
5.1. Conclusion	46
5.2. recommendation	47
References	48
Appendices	60

List of Tables

Table 1	Socio-demographic characteristics of the study participants	20
Table2	Distribution of source of study participants	21
Table3	Knowledge of the participants about facial cosmetic procedures	22
Table4	Attitude of the study participants about facial cosmetic procedures	25
Table5	Questions regarding Practice of facial cosmetic procedures by the study participants	33
Table6	Association of the demographic characteristics with the Total Knowledge Score among the study participants a	34
Table7	Association of the demographic characteristics with the Total Attitude Score among the study participants	35

List of Figures

Figure1	Source of information of the study participants about facial cosmetic procedures	22
Figure2	Study participants' knowledge about the types of facial cosmetic procedures available in Karbala city	23
Figure3	The overall knowledge level of the study participants about the facial cosmetic procedures	24
Figure4	The study participants attitude about the facial cosmetic procedures	26
Figure5	History of any type of facial cosmetic procedure of the study participants	27
Figure6	Reasons behind practicing facial cosmetic procedures of the study participants	27
Figure7	Frequencies of surgical procedure practiced by the study participants	28
Figure8	Frequencies of non-surgical procedure practiced by the study participants	28
Figure9	Complications for surgical procedures experienced by the study participants	29
Figure10	Complications for non-surgical procedures experienced by the study participants	30
Figure11	unsatisfactory results for the study participants	
Figure12	Frequency of practice of facial cosmetic procedures among the study participants	
Figure13	Frequency of specialists who made the procedure to the study participants 32	
Figure14	Sites at which the facial cosmetic procedures were performed to the study participants	32

Abstract

Background: Cosmetic procedure is defined as any invasive procedure where the primary intention is to achieve what the patient perceives to be a more desirable appearance (Arab et al., 2019). Both surgical and non-surgical procedures are referred to as cosmetic procedures. Rhinoplasty, surgical face-lift and blepharoplasty referred to surgical procedures. While dermal filler, Botox and other minimal invasive cosmetic procedures refer to as non-surgical procedures.

Objective: to assess knowledge, attitude and practice of facial cosmetic procedure among sample of females in Kerbala Governorate.

Subjects and Methods: A cross-sectional study with 307 participants who were 18 years old and above was carried out in the Kerbala city. Two categories were used as sample sources (female college students and female teachers). The study was conducted from February 2023 March 2024 using self-administered questionnaire. To conduct the statistical analysis, the Statistical Package for the Social Sciences was used. (SPSS 23.0 for Windows). Significance level was considered when p-value is equal or less than 0.05.

Results: The mean age of the participants was 27.93 ± 9.30 years old. The study findings indicate 98.7% of the study participants have heard about facial cosmetic procedures and the main information source was the social Network account 87.3%. 86.6% of the study participants showed good knowledge regarding the facial cosmetic procedures and only (12.4%) of the study participants had negative attitude whereas, (76.2%) and (11.4%) had neutral and positive attitude about the facial cosmetic procedures respectively. 20.5% of the participants reported that they had practiced facial cosmetic procedure. Personal desire was the primary source of

motivation to underwent such procedures formed 49.2%. The remaining of study participants not underwent such procedures and self-satisfaction was the commonest cause formed 59.8%.

Conclusions:

the majority of the study participants had good knowledge. Filler, Rhinoplasty and Botox were the main three types of facial cosmetic procedures available in Karbala city. More than three quarter of the participants had neutral attitude. There were no significant associations of the demographic characteristics with the total knowledge score or with the total attitude score.

1-Introduction

Cosmetic procedure is defined as any procedure where the primary intention is to achieve what the patient perceives to be a more desirable appearance and where the procedure involves changes to bodily features that have a normal appearance on presentation to the doctor (**Arab et al., 2019**). The Greek word "plastikos," which means to mold or form, is where the name "plastic surgery" originates. It is divided into two primary categories: reconstructive procedures and cosmetic procedures.

The goal of reconstructive procedures is to correct abnormalities brought on by trauma, illness, or birth defects and to restore function and normal appearance. Cleft lip and palate repair are two examples. Usually, it requires grafting tissue like skin or cartilage from one area of the body to another (Hammadi and Elshereef, 2017). The cosmetic procedures are not seen as medically required, in contrast to reconstructive procedures. Many people seek cosmetic procedures to correct age-related changes such loose skin, reduced volume of tissue around the face and neck, fine lines on the forehead, lack of definition in the jawline, drooping jowls, and double chins (Chuang et al., 2016).

Hence, facial cosmetic procedures are further subdivided into non-surgical (minimally invasive) procedures and surgical procedures. There has been a significant increase in individual interest in cosmetic procedures and the number of professionals providing these services (Sobanko et al., 2018). The latest surgical procedures for facial rejuvenation are much more advanced than they were in the past which performed by a professional facial plastic surgeon. Among the many surgical procedures available for improving the

appearance of the face are facelifts, brow lifts, blepharoplasty (cosmetic eyelid surgery), cheek and chin implants, rhinoplasty, hair transplants, and others (Solutions, 2023). The number of cosmetic surgical interventions has declined in recent years as compared to non-surgical procedures. A few epidemiological variables, social networks, and psychological traits including self-esteem and body image are linked to interest in cosmetic surgery. These variables may affect their desire to seek out and get a cosmetic procedure positively or negatively (Milothridis et al., 2016).

Non-surgical (minimal invasive) procedures: A variety of minimal invasive procedures are available, most of which may be completed with minimal to no recovery time. Minimally invasive cosmetic procedures include facial injectable filler, neuromodulators (like Botox) to help with wrinkles and various lasers and other skin resurfacing equipment are used to achieve facial optimization and improve outcomes (Chuang et al., 2016).

Injectables and skin resurfacing procedures, which are less invasive than surgery, correct a range of face abnormalities, such as fine lines and wrinkles, a decrease in volume and contour, and excess fat. Carefully evaluating the patient's health, distinct anatomical features, tissue quality, and desired outcomes are necessary when deciding which method is perfect for a particular patient. Combining these procedures, the goal is to improve the aesthetics of the face by returning youthfulness, symmetry, curves and lines, and neck and face proportions (Devgan et al., 2019).

Currently, 16 million cosmetic procedures are performed in the United State, and 85 percent of those procedures involve minimally invasive injectable treatments including neuromodulators and soft tissue fillers. The advantages of these nonsurgical procedures, such as quicker in-office execution and less treatment costs, probably explain their increase in comparison to cosmetic surgical procedures.

The American Academy of Facial Plastic and Reconstructive Surgery has released data showing a 6% rise in facial cosmetic procedures from 2018 to 2019. 85% of the procedures carried out during this period were found to be minimally invasive. Skin treatments increased by 39%, fillers by 13%, and the usage of neurotoxins by 12% (Solutions, 2023). Throughout 2022, minimally invasive procedures gained popularity because it provided nearly instantaneous results and a quicker recovery time. Dermal fillers and neuromodulator injections became popular, rising nearly two times as popular as they were in 2019. The popularity of skin-rejuvenating procedures like chemical peels, laser pulse therapy, and skin resurfacing have also increased.

(The American Society of Plastic Surgeons Statistics, 2022).

Botox: Botox is a quick, minimally invasive procedure that is great for a wide range of people. Botulinum toxin is an extraction made from bacteria that has been purified. There are four types of Onobotulinumtoxin A, including Botox®, Dysport®, Xeomin® and Jeuveau® (Aston et al., 2012).

BOTOX® Cosmetic is an FDA-approved neurotoxin currently recognized as a safe and effective method for treating wrinkles on the forehead, frown lines, and other parts of the face known as "crow's feet". Furthermore, BOTOX® used to carry out more sophisticated procedures, such as correcting the lines surrounding the mouth (often called as "smoker's lines," though they are also frequently observed in nonsmokers) and the nasal lines, commonly referred to as "bunny lines") and smile lines. Its function is done by restricts the muscle from contracting, that mean Botox physically weakens the muscles because these contractions are what highlight and deepen wrinkles that already exist to achieve relaxed, smooth, and natural-looking facial skin. As in contrast to injectable fillers which correct wrinkles or depressions (Plastic Surgery of the Face, Breasts and Body, 2023).

In addition to diminishing facial wrinkles, gummy smiles, lip wrinkles, thick jaw muscles, and thick bands in the neck have all been treated (American Society of Plastic Surgeons, 2019). BOTOX can also be used for issues such as excessive sweating, migraines, eye twitching, jaw pain and overactive neck muscles. Usually, a Botox session takes up to 14 days to show complete effects, however its benefits can be sawed as soon as 3 days following treatment. To obtain the desired outcomes may require multiple sessions, depending on the depth of the wrinkles and the targeted surface area. According to statistic of The American Society for Aesthetic Plastic Surgery in 2018 state: Botox injection procedure (including Botox, Dysport, Xeomin) count (1,801,033) in 2018, (1,548,236) in 2017 and (1,326,323) in 2014.

Botox injection in 2018 is increased by (35.8%) from 2014 and increased by (16.3%) from 2017. According to 2021 statistic published by The American Society for Aesthetic Plastic Surgery, Neurotoxin injection was the most popular non-surgical procedure for every age group. Neurotoxins count 3,474,160 procedures in United Status.

Dermal filler injection: According to the American Society of Plastic Surgeons, injectable fillers are becoming a popular choice for facial rejuvenation. In 2019, over 2 million dermal filler procedures were carried out in the USA, making them the second most popular nonsurgical cosmetic procedure after neuromodulators (American Society of Plastic Surgeons, 2022).

Since dermal fillers have more uses, the market has grown due to public awareness and acceptance, with an estimated 160 products currently available worldwide from more than 50 companies (Ballin et al., 2015).

The main explanation of its widespread popularity and quick spread is the application of facial fillers, which help to restore facial volume, and give the appearance of being younger by minimizing the appearance of deep wrinkles or lines around the mouth, brow, or eyes, enhancing the appearance of lips, and improving the contours of jaw and cheeks (chin augmentation) (Bass, 2015). Dermal filler is also used for hand rejuvenation, correcting facial asymmetry, reconstructing facial contour irregularities, improving the look of sunken scars, and reducing or eliminating the shadow of the lower lid (**Ballin et al., 2015**).

Surgery, such as a facelift and brow lift can be the best course of action for certain people. While soft tissue fillers and other minimally invasive rejuvenation procedures cannot produce the same outcomes, they can postpone the need for a facelift. This means that continual treatments are required for long-term results and that dermal fillers are a temporary remedy for facial aging (American Society of Plastic Surgeons, 2022). The composition, duration of action, palpability, ease of administration, potential complications, and other factors of dermal fillers vary, which influences the therapeutic outcomes (Urdiales-Gálvez et al., 2017).

According to the statistic published by The American Society of Plastic Surgeons dermal filler injection increases by (42%) between 2020 and 2021 and (70%) between 2019 and 2022.

Facial rejuvenation procedures: because aging, especially the aging of the face, is a growing issue in modern society. This is a complicated process that involves two key elements: the loss of volume in the face as a whole and the repeated movement of muscles that result in wrinkles and folds (Savoia et al., 2013). In the past, facial rejuvenation has mostly concentrated on several dermatological cosmetic procedures including microdermabrasion and

electric stimulation that causes human skin fibroblasts to produce collagen. Mesotherapy has become more and more popular as an anti-aging procedure in recent years (Savoia et al., 2013). The term mesotherapy is derived from the Greek words "mesos" (middle) and "therapeia" (to treat medically). It was first introduced by Pistor in 1958. Mesotherapy aims to slow down the aging-related changes to the skin while maintaining or even improving the skin's youthful, healthy texture. It is one of the newest minimally invasive procedures that includes the simultaneous injection of diluted small amounts of vitamins, antioxidants, enzymes, hyaluronic acids, and other reagents into the area that has to be treated (Jung et al., 2018). Several experimental investigations have shown that injecting hyaluronic acid and carbon dioxide into the skin increases the expression of collagen type 1, matrix metalloprotease, and their inhibitors, leading to less irritating skin renewal (Cesare et al., 2018).

According to statistic of The American Society for Aesthetic Plastic Surgery in 2018 state that is increased by (29.2%) from 2014 and increased by (19.8%) from 2017. In 2021, Skin Rejuvenation increased by (17%) from 2020.

Chemical Peel: Chemical peeling as an alternative to mesotherapy, is a topical modality for skin resurfacing that improves the appearance and texture of the skin's surface by creating an injury of a specific skin depth and encouraging the growth of new skin through exfoliation to reverse skin degeneration caused by time, trauma, disease, UV light, and environmental exposures (Lee et al., 2016). The process of action consists in removing the damaged skin, which is followed by the formation of a new epidermal layer and dermal remodeling (Salam et al., 2013).

In 2016, the chemical peel treatment was the fifth most common nonsurgical procedure in the United States, with more than 600,000 treatments taking

place (**Devgan et al., 2019**). According to statistic of The American Society for Aesthetic Plastic Surgery in 2021, chemical peel increased by (37%) from 2020.

Laser Skin Resurfacing: Reduce the appearance of wrinkles, scars, and imperfections on the face with laser skin resurfacing, sometimes referred to as laser peeling and laser vaporization. With the use of more advanced laser technologies, the plastic surgeon may now do laser surfacing with unprecedented precision, particularly in sensitive regions (American Society of Plastic Surgeons, 2022).

Cosmetic golden threads and other procedures: all of these are minimal invasive procedures that aimed to make the face younger by enhancing its brightness, freshness, and vibrancy.

Surgical cosmetic procedures:

Blepharoplasty: One of the most popular aesthetic treatments carried out nowadays is blepharoplasty. Is a method used to treat blepharochalasis (excessively papery thin skin) and dermatochalasis (aging-related alterations in the periorbital structures) that involves excising excessive skin from the eyelids and/or removing fat from the orbits. Commonly known as "tired eyes," or "bags under the eyes," these aesthetically unpleasant changes can be caused by UV damage, alterations in skin composition, the influence of gravity on periorbital structures, and diminished strength in periorbital muscles.

Blepharoplasty has continuously clocked in as a top-five mainstay of the most popular procedures in the United Status. In 2022 blepharoplasty increased by (13%) from 2019 according to data from the American Society of Plastic Surgeons (American Society of Plastic Surgeons,2022). In 2021, blepharoplasty increased by (72%) from 2020.

Rhinoplasty: Cosmetic rhinoplasty is the term for the procedure that can be used to reduce the size of the nose, alter its general form, or even augment the nose structure to add size if necessary. To improve the overall proportion and balance of the face, it may be essential to make changes to several internal structure components of the nose in order to get the desired appearance

(American Society for Aesthetic Plastic Surgery, 2022).

According to the American Society of Plastic Surgeons, rhinoplasties are the most common plastic surgery procedure for the face. The most recent statistics show that is (37%) increase over the year 2022 from 2019 according to data from the American Society of Plastic Surgeons (American Society of Plastic Surgeons,2019). In 2021, rhinoplasty increased by (37%) from 2020 (American Society of Plastic Surgeons,2022).

Facial cosmetic procedure knowledge in the Arab world varies among different populations. In Saudi Arabia, out of 402 participants of Majmaah, 2019-2020, all had heard about cosmetic procedures. The majority of participants demonstrated a respectable level of awareness regarding the existence of cosmetic operations; However, only 18.66% of participants had good knowledge, 47.01% of people had poor knowledge, and 34.33% had moderate knowledge (Hindi et al., 2022).

Also, a study of the majority of 220 participants of Females Students at Faculty of Education, Taif University, Saudi Arabia (94.0%) have heard about cosmetic surgery. Seventy-nine percent of participants had heard of cosmetic surgery through the mass media. Students' attitudes toward cosmetic surgery are generally negative; 61.8 % disagreed that cosmetic surgery is socially acceptable, and 72.3% approved of themselves having cosmetic surgery. (Hammadi and El-Shereef, 2017). Another study in Jordan revealed that individuals have undergone a number of cosmetic procedures to improve their

appearance and were aware of the associated side effects, possibly due to their educational backgrounds and easy access to information services (Aladwan et al., 2023).

Another study demonstrated, peoples are seeking minimally invasive technique at academic dermatological centers in Tehran, Iran at 2019. They had acceptable level of knowledge about the process, as well as previous experience with the minimally invasive technique with a good satisfaction rate. The most common motivating factor was the desire for rejuvenation; those requesting dermal filler injections differed from those requesting toxin injections in terms of the facial areas they wanted to improve from what they had experienced prior to undergoing the procedures. Most participants had heard about the procedures from friends and colleagues and knew at least one person who had done such these procedures (Dadkhahfar et al., 2021).

Another study was done at 2016 in a university in Nigeria among Basic Science Students revealed that approximate results as most of their responder showed poor knowledge account (47%), moderate knowledge (48.8%) and the total good knowledge were only (4.2%). The respondents' attitudes regarding cosmetic surgery and their understanding of the procedure are positively correlated (**Otene et al., 2016**).

Knowledge about facial cosmetic procedures in the United States is increasing, with a significant number of surgical and nonsurgical procedures being performed each year. In 2010, nearly 770,000 cosmetic surgical procedures and 11.5 million minimally invasive nonsurgical facial cosmetic procedures were carried out in the US (Magee, 2012). Nonsurgical cosmetic procedures including neurotoxins and dermal fillers become more popular and are often used in combination approaches to improve outcomes (Wm. Philip Werschler et al., 2015). The overall complication rate of facial cosmetic procedures is low, but it is important for practitioners to have knowledge of both complications and treatments to ensure safe and successful outcomes. The knowledge of facial cosmetic procedures in Iraq is relatively low, a cross-sectional study with 400 females participants was done in Baghdad's primary healthcare centers. A study concludes that about one-quarter of the studied women practicing fillers and Botox for cosmetic reasons. The majority (96.8%) of subjects have positive past history of cosmetic procedures. The participants' average level of knowledge on cosmetic procedures was 61.5% (Fareed and Alnuaemi, 2023). Overall, there is a need for further research and education to improve knowledge and awareness of facial cosmetic procedures in Iraq.

Attitudes towards facial cosmetic procedures in the Arab world vary based on different factors. Factors such as female gender, religious attitude, evaluation of one's health, contentment with life, self-satisfaction, use of social media, exposure to television, influence from family and friends, and internalization of beauty standards have been found to influence attitudes towards cosmetic procedures in Egyptian women (Khattab et al., 2022).

In Jordan, self-esteem, fear of aging and social acceptance was found to significantly impact women's attitudes towards cosmetic treatment (European Journal of Business and Management, 2015). In Saudi Arabia, while there is a prevalence of cosmetic interventions, acceptance levels among females are below average, possibly due to cultural factors (Alhusaini et al., 2022).

In 2015, a study done with 206 college students in an international university in Japan to evaluate South Korean, Chinese, and Japanese students' opinions on cosmetic surgery. Overall attitudes regarding cosmetic surgery were found to be "negative" among Chinese and Japanese students (74% and 63% respectively), while attitudes toward cosmetic surgery were generally "positive" (73%) among Korean students and it was statistically significant (chi-square value of 19.477) .Significant differences were found in the sociocultural and moral values for and against cosmetic surgery, which shows that cultural differences may account for the differences in attitudes and, consequently, some of the variations in the rates of cosmetic surgery between the countries (Ghotbi and Khalili, 2017).

A study was done at six universities in the United States among 559 female students, only 5% of female participants reported having had cosmetic surgery, most of them were aware of the most common cosmetic procedures. They are obviously aware that cosmetic surgery can be used to improve the appearance of them. Approximately 40% would think about having surgery in near future, and 48% would think about it when they were middle-aged.

Attitudes toward cosmetic surgery may change depending on the geographic area. This study aims to determine the acceptability of the study participants and attitudes regarding cosmetic surgery in Karbala, as there hasn't been a study conducted there that particularly focuses on these topics. The rising number of cosmetic procedures performed makes this a crucial topic to take into account, and it offers strong support for looking into and identifying the causes of the increasing demand for these procedures.

Plastic surgery has had a noticeable upswing. Comparing the 2022 Procedural Statistics to 2019, cosmetic surgery procedures have grown by 19%. Surgical procedures for the face grew. an average of 18% over the course of the pandemic– totaling 346,384 and includes procedures such as eyelid surgery (blepharoplasty), facelifts and nose reshaping (rhinoplasty) (American Society of Plastic Surgeons,2023).

In 2022, minimally invasive procedures became more popular because they provided nearly rapid outcomes and a quicker recovery time. Dermal fillers and neuromodulator injections are two more favorable minimal invasive cosmetic procedures, which have increased by almost double since 2019. Cosmetic procedures for skin rejuvenation like Chemical peels and skin resurfacing have also become more popular (The American Society of Plastic Surgeons (ASPS), 2023)

According to the statistics of the American Society for Aesthetic Plastic Surgery Shaw that the minimally invasive procedures increased by 228% from 2000 to 2018; although within the same period of time, cosmetic surgeries decreased by 5%.

According to Aesthetic Plastic Surgery in 2019, Surgical procedures increased 54% and non-surgical procedures were up 44% in united state and increased 55% in 2021(**The Aesthetic Society,2019**). Up to our knowledge There were no similar reports on this issue for people living in Karbala. So, this study was conducted.

1.2. Rationale of the study:

Up to our knowledge, there are no available such researches in Iraq. Facial cosmetic procedures hold significant aesthetic importance for several reasons. Facial cosmetic procedures can enhance self-esteem, improve appearance, and help individuals feel more confident. They often address specific concerns like aging, asymmetry, or skin imperfections, ultimately allowing people to express their true selves. Overall, Facial cosmetic procedures play a crucial in promoting not just physical changes but also positive emotional and psychological effects.

1.3. The Objectives of the study:

This study aims to assess the knowledge, Attitude, and Practice of Facial Cosmetic Procedures among sample of females in Kerbala governorate.

2.Subjects and Methods

2.1. Study design, setting, and time:

A cross-sectional descriptive study was carried out in the Kerbala city. Two categories were used as sample sources. The study was conducted from February 2023 March 2024 using self-administered questionnaire.

2.2. Sample and sampling technique:

The study Sample was taken from 307 participants who were 18 years old and above from two categories (college students and teachers). Firstly, there is a category of female college students, they were collected from four colleges of University of Kerbala including college of engineering, college of computer science and information technology, college of law and college of education for human sciences, department of English, which is collected by simple random sampling technique. The female college students were collected by (convenience sampling technique). An interview was done in the lecture halls to explain the purpose of the study and those who were willing to participate and were given the questionnaires to answer them. Some of female students refused to participate because they had an exam and some of them didn't have the desire to participate. The total number of female college students that participated in the study were one hundred and eighty-eight.

The second group was collected from teachers in four different schools, primary and secondary that were selected by simple random sampling technique. They are Al-Ajyal primary school for girls which is located in the periphery of Karbala city, Karbala secondary school for girls, Sumaya secondary school, Shuhada Muta secondary school for girls which are located in the city center. An interview was done in the director's room to explain the purpose of the study and those were willing to participate and giving the questionnaires to answer them. All teachers in the school participated in the study except those who had a leave for different causes making the total number of teachers that participated in the study were one hundred nineteen. Data collection was conducted 2 days a week.

2.2.1. Inclusion criteria:

Female college students and teachers aged 18 years and older.

2.2.2. Exclusion criteria:

Medical field students and those who refuse to participate or participants not complete the answer of data.

2.3. Pilot study:

The reliability of the questions and the time required for participant response were examined using a pilot project of 20 participants, it was carried out in April 2023, to address any challenging issues that may develop during data collection. As a result of this pilot, the range time needed to complete filling the questionnaire by the participant is about 7-10 minutes. Little change was done on the questionnaire and the final analysis did not include the responses collected during the pilot project.

2.4. Data collection:

After the verbal consent was taken from the participants (female college students and teachers) and after explaining of the objectives of this study, each

participant received an anonymous questionnaire sheet. A questionnaire was selected from two articles and literature review (Hammadi and El-Shereef, 2017; Hindi et al., 2022) and another one which is not published with some modification. Firstly, it was written in English and then translated into Arabic to suit their language. The questionnaire was examined many times in both languages by research team and it was also evaluated by assistant professor in dermatology in University of Karbala college of medicine and by assistant professor in plastic surgery in University of Karbala college of medicine. The supervisor checked the data to ensure that they had been gathered and saved properly.

The questionnaire was designed to include 32 questions divided into 4 parts. Questions about personal and sociodemographic data were included in the first part. Including age, marital status, educational status, occupational level, monthly Income and current address.

The second part covered the knowledge about facial cosmetic procedure which consist of 4 questions.

For the second part(knowledge), participants were asked about the general rules to done facial cosmetic procedure, and they were given four options, the correct answer are (Do if there is a congenital facial deformity and do if there is facial disfigurement due to an accident) and another two questions were incorrect. It also includes the question about their knowledge of the type of facial cosmetic procedure. In addition, a question concerning their source of knowledge regarding facial cosmetic procedure was asked with some options. It also includes the questions about availability of facial cosmetic procedure in Kerbala city. The participants can choose more than one answer.

The third part is about the attitude toward the facial cosmetic procedures that consists of 8 questions, 3 answer options were given Yes (Agree), No

(Disagree), I don't know (Neutral). It includes question about the agreement to perform facial cosmetic procedure, about the effects of social media on the decision regarding facial cosmetic procedures, about telling and requitement of others for doing such procedures and about the acceptance of these procedures socially. It also includes questions about the low self-esteem effect and whether the people who did such procedures looked better appearance and hesitance of people after decision making to do such procedures.

The fourth part is about Practice of facial cosmetic procedures, it consists of 13 questions, which divided into two categories according to the undergoing of participants of facial cosmetic procedures or not (Yes or No). The first, if they undergo any procedures, they asked about the reason behind this decision, which include (12 options). It also includes questions about the types of procedures that done (surgical and their types or non-surgical and their types) and if any complications related to this practice. In addition, a question about the numbers of times of doing these procedure/procedures were asked. Also questions about the identity of the person that made these procedures which include (8 options) and the place for performance of these procedures which include (4 options) were asked.

The second category includes those who didn't undergo any procedures, they asked about the reason behind this decision, which include (7 options). Also, a question about the future performance of these procedures and the reason behind that which include (13 options) were asked.

2.4.1. Scoring system:

The overall knowledge level: The three knowledge questions in the questionnaire form (question 1, question 2 and question 4) were considered to obtain the overall knowledge score. Regarding question 1, Consider answers

(1 and 3) the correct answer and others incorrect. Question (2 and 4) the answer (Yes) the correct answer and (No) was incorrect. The participants can choose more than one answer.

the correct answer was given (2) points while the incorrect answer given (1) point yielding a total score ranging from (3 to 6) points. For each participant, good knowledge was considered when the total scores of the participants reached 5 points and above, whereas a score of 3 or 4 points was considered as poor knowledge.

The overall attitude level: The eight attitude questions in the questionnaire form were considered to obtain the overall attitude score. For each question, if answer was "Agree" it given (3) points while the "Neutral" given (2) points and "Disagree" given (1) point. The total score ranged from (8 to 24) points. For each participant, positive attitude was considered when the total scores of the participants reached 20 points and above, whereas a score of (14 - 19) points was considered as neutral and a score between (8-13) points regarded as negative attitude.

2.5. Statistical analysis:

The data of the current study were analyzed by the Statistical Package for the Social Sciences. (SPSS 23.0 for Windows). The descriptive statistics were used in term of frequency and percentage and mean \pm SD in appropriate tables and graphs. Possible association between two groups was made through the t-test and Anova test. Significance level was considered when p < 0.05.

2.6. Ethical consideration:

The study was performed after ethical approval from research ethical committee at college of medicine – University of Kerbala and Kerbala health

Directorate, dated (4 /2 /2023). The facilitation form was received to deliver it to the directorate of education in Kerbala and to the presidency of Kerbala university. the factuality of medicines ethical committee has evaluated and approved the study protocol. Verbal consent was taken from each participant and informed consent was written at the beginning of the questionnaire. In the informed consent, participants were aware of the goal and aim of the study. Additionally, the participants were aware that their data would be kept confidential and their names would be kept anonymous.

3.Results

3.1. Socio-demographic characteristics.

The current study included a total of 307 participants (188 female college students and 119 school teachers). More than one half of the study participants were single. The majority (88.6%) of the study participants were urban residence as shown in Table-1 and Table-2 below.

Variables	Categories	Total
v al lables		No. (%)
Age in years	mean ±SD	27.93±9.30
	Range	18- 61
	Single	171 (55.7)
Marital status	Married	130 (42.3)
Marital status	Divorced	3 (1)
	Widow	3 (1)
Education	Undergraduate	182 (59.3)
	Bachelors	107 (34.9)
	Master/ Doctorate	18 (5.8)
Occupation	College student	188 (61.2)
	School teacher	119 (38.8)
Residence	Urban	272 (88.6)
	Rural	35 (11.4)

 Table 1: Socio-demographic characteristics of the study participants

participants			No. (%)
College students		College of Law	50 (26.6)
		College of human sciences, department of English	49 (26.1)
		College of Computer Sciences and information technology	47 (25)
		College of Engineering	42 (22.3)
Total			188 (100)
School teachers	G 1	Karbala Secondary School	33 (27.8)
	Secondary	Shuhada Muata Secondary School	30 (25.2)
	Intermediate	Sumaia Intermediate School	28 (23.5)
	Primary	AL-Ajeal Primary School	28 (23.5)
Total		· · ·	119 (100)

Table 2: Distribution of source of study participants

3.2. Knowledge of the study participants about facial cosmetic procedures.

The responses of the study participants regarding the knowledge about facial cosmetic procedures revealed that most of the study participants (98.7%) reported that they have heard about facial cosmetic procedures. The study participants reported that Filler, Rhinoplasty and Botulinum toxin injection were the main three types of facial cosmetic procedures available in Kerbala city as illustrated in Figure-2. They also reported that the main source of information about the facial cosmetic procedures were the social network and their friends as illustrated in Figure-1

Knowledge questions	Categories	No. (%)
	If there is a congenital facial deformity	149 (48.5)
1. Are there general rules to do facial cosmetic procedure?	If there is facial disfigurement due to an accident	106 (34.5)
	Not change God's creation	80 (26.1)
	Advancing age (signs of aging)	68 (22.1)
2. Have you heard about facial cosmetic	Yes	303 (98.7)
procedures?	No	4 (1.3)
	Surgical	27 (8.9)
3. Which type you heard about?	Non-surgical	24 (7.9)
	Both	252 (83.2)
4. Availability of facial cosmetic procedure	Available	267 (87)
in Karbala city	Not available	40 (13)

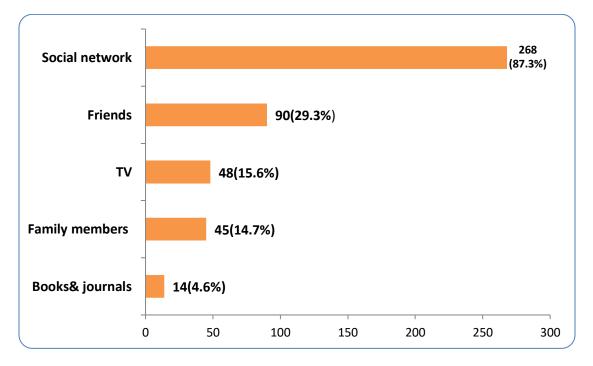


Figure 1: Source of information of the study participants about facial cosmetic procedures (more than one answer can chose)

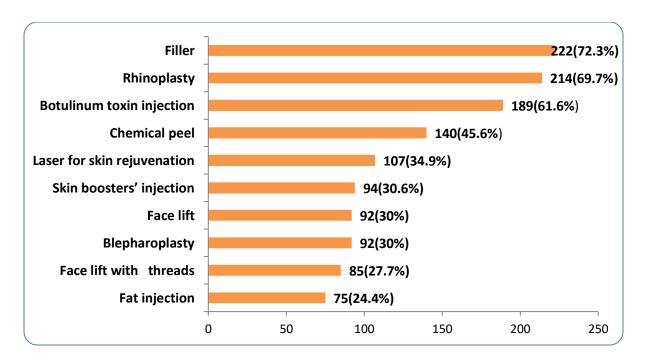


Figure 2: Study participants' knowledge about the types of facial cosmetic procedures available in Karbala city (more than one answer can chose)

The knowledge levels of the study participants obtained after scoring of the knowledge questions of the questionnaire form which concluded that the majority (86.6%) of the study participants revealed good knowledge about the facial cosmetic procedures (Figure-3).

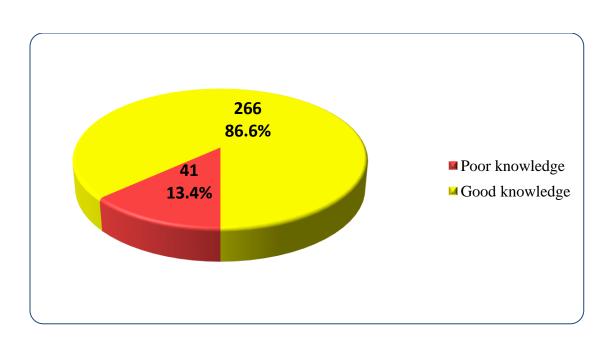


Figure 3: The overall knowledge level of the study participants about the facial cosmetic procedures

3.3. Attitude of the study participants about facial cosmetic procedures.

The reported answers of the study participants to the attitudes questions of the questionnaire form showed that more than one third (38.8%) of the study participants agreed to perform facial cosmetic procedures on themselves. More than one half of the study participants agreed that facial cosmetic procedures accepted socially. Two thirds of the study participants agreed that low self-esteem makes people to do facial cosmetic procedure (Table-4).

Agree	Neutral	Disagree
No. (%)	No. (%)	No. (%)
119 (38.8)	47 (15.3)	141 (45.9)
110 (35.8)	32 (10.4)	165 (53.7)
160 (52.1)	65 (21.2)	82 (26.7)
23 (7.5)	15 (4.9)	269 (87.6)
176 (57.3)	69 (22.5)	62 (20.2)
203 (66.1)	31 (10.1)	73 (23.8)
121 (39.4)	96 (31.3)	90 (29.3)
176 (57.3)	65 (21.2)	66 (21.5)
	No. (%) 119 (38.8) 110 (35.8) 160 (52.1) 23 (7.5) 176 (57.3) 203 (66.1) 121 (39.4)	No. (%) No. (%) 119 (38.8) 47 (15.3) 110 (35.8) 32 (10.4) 160 (52.1) 65 (21.2) 23 (7.5) 15 (4.9) 176 (57.3) 69 (22.5) 203 (66.1) 31 (10.1) 121 (39.4) 96 (31.3)

Table 4: Attitude of the study participants about facial cosmetic procedures

*Reverse questions: question (1,3,4,5)

The scoring of the attitude questions of the questionnaire form about the facial cosmetic procedures concluded that only 12.4% of the study participants had negative attitude about the facial cosmetic procedures, whereas, 76.2% and 11.4% had neutral and positive attitude about the facial cosmetic procedures respectively (Figure-4).

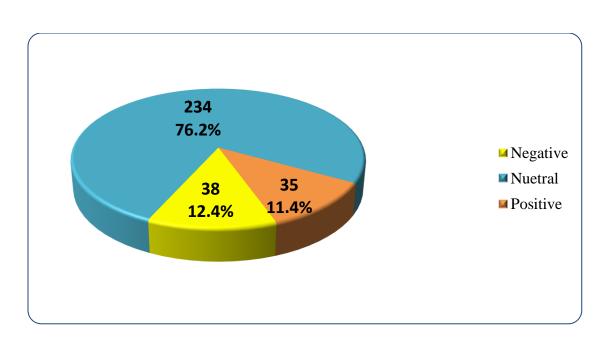


Figure 4: The study participants attitude about the facial cosmetic procedures

3.4. Practice of the study participants of facial cosmetic procedures.

One fifth of the study participants (63 participants) reported that they had practiced facial cosmetic procedure of any type previously, attributed the reasons behind it mainly due to personal desire firstly and secondly to look better and to a lesser extent to the influence of the social media (Figure-5 and Figure-6) and could be more than one reason to practiced facial cosmetic procedures.

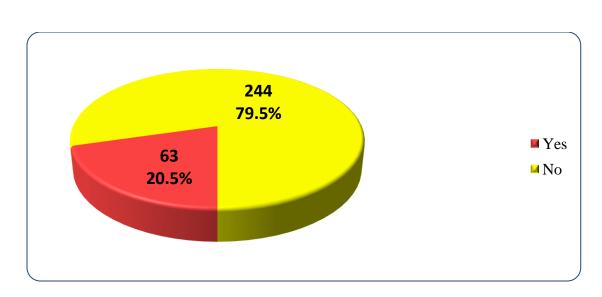


Figure 5: History of any type of facial cosmetic procedure of the study participants

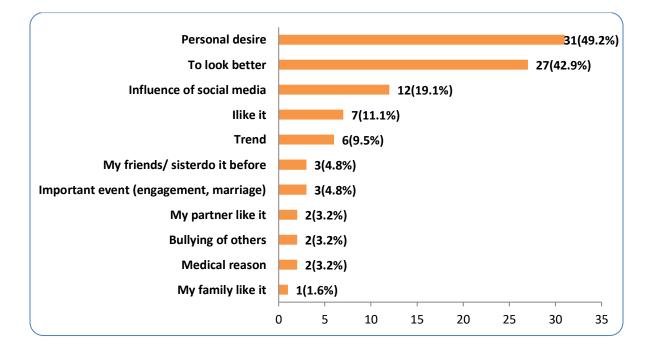


Figure 6: Reasons behind practicing facial cosmetic procedures of the study participants (more than one answer can chose)

The number of facial surgical procedures practiced by the study participants were (31 procedures) and the main surgical facial cosmetic procedures were rhinoplasty and blepharoplasty (Figure-7). On the other hand, the number of non-surgical

procedures practiced by the study participants were (54 procedures) and the main procedures were botulinum toxin injection followed by filler (Figure-8).

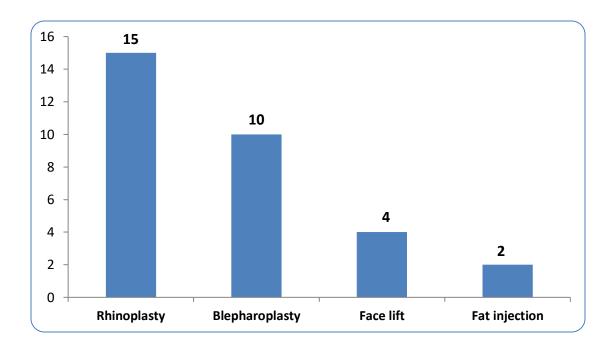
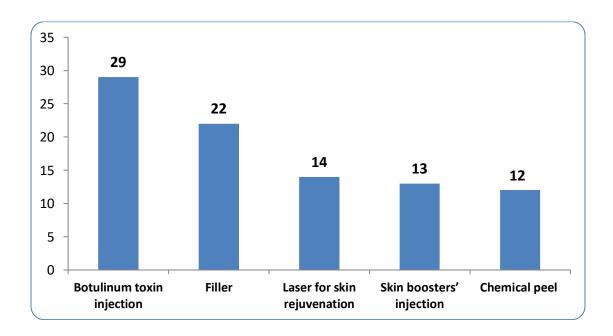
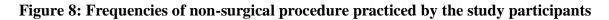


Figure 7: Frequencies of surgical procedure practiced by the study participants





Infection and bleeding were the only two types of complication reported to the surgical procedure practiced by the study participants. On the other hand, simple reaction and allergy were the main complication of the non-surgical procedure practiced by the study participants (Figure-9 and Figure-10 below). The unsatisfactory result for both surgical and non-surgical procedures were showed in (Figure-10).

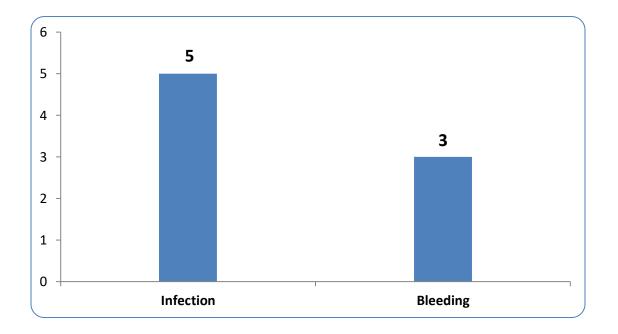


Figure 9: Complications for surgical procedures experienced by the study participants

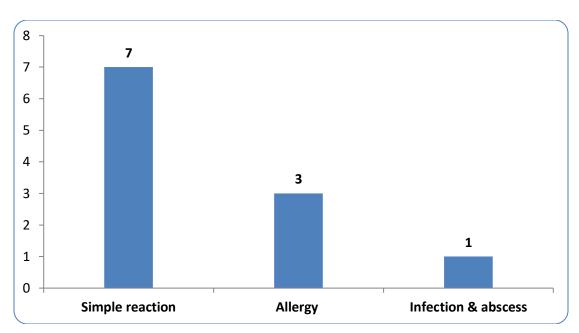


Figure 10: Complications for non-surgical procedures experienced by the study participants

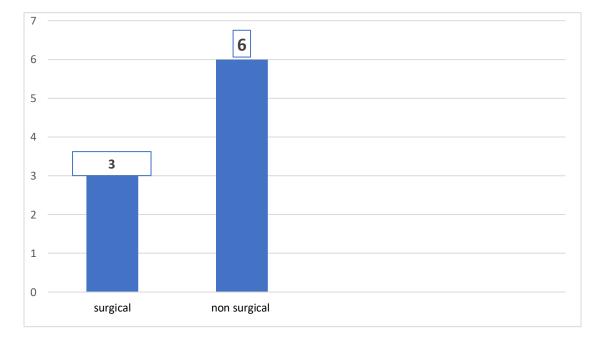


Figure 11: unsatisfactory results for the study participants

The results concluded that botulinum toxin injection, skin boosters' injection and filler were the main facial cosmetic procedures practiced by the study participants more than one time (Figure-12).

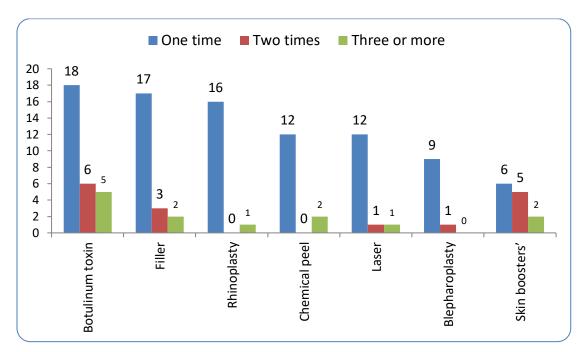


Figure 12: Frequency of practice of facial cosmetic procedures among the study participants

Dermatologist and Plastic surgeon were the main two specialist reported by the study participants and to a lesser extent by the by Dentist (Figure-13). Half of the reported practiced procedures to the study participants were performed at the clinic, one quarter of them at hospital and the other quarter at beauty center (Figure-14).

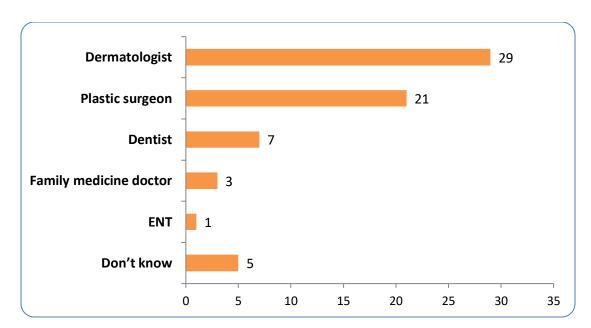


Figure 13: Frequency of specialists who made the procedure to the study participants

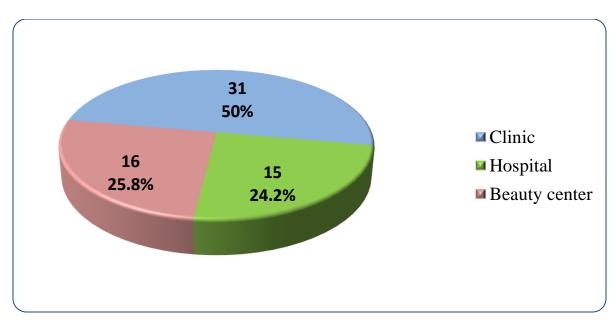


Figure 14: Sites at which the facial cosmetic procedures were performed to the study participants

Satisfactions with their appearance followed by cost were the main barriers for not practiced facial cosmetic procedures by the study participants and to a lesser extent a religious concern. Filler, botulinum toxin injection, laser for skin rejuvenation and

rhinoplasty were the main facial cosmetic procedures expected to perform in the future; to look better and/or when reach 40 years and more (Figure-14).

Practice questions	Categories	No. (%)	Total
Reasons behind not undergoing facial cosmetic	I am satisfied with my appearance	146 (59.8)	n=244
	Expensive	57 (23.4)	
	Religious Concerns	38 (15.6)	
	I don't like it	35 (14.3)	
procedures	My family and my husband prevent me	13 (5.3)	
	Because of Complication	9 (3.7)	
	Later, at advance age	6 (2.5)	
Expect to perform these	Yes	163 (61.5)	n=265
procedures in the future	No	102 (38.5)	
	Filler	82 (50.3)	n=163
	Botulinum toxin injection	63 (38.7)	
	Laser for skin rejuvenation	49 (30.1)	
	Rhinoplasty	47 (28.8)	
Which procedures expect to	Chemical peel	37 (22.7)	
perform in the future?	Skin boosters' injection	36 (22.1)	
	Face lift	29 (17.8)	
	Blepharoplasty	18 (11)	
	Fat injection	13 (8)	
	Face lift with threads	13 (8)	
	To look more better	92 (60.9)	n=151
	When I become 40 years or more	44 (29.1)	
Reasons to perform these procedures in the future	To delay the appearance of signs of aging	39 (25.8)	
	when money available	36 (23.8)	
	I like it	21 (13.9)	
	When I become 30 years	13 (8.6)	
	Important event (engagement, marriage)	10 (6.6)	
	my husband like it	3 (2)	
	Others (Bullying of others, my job requires it, Accident)	3 (2)	

 Table 5: Questions regarding Practice of facial cosmetic procedures by the study

 participants

3.5. Association between variables and the knowledge score about facial cosmetic procedures.

The analysis of the data revealed that there were no significant associations of the demographic characteristics with the Total Knowledge Score (Table-6).

Variables	Categories	Total Knowledge Score (mean SD)	P value
Marital status	Single	5.32±0.76	
	Married	5.45±0.73	0.302
	Divorced	5±1	**
	widow	5±1	-
Education	Undergraduate	5.32±0.75	0.326
	Bachelors	5.41±0.78	**
	Master/ Doctorate	5.56±0.75	
Occupation	College student	5.32±0.75	0.182
	School teacher	5.44±0.76	*
	< 1 million	5.30±0.76	
Monthly income (Iraqi	0.5-1 million	5.46±0.73	0.111
Dinars)	1-1.5 million	5.29±0.82	**
	>1.5 million	5.75±0.45	1
Residence	Urban	5.39±0.75	0.106
	Rural	5.17±0.79	*

Table 6: Association of the demographic characteristics with the Total Knowledge Score among the study participants.

(*)t-test was used

(**) Anova test was used

3.6. Association between variables and the attitude score about facial cosmetic procedures.

The analysis of the data revealed that there were no significant associations of the demographic characteristics with the Total Attitude Score (Table-7).

Variables	Categories	Total Attitude Score (mean SD)	P value
Marital status	Single	16.35±2.47	
	Married	16.59±2.60	0.167
	Divorced	16±3.46	**
	widow	17±3	
Education	Undergraduate	16.28±2.51	0.167
	Bachelors	16.82±2.48	**
	Master/ Doctorate	16.06±2.86	
Occupation	College student	16.31±2.50	0.216
	School teacher	16.68±2.57	*
Residence	Urban	16.48±2.52	0.673
	Rural	16.29±2.61	*

Table 7: Association of the demographic characteristics with the Total Attitude Score among the study participants

(*)t-test was used

(**) Anova test was used

Discussion:

Cosmetic surgery is becoming progressively prevalent in different parts of the world, both among men and women. There is a continuing rise in cosmetic procedures with a notable rise in both surgical and non-surgical procedures (ISAPS,2022).

the prevalence of cosmetic procedures is relatively low. One fifth of the participants in this study practice facial cosmetic procedures for cosmetic reasons, with the majority being within the age group of 27-37 years and this might be attributed to that, this age is the time when people are concerned more about their facial look and appearance and the start of aging changes. It is comparable to the result of the study done in Baghdad 2021 which found 86% of those had cosmetic procedures are within the age group of 20-40 years

(Fareed and Alnuaemi, 2023).

The results showed more than one half of the participants who underwent cosmetic procedures were single, this might be attributed to the most of the participants were college students. In the present study, the majority of the study participants were urban residence with high economic level in this intervention may indicate more ability to access cosmetic procedures.

Regarding the level of knowledge about facial cosmetic procedures, more than three quarters of the study participants revealed good knowledge and the remaining had poor knowledge compared with results at Saudi Arabia study that show the study participants who had poor knowledge (47.01%), with moderate knowledge (34.33%) and only (18.66%) of participants had good knowledge (Hindi et al., 2022). Another study among females attending the primary health care centers in Baghdad, most of participants had average level of knowledge about cosmetic procedures (Fareed and Yousif Alnuaemi,

2023). These differences because it is a new trend in Iraq towards facial cosmetic procedures and an increase in the number of cosmetic centers, an increase in the number of doctors who can perform such procedures, and an increase in the number of training courses for them, there are many advertisements on social media, on the street, or in advertising spaces for facial cosmetic procedures made people want to know the largest amount of information about facial cosmetic procedures, whether true or incorrect.

Regarding the general rules that should be taken into account to do cosmetic procedures; nearly half of the participants in this study believed that it should done only if indicated as if there is a congenital facial deformity, about one third mentioned that should done If there is facial disfigurement due to an accident and others they mentioned not change God's creation and due to signs of aging, They didn't mention beauty as the reason for undergoing a cosmetic procedure which is a similar to the result of the study done in 2017 at Taif University, Saudi Arabia among female students (Hammadi and El-Shereef, 2017). This study is inconsistent with study done in Iran that showed about three quarter (79.4%) of study participants who believed that this current procedure was carried out to avoid or delay procedures that would rejuvenate the face, such as facelifts (Dadkhahfar et al., 2021).

Almost all the participants in this study heard about facial cosmetic procedures, most of them heard about both surgical and non-surgical procedures and most common source of knowledge about facial cosmetic procedures were social media fallowed by friends. The results agreed with a research findings in Baghdad. (Fareed and Alnuaemi, 2023), and Saudi Arabia (Hindi et al., 2022), Nigeria (Otene et al., 2016), showing that social media was the commonest source of knowledge about facial cosmetic procedures.

In contrast to the study in United State at academic medical center found that most patients heard about non-surgical procedure from friends fallowed by colleagues while social media played a lesser role (Sobanko et al., 2015) and among participants in two academic dermatology centers in Tehran, Iran, that show about (40.4%) heard about the cosmetic procedures from friends (Dadkhahfar et al., 2021).

Regarding availability of these procedures in Karbala city, the study participants reported that Filler, Rhinoplasty and Botulinum toxin injection were the main three types of facial cosmetic procedures. Similarly to a study showed that rhinoplasty was the most popular cosmetic surgical procedure in Iran, also botulinum toxin injections and filler injections account (Dadkhahfar et al., 2021). As contrast to a 2017 study conducted among female students at AL-Taif University in Saudi Arabia, which found that skin lasers and rhinoplasty were the most common types (Hammadi and El-Shereef, 2017).

In this study, there is no significant association between knowledge and demographic characteristics of the study participants which was similar to the result of the studies in Saudia Arabi (Hindi et al., 2022), Nigeria (Otene et al., 2016). The lack of significant associations between knowledge and demographic characteristics of the study participants is because that the knowledge is not gained only through the educational level, but instead of through the information acquired from social media, internet, newspapers and television. Also, most of females knew about facial cosmetic procedures regardless of marital status and whether they were students or teachers and that was through mostly by social media.

The attitude of the participants toward facial cosmetic procedures is mostly neutral attitude inconsistence with the result among students in Saudi Arabia towards cosmetic procedures was mostly negative attitude (Hammadi and El-Shereef, 2017) and in a University in Nigeria among students towards cosmetic procedures and recipients of cosmetic procedures is predominantly negative across different cultures (Otene et al., 2016), so they stay informed about the risks, benefits, and advancements in cosmetic procedures to better understand the implications of these procedures.

In terms of approval and acceptance of the cosmetic procedures, about half of the study participants didn't accept the facial cosmetic procedures. This was dissimilar to the study done among female students at Taif University, Saudi Arabia, which revealed that the majority of participants accepted cosmetic procedure (Hammadi and El-Shereef, 2017). These differences could be affected by factors like mass media, culture, relatives, and religious beliefs in Iraq. Despite of the social Network was the major source of information for potential cosmetic procedures, but didn't affect their decision to do these procedures. More than half of participants reported that the social Network didn't affect their decision to do facial cosmetic procedures which similar to the study in Makkah City, Saudi Arabia that social media didn't impact the general population's decisions to undergo cosmetic procedures (Sindi et al., 2023).

Because of the large number of advertisements, the large number of cosmetic procedures advertisers and increasing impact of social media influencers and celebrities, all of these undermined confidence in social media. Since the majority of participants believed that cosmetic procedures were acceptable in the community, more than half of them are able to tell others whether they have had cosmetic procedures.

Most of the participants in this study refused to do cosmetic procedures upon request to others, this is consistent with the participants' opinion of the most frequent factor leading individuals to have such procedures, the majority reported personal desire as their main motivating factor which similar to the result by Hindi (Hindi et al., 2022). In contrast with the result done in al Taif university that Showed (38.2%) agreed to undergo cosmetic surgery upon request to others (Hammadi and El-Shereef, 2017). Our results are in agreement with those of the Maisel et al. (2018) study that showed that the most common motivations for doing a minimally invasive procedure were internally generated, designed to satisfy the patients themselves and not others, and rarely with the influence of their spouses (Maisel et al., 2018).

Nearly half of participants agreed that cosmetic procedures were accepted socially and consistent with the study of Al Doheyan and colleagues (2016), who believed that cosmetic procedures are common in general and that female medical students' attitudes about cosmetic surgery are acceptable (Doheyan et al., 2016). On the other hand, our study differs from the study in Saudi Arabia that most of them disagree that cosmetic procedures is accepted socially Hammadi and El-Shereef, 2017). We think that attitude towards elective cosmetic procedures differ from place to another.

In terms of factors affecting decisions regarding cosmetic procedures, in this study, two third of the participants agreed that participants with low self-esteem reported a greater likelihood of doing cosmetic procedure which is similar to the result done in al Riyadh (Furnham and Levitas, 2012) and similar to other study in Saudia Arabia which found near three quadrants of the participants agreed that females with low self-esteem had a greater likelihood of undergoing cosmetic procedures (Hindi et al., 2022).

More than half of the participants thought that people who had cosmetic procedures looked better and more attractive which is consistent with the study in 2019 about attitudes and acceptance of the Saudi population toward cosmetic surgeries that found the majority of their participants agreed that cosmetic surgery is good as because it will help people feel better about themselves (Morait et al., 2019).

Regarding hesitance when decide to do cosmetic procedures, more than half of the study participants mentioned that they feel hesitated which similar to the study done in 2022 by Hindi et al., that showed about two third (69.7%) of the study participants feeling fear (Hindi et al., 2022). Unsatisfactory results such as inappropriate cosmetic procedure or disfigurement may be the cause of hesitance or fears, also, damage and loss of function and lastly infections. Study of Assad Hammadi and AA El-Shereef, only 77.3% found that cosmetic surgery is not harmful (Hammadi and El-Shereef, 2017). In contrast, 91% of Otens et al., respondents believed that it is harmful (Otene et al., 2016).

High percentage of the participants have not undergone any type of cosmetic procedure. While the remaining have undergone one or more type of such procedure, one third of them have been undergone surgical cosmetic procedures whereas others have been undergone non-surgical cosmetic procedures. This study aimed to study the practice of facial cosmetic procedures use in Kerbala. It showed that the most common surgical procedures were Rhinoplasty and blepharoplasty whereas the most common non-surgical were botulinum toxin injection followed by filler injection which similar to the study in Saudia Arabia that showed rhinoplasty and botulinum toxin injection were the major cosmetic procedure undergone (Hindi et al., 2022). Similarly to study done in Iran found that most patients requesting botulinum toxin injections and filler injection (Dadkhahfar et al., 2021). Another study in United State done in 2 academic and 11 private dermatology practice showed Interest was greatest for botulinum toxin injections fallowed

by soft-tissue fillers injection and to lesser extent lasers for skin rejuvenation (Maisel et al., 2018). Another study done in PHC Baghdad city found that (22%) of participants had history of Botox and/or filler procedure (Fareed and Alnuaemi, 2023). So, the young age, female cause, importance of facial look with brighten face and lack of wrinkles effect on those decision to undergone these facial cosmetic procedures. On the other hand, this study is inconsistent with a study done in Taif University, Saudi Arabia among female students showed that no one of female students who took part in the study had undergone cosmetic procedures before and only (5.9%) said that they knew others who did (Hammadi and El-Shereef, 2017). So, the education level, socioeconomic state and financial status effect on those decision to undergo such procedures.

When asking about the main cause for undergone cosmetic procedures said the main reason is personal desire secondly to look better and to a lesser extent to the influence of the social Network. The study is in agreement of the study among Female Medical Students in al Riyadh, Saudi Arabia that found most of the students who underwent cosmetic surgery was because of issues of personal desire followed by to look more better and lastly social Network effect (**Doheyan et al., 2016**) and in agreement of the study in Iran show the most important cause to undergo cosmetic procedures were requesting rejuvenation followed by friends' suggestions (**Dadkhahfar et al., 2021**). Another research among Adults in Central Jordan showed that physical attractiveness significantly affects desire to do cosmetic procedures. 60% of participants mentioned that they had done a procedure to become more attractive (**Aladwan et al., 2023**) but when searching other studies, we found that the main reason was the media effect such in Saudi Arabia showed that participants influenced by social to undergo cosmetic procedure (**AlBahlal et** **al., 2023),** but our study took the last place and the lowest percentage. The study results showed that the most common motivations for doing cosmetic procedures were internally generated, designed to satisfy the participants themselves and not others, and spouses are rarely influential.

Regarding to the complication from cosmetic procedures, our study show infection and bleeding were the only two types of complication reported to the surgical procedure practiced by the study participants. Similarly, a study in Switzerland found that the most common complications occurring after surgeries were pain and discomfort, aesthetic dissatisfaction, wound breakdown and infection (Hummel et al., 2023). Another study in United Status found the most common complications after aesthetic rhinoplasty to be hematoma and infection (Namin et al., 2020). On the other hand, simple reaction and allergy were the main complication of the non-surgical procedure practiced by the study participants. Similar to the study by Colon et al. was found in the proportion of individuals experiencing swelling, lumps or bumps, and firmness at the injection site and some individuals experiencing pain, erythema, bruising, tenderness or itching (Colon et al., 2023).

Also similar to the study by levy, mentioned that the most common complications from Botox injection and soft-tissue filler injection are bruising, erythema and pain. With chemical peels, it is not uncommon to have erythema, irritation and burning (Levy and Emer, 2012), whereas the unsatisfactory result of our study for non-surgical procedures was (42.9%) more than the result on surgical procedures (27.3%).

Regarding number of Surgical cosmetic procedures, the results showed all participant had done procedures one time but non-surgical cosmetic procedures, results concluded that botulinum toxin injection, skin boosters' injection and filler were the main facial cosmetic procedures practiced by the study participants more than one time. Similar results were reported by previous study in Baghdad showed that most of the women who underwent cosmetic procedures (76%) of them, considered as frequent practice of these procedures, and (24%) did it for one time only (Fareed and Yousif Alnuaemi, 2023). Also, a study in Saudi Arabia showed that most women reported having cosmetic procedures more than one times (Almasri et al., 2019). So, participants who understand the procedures estimated that the procedure had to be repeated to prevent or postpone rejuvenating surgeries, such as facelifts or this might mean that the first experience for some women was not very satisfactory.

Dermatologist and Plastic surgeon were the main two specialist reported by the study participants and to a lesser extent by the by Dentist that perform cosmetic procedures in their clinics. This explains that the participant prefers dermatologist or plastic surgeon because this procedure might be done by two specialists who are more experienced than others. About half of the study participants performed procedures at the clinic, one quarter of them at hospital and the other quarter at beauty center.

In this study, more than three quarters have not done any type of cosmetic procedure and the most common reason for not doing cosmetic procedure was satisfaction about oneself followed by higher cost of the procedures then the religious concerns. The results are in agreement with the study in Saudi Arabia (Hindi et al., 2022) and with the study in Nigeria (Otene et al., 2016) that found the major cause for not doing cosmetic procedures was satisfaction with appearance. In contrast to the study in Iran that showed the most common preventive factors for participants to do the cosmetic procedures were financial concern (Dadkhahfar et al., 2021). In this study financial concern

was the second cause followed by the religious concerns, in Saudia and Nigeria the religious concern precedes the financial concern.

Regarding money expenditure and cosmetic procedures, in this study, about 23.4% of the studied subjects not undergone procedures because it expensive in contrast to the result of Saudian study which found the majority of Saudi Arabians getting cosmetic procedures regardless to money expenses (Alharethy, 2017).

With the strong effects of culture, religion, and society all around us, this study has further simplified the primary barriers to cosmetic surgery willingness, which include fear of complications, accessibility, culture, societal values, finance, and religion. According to the study's findings, over half of the participants intended to have cosmetic procedures carried out in the future. Similarly to the study in Jordon (Aladwan et al., 2023). In comparison, filler injection was the most desirable procedure that they would most like to have done in the future followed by botulinum toxin injection, laser for skin rejuvenation and rhinoplasty.in contrast to the study in Saudi Arabia that found about three quarters of participants had no intention to do cosmetic procedures in the future (Sindi et al., 2023).

The most common reason to perform procedures in future was to look better followed by when reaching 40 years and to delay the appearance of signs of aging and others, to maintain and preserve a youthful appearance of the face, which explains why most women become aware of their skin aging around their mid-thirties when fine lines start appearing and they start to feel tiredlooking and to maintain and preserve a youthful appearance of the face

5.1. Conclusion

1-the majority of the study participants had good knowledge and the main source of information about the facial cosmetic procedures were the social network. The study participants reported that Filler, Rhinoplasty and Botulinum toxin injection were the main three types of facial cosmetic procedures available in Kerbala city

2-More than three quadrants of the participants had neutral attitude about facial cosmetic procedures and Two thirds of the study participants agreed that low self-esteem makes people to do facial cosmetic procedure

3- The participants reported that they underwent these procedures in the future to improve facial appearance and delay signs of aging

4-There were no significant associations of the demographic characteristics with the Total Knowledge Score or with the Total Attitude Score.

5- knowledge and attitudes about facial cosmetic procedures are consistent regardless of demographic factors such as age, education, or residence. This implies that information and opinions about these procedures are widespread and not confined to specific demographic groups. This finding challenges such assumptions and suggests a more uniform distribution of knowledge and attitudes

5.2. Recommendation

1. Peoples Education by Provide thorough information about procedures, including potential risks and benefits, and avoiding overdoing such procedures.

2. Educate and increase awareness of people about cosmetic procedures and to underwent these in the right place by qualified personnel to avoid the complications and unsatisfactory results.

3. Understanding people motivations, expectations, satisfaction levels, and experiences with cosmetic procedures can provide a balanced view alongside clinical data.

4. Further studies to be conducted in cosmetic centers that focusing on reasons that motivate people to undergo cosmetic procedures. Incorporate people perspectives through qualitative research methods such as interviews or surveys. Which might include men also.

References

1-Ahn, C.S., Davis, S.A., Dabade, T.S., Williford, P.M. and Feldman, S.R. (2013c). Cosmetic Procedures Performed in the United States: A 16-Year Analysis. Dermatologic Surgery, 39(9), pp.1351–1359. doi:https://doi.org/10.1111/dsu.12267.

2-Al Mashhrawi, Y.M., AlNojaidi, T.F., Alkhaldi, R.A., Alshami, N.S. and Alhadlaq, A.S. (2023). Awareness and Knowledge of the Adverse Effects of Dermal Fillers Among the Saudi Population: A Cross-Sectional Study. Cureus. doi:https://doi.org/10.7759/cureus.40322.

3-Aladwan, S.M., Shakya, A.K., Naik, R.R. and Afrashtehfar, K.I. (2023). Awareness of Cosmetic Procedures among Adults Seeking to Enhance Their Physical Appearance: A Cross-Sectional Pilot Study in Central Jordan. Cosmetics, 10(1), p.19. doi:https://doi.org/10.3390/cosmetics10010019.

4-AlBahlal, A., Alosaimi, N., Bawadood, M., AlHarbi, A. and AlSubhi, F. (2023). The Effect and Implication of Social Media Platforms on Plastic Cosmetic Surgery: A Cross-sectional Study in Saudi Arabia From 2021 to 2022. Aesthetic Surgery Journal Open Forum, 5. doi:https://doi.org/10.1093/asjof/ojad002.

5-Alharethy, S. (2017). Trends and demographic characteristics of Saudi cosmetic surgery patients. Saudi Medical Journal, 38(7), pp.738–741. doi:https://doi.org/10.15537/smj.2017.7.18528.

6-Alhusaini, B.K., Sharaf, F.Z., Alqthmi, R.O., Alotaibi, N.T., Ballaji, M.B. and Mohammed, H.M. (2022). The Impact of Snapchat Use on Self-Image and Inclination Toward Cosmetic Procedures in Saudi Arabia. Cureus. doi:https://doi.org/10.7759/cureus.32456.

7-Almajnoni, R.S., Alharbi, M., K. Aljindan., F., AlSulami, L., Alsulami, N., Waiz, W., Alshrif, A., Almaghrabi, H. and Jastania, A. (2023). Acceptance and Attitude Toward Cosmetic Surgeries in the Western Region of Saudi Arabia: A Cross-Sectional Survey. Cureus. doi:https://doi.org/10.7759/cureus.45292.

8-Almasri, R., Alomawi, M., Alotaibi, M., Ghamdi, S., Alahmadi, M., Alhabshan, H. and Alosaimi, M. (2019). Number of cosmetic procedures among women in Saudi community. International Journal of Medicine in Developing Countries, pp.920–925. doi:https://doi.org/10.24911/ijmdc.51-1566658969.

9-American Society for Dermatologic Surgery (2017). Noninvasive approach to treatment of submental fullness. [online] SCMSJournal.com. Available at: http://refhub.elsevier.com/S0030-6665(19)30015-5/sref12 [Accessed 27 Nov. 2023].

10-American Society of Plastic Surgeons (2019). American Society of Plastic Surgeons. [online] American Society of Plastic Surgeons. Available at: <u>https://www.plasticsurgery.org/</u>.[Accessed 27 Nov. 2023].

11- Arab, K., Barasain, O., Altaweel, A., Alkhayyal, J., Alshiha, L., Barasain, R., Alessa, R. and Alshaalan, H. (2019). Influence of social media on the decision to undergo a cosmetic procedure. Plastic and Reconstructive Surgery–Global Open, 7(8), p.e2333.

12-Aston, S.J., Steinbrech, D.S. and Walden, J.L. (2012). Aesthetic Plastic Surgery EBook. Elsevier Health Sciences.

13-Ballin, A.C., Brandt, F.S. and Cazzaniga, A. (2015). Dermal fillers: an update. American journal of clinical dermatology, 16, pp.271–283.

14-Bass, L.S. (2015). Injectable Filler Techniques for Facial Rejuvenation, Volumization, and Augmentation. Facial Plastic Surgery Clinics of North America, 23(4), pp.479–488. doi:https://doi.org/10.1016/j.fsc.2015.07.004.

15-Belmontesi, M., De, F., Di, C. and Iozzo, I. (2018). Injectable nonanimal stabilized hyaluronic acid as a skin quality booster: an expert panel consensus. Journal of Drugs in Dermatology, 17(1), pp.83–88.

16-Brandi, C., Cuomo, R., Nisi, G., Grimaldi, L. and Aniello, C. (2018). Face rejuvenation: a new combinated protocol for biorevitalization. Acta Biomed, 89, pp.400–405. doi:https://doi.org/10.23750/abm.v89i3.6162.

17-Casabona, G., Frank, K., Koban, K.C., Freytag, D.L., Schenck, T.L., Lachman, N., Green, J.B., Toni, S., Rudolph, C. and Cotofana, S. (2019). Lifting vs volumizing—the difference in facial minimally invasive procedures when respecting the line of ligaments. Journal of cosmetic dermatology, 18(5), pp.1237–1243.

18-Cesare, B., Roberto, C., Giuseppe, N. and Luca, G. (2018). Face rejuvenation: a new combinated protocol for biorevitalization. Acta Bio Medica: Atenei Parmensis, 89(3), p.400.

19-Chuang, J., Barnes, C. and Wong, B.J. (2016). Overview of facial plastic surgery and current developments. The Surgery Journal, 2(01), pp.e17–e28.

20-Colon, J., Mirkin, S., Hardigan, P., Elias, M.J. and Jacobs, R.J. (2023). Adverse Events Reported From Hyaluronic Acid Dermal Filler Injections to the Facial Region: A Systematic Review and Meta-Analysis. Cureus, [online] 15(4), p.e38286. doi:https://doi.org/10.7759/cureus.38286.

21-Dadkhahfar, S., Gheisari, M., Kalantari, Y., Zahedi, K., Ehsani, A. and Ifa, E. (2021). Motivations and characteristics of patients seeking minimally invasive cosmetic procedures in two Iranian dermatology centers: A cross-sectional study. International Journal of Women's Dermatology, 7(5), pp.737–742. doi:https://doi.org/10.1016/j.ijwd.2021.07.001.

22-Davis, R.E. (2006). Rhinoplasty and concepts of facial beauty. Facial plastic surgery, 22(03), pp.198–203.

23-De Boulle, K., Furuyama, N., Heydenrych, I., Keaney, T., Rivkin, A., Wong, V. and Silberberg, M. (2021). Considerations for the Use of Minimally Invasive Aesthetic Procedures for Facial Remodeling in Transgender Individuals. Clinical, Cosmetic and Investigational Dermatology, Volume 14, pp.513–525. doi:https://doi.org/10.2147/ccid.s304032.

24-Dean, N., Foley, K. and Ward, P. (2018). Defining cosmetic surgery. Australasian Journal of Plastic Surgery, 1(1), pp.95–103.

25-Devgan, L., Singh, P. and Durairaj, K. (2019). Surgical Cosmetic Procedures of the Face. Otolaryngologic Clinics of North America, 52(3), pp.425–441. doi:https://doi.org/10.1016/j.otc.2019.02.001.

26-Doheyan, T., Saad, A., Haidar, A., Fwzan, H., Askar, J., Malki, F., Alanzi, O., Alanazi, M., Alanazi, W., Alanazi, J., Alanazi, F., Baqadir, O., Alanazi, A., Alanazi, A. and Alenzi, F. (2016). Knowledge, Attitude and Practices Concerning Cosmetic Surgery among Female Medical Students at the University Hospital, King Saud University, Riyadh, Saudi Arabia. British Journal of Medicine and Medical Research, 14(4), pp.1–10. doi:https://doi.org/10.9734/bjmmr/2016/22887.

27-El-Domyati, M., Barakat, M., Awad, S., Medhat, W., El-Fakahany, H. and Farag, H. (2015). Multiple microneedling sessions for minimally invasive facial rejuvenation: an objective assessment. International journal of dermatology, 54(12), pp.1361–1369.

28-Es Ehlinger-Martin, A., Cohen-Letessier, A., Ta€, M., Azoulay, E., Ma and Du Crest, D. (2015). Women's attitudes to beauty, aging, and the place of cosmetic procedures: insights from the QUEST Observatory. Journal of Cosmetic Dermatology, 15, pp.89–94.

29-European Journal of Business and Management (2015). The Impact of Jordanian Women's Motives, on their Attitudes towards Cosmetic Treatment.

30-Fernandes, J.R., Samayoa, J.C., Felix, B.G., McCormack, M.C., Nicholls, A.M., Randolph, M.A., Mihm, M.C. and William (2013). Micromechanical fractional skin rejuvenation. Plastic and Reconstructive Surgery, 131(2), pp.216–223.

31-Funt, D. and Pavicic, T. (2015). Dermal fillers in aesthetics: an overview of adverse events and treatment approaches. Plastic and Aesthetic Nursing, 35(1), pp.13–32.

32-Furnham, A. and Levitas, J. (2012a). Factors that motivate people to undergo cosmetic surgery. Plastic Surgery, 20(04). doi:https://doi.org/10.4172/plastic-surgery.1000777.

33-Furong, M., Zhengying, P., Ni, L. and Xueqin, Z. (2011). Current situation and countermeasures for healthy development of plastic surgery. Chinese Cosmetol, 20(11), pp.1810–1.

34-Ghotbi, N. and Khalili, M. (2017). Cultural Values Influence the Attitude of Chinese, Japanese, and Korean College Students towards Cosmetic Surgery. Asian Bioethics Review, [online] 9(1), pp.103–116. doi:https://doi.org/10.1007/s4164901700041.

35-Hammadi, H. and Elshereef, E. (2017). Study of Knowledge, Attitude and Practices of Plastic Surgery among Females Students at Faculty of Education, Taif University, Saudi Arabia. American Journal of Public Health Research, 5, pp.63–69. doi:https://doi.org/10.12691/ajphr533.

36-Hindi, A.M.A., Abdalla, S.M., Mutairi, B.A.A. -, Alnasser, F.A., Alhegail, R.O., Ghannam, R.G.A. -, Almutairi, A.F. and Albaker, A.B. (2022b). Knowledge, Attitudes, and Practice of Cosmetic Procedures among Population of Majmaah, Saudi Arabia, 2019-2020. Pakistan Journal of Medical and Health Sciences, 16(2), pp.907–913. doi:https://doi.org/10.53350/pjmhs22162907.

37-Hiwa, S. (2022). Acceptance of the General Population about Facial Fillers, A Case-Study in Sulaimani City. International Journal of Clinical Studies and Medical Case Reports, 20(3). doi:https://doi.org/10.46998/ijcmcr.2022.20.000489.

38-Hoffman, L. and Fabi, S. (2022). Look better, feel better, live better? The impact of minimally invasive aesthetic procedures on satisfaction with appearance and psychosocial wellbeing. The Journal of Clinical and Aesthetic Dermatology, 15(5), p.47.

39-Hummel, C.E., Klein, H.J., Giovanoli, P. and Lindenblatt, N. (2023). Complications arising from aesthetic surgery procedures in foreign countries and Switzerland. Swiss Medical Weekly, [online] 153, p.40077. doi:https://doi.org/10.57187/smw.2023.40077.

40-Ibrahim, A., Abubakar, A., Jamda, M., Ajani, A., Iyun, K. and Opara, K. (2016). University students and cosmetic surgery in Nigeria: A survey of perception, attitudes, and experiences. Nigerian Journal of Plastic Surgery, 12(1), p.12. doi:https://doi.org/10.4103/0794-9316.193733.

41-Imadojemu, S., Sarwer, D.B., Percec, I., Sonnad, S.S., Goldsack, J.E., Berman, M. and Sobanko, J.F. (2013). Influence of Surgical and Minimally Invasive Facial Cosmetic Procedures on Psychosocial Outcomes: A Systematic Review. JAMA Dermatol, [online] 149(11), pp.1325–1333. doi:https://doi.org/10.1001/jamadermatol.2013.6812.

42-Jin, X., Twayigira, M., Zhang, W., Gao, X., Luo, X., Xu, H., Huang, C. and Shen, Y. (2022). Prevalence and associated factors of minimally invasive facial cosmetic surgery in Chinese college students. BMC Psychiatry, 22(1). doi:https://doi.org/10.1186/s12888-021-03676-3.

43-Jung, G.S., Eom, J.R., Jeon, H.J., Chu, S.G., Oh, E. and Lee, J.W. (2018a). Facial Rejuvenating Effects of Mesotherapy Using a New Polycomponent Formulation. Medical Lasers; Engineering, Basic Research, and Clinical Application, 7(2), pp.69–73. 44-Khattab, N.R., Abdelraouf, N. and Ashour, T. (2022). Conflicting Cultural and Religious Views on Cosmesis: The Modern Women's Dilemma. Aesthetic Plastic Surgery, 46(4), pp.2040–2052. doi:https://doi.org/10.1007/s00266-022-02834-6.

45-KimPong, T., Ng ,Henry KinShing, YoungHoon, K., Yeung ,Victoria WaiLan and Cheung ,Francis YueLok (2012). Attitudes Toward Cosmetic Surgery Patients: The Role of Culture and Social Contact. The Journal of Social Psychology, [online] 152(4), pp.458–479. doi:https://doi.org/10.1080/00224545.2011.637997.

46-Lee, J.C., Daniels, M.A. and Roth, M.Z. (2016). Mesotherapy, microneedling, and chemical peels. Clinics in Plastic Surgery, 43(3), pp.583–595.

47-Levy, L.L. and Emer, J.J. (2012). Complications of Minimally Invasive Cosmetic Procedures: Prevention and Management. Journal of Cutaneous and Aesthetic Surgery, [online] 5(2), pp.121–132. doi:https://doi.org/10.4103/0974-2077.99451.

48-Magee, L. (2012). Cosmetic Surgical and Non-Surgical Procedures for the Face. Encyclopedia of Body Image and Human Appearance, pp.350–359. doi:https://doi.org/10.1016/b978-0-12-384925-0.00056-0.

49-Maisel, A., Waldman, A., Furlan, K., Weil, A., Sacotte, K., Lazaroff, J.M., Lin, K., Aranzazu, D., Avram, M.M., Bell, A., Cartee, T.V., Cazzaniga, A., Chapas, A., Crispin, M.K., Croix, J.A., DiGiorgio, C.M., Dover, J.S., Goldberg, D.J., Goldman, M.P. and Green, J.B. (2018). Selfreported Patient Motivations for Seeking Cosmetic Procedures. JAMA Dermatol, [online] 154(10), pp.1167–1174.

doi:https://doi.org/10.1001/jamadermatol.2018.2357.

50-Marketing (2015). International Society of Aesthetic Plastic Surgery. [online] ISAPS. Available at: https://www.isaps.org/ [Accessed 10 Sep. 2022].

51-Milothridis, P., Pavlidis, L., Haidich, A. and Panagopoulou, E. (2016). A systematic review of the factors predicting the interest in cosmetic plastic surgery. Indian Journal of Plastic Surgery, 49(03), pp.397–402.

52-Molina, A.R., Baker, R.H. and Nduka, C. (2011). 'What women want' the UK's largest cosmetic surgery survey. European Journal of Plastic Surgery, 35(8), pp.607–612. doi:https://doi.org/10.1007/s00238-011-0635-5.

53-Morait, S.R., Abuhaimed, M., Alharbi, M., Almohsen, B., Alturki, A. and Alarbash, A. (2019). Attitudes and acceptance of the Saudi population toward cosmetic surgeries in Riyadh, Saudi Arabia. Journal of Family Medicine and Primary Care, 8(5), p.1685. doi:https://doi.org/10.4103/jfmpc.jfmpc_249_19.

54-Namin, A., Shokri, T., Vincent, A., Saman, M. and Ducic, Y. (2020). Complications in Facial Esthetic Surgery. Seminars in Plastic Surgery, 34(04), pp.272–276. doi:https://doi.org/10.1055/s-0040-1721764.

55-Nibras, A., Hussain, Kadhem, Q. and Hussain, A. (2020). The Practicing and Attitude of Some Medical Students at Al-Nahrain College of Medicine Towards Cosmetic Rhinoplasty. Medico-legal Update, 20(1). doi:https://doi.org/10.37506/v20/i1/2020/mlu/194401.

56-Nisreen Mobayed, BS, Julie, K. and Jagdeo, J. (2020). Minimally invasive facial cosmetic procedures for the millennial aesthetic patient. J Drug Dermatol, 19(1), pp.100–3.

57-Oni, G. and ahmad, J. (2010). Special Topic. Cosmetic Surgery Training in Plastic Surgery Residency Programs in the United States: How Have We Progressed in the Last Three Years, 31(4) 445–455(31(4) 445–455). doi:https://doi.org/10.1177/1090820X11404551.

58-Otene, C., Odonmeta, A., Ebeye, O., Enivwenae, A., Ozoko, L. and Ebeigbe, P. (2016). Knowledge, attitude and practices of cosmetic surgery

among basic sciences students of University in Delta state, Nigeria. J Dent Med Sci, 15, pp.28–36.

59-Padula, S., Hersant, B., Helynck, Mounia, Sidahmed, M., Jean and Meningaud, P. (2019). Proposal of a Noninvasive Method to Reduce Injection-Related Bruising in Aesthetic Medicine: Transillumination.

60-Pierre, S., Liew, S. and Bernardin, A. (2015). Basics of dermal filler rheology. Dermatologic surgery, 41, pp.S120–S126.

61-Plastic Surgery of the Face, Breasts and Body (2023). Seattle Plastic Surgery | Award-Winning Surgeon, Dr. Shahram Salemy. [online] | Seattle Plastic Surgery | Award-Winning Surgeon, Dr.Shahram Salemy. Available at: https://www.drsalemy.com/ [Accessed 24 Nov. 2023].

62- Fareed and Alnuaemi (2023). Knowledge and attitude about botulinum toxins and dermal fillers among females attending the primary health care centers in Baghdad. World Journal of Advanced Research and Reviews, 18(2), pp.838–846. doi:https://doi.org/10.30574/wjarr.2023.18.2.0870.

63-Rekawek, P., Wu, B. and Hanna, T. (2021). Minimally invasive cosmetic procedures, social media, and oralmaxillofacial surgery: use of trends for the modern practice. Journal of Oral and Maxillofacial Surgery, 79(4), pp.739–740.

64-Salam, A., Dadzie, O. and Galadari, H. (2013a). Chemical peeling in ethnic skin: an update. British Journal of Dermatology, 169(s3), pp.82–90.

65-Sarwer, D.B., Cash, T.F., Magee, L., Williams, E.F., Thompson, J.K., Roehrig, M., Tantleff-Dunn, S., Agliata, A.K., Wilfley, D.E., Amidon, A.D., Anderson, D.A. and Romanofski, M. (2005). Female College Students and Cosmetic Surgery: An Investigation of Experiences, Attitudes, and Body Image. Plastic and Reconstructive Surgery, 115(3), pp.931–938. doi:https://doi.org/10.1097/01.prs.0000153204.37065.d3.

66-Sindi, E.E., Bondagji, M.F., Malibary, J.A., Alghamdi, M.K., Baashar, D.S., Sindi, S.A., Almalki, A.M., Alsaedi, F. and Al-Otaibi, H.O. (2023). An Evaluation of the Effect of Social Media Platforms on the General Population's Decision-Making About Cosmetic Procedures in Makkah City, Saudi Arabia. Cureus. doi:https://doi.org/10.7759/cureus.41093.

67-Slevec, J. and Tiggemann, M. (2010). Attitudes Toward Cosmetic Surgery in Middle-Aged Women: Body Image, Aging Anxiety, and the Media. Psychology of Women Quarterly, 34(1), pp.65–74. doi:https://doi.org/10.1111/j.1471-6402.2009.01542.x.

68-Sobanko, J.F., Dai, J., Gelfand, J.M., Sarwer, D.B. and Percec, I. (2018). Prospective Cohort Study Investigating Changes in Body Image, Quality of Life, and Self-Esteem Following Minimally Invasive Cosmetic Procedures. Dermatologic Surgery, 44(8), pp.1121–1128. doi:https://doi.org/10.1097/dss.00000000001523.

69-Sobanko, J.F., Taglienti, A.J., Wilson, A.J., Sarwer, D.B., Margolis, D.J., Dai, J. and Percec, I. (2015). Motivations for Seeking Minimally Invasive Cosmetic Procedures in an Academic Outpatient Setting. Aesthetic Surgery Journal, 35(8), pp.1014–1020. doi:https://doi.org/10.1093/asj/sjv094.

70-Tao, J.P. (2023). Plastic Surgery of the Lower Eyelids. Springer Nature.

71-Tedeschi, A., Lacarrubba, F. and Micali, G. (2015). Mesotherapy with an intradermal hyaluronic acid formulation for skin rejuvenation: an intrapatient, placebocontrolled, longterm trial using highfrequency ultrasound. Aesthetic plastic surgery, 39, pp.129–133.

72-The Aesthetic Society (n.d.). Homepage. [online] The Aesthetic Society. Available at: <u>https://www.theaestheticsociety.org/</u>.[Accessed 20 Nov. 2023].

73-The Aesthetic Society (2020). Injectable Fillers | Dermal Fillers | The Aesthetic Society. [online] www.theaestheticsociety.org. Available at:

https://www.theaestheticsociety.org/procedures/skin-hair/fillers [Accessed 27 Nov. 2023].

74-The American Society for Aesthetic Plastic Surgery (2023). Homepage. [online] The Aesthetic Society. Available at: <u>https://www.theaestheticsociety.org/</u>.[Accessed 30 Nov. 2023].

75-The American Society of Plastic Surgeons (ASPS) (2023). 2022 ASPS Procedural Statistics Release.

76-Tomaszewski, M., Matthews-Kozanecka, M. and Zbitkowski, S. (2019). Preliminary research on the demand for face aesthetic medicine among medical students. Journal of Face Aesthetics, 2(2), pp.80–88. doi:https://doi.org/10.20883/jofa.13.

77-Urdiales-Gálvez, F., Delgado, N.E., Figueiredo, V., Lajo-Plaza, J.V., Mira, M., Ortíz-Martí, F., del Rio-Reyes, R., Romero-Álvarez, N., del Cueto, S.R., Segurado, M.A. and Rebenaque, C.V. (2017). Preventing the Complications Associated with the Use of Dermal Fillers in Facial Aesthetic Procedures: An Expert Group Consensus Report. Aesthetic Plastic Surgery, 41(3), pp.667–677. doi:https://doi.org/10.1007/s00266-017-0798-y.

78-Wieczorek, I.T., Hibler, B.P. and Rossi, A.M. (2015). Injectable cosmetic procedures for the male patient. Journal of Drugs in Dermatology: JDD, 14(9), pp.1043–1051.

79-Zhang (2020). Cosmetic blepharoplasty and dry eye disease: a review of the incidence, clinical manifestations, mechanisms and prevention. International Journal of Ophthalmology, [online] 13(3), pp.488–492. doi:https://doi.org/10.18240/ijo.2020.03.18.

80-Zhong, Y. and Liang, F. (2020). Analysis of cosmetic effect of botulinum toxin type a masseter fixed point injection combined with hyaluronic acid mentalfilling injection for remodeling female maxillofacial contour. Women's Health Res, 13, pp.112–3.

81-Zoumalan, C.I. and Roostaeian, J. (2016). Simplifying blepharoplasty. Plastic and reconstructive surgery, 137(1), pp.196e213e.

Appendix

جمهورية العراق وزارة التطيم العالى والبحث العلمى 919/6/2: كلية الطب معاون العميد لشؤون الطمية شعية الدراسات العليا التاريخ: 112 3 /12 جامعة وزيلاه كلية الطب الى/ رئاسة جامعة كربلاء م/ تسهيل مهمة تحية طبية : يرجى تفضلكم بتسهيل مهمة طالبة الدراسات العلي الدبلوم عالى/طب اسرة (يُسر سمير كاظم) في مشر وع البحث الموسوم: Knowledge, Attitude and Practice of Facial Cosmetic Procedures among Females in Karbala, 2023 لغرض اكمال متطلبات البحث، شاكرين تعاونكم معنا خدمة للحركة العلمية في بلدنا العزيز ... مع التقدير ... 5. أ.م.د. على عبد الرضا أبو طحين معاون العميد للشؤون العلمية 2023/3/19 الاستاذ الساعد الدكتهر ** نمىخة منه: - مكتب السيد العميد المحترم للتفضل بالاطلاع مع التقدير. - مكتب السيد العميد المحترم للتفضل بالاطلاع مع التقدير. - مكتب معاون العميد للشؤون العلمية المحترم للتفضل بالاطلاع مر الشيب مقيل العلى - فرع طب الاسرة والمجتمع. للتفضل بالاطلاع مع التقدير. معاون العميد للشؤون الادارية - شعبة الدر اسات العليا/الحفظ. - الصادرة.

جمهورية العراق وزارة التطيم العالى والبحث العلمى جامع ية كرب لاء كلية الطب 918/6/2:20 معاون العميد لشوون العلمية شعبة الدر اسات العليا التاريخ: 1 / 2023 3 / 19 الى/ مديرية تربية كربلاة المعدمة كلية الطب م/ تسهيل مهمة مسادر تحية طيبة : يرجى تفض الكم بتسهيل مهمة طالبة الدر اسات العلي ا/دبلوم عالى/طب اسرة (يُسر سمير كاظم) في مشروع البحث الموسوم: Knowledge, Attitude and Practice of Facial Cosmetic Procedures among Females in Karbala, 2023 لغرض اكمال متطلبات البحث، شاكرين تعاونكم معنا خدمة للحركة العلمية في بلدنا العزيز ... مع التقدير ... ۲ . أ.م.د. على عبد الرضا أبو طحين معاون العميد للشؤون العلمية 2023/7/12 الاستاذ المساعد الدكتور **نسخة منه: - مكتب السيد العميد المحترم للتفضل بالاطلاع مع التقدير. - مكتب معاون العميد للشؤون العلمية المحترم للتفضل بالاطلاع ليستعبير عقيل العلى - فرع طب الاسرة والمجتمع. للتفضل بالاطلاع مع التقدير. معاون العميد للشؤون الادارية - شعبة الدر اسات العليا/الحفظ. - الصادرة.



جامعة كربلاء كلية الطب فرع طب الأسرة المجتمع

إلى / الاستاذ الدكتور محمد مصطفى ويس المحترم

م/ تقييم استبانة

تحية طيبة

نظر اللمكانة العلمية والخبرة التي تتمتعون بها نرفق لكم استمارة استبانة مقترحة لرسالة طالبة الدبلوم العالي في طب الاسرة ديسر سمير كاظم المبين عنوانها في ادناه، راجين من جنابكم الاطلاع عليها واعطاء ملاحظاتكم القيمة بشأنها ... مع فائق التقدير

"knowledge, attitude and practice of facial cosmetic procedure among females in karbalaa governorate, ", ""

أ.م. د شهرزاد شمخي الجبوري

Y.YW/ ± / ±

عنوان الرسالة:

knowledge, attitude and practice of facial cosmetic procedure among females in karbalaa governorate, $\vec{Y} \cdot \vec{Y} \vec{Y}$

اهداف الرسالة:

Aim of the study:

this study is aim to assessing the knowledge, attitude, and practice of cosmetic procedures among females in kerbalaa governorate

الملاحظات:

احم اللقاء مع الطالبة واعطيت ملاحظات تفصيليه حول الاستبيان وطريقة البحث والاستفادة من المصادر ٢ - الاستبيان جيد لكن يحتاد بعض التعديلات: ا-اضافة (حوادث وتشوه ولادي) و (تقدم العمر وعلامات الشيخوخة)الى سؤال قواعد عمليات التجميلية. ب اضافة عملية رفع الحاجب الى انواع العمليات الجراحية. ج-اضافة حقل (لا اعلم) في حقل توجهات المشتركات حول العمليات التجميلية. د-اضافة (التهاب , نزيف , عدم الرضا على العملية) لسؤال المضاعفات للعمليات الجر احية. ح تعديل مضاعفات العمليات الغير جراحية الى (التهابات وقيح, تحسس من التداخل الغيرجر احي, تكون الورم الحبيبي القيحي, رد فعل بسيط (احمرار وتهيج البشره, كدمات تندب في البشرة). خ- اضافة سؤال كم مرة اجريتي التداخلات الغير جراحية وفصلها عن العمليات الجراحية في حقل تطبيق وممارسة عمليات تجميل الوجه.

اسم الخبير : د.محمد مصطفى ويس اللقب العلمى :مدرس مكان العمل :كلية الطب/ جامعة كربلاء عدد سنوات الخبرة : ١٨ سنة التوقيع : ____



جامعة كربلاء كلية الطب فرع طب الأسرة المجتمع

إلى / الاستاذ الدكتور على طارق المحترم

م/ تقييم استبانة

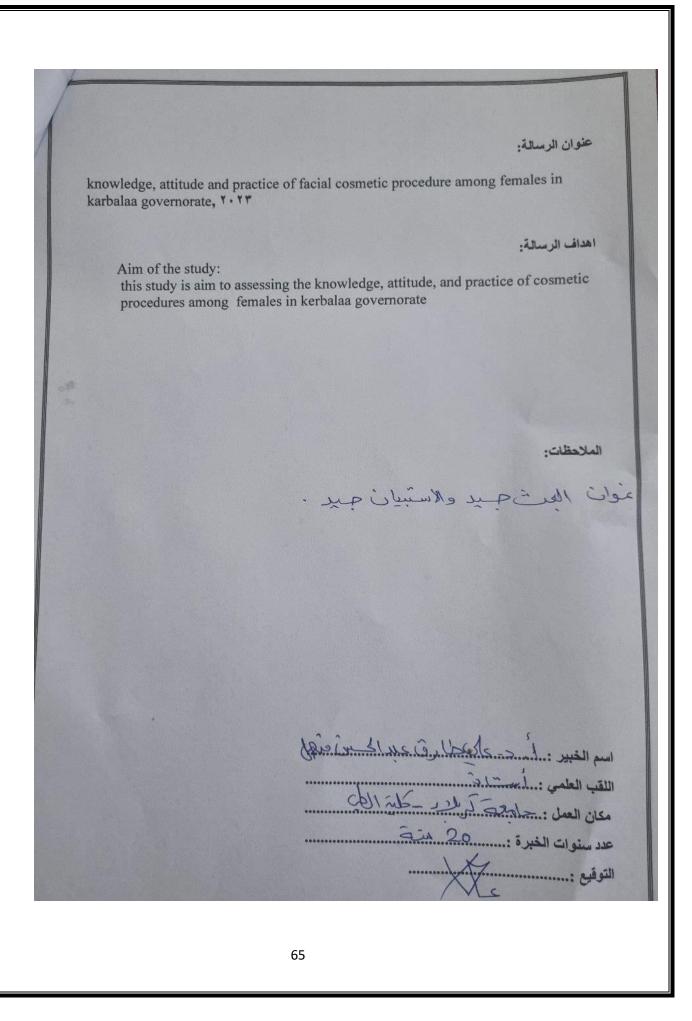
تحية طيبة

نظرا للمكانة العلمية والخبرة التي تتمتعون بها نرفق لكم استمارة استبانة مقترحة لرسالة طالبة الدبلوم العالي في طب الاسرة د. أيسر والتدرك لظ المبين عنوانها في ادناه، راجين من جنابكم الاطلاع عليها واعطاء ملاحظاتكم القيمة بشأنها ... مع فائق التقدير

knowledge, attitude and practice of facial cosmetic procedure among females in karbalaa governorate, $\forall \cdot \forall \forall''$

أ.م. د شهرزاد شمخي الجبوري

Y.YT/ ± / ±







FINAL APPROVAL LETTER

Yusur Sameer Kadhim Department of Family and Community Medicine \ College of Medicine \ University of Kerbala

Title of Project:

"Knowledge, Attitude and Practice of Facial Cosmetic Procedure among Females in Karbala Governorate, 2023"

This is to certify that proposal provided have satisfactorily addressed the research bioethical guidelines.

Please consider the following requirements of approval:

- 1. Approval will be valid for one year. By the end of this period, if the project has been completed, abandoned, discontinued or not commenced for any reason, you are required to announce to the Committee. And you should inform the committee if the study extends over one year.
- 2. Please remember the Committee must be notified of any alteration to the project.
- 3. You must notify the Committee immediately in the event of any adverse effects on participants or of any unforeseen events that might affect continued ethical acceptability of the project.
- 4. Always consider the confidentiality of participants/ patients' information and/or opinions. And they must never be obligated to participate in the study and can withdraw at any time.
- 5. At all times you are responsible for the ethical conduct of your research in accordance with the standard bioethical guidelines.
- 6. The Committee should be notified if you will be applying for or have applied for internal or external funding for the above project.
- 7. This document does not compensate administrative or ethical approval might be required from hospitals/ health authorities.

Ale Alu Ti

Assoc. Professor Ali A. Abutiheen Chair, Medical Research Bioethical Committee College of Medicine - University of Kerbala

Questionnaire English form

Dear participant, This research aims to assess the knowledge, attitude and practice of facial cosmetic procedure among adult females in Karbala Governorate.

This survey is optional, and the information will be kept confidential. Your participation is important and this survey will only take a few minutes of your time

Demographic characteristics of the participants:

1- Age in years	[]	
2-Marital status		
1-[] single	2-[] married	3-[] divorced
4-[] widow		
3-Educational level		
1-[] Undergraduate	2-[] Bachelors	3-[] master
4-[]doctorate		
4-Occupation		
1-[] student	2-[] employee	3-[] Private

6-Address

1-[]urban	2-[]rural
------------	-----	--------

knowledge about facial cosmetic procedure

1-Are there general rules to do facial cosmetic procedure?				
1-[] Do if there is a congenital facial deformity 2-[] Do not change God's creation				
3-[] Do if there is facial disfigurement aging)	nt due to	an accident 4-[] Advancing a	ge (sig	ns of
2-Have you heard about facial o	cosmeti	c procedures?		
1-[] Yes	2-[] No		
if answer yes which type?				
1-[] surgical	2-[]non-surgical	3-[]both
3-source of information about t	hese pr	ocedures ?		
1-[]friends	2-[]social network	3-[]TV
4-[]Family member or relatives	5-[]books& journals	6-[]Others
4-Are you aware of availability	of facia	al cosmetic procedure in o	ur cit	y?
1-[] yes	2-[]No		
If answer yes ,which type?				
surgical				
1-[]rhinoplasty 4-[]fat injection	2-[]blepharoplasty	3-[]face lift
non-surgical				
 1-[] filler 3-[] chemical peel 	-] botulinum toxin injection] skin boosters' injection		
5-[] face lift with threads	6-[] laser for skin rejuvenation		
7-[] Others (mention it)				

Attitude of participants about facial cosmetic procedure:

1-Do you agree to perform facial cosmetic procedures on yourself?	agree	neutral	disagree
2- Do You think social media affects decision regarding facial cosmetic procedures?	agree	neutral	disagree
3- If you are decided to do a cosmetic procedure, can you tell others?	agree	neutral	disagree
4- Would you undergo facial cosmetic procedures upon request of others?	agree	neutral	disagree
5- Do you think facial cosmetic procedures accepted socially?	agree	neutral	disagree
6- Do you think low self-esteem makes people to undergo facial cosmetic procedure?	agree	neutral	disagree
7- do you think people who have undergone facial cosmetic procedures look more better appearance ?	agree	neutral	disagree
8- If you decided to have facial cosmetic procedures, would you feel hesitant?	agree	neutral	disagree

Practice of facial cosmetic procedures

1-do you undergo any type of facial cosmetic procedure?

1-[] yes

2-[]No

If answer NO move to question (11), if yes , answer the following:

2-which Reasons behind undergone facial cosmetic procedures?

1-[] Personal desire	2-[] influence of social media
3-[] to look more better5-[] trend	4-[]my friends/sisters done such procedure,so try it6-[] I like that
7-[]my family like it	8-[]my partner like it
9-[] Bullying of others on my face 11-[] My job requires it	10-[]Important event (engagement, marriage)12-[] Others (mention it)

3-what procedure did to do?

surgical/

-	
1-[]rhinoplasty 4-[]fat injection	2-[]blepharoplasty3-[]face lift5[] Others (mention it)
4-Did complications occur for	r this procedures ?
1-[] yes	2-[]No
5-If answer YES, what is it?	
1- [] Unsatisfactory result for me4-[]nothing	2-[]infection 3-[]bleeding
non-surgical	
 1-[] filler 3-[] chemical peel 	2-[] botulinum toxin injection4-[] skin boosters' injection
5-[] face lift with threads	6-[] laser for skin rejuvenation
7-[] Others (mention it)	
6-Have there been complication	ions from these non-surgical interventions?
1-[] yes	2-[]No
7-If answer YES, what is it?	
1-[] Unsatisfactory result for me	2-[]infection & abcess
3-[]allergy from non-surgical inte	ervention 4-[]granuloma formation
5-[] simple reaction (redness and	irritation of the skin, bruising, scarring of the skin)
6-[] Others (mention it)	

8-How many times have you had this procedure / procedures? State the number for each type

1- []rhinoplasty()	2-[]blepharoplasty()
3-[]face lift ()	4-[]fat injection ()

How many times have you had this intervention/interventions ? State the number for each type:

1-[] filler()2-[] botulinum toxin injection()3-[] chemical peel()4-[] skin boosters' injection()5-[] face lift with threads()6-[] laser for skin rejuvenation()7-[] Others (mention it)

9-who made it for you?

1-[]plastic surgeon	2-[] dermatologist
3-[]family medicine doctor	4-[]other specialist
5-[]dentist	6-[]nurse, Dental assistant, Analyst
7-[]I don't know	8-[] Others (mention it)

10-Where is this procedure/procedures performed?

If answer NO :

11-reasons behind not undergoing facial cosmetic procedures:

1-[]Religious Concerns	2-[] I am satisfied with my appearance
3-[] Expensive	4-[] My family and my husband prevent me
5-[]I don't like it	6-[] Because of Complication

7-[] Others (mention it)

12-Do you expect to perform these procedures in the future?

1-[] yes 2-[]No

If yes ,which this ?

1-[]rhinoplasty 2-[]blepharoplasty

3-[]face lift	4-[]fat injection
5-[] filler 7-[] chemical peel	6-[] botulinum toxin injection8-[] skin boosters' injection
9-[] face lift with threads	10-[] laser for skin rejuvenation
11-[] Others (mention it)	

13-Why?

- 1-[] When i become 30years
- 2-[] When i become 40 years or more
- 3-[] To delay the appearance of signs of aging
- 5-[]when money available
- 7-[] my husband like it

9-[] Bullying of others on my face marriage)

12-[] Others (mention it)

- 4-[] To look more better
- 6-[]I like it
- 8-[]my family like it
- 10-[]Important event (engagement,
- 11-[] My job requires it

Do you have any other comments or suggestions? Mention them

الاستبيان:

عزيزتي المشاركة ، اني طالبة دبلوم عالي\طب الاسرة اقوم بأجراء بحث يهدف الى تقييم معرفة وموقف وتطبيق إجراءات تجميل الوجه لدى الإناث في محافظة كربلاء.

هذا الاستطلاع اختياري ، وسيتم الحفاظ على سرية المعلومات. مشاركتك مهمة وسيستغرق هذا الاستطلاع بضع دقائق فقط من وقتك

> الخصائص الديمو غرافية للمشتركة: العمر (رقما بالسنين): الحالة الاجتماعية:] عزباء _____متزوجة ___ مطلقة ____ارملة مستوى التعليم :] طالبه جامعية _____كالوريوس ___ ماجستير ___دكتوراه المهنة :] طالبة _____موظفة ____عمل خاص السكن : _____ الحظر _____ الريف

أولاً (معرفة المشتركات حول العمليات التجميلية للوجه)

١- هل هناك قواعد لعمل عمليات تجميل الوجه؟ □افعل اذا كان هناك تشوه ولادي في الوجه □لا اغير خلقة الله □افعل اذا كان هناك تشوه في الوجه بسبب حادث تقدم العمر (علامات الشيخوخة) ۲- هل سمعت حول عمليات تجميل الوجه؟ 🛛 🗆 نعم ע אצ اذا كان الجواب نعم اي نوع ؟ 🗆 جراحی 🛛 غیر جراحی 🔄 کلاهما ٣-ماهو مصدر معلوماتك حول تلك العمليات؟ □التلفزيون □افر اد العائله و الاقر باء □الاصدقاء □ مواقع التواصل الاجتماعي □اخرى (اذكريها □الكتب و المجلات ٤- هل انت على معرفة بتوفر عمليات تجميل الوجه في مدينتنا؟ □ نعم בצ اذا كان الجواب نعم إيّ منهما؟

□حقن الدهون	∟شد الوجه	□قص الاجفان	جراحي: □عملية تجميل الانف
	□التقشير الكيميائي	□حقن البوتوكس	غیر جراحی :□ الفلر
	رط الذهبية	∟شد الوجه بالخيو	□حقن معززات البشرة
		□اخرى(اذكريها	□ليزر لتجديد وتعزيز البشرة

ثانيا (توجهات المشتركات حول العمليات التجميلية للوجه)

		□اوافق	ل توافقين الرأي على اجراء عمليات تجميل الوجه لك؟	۵-۱
لااوافق	محايد			
			، تعتقدين ان وسائل التواصل الاجتماعي تؤثر على قرارك بشان اجراء مثل تلك	۵-۲
لااوافق	محايد	اوافق	بات؟	العم
			قررت اجراء عمليه تجميلة, هل يمكنك اخبار الاخرين؟	51-77
لااوافق	محايد	اوافق		
) ستخصعين لاجراء تلك العمليات بناءاً على طلب الاخرين؟	ه-٤
لااوافق	محايد	اوافق		
			ل تعتقدين ان عمليات تجميل الوجه مقبولة اجتماعيا؟	-0
لااوافق	محايد	اوافق		
			، تعتقدين ان قلة الثقة بالنفس تجعل الاشخاص يخضع <i>و</i> ن لمثل تلك العمليات؟	٦-ھ
لااوافق	محايد	اوافق		
			ى تعتقدين ان الاشخاص الذين خضعوا لعمليات تجميل الوجه يبدون احسن شكلاً؟	ه-٧
لااوافق	محايد	اوافق		
			قررت اجراء عملية تجميل للوجه فهل ستشعرين بالتردد؟	21-V
لااوافق	محايد	اوافق		

ثالثاً (تطبيق وممارسة عمليات تجميل الوجه)

١- هل خضعت لاي نوع من عمليات تجميل الوجه؟

- اذا كانت الاجابة(نعم),اجيبي مايلي
- ٢-ماهي الإسباب للخضوع لعمليات تجميل الوجه؟
- □ر غبة شخصية □تاثير مواقع التواصل الاجتماعي □لكي ابدو افضل
 □صديقاتي او/اخواتي عملو ها لذلك اريد ان اجرب □كونها شائعة

🗆 يعجب زوجي	🗆 يعجب اهلي	□يعجبني
🗆 مناسبة مهمة(خطوبة,زواج)	، على شكلي	🗆 تنمر الاخرين
🗆 اسباب اخرى(اذكريها	، ذلك	🗆 عملي يتطلب

٣-وماهى العمليات التي عملتيها؟

جراحية: [] تجميل الانف [] قص الاجفان [] شد الوجه [] حقن الدهون [] اخرى ٤- هل حدثت مضاعفات لتلك العمليات الجراحية؟ [] نعم [] كلا ٥- اذا كان الجواب نعم مماهي ؟ [] نتيجة غير مرضية لي [] التهاب العملية [] نزيف [] لاتوجد

<u>غيرجراحية:</u>

الفلر الفلر الفريبائي
 حقن البوتوكس التقشير الكيميائي
 حقن معززات البشرة المشد الوجه بالخيوط الذهبية
 اليزر لتجديد وتعزيز البشرة الخرى(اذكريها
 ٢- هل حدثت مضاعفات لتلك التداخلات الغيرجراحية؟
 ٢- هل حدثت مضاعفات لتلك التداخلات الغيرجراحية؟
 ٢- مل حدث مضاعفات لتلك التداخلات الغيرجراحية؟
 ٢- مل حدث مضاعفات لتلك التداخلات الغيرجراحي
 ٢- مل حدث من التداخل الغيرجراحي
 ٢- مل حدث من التداخل الغيرجراحي
 ٢- مل حدث من التداخل الغيرجراحي

رد فعل بسيط(احمرار وتهيج البشره, كدمات, تندب في البشرة)

□اخرى(اذكريها

٨-كم مرة اجريت تلك العمليه/العمليات؟ اذكري العدد لكل نوع
 تجميل الانف ()
 شد الوجه()

-كم مرة اجريت تلك التداخلات الغير جراحية؟اذكري العدد لكل نوع

١٣ -ولماذا؟

عندما اصبح ثلاثون عاما
 عندما اصبح اربعون عاما اواكثر
 التاخير ظهور علامات تقدم العمر (التجاعيد)
 اعند توفر المال
 عند توفر المال
 تعجب اهلي
 تعجب اهلي
 تعجب العلي
 تعجب مهمة (خطوبة, زواج)
 عملي يتطلب ذلك

-هل لديك اي ملاحظات اخرى او مقترحات؟اذكريها

الخلاصة

الخلفية : يتم تعريف الإجراء التجميلي على أنه أي إجراء يكون الهدف الأساسي منه هو تحقيق ما . يشار إلى كل من الإجراءات الجراحية وغير الجراحية بالإجراءات يعتبره الفرد مظهرًا مرغوبًا فيه. التجميلية. تشير عمليات تجميل الأنف وشد الوجه الجراحي وتجميل الجفن إلى العمليات الجراحية. في حين أن حقن الفلر والبوتوكس وغيرها من الإجراءات التجميلية الطفيفة التوغل ً بالإجراءات الغير جراحية.

طريقة العمل: أجريت دراسة وصفية مقطعية بين ٣٠٧ مشاركين بعمر ١٨ سنة فما فوق في مدينة كربلاء. تم استخدام فئتين كمصادر عينة (طالبات الجامعات من كليات مختارة من جامعة كربلاء والمعلمات من المدارس المختارة). أجريت الدراسة في الفترة من ابريل ٢٠٢٣ الى مارس ٢٠٢٤ باستخدام استبيان منظم ذاتيا بدون ذكر الاسماء . تم اجراء التحليل الاحصائي باستخدام برنامج الحزمة الاحصائية للعلوم الاجتماعية , وتعتبر القيمة الاحتمالية ٩ التي تساوي او اقل من ٥.٠٠ ذات دلالة الحصائية . وتعتبر القيمة الاحمالية ٩ من المراحية من المراحية . وتعتبر القيمة الاحتمالية ٩ التي تساوي او اقل من ٥.٠٠ ذات دلالة الحصائية.

النتائج: متوسط عمر المشاركين كان 27.93 ± 9.30. تشير نتائج الدراسة إلى أن حوالي ٩٨,٧ من المشاركين في الدراسة سمعوا عن إجراءات تجميل الوجه وكان مصدر المعلومات الرئيسي هو هو شبكات التواصل الاجتماعي(٨٧, ٣٧). وأفادوا أن حقن الفلر وتجميل الأنف وحقن البوتوكس هي الأنواع الثلاثة الرئيسية لعمليات تجميل الوجه المتوفرة في مدينة كربلاء. كذلك اتفق أكثر من نصف المشاركين في الدراسة على أن إجراءات تجميل الوجه مقبولة اجتماعيا. و اتفق حوالي ثلثا المشاركين المشاركين في الدراسة على أن إجراءات تجميل الوجه مقبولة اجتماعيا. و اتفق حوالي ثلثا المشاركين المشاركين في الدراسة على أن الأشخاص الذين يعانون من تدني احترام الذات غالبًا ما يقومون بعمليات تجميل الوجه . أفاد ان ٥, ٢٠٪ من المشاركين في الدراسة أنهم خضعوا لعمليات تجميل الوجه. وكانت الرغبة الشخصية هي المصدر الأساسي للتحفيز للخضوع لمثل هذه العمليات وشكلت ٢٩.٢٢٪. أما باقي المشاركين في الدراسة فلم يخضعوا لمثل هذه الإجراءات وكان الرضا عن النفس هو السبب الرغبة الشخصية هي المصدر الأساسي للتحفيز الخضوع لمثل هذه العمليات وشكلت ٢٩.٢٢٪. أما الاستنتاج: غالبية المشاركين في الدراسة لديهم معرفة جيدة والباقي ضعيفي المعرفة. كان المصدر الرئيسي للمعلومات حول إجراءات تجميل الوجه هو شبكة التواصل الاجتماعي. أفاد المشاركون في الدراسة أن حقن الفلر وتجميل الأنف والبوتوكس هي الأنواع الثلاثة الرئيسية لعمليات تجميل الوجه المتوفرة في مدينة كربلاء. لم تكن هناك ارتباطات ذات دلالة إحصائية للخصائص الديمو غرافية مع مجموع نقاط المعرفة أو مع مجموع نقاط الاتجاه. يمكن أن تستكشف الأبحاث المستقبلية العوامل الاخرى التي تؤثر على المعرفة والمواقف تجاه إجراءات تجميل الوجه الاخرى التي في في معاليات الخصائص الديمو غرافية مع



جامعة كربلاء كلية الطب فرع طب الأسرة والمجتمع

المعارف والتوجهات والممارسات حول عمليات تجميل الوجه لدى عينة من الإناث في محافظة كربلاء, ٢٠٢ <u>أطروحة</u> مقدمة الى مجلس كلية الطب/جامعة كربلاء كجزء من متطلبات نيل درجة الدبلوم العالي في طب الاسرة

> من ^{قبل} **یسر سمیر کاظم** بکالوریوس طب وجراحة عامة

> > اشراف

أ.م.د.شهرزاد شمخي الجبوري منعم . بورد طب مجتمع بورد جراحة تجميلية

٥٤٤٥ ه

٢٠٢٤م