

## Evaluation of the Effect of Aesthetic Procedure on Female Psychosexual and Sexual Behavior

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### Abstract

Human beings are born with sexual interest, sexual drive, sexual desire, and multidimensional response to sex. Human's feeling and thinking, learning and language, and many other resources achieve human biological responses and accumulate the life experience. Sex is a motive force bringing a man and a woman into intimate contact. Satisfying usual experience is an essential part of a healthy and enjoyable life for most people. The aim of this study is to evaluate the effect of aesthetic surgical and non-surgical procedures on female sexual activity and psychosexual behavior. This is a cross sectional study performed at outpatient clinics of Dermatology, Venereology and Andrology Department, at Banha University hospitals in the period from May 2018 till May 2019, after the approval of the ethics committee on research involving human subjects of Banha faculty of Medicine. after cosmetic procedures, female sexual function dimensions significantly increased, where mean of desire increased from  $3.60 \pm 1.2$  to  $4.20 \pm 1.2$  also, there was significant difference in Arousal, Orgasm, Satisfaction and pain ( $p < 0.05$ ). Also, total FSFI scale score was statistically higher after cosmetic procedures as, it increased from  $20.79 \pm 6.19$  to  $24.33 \pm 4.98$ . **Conclusion:** According to the results of the current study and many others about the same issue of good appearance and good sexuality we concluded that, Sense of beauty is so important for the female to feel that she is accepted and she is sexually successful.

**Keywords:** Aesthetic, Behavior, Cosmetic, Sexual, Surgical Non-Surgical and Psychosexual.

### 1. Introduction

Unfortunately, many cultures put physical appearance in a more important position for women than for men. Women sense and expect harsh judgment on their physical appearance. Hence women are obviously more common to seek for aesthetic procedures in dermatology clinics. Sexual dysfunctions may affect any stage or all of sexual response cycle as dyspareunia, as well as the absence of sexual desire, arousal, and stages of orgasm. Several studies have focused on different factors of influence that, according to the authors, could contribute to the incidence of female sexual dysfunction (FSD). The influencing factors might be physiological, psychological and physical factors..

Since skin is the most important component of an individual's physical appearance; aesthetic defects do greatly interfere with social life, work and relationships the sexual lives of patients may also be impacted by their skin condition.

The sex lives of both patients and their sexual partners can be strikingly enhanced after elective surgical and nonsurgical aesthetic interventions. As aesthetic procedures are no longer a luxury restricted to celebrations and the extremely wealthy.

However, data on the effects of both surgical and nonsurgical aesthetic interventions on well-being are rather scarce. New quality of life measuring instrument would present a special challenge to dermatologists but can significantly improve the aesthetic sciences [4].

In recent years, there has been a broad development of Aesthetic Dermatology as a

medical subspecialty of Dermatology. Many aesthetic procedures are nowadays performed to attain youthful appearance as platelet rich plasma (PRP), hyaluronic acid filler, botulinum toxin.

In addition, different types of lasers have been developed in order to regain self-esteem and enhance the sexual life of female patients.

### 2. Subjects and methods

This is a cross sectional study performed at outpatient clinics of Dermatology, Venereology and Andrology Department, at Banha University hospitals in the period from May 2018 till May 2019, after the approval of the ethics committee on research involving human subjects of Banha faculty of Medicine.

#### 2.1 Subjects

The study included 100 female who had experienced sexual activity before an elective aesthetic procedure versus post-aesthetic procedure.

##### 2.1.1 Inclusion criteria

Good general health married female, Above 20 years old and less than 50 years old and admitted for cosmetic procedures either Vaginal rejuvenation, Filler, Botox, Laser Hair reduction, Fractional laser (peeling of hyper-pigmented area, Plasma and hair mesotherapy).

##### 2.1.2 Exclusion criteria

Pregnancy and Age below 20 or above 50

#### 2.2 Methods

All females were subjected to the following:

### 2.2.1 Sociodemographic questionnaire

- 1- Personal data: age, education and residence.
- 2- Partner age and partner's sex problems.
- 3- Type of Cosmetic Procedures.

### 2.2.2 Female Sexual Function Index (FSFI) questionnaire

All participant females were subjected to an Arabic Female Sexual Function Index which is a translated form of an English form of Female Sexual Function Index (FSFI) before and after cosmetic procedures.

### 2.3 Statistical Analysis

The collected data were analyzed by computer using Statistical Package of Social Services version 24 (SPSS), Data were represented in tables and graphs, Continuous Quantitative variables e.g. age were expressed as the mean  $\pm$  SD & (range), and categorical qualitative variables were expressed as absolute frequencies (number) & relative frequencies (percentage).

### 3. Results

The current study was done to evaluate the effect of aesthetic surgical and non-surgical procedures on female sexual activity.

The study included 100 females. Their ages ranged from 20 to 50 years old, with a mean of  $32.94 \pm 5.92$  years old, demographic characteristics of the participants are illustrated in Table (1).

Eighty-five (58%) of the studied females were from urban areas, 18 (18%) of them can write and read, while half of them were highly educated (50%), as demonstrated in Table (2)

different cosmetic procedures among the studied females, (15%) of them had fractional laser, and 14 % of them coming for fillers or Peeling of hyper-pigmented area, only 9% subjected to vaginal rejuvenation, Fig (1).

The studied female partner's age ranged from 20 to 50 years old, with a mean of  $36.04 \pm 6.11$  years old, demographic characteristics of the participants, age of 56% of the them ranged from 30 to 40 years old and 23% of them were older than 40 years old, only 15 % of them had sex problems, are illustrated in Table (3).

Reliability statistics (Cronbach's Alpha) for FSFI Subscales for women before and after cosmetic procedures ranging from 0.71 to 0.91, indicated good internal consistency, where questions of FSFI subscales were closely related. Table (4)

After cosmetic procedures, female sexual function dimensions significantly increased, where mean of desire increased from  $3.60 \pm 1.2$  to  $4.20 \pm 1.2$  also, there was significant difference in Arousal Orgasm, Satisfaction and Pain ( $p < 0.05$ ). Also, total FSFI scale score was statistically higher after cosmetic procedures as it increased

from  $20.79 \pm 6.19$  to  $24.33 \pm 4.98$ , as shown in Fig (2 & 3).

As regard female sexual dysfunction, after cosmetic procedures, it significantly decreased, where percentage of females with FSD decreased from 78% before cosmetic procedure to be 62% after cosmetic procedure, as shown in Fig (4).

Female sexual dysfunction, decreased after cosmetic procedures in difference age groups, but it significantly decreases from 81.4% to 61.11% at age from 30 to 40 years old, as shown in Fig (5).

Total female sexual function index, statistically increased after cosmetic procedures in difference age groups, where it significantly increased from  $21.10 \pm 6.29$  to  $24.80 \pm 5.34$  at age from 20 to 30 years old, and it increased from  $20.80 \pm 6.21$  to  $4.38 \pm 4.76$  at age from 30 to 40 years old as shown in Fig (6).

There was no significant difference in Female sexual dysfunction after cosmetic procedures on comparison according to residence where FSD decreased from 77.95% to 62.07% among urban resident, also it decreased from 78.5% to 61.9% among rural resident, as shown in Fig (7).

There was significant difference in Total FSFI scale score after cosmetic procedures on comparison according to residence where significantly increased in both urban resident and rural resident ( $p < 0.05$ ), as shown in Fig (8).

There was significant difference in Female sexual dysfunction after cosmetic procedures at higher education level where FSD decreased from 82% to 66% among highly educated females, as shown in Fig (9).

There was significant difference in Total FSFI scale score after cosmetic procedures at basic and higher education level as shown in Fig (10).

There was no significant difference in Female sexual dysfunction after cosmetic procedures on comparison according to cosmetic procedures except after Vaginal rejuvenation, Botox where FSD significantly decreased from 88.89% to 33.33% among females underwent Vaginal rejuvenation, also it decreased from 76.9% to 38.46 % among females subjected to botox injection, as shown in Fig (11).

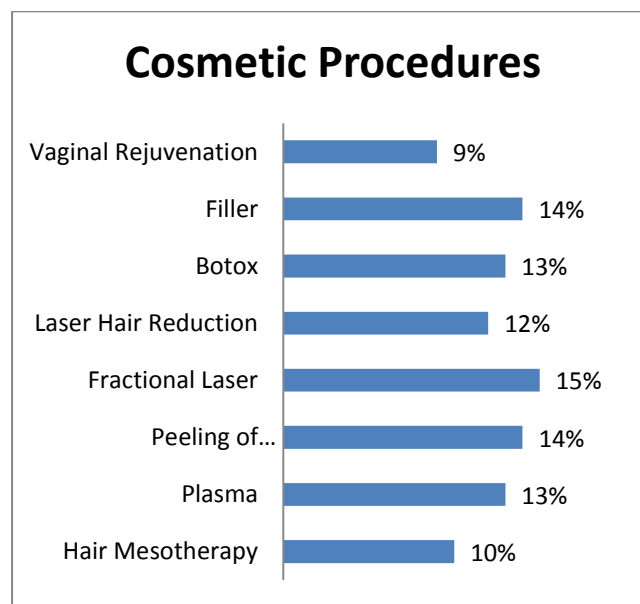
There was no significant difference in Total FSFI scale score after cosmetic procedures on comparison according to cosmetic procedures except after Vaginal rejuvenation, filler and Botox where Total FSFI scale score significantly increased from  $21.07 \pm 5.99$  before to  $26.63 \pm 4.48$  after vaginal rejuvenation, and from  $20.135 \pm 8.39$  to  $26.37 \pm 4.77$  after filler, finally from  $20.85 \pm 7.44$  to  $25.50 \pm 5.35$  after botox injection, as shown in Fig (12).

**Table (1)** Demographic data of the studied participant females

Demographic data	Studied females (N=100)	
	No.	%
<b>Age (years)</b>		
Mean $\pm$ SD	32.94 $\pm$ 5.92	
(Range)	(20-50)	
<b>Subjects' Age Group</b>		
<b>20 to &lt;30</b>	36	36.0
<b>30 to &lt;40</b>	54	54.0
<b>40 to &lt; 50</b>	10	10.0

**Table (2)** Residence and education level of the studied females

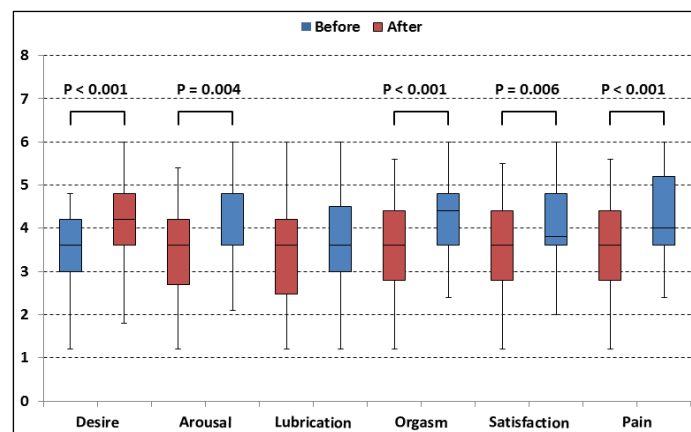
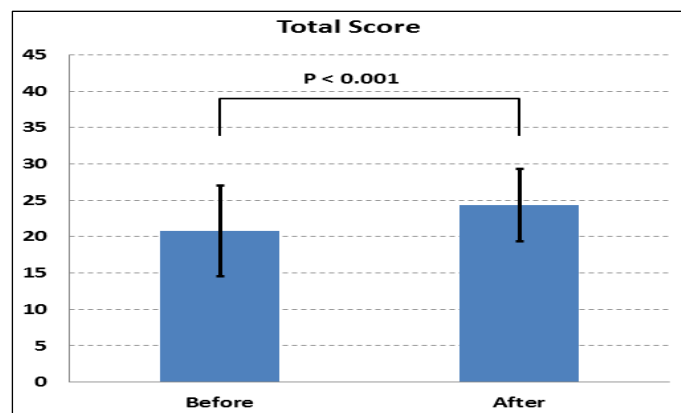
variable	Studied female (N=100)	
	No.	%
<b>Subjects' Residence</b>		
<b>Urban</b>	58	58.0
<b>Rural</b>	42	42.0
<b>Education level</b>		
<b>Write and Read</b>	18	18.0
<b>Basic Education</b>	32	32.0
<b>High Education</b>	50	50.0

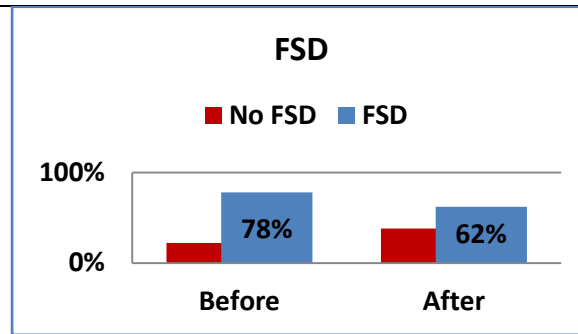
**Fig (1)** Bar chart representing Cosmetic Procedures among the studied females**Table (3)** Partner's age and partner sex problem

Partners' Age	Mean $\pm$ SD	
	36.04 $\pm$ 6.11	
<b>Partners' Age Groups</b>	20 to <30	21 (21%)
	30 to <40	56 (56%)
	40 to < 50	23 (23%)
<b>Partners' sex problem</b>	Yes	15 (15%)
	NO	85 (85%)

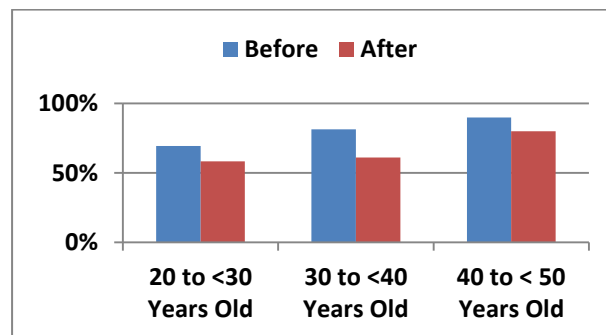
**Table (4)** Reliability statistics (Cronbach's Alpha) for FSFI Subscales for women before and after cosmetic procedures

Subscale Group	Cronbach's Alpha
<b>Desire (Q1 and Q2)</b>	
Before	0.719
After	0.811
<b>Arousal (Q3, Q4, Q5 and Q6)</b>	
Before	0.898
After	0.893
<b>Lubrication (Q7, Q8, Q9 and Q10)</b>	
Before	0.916
After	0.932
<b>Orgasm (Q11, Q12 and Q13)</b>	
Before	0.859
After	0.819
<b>Satisfaction (Q14, Q15 and Q16)</b>	
Before	0.889
After	0.829
<b>Pain (Q17, Q18 and Q19)</b>	
Before	0.871
After	0.842

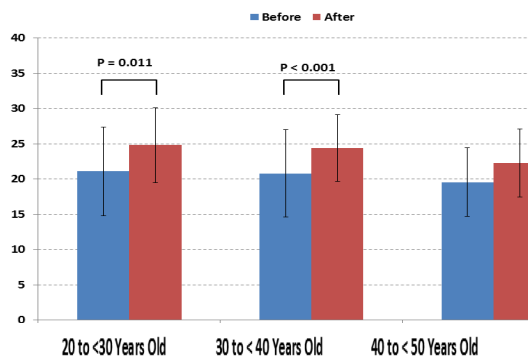
**Fig (2)** Comparisons between Women before and after cosmetic procedures as regard female sexual function dimensions**Fig (3)** Comparisons between Women before and after cosmetic procedures as regard total FSFI scale score



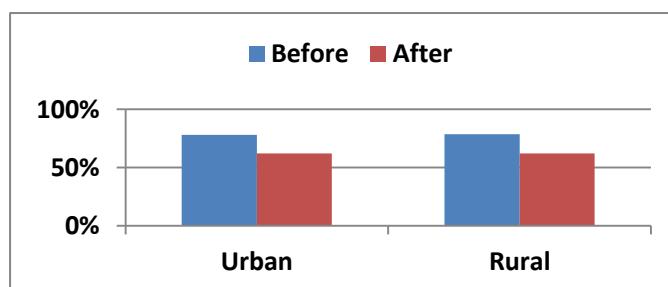
**Fig (4)** Comparisons between Women before and after cosmetic procedures as regard FSD



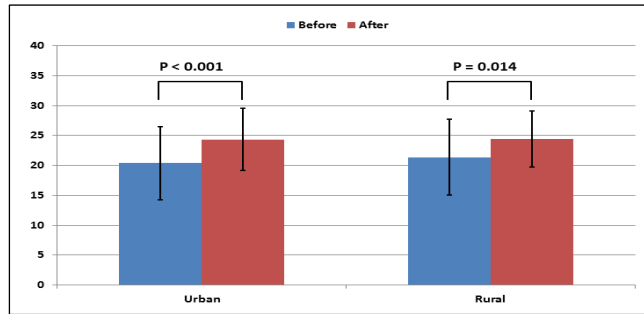
**Fig (5)** Female sexual dysfunction between Women before and after cosmetic procedures as regard patient's age.



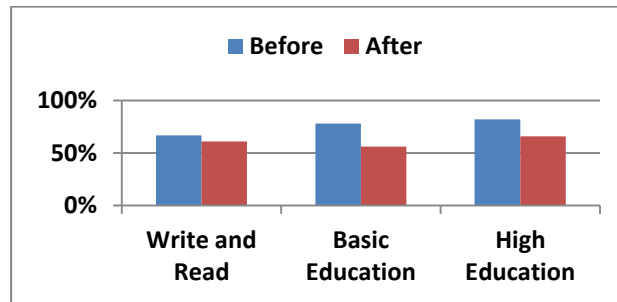
**Fig (6)** Total FSFI scale score between Women before and after cosmetic procedures as regard female age



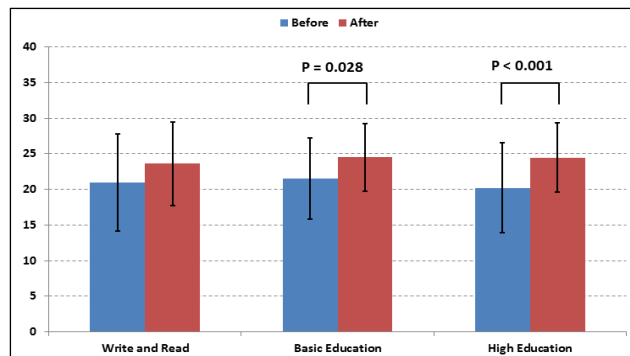
**Fig (7)** Female sexual dysfunction between Women before and after cosmetic procedures as regard patient's residence.



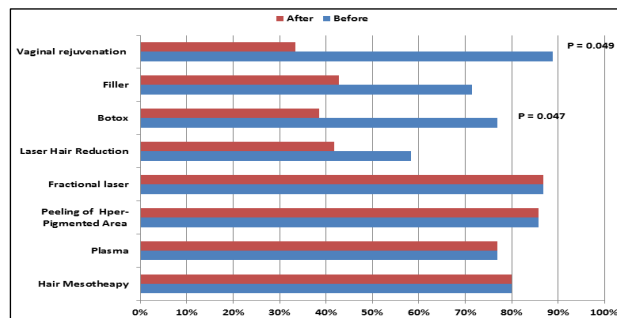
**Fig (8)** Total FSFI scale score between Women before and after cosmetic procedures as regard residence



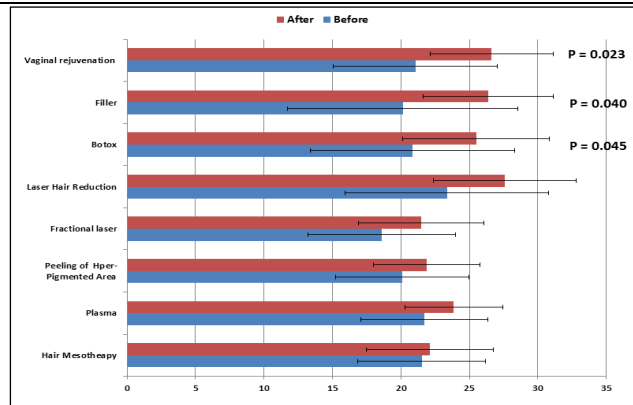
**Fig (9)** Female sexual dysfunction between Women before and after cosmetic procedures as regard patient's education.



**Fig (10)** Total FSFI scale score between Women before and after cosmetic procedures as regard education level



**Fig (11)** Female sexual dysfunction between Women before and after cosmetic procedures as regard cosmetic procedures.



**Fig (12)** Total FSFI scale score between Women before and after cosmetic procedures as regard cosmetic procedures.

#### 4. Discussion

Human beings are born with sexual interest, sexual drive, sexual desire, and multidimensional response to sex. Human's feeling and thinking, learning and language, and many other resources achieve human biological responses and accumulate the life experience. Sex is a motive force bringing a man and a woman into intimate contact. Satisfying usual experience is an essential part of a healthy and enjoyable life for most people [1].

Self-esteem, conceptualized as a subjective evaluation of the self has been extensively discussed in the context of emotional disorders. Researchers in that field have characterized sexual self-esteem as being closely related to self-esteem, but representing a different dimension. Sexual self-esteem is described as a multidimensional concept developed according to one's past sexual experiences. It embraces a positive attitude towards sexual experiences, as well as the ability to experience sexuality in a satisfying way, which is closely related to greater sexual satisfaction within intimate relationships [2].

As body image has been defined as a view of one's own overall physical appearance and is established an important aspect of self-worth and mental health across the life span. Much research has shown that negative body image and body dissatisfaction leads to low self-esteem. Sexual self-esteem is currently being assessed as the value that each person attributes to one self as a sexual being related to sexual competence, sexual identity and sexual self-acceptance [3].

Because little is known about these medical-psychological aspects in users of minimally invasive rejuvenation procedures, we designed our study with the focus on sexual activity, self-esteem, and sociodemographic parameters. So the current study was done to evaluate the effect of aesthetic surgical and non-surgical procedures on female sexual activity by using

before and after cosmetic procedures female sexual functions dimensions and total (Female Sexual Function Index) FSFI scale score.

The study included 100 female who had experienced sexual activity before an elective aesthetic procedure versus post-aesthetic procedure. In the current study, main age of the involved group was middle age ranged from 20 to 50 years old. Fifty percent of the participants were highly educated and rural residents that may suggest sexual dysfunction and associated low self-image estimation in high socioeconomic level group that results agreed with another study by [4] concluded that a psychophysiological syndrome such as Vaginismus may affect women of any age and most often afflicts highly educated women and those in the higher socioeconomic status.

In a study conducted by [2], the aim of this study was to investigate body image, global self-esteem and socioeconomic parameters in patients undergoing a minimally invasive cosmetic treatment with botulinum toxin and/or facial filler in an urban outpatient clinic in Germany. It was found that patients undergoing minimally facial rejuvenation procedures generally have a high level of education and dispose of an above-average net monthly income.

This observation could indicate a link between the demand for minimally invasive facial rejuvenation procedures and increased health awareness.

In the current study the prevalence of female sexual dysfunction, using (Female Sexual Function Index) was (78%), as shown in Table (7) in the results. That was in a good agreement with a recent cross-sectional study [5] from a different geographical area (Iran) using Female Sexual Function Index (FSFI) also found a similarly prevalent sexual problems in the range of 22% (<20 years) to 75% (40–50 years).

Problems with desire were found with 45%, arousal problems in 37%, the lubrication problem

in 41%, the orgasmic problem in 42% and pain problem in 42%. Some of the important associated etiological factors were older age, infrequent sexual activity, more than 10 years of marriage, more than three kids and husbands more than 40 years. The authors consider that the female sexual dysfunction is a significant public health problem of women in that nation.

The prevalence in the current study was in same values conducted by the National Health and Social Life Survey in (1992) that showed a prevalence of 43%, but more recent international survey of 27000 men and women from 40 to 80 years of age found that 39% of sexually active women reported a problem with sexual activity.

In the current study after cosmetic procedures, female sexual function dimensions significantly increased, where mean of desire increased from  $3.60 \pm 1.2$  to  $4.20 \pm 1.2$  also, there was significant difference in Arousal, Orgasm, Satisfaction and pain ( $p < 0.05$ ). Also, total FSFI scale score was statistically higher after cosmetic procedures as it increased from  $20.79 \pm 6.19$  to  $24.33 \pm 4.98$ , as shown in Table (6) and Fig (7 & 8) in the previous results.

In the same point of view in the results of a study by

B. Fink et al., [6] There was a significant effect of treatment on age perception ( $F=67.06$ ,  $p < 0.001$ ) such that women who received treatment were judged to be younger than those who did not receive treatment. The authors demonstrate that naïve judges are readily able to perceive the effect of nonsurgical facial rejuvenation procedures with incobotulinumtoxin A, calcium hydroxylapatite and hyaluronic acid in terms of age, health, and attractiveness judgments.

In agreement with the current study, [7] in a valuable study on French Canadian women, concluded that the associations between women's attachment anxiety and their lower sexual function and satisfaction are fully explained (or mediated) by lower sexual self-esteem and higher sexual anxiety. That is, the more anxious about losing their partner the women are, the more anxious and less confident they feel about their sexual interactions, which in turn is associated with their poorer sexual functioning and satisfaction with their sex lives.

Another study [3] used sexual self-esteem as a parameter for sexual activity, they concluded that, sexual self-esteem was closely related to nonpainful sexual activity and sexual pain has higher rates among young women when compared to older.

In a recent interesting study [1], they studied the correlation between Body Image, Self-esteem and sexual satisfaction of College Students in Southern Taiwan, the results of the study were,

the significantly medium and positive relationships were found in college students in southern Taiwan between perception of body image and sexual satisfaction ( $r=.378$ ,  $p < .01$ ). It showed that the more positive perception of body image, the higher the sexual satisfaction. The significantly medium and positive relationships were found in college students in southern Taiwan between self-esteem and sexual satisfaction ( $r=.367$ ,  $p < .01$ ). It showed that the more positive self-esteem, the higher the sexual satisfaction.

Finally, although the present study makes an important contribution to the literature on attachment and sexuality, it has limitations. One is the study's cross-sectional, correlational design, which precludes conclusions about causal links between the studied variables. It is therefore important to consider that attachment anxiety, for example, may contribute to the women's lower sexual self-esteem and sexual difficulties, but also that women could become more insecure as a result of sexual difficulties and lower sexual self-esteem. Despite these limitations, the results of this study have important implications for understanding young women's sexual satisfaction as well as their experience of sexual difficulties.

These results allow researchers to further their understanding of the links between self-body image and both subjective (satisfaction) and relatively objective (function) of sexual activity.

#### 4. Conclusion

According to the results of the current study and many others about the same issue of good appearance and good sexuality we concluded that, Sense of beauty is so important for the female to feel that she is accepted and she is sexually successful. Today we are into the 21<sup>st</sup> century. Yet when it comes to the female sexuality, many cultures, and religions, especially in the developing world impose social restrictions. This ongoing restriction for ages has evolved a strong negativity among women regarding sex. So even today the first healing step is to create a factual awareness among them, as well as in the entire society as to what is sexuality. This would probably answer most of the problems related to female sexuality.

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