

What Do Women Want: Factors Affecting Female Libido Human Andrology Factors Affecting Female Libido

Original
Article

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ABSTRACT

Back ground: Information about female sexuality is limited in Egypt and many other Islamic countries due to traditions. The current study is an effort to evaluate some aspects of libido in women in order to shed some light on this ignored item in this area of the world. **Participants and Methods:** A self-report questionnaire was given to 200 women attending the andrology and gynecology outpatient clinics, Benha University, Egypt. The questionnaire covered demographic data and some factors that may affect female libido.

Results: Most women reported no change in libido related to menstruation timing, obesity, menopause, diabetes or use of hormonal contraceptives. Pregnancy had a negative effect on libido. Stress either in work or within the family or with husband resulted in a decrease in libido. Sea foods followed by eggs were the most commonly reported foods producing an increase in libido (93.7%, 71%). On the other hand, liquorice followed by garlic were the most common types of foods that produced a decrease in libido (85.7%, 64.9%). Almost 70% of genitally cut women reported either a medium or a high libido.

Conclusion: Libido in most studied women seems to be negatively affected by pregnancy but not by menstruation or hormonal contraceptive agents. The effect of food needs further study.

Key Words: Libido, sexual desire, women.

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INTRODUCTION

What do women want? It is a question that was always present since the time of Sigmund Freud to Mel Gibson. It has been at the center of numerous books, articles, and blog posts, and no doubt the cause of countless agonized deep thoughts by men and women alike. However, despite decades spent trying to crack this mystery, researchers have yet to land on a unified definition of female desire, let alone come close to fully understanding how it works^[1].

A useful working definition for libido was suggested by Levine^[2] as follows: 'sexual desire is normally an activated, unsatisfied mental state of variable intensity, created by external sensory modalities or internal stimuli such as fantasy, memory, and cognition that induce a feeling of a need or want to partake of sexual activity to satisfy the need'.

The current study aimed to explore female sexual

desire and the various factors affecting it in a sample of Egyptian women.

PATIENTS AND METHODS

The work started after obtaining approval from the Research Ethics Committee in Banha Faculty of Medicine (20 September 2015).

The current study was a cross-sectional observational one. It was performed on 200 married women who attended the Andrology and Gynecology outpatient clinics in Banha University Hospital during the period from October 2015 to March 2016.

The tool used was a self-report questionnaire designed by the investigators. The questionnaire contained questions covering some aspects of sexual response cycle and factors affecting female sexual desire. The questionnaire included questions dealing with demographic data, information

about factors that may affect libido, either biological (e.g. pregnancy and menstruation) or physical (e.g. obesity and diabetes), and the possible effect of some foods on libido. The question about foods was an open end question wherein the participant was asked to name two types of foods that enhance libido and two types that depress it.

The aim of the study and details of the questionnaire were explained to the women before taking their informed consent to fill the questionnaire. To ensure that all gathered information was kept confidential and the participants was anonymous, each questionnaire was handed in an open envelope, and after filling it the participant sealed the envelope and put it in a basket containing other sealed envelopes.

Inclusion criteria

- (1) Married women.
- (2) Women with regular sexual life.

Exclusion criteria

- (1) Previous pelvic operation (e.g. hysterectomy or oophorectomy).
- (2) Having diseases that can affect their sexual performance (e.g. psychiatric illness).

Statistical analysis

All statistical analyses were carried out in STATA/SE, version 11.0 for Windows. Two types of statistics were performed:

- (1) Descriptive statistics: example, number and percentage.
- (2) Analytical statistics:
 - (a) χ^2 : It is used to compare two groups or more as regards one qualitative variable in 2x2 contingency table or row-column complex table.
 - (b) Fisher's exact test: It was used to compare between proportions at small frequencies.
 - (c) Z test: It was used to compare proportions.
 - (d) P value:
 - (i) Significant difference if P value less than 0.05.
 - (ii) Nonsignificant difference if P of at least 0.05.
 - (iii) Highly significant difference if P value less than 0.001.

RESULTS

Demographic characteristics of the studied women

The age range of participants was 18–55 years; most of them were 20–29 years of age (43.7%). Most women were living in urban areas (52.3%) and most of them had a university degree (70%). Working women constituted 82.8% of our sample. Female genital cutting (FGC) had been performed on 77.5% of participants (Table 1).

Biological factors affecting libido

Most women reported no change in libido related to menstruation timing (48.5% before, 39.6% during, and 44.1% after menstruation).

Increase in libido was most commonly reported after menstruation (43.6%), whereas decrease in libido was reported most commonly during menstruation (38.6%). This comparison is statistically significant.

Pregnancy produced a statistically significant decrease in libido throughout pregnancy and after delivery as reported by participants (69.3% during first and second trimester, 50.5% during third trimester, and 40.8% after delivery).

No change in libido was the most common finding in menopausal women and hormonal contraception users (58.5 and 69.3%, respectively) (Table 2).

Physical factors affecting libido

No change in libido was reported by most obese (51.5%) or diabetic (63.6%) participants. Problems either in work (97.5%), within family (98.3%), or with husband (97.4%) resulted in a decrease in libido. Participants with medium and high libido constituted 69.5% of participants with FGC (Table 3).

Foods affecting libido

Among the different types of food affecting libido, sea foods followed by eggs were the most commonly reported foods producing an increase in libido (93.7 and 71%). Liquorice followed by garlic were the most common types of foods that produced a decrease in libido (85.7 and 64.9%) (Table 4).

Effect of age on sexual activity

Coital frequency, lubrication attainment, and ability to reach orgasm showed a statistically significant decline with age. Dyspareunia occurrence was not affected by age (Table 5).

Table 1: Demographic characteristics of the studied women

	<i>n</i> (%)
Age (<i>N</i> =199)*	
• <20	1 (0.5)
20–29	87 (43.7)
30–39	67 (33.7)
40–49	26 (13.1)
50+	18 (9.0)
Residence (<i>N</i> =199)	
Rural	95 (47.7)
Urban	104 (52.3)
Educational level (<i>N</i> =200)	
Can read and write	15 (7.5)
Finished secondary school	45 (22.5)
Have a university degree	140 (70.0)
Having a job? (<i>N</i> =198)	
Yes	164 (82.8)
No	34 (17.2)
Female genital cutting	
Yes	155 (77.5)
No	45 (22.5)

Table 2: Biological factors affecting libido

	<i>n</i> (%)
Menstruation	
2 weeks before (<i>N</i> =200)	
Increase	28 (14.0)
Decrease	75 (37.5)
No change	97 (48.5)
During (<i>N</i> =197)	
Increase	43 (21.8)
Decrease	76 (38.6)
No change	78 (39.6)
2 weeks after (<i>N</i> =195)	
Increase	85 (43.6)
Decrease	24 (12.3)

LIBIDO IN WOMEN

No change	86 (44.1)	
χ^2		66.2
<i>P</i> value		0.001 (HS)
Pregnancy		
First and second trimester (N=192)		
Increase	14 (7.3)	
Decrease	133 (69.3)	
No change	45 (23.4)	
Third trimester (N=188)		
Increase	41 (21.8)	
Decrease	95 (50.5)	
No change	52 (27.7)	
After delivery (N=179)		
Increase	46 (25.7)	
Decrease	73 (40.8)	
No change	60 (33.5)	
χ^2		37.48
<i>P</i> value		0.001 (HS)
Menopause (N=53)		
Decrease	22 (41.5)	
No change	31 (58.5)	
Hormonal contraception use (N=127)		
Increase	8 (6.3)	
Decrease	31 (24.4)	
No change	88 (69.3)	

HS, highly significant.

Table 3: Physical factors affecting libido

		<i>n</i> (%)
Obesity (N=101)		
Increase	2 (2.0)	
Decrease	47 (46.5)	
No change	52 (51.5)	
Diabetes mellitus (N=44)		
Increase	1 (2.3)	
Decrease	15 (34.1)	
No change	28 (63.6)	

Stress		
Work problems (N=122)		
Increase	3 (2.5)	
Decrease	119 (97.5)	
Family problems (N=180)		
Increase	3 (1.7)	
Decrease	177 (98.3)	
Problems with husband (N=194)		
Increase	5 (2.6)	
Decrease	189 (97.4)	
Female genital cutting (N=155)		
Low	16 (8.0)	
Medium	102 (51.0)	
High	37 (18.5)	
Fisher's exact test		0.4
P value		0.82 (NS)

Table 4: Foods and libido

		n (%)
Food ^a		
Sea foods (N=79)	74 (93.7)	
Decrease	5 (6.3)	
Eggs (N=31)	22 (71.0)	
Increase	9 (29.0)	
Figs (N=29)		
Increase	20 (69.0)	
Decrease	9 (31.0)	
Mint (N=29)		
Increase	12 (41.4)	
Decrease	17 (58.6)	
Garlic (N=37)		
Increase	13 (35.1)	
Decrease	24 (64.9)	
Liquorice (N=28)		
Increase	4 (14.3)	
Decrease	24 (85.7)	

Table 5: Effect of age on sexual activities

	Age [n (%)]					P value
	<20	20–29	30–39	40–49	50+	
Coital frequency						
Daily	1 (100)	9 (10.6)	2 (3.1)	2 (8.0)	2 (12.5)	0.026 (S)
2–3 times/day	0 (0.0)	63 (74.1)	46 (70.8)	13 (52.0)	8 (50.0)	
Once/month	0 (0.0)	8 (9.4)	11 (16.9)	7 (28.0)	4 (25.0)	0.001 (S)
<Once/month	0 (0.0)	5 (5.9)	6 (9.2)	3 (12.0)	2 (12.5)	
Lubrication attainment						
>Half	0 (0.0)	46 (54.8)	26 (40.6)	3 (12.5)	3 (20.0)	0.001 (S)
<Half times	1 (100)	31 (36.9)	17 (26.6)	10 (41.7)	8 (53.3)	
Very rare	0 (0.0)	7 (8.3)	21 (32.8)	11 (45.8)	4 (26.7)	
Orgasm attainment						
> Half	0 (0.0)	41 (47.7)	24 (38.1)	6 (25.0)	2 (12.5)	0.006 (S)
<Half	1 (100)	34 (39.5)	19 (30.2)	7 (29.2)	7 (43.8)	
Very rare	0 (0.0)	11 (12.8)	20 (31.7)	11 (45.8)	7 (43.8)	
Dyspareunia						
>Half times	1 (100)	15 (17.6)	9 (14.3)	7 (29.2)	3 (20.0)	0.131
<Half times	0 (0.0)	38 (44.7)	21 (33.3)	9 (37.5)	3 (20.0)	
Very rare	0 (0.0)	32 (37.6)	33 (52.4)	8 (33.3)	9 (60.0)	

S, significant.

DISCUSSION

For decades, researchers bought into society's belief that men have higher desire compared with women. One example of this research work is the study by Beck *et al.*^[3], whose results indicated that as a group, men report experiencing sexual desire more frequently compared with women. A decade later, Baumeister *et al.*^[4] concluded that the male sex drive is stronger compared with the female sex drive. The sex difference in sex drive should not be generalized to other constructs such as sexual or orgasmic capacity, enjoyment of sex, or extrinsically motivated sex. However, more recent evidence reveals that differences between the sexes may actually be slighter or even nonexistent, depending on how you define and attempt to measure desire. Mark^[5] found that men in relationships are as likely as women to be the member of the couple with the lower level of sexual desire. Moreover, Dawson and Chivers^[6] were of the opinion that sexual desire emerges similarly in women and men and that other factors may influence the observed sex difference in sexual desire.

Although many studies report that women's sexual behavior varies across their menstrual cycles,

the research findings remain inconsistent^[7]. In the current study, most participants did not notice a relation between libido and menstruation timing. However, there was a trend to report an increase in libido after menstruation and a libido decrease during it. This is in agreement with the findings of Abd El-Rahman *et al.*^[8], who found that sexual desire appears to increase during the weeks immediately before or subsequent to menstruation, but they also found that many women did not report any fluctuation in their libido in relation to menstruation.

Bullivant *et al.*^[9] found that sexual activity was elevated for the 3 days before and 2 days after the luteinizing hormone surge. On studying day-to-day fluctuations in subjective desire during the menstrual cycle, Roney and Simmons^[10] found that desire exhibited a mid-cycle peak mediated by estradiol and a fall in desire from mid-cycle to the luteal phase mediated by progesterone. However, other studies reported no significant differences in sexual activity across the menstrual cycle^[11], differences in female-initiated but not male-initiated sexual activity at mid-cycle^[12], and differential sexual attraction to men other than their partners at mid-cycle^[13]. The different findings on women's sexuality across the menstrual

cycle result from a variety of factors are as follows: whether or not the women studied had a partner^[14], the degree of sexual attraction they felt toward their partners^[13], and whether or not masturbation was practiced^[15].

In agreement with previous results^[16-18], most of our participants reported a decrease in their libido level across pregnancy and after delivery. Pregnancy and childbirth are important periods in women's lives that reflect changing priorities such as maternal and fetal health, concerns about delivery, and increasing responsibilities requiring more time, more energy, less sleep, and still being a good wife for her husband^[19].

Although sexual functions showed a decline with aging, libido after menopause declined in a minority of our participants. This is contrary to the findings of other studies^[20,21]. This difference may be due to the limited number of participants who reached menopausal age in the current study (53 women).

The final comment on biological factors affecting female libido concerns the effect of hormonal contraception. Most of our participants (69.3%) reported no change in libido with hormonal contraceptives. After reviewing this subject, Burrows *et al.*^[22] stated that sexual side effects of hormonal contraceptives are not well studied, particularly with regard to impact on libido. This is likely due to the fact that female libido is complex, and it is therefore difficult to reliably predict how it may be affected by hormonal contraceptive. It seems there are mixed effects on libido, with a small percentage of women experiencing an increase or a decrease, with the majority being unaffected. Healthcare providers must be aware that hormonal contraceptives can have negative effects on female sexuality so that they may counsel and care for their patients appropriately. Other reviews^[23,24] stated the same conclusions.

The first of the physical factors affecting libido studied in the present work was obesity. After comparing 64 sexually active obese premenopausal women with a control group of 27 age-matched healthy volunteers with a normal BMI, Kadioglu *et al.*^[25] concluded that obesity has no significant relationship with female sexual dysfunction. This is in agreement with the findings of the present study and other workers^[26-28], who found that obesity affects several aspects of sexual functions, including arousal, lubrication, satisfaction, and orgasm, but not desire and pain.

Libido was not affected in most of our diabetic participants (63.6%). In various studies in which there was comparison with a control group, a nonsignificant trend of a decrease in sexual interest was found in

20, 21, and 24% of diabetic women^[29-31]. However, in other studies [32,33] there is evidence for a significantly decreased libido in diabetic patients in comparison with controls. This differential effect of diabetes may be due to diabetes type and severity, age of participants, and whether or not they are partnered.

As expected, problems either with husband or at work decreased libido in a sweeping majority of our participants. Katz^[34] wondered whether the things being labeled as women's sexual desire problems are really problems to be fixed with a drug? Her answer was that education and counseling are central to a couple's understanding of the multiple factors that influence a woman's desire. Some questions have to be answered: what stressors are affecting her life on any given day? How is she balancing work and caring for children and/or parents? How much is her partner providing real help with household tasks? What factors are at play when the couple goes away for the weekend and her desire comes back, even if only briefly, when away from the normal busyness and challenges of life?

FGC is still prevalent in Egypt. A study^[35] conducted on Egyptian schoolgirls found that the prevalence was 50.3%. However, the prevalence is still high in Upper Egypt 6 years after enforcement of the law prohibiting FGC; a study^[36] reported that 84.9% of schoolgirls were genitally cut. FGC did not seem to affect libido in our participants as only 8% of them had low sexual desire. This is in agreement with a study conducted in Saudi Arabia^[37]. However, an Egyptian study found that desire, arousal, lubrication, orgasm, and satisfaction domains were significantly higher in the uncut participants compared with those of the cut participants^[38].

Despite the fact that many aphrodisiacs may be used by men and women alike, studies on the use of aphrodisiacs by women or female animals are extremely rare. Currently, many beverages and foods are used popularly as aphrodisiacs. For example, some Eastern cultures consider tea as a good aphrodisiac. Moreover, kebab (barbequed beef) is considered as a strong aphrodisiac by Middle Eastern people. It could be speculated that this may be true because of its very high protein content that increases body vitality as a whole and therefore increases energy to perform sex. Another common food thought to be a strong aphrodisiac is sea food. Spicy food and chili are believed to be aphrodisiacs; however, this may be because of the fact that their consumption leads to sweating, burning, and distraction, physical responses very similar to that encountered during sexual intercourse. Other popular aphrodisiacs include oysters, shark components, rhinoceros horn, and snakes, which are largely used because of their physical similarity to the genital organs. Although

any substance may be claimed as a good aphrodisiac, scientific data are needed to prove these claims^[39]. It is difficult to comment on the aphrodisiac effect of some foods mentioned by our participants (sea foods, eggs, and figs increased libido, whereas mint, garlic, and liquorice decreased it). Their opinions may be affected by traditional folklore. However, it may be useful to validate this information in a future study.

A decline in sexual activities with aging was reported by participants of the present study as well as in a previous study^[40]. Lochlainn *et al.*^[41] collected data from 13 882 women aged 40 or more in 29 counties and found that the most common sexual dysfunctions reported were lack of sexual interest (21%), inability to reach orgasm (16%), and lubrication difficulties (16%). Lindau *et al.*^[42] surveyed 749 American women aged 57–85 and found that lack of sexual interest (33.2%) and lubrication difficulties (21.5%) were the most common problems.

CONCLUSION

There are several factors affecting libido in women. These factors can be divided into biological, psychological, and social. Of the biological factors, pregnancy produces a decrease in libido throughout its course. Of the psychological factors, stress has a negative effect on libido. Some points need further investigation (e.g. effect of food, diabetes, and hormonal contraceptives).

Limitations

Illiterates were excluded from this study to ensure complete privacy during filling the questionnaire; however, this exclusion makes the results of the current study not very representative. Moreover, the fear of some participants of inadequate privacy made some results not very accurate.

Some of the participants who can just read and write needed some aid in reading and understanding certain points in the questionnaire. This made the accuracy of some of their responses questionable.

Many menopausal women refused to answer the questionnaire. The small number of these women made their responses less measurable.

CONFLICT OF INTEREST

There are no conflicts of interest

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