



Female sexuality at reproductive age as an indicator of satisfaction with life – descriptive cross-sectional survey

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Abstract

Introduction. Life satisfaction is the result of valuing one's own life, and it is higher when the individual situation is closer to the general norm. It is characterized by dynamic and subjectivity and the way it is perceived is regulated by internal and external factors. Life satisfaction can be described in subjective and objective categories, by various indicators.

Objective. The aim of the study was to evaluate the determinants of satisfaction with life in selected aspects among women of reproductive age.

Materials and method. The study was conducted on 280 women, selected according to the following criteria: age range 18–45, at least one sexual intercourse per month, lack of chronic diseases or cancer, and consent to participate in the research. The research instruments used were: Satisfaction With Life Scale (SWLS), Sexual Satisfaction Questionnaire (SSQ), Female Sexual Function Index (FSFI).

Results. Life satisfaction increased with age ($p < 0.0001$), higher life satisfaction was reported by women with higher education ($p < 0.001$), married, ($p < 0.01$), talked with their partner about their sexual expectations ($p = 0.03$) and did not want to change anything in their sexual life ($p < 0.001$). Analysis revealed a positive correlation between life satisfaction and sexual satisfaction ($p < 0.0001$).

Conclusions. Higher level of sexual satisfaction and sexual health is related to better satisfaction with life. Factors affecting sexual satisfaction include residence, having children, discussing one's sexual expectations with their partner, feeling no need to change one's sex life, and frequency of sexual activity.

Key words

women, life, satisfaction, Sexuality, sexual health

INTRODUCTION

Life satisfaction is an assessment of one's aspirations and aims in the daily reality – comparing one's life circumstances with self-imposed standards and goals [1, 2]. Life satisfaction is the result of valuing one's own life, which is higher when the individual situation is closer to the general norm. It is characterized by dynamics and subjectivity, and the way it is perceived is regulated by internal and external factors. Life satisfaction can be described in subjective and objective terms, by various indicators (e.g. system of values, aspirations, personality traits, ability to cope with emotions or the possibility of achieving life goals) [3]. In this approach, life satisfaction can be treated as a subjective psychological well-being which is constantly evaluated [4].

Sexuality and sexual activity are crucial determinants of the quality of life and life satisfaction [5]. According to the current working definition adopted by the WHO, sexual health is a state of physical, emotional, mental and

social well-being in relation to the sexuality of every human being, and not merely the absence of disease, dysfunction or infirmity. Sex is a very important part of life and sexuality is seen to be an integral part of the human personality. Sexuality encompasses sex, gender identities and roles, sexual orientation, intimacy, desire, eroticism, and reproduction. It is considered a central aspect of the being human [6, 7]. Sexuality is experienced and expressed through thoughts, fantasies, relationships, experiences, behaviours, values, and other aspects of life.

Human sexuality is very complex and influenced by a multitude of factors, including biological, psychological, social and cultural [5, 7, 8]. Ensuring sexual health is based on fulfilling one's individual sexual needs and being able to make informed choices about one's sexual life [6, 7]. Sexual satisfaction perceived individually by every human being is an important element of sexual activity [9]. Sexual satisfaction is understood as an attitude towards one's sex life, expressed through thoughts, behaviours, and emotions related to one's sexual attractiveness, sexual partners, and sexual activity [10]. Sexual satisfaction is understood as physical pleasure and experience during a sexual act, and as the couple's subjective satisfaction with the quality of their sexual life [8].

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A holistic approach to sexual health, sexual activity or sexual satisfaction of females should comprise different stages of life, the woman's age, relations with her partner or other psychological and social factors which may affect the level of clinical sexual dysfunction, ranging from dissatisfaction to actual deviation [7, 9, 10].

OBJECTIVE

The aim of the study was to determine the elements of female sexuality affecting satisfaction with life.

MATERIALS AND METHOD

The study was conducted on 280 women in 2016. The women surveyed were selected according to the following criteria: age range 18–45, at least one sexual intercourse per month, lack of chronic diseases or cancer, and consent to participate in the research. The research group was selected from women of reproductive age who came for a routine visit to a gynecological clinic and met all the qualification criteria. The study covered a group of women living in rural areas of the Lublin province in eastern Poland. The study was approved by the Bioethical Committee of the Medical University of Lublin (KE-0254/8/2016). The women were informed that participation in the study was voluntary and were free to withdraw at any time. They were also informed, that their anonymity would be maintained and the results would be used for scientific purposes only.

Research tools used were the Satisfaction With Life Scale (SWLS), Sexual Satisfaction Questionnaire (SSQ), Female Sexual Function Index (FSFI) and a survey questionnaire developed on the basis of literature on the subject and verified in pilot studies.

Satisfaction With Life Scale. Developed by Diener, Emmons, Larsen and Griffin at the Department of Psychology, University of Illinois, USA, and adapted to Polish conditions by Juczyński. The scale is a commonly used tool for measuring psychological well-being based on the operationalization of life satisfaction as a conscious cognitive assessment of one's life, in which an individual compares his or her life conditions with self-imposed standards. The scale consists of 5 questions, which the respondents address by means of a 7-point scale, where 1=strong disagreement with a given statement and 7=strong agreement. The scores of each participant are totalled and converted to a standardised scale – sten scores (10 point scale). The total result is the sum of all scores. The results range from 5–35 points. The higher the score, the higher life satisfaction. The reliability of the questionnaire measured by Cronbach's α internal consistency coefficient was 0.72 [2, 11].

Sexual Satisfaction Questionnaire (SSQ). Designed by Nomejko and Dolińska-Zygmunt to measure sexual satisfaction related to 2 dimensions: individual sexual attractiveness and sexual activity. The questionnaire consists of 10 statements. The respondents address these statements with a 4-point Likert scale: 1 – strongly disagree, 2 – rather disagree, 3 – rather agree, 4 – strongly agree. The result provides information about the level of sexual satisfaction: the

higher the result, the higher the satisfaction. The theoretical distribution of scores is within the 10–40 range. Reliability of the method was measured by Cronbach's α is 0.83, which indicates high consistency of the test. RMSE (root mean square error of approximation) ratio used to evaluate the match of the model was 0.073 [12].

Female Sexual Function Index (FSFI). A tool for screening females for sexual dysfunction. The questionnaire was developed on the basis of a document issued by the International Society for Sexual Medicine, adapted to Polish conditions by Nowosielski and Wróbel. It consists of 19 questions, grouped into 6 domains: sexual desire, arousal, lubrication, orgasm, satisfaction and pain. Higher results indicate better sexual function. The maximum total score is 36. The reliability of the questionnaire measured by Cronbach's α internal consistency coefficient was more than 0.70. The test-retest reliability demonstrated good-to-excellent agreement between the assessment points. Based on principal component analysis, a 5-factor model was established that explained 83.62% of the total variance. Domain intercorrelations of the PL-FSFI ranged from 0.37–0.77. The optimal PL-FSFI cutoff score was 27.50, with 87.1% sensitivity and 83.1% specificity [13, 14].

Statistical analyses. STATISTICA 12.0 (StatSoft, Poland) was used to develop the database and conduct statistical analysis. Mean and standard deviation were calculated for the parameters analysed. The normality of distributions for measurable data was assessed with the Shapiro-Wilk test. The Chi-square test for independence was used to identify differences between the groups compared for independent qualitative characteristics. Correlation analysis was performed using Spearman's rho. With continuous variables, the Mann-Whitney test was used for comparisons of differences between 2 groups, and the Kruskal-Wallis test was used for 3 or more groups. Significance was set at $p < 0.05$.

RESULTS

The study included 280 women of different ages (mean 23.95 ± 4.13), most had higher education (68.93%), lived in a city (62.14%), were unmarried (80.36%), had no children (84.29%), talked with their partner about their sexual expectations (85.36%), did not see a need to change anything in their sexual life (68.57%), and had sexual intercourse less than 4 times per month (31.07%) (Tab. 1).

The average level of satisfaction in the women surveyed was $23.75 (\pm 5.08)$. Correlation analysis revealed a significant relationship between age and life satisfaction score, in that life satisfaction increased with age ($r = 0.24$; $p < 0.0001$). Higher life satisfaction was reported by women with higher education ($p < 0.001$), married, ($p < 0.01$), talked with their partner about their sexual expectations ($p = 0.03$), and did not want to change anything in their sexual life ($p < 0.001$) (Tab. 1).

In assessing sexual satisfaction, the participants gave the highest score to the following statement: *sex is a source of pleasure for me* – 3.64. The lowest scores were given to the statement: *thinking about sex generates negative emotions* – 1.17 (Tab. 2).

As for sexual satisfaction, higher scores were obtained by the participants who lived in a city ($p = 0.03$), did not have

Table 1. Life satisfaction in relation to demographic and relational predictors

Demographic and relational predictors	Life satisfaction (SWLS)			
		M	SD	Me
		23.75	5.08	24.00
	n (%)	M	SD	Statistical analysis
Average age	---	23.95	4.13	r = 0.24 p < 0.0001
Education	secondary	87 (31.07)	22.16	5.24
	higher	193 (68.93)	24.46	4.85
Place of residence	city	174 (62.14)	24.11	4.99
	town	62 (22.14)	23.08	5.68
Marital status	unmarried	225 (80.36)	23.31	5.06
	married	55 (19.64)	25.62	4.79
Children	no	236 (84.29)	23.58	5.06
	yes	44 (15.71)	24.66	5.16
Discussion with the partner about one's sexual expectations	yes	239 (85.36)	24.05	4.97
	no	41 (14.64)	21.95	5.43
Need to change something in one's sexual life	yes	88 (31.43)	22.08	5.42
	no	192 (68.57)	24.51	4.74
Number of sexual intercourses per month	< 4	87 (31.07)	23.23	5.55
	5–9	63 (22.50)	23.17	4.53
	10–14	68 (24.29)	24.49	4.71
	> 14	62 (22.14)	24.24	5.28

M – Mean; SD – Standard Deviation; Me – Median

Table 2. Sexual life satisfaction score

Statements	M ± SD	Me
I am disconcerted with a part of my sexual life	2.12 ± 0.98	2.00
Sex is a source of pleasure for me	3.64 ± 0.65	4.00
Thinking about sex generates negative emotions	1.17 ± 0.45	1.00
I feel sexuality attractive	3.25 ± 0.78	3.00
I find myself a poor sexual partner	1.57 ± 0.77	1.00
I do not have any problems in my sexual life	2.91 ± 1.01	3.00
I like thinking about my sexual life	3.24 ± 0.84	3.00
My sexual life frustrates me	1.44 ± 0.72	1.00
I am afraid I do not satisfy my sexual partner	1.66 ± 0.87	1.00
I find my sexual life fulfilling	3.30 ± 0.83	3.00

M – Mean; SD – Standard Deviation; Me – Median

children ($p=0.02$), who talked with their partner about sex ($p<0.0001$), did not see a need to change anything in their sexual life ($p<0.0001$), and who had sexual intercourse more than 10 times per month ($p<0.0001$) (Tab. 3).

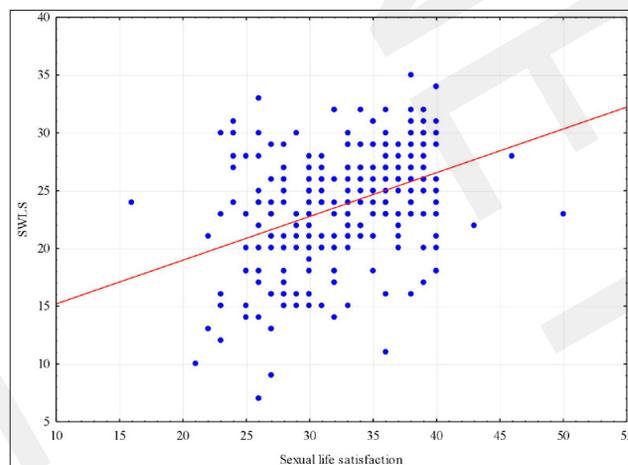
Analysis revealed a positive correlation between life satisfaction and sexual satisfaction. The higher the sexual satisfaction, the higher the life satisfaction ($r=0.37$; $p<0.0001$) (Fig. 1).

In its subsequent stage, the study analysed associations between sexual dysfunctions among the women respondents, which were identified using the Female Sexual Function Index (FSFI), and their satisfaction with life. Mean score for FSFI – 27.92 ± 7.35 . The highest scores were observed in the

Table 3. Sexual satisfaction in relation to demographic and relational predictors

Demographic and relational predictors	Sexual satisfaction		
	M	SD	Statistical analysis
Average age	-	-	r = 0.02 p = 0.68
Education	secondary	31.98	5.38
	higher	32.83	5.10
Place of residence	city	32.92	5.29
	town	32.90	5.10
	countryside	30.70	4.62
Marital status	unmarried	32.81	5.05
	married	31.53	5.70
Children	no	32.91	5.08
	yes	30.75	5.49
Discussion with the partner about one's sexual expectations	yes	33.22	5.08
	no	28.76	4.12
Need to change something in one's sexual life	yes	29.52	4.83
	no	33.96	4.75
Number of sexual intercourses per month	< 4	29.63	4.88
	5–9	32.33	4.28
	10–14	34.96	4.95
> 14	34.31	4.74	H = 48.54 p < 0.0001

M – Mean; SD – Standard Deviation

**Figure 1.** Correlation between sexual satisfaction and life satisfaction scores

satisfaction 5.07 domain, and the lowest in the *desire* 4.12 domain (Tab. 4).

Correlation analysis revealed a significant relationship

Table 4. Femal Sexual Function Index (FSFI) domain scores

FSFI domains	M	SD	Me
Desire	4.12	4.20	1.07
Arousal	4.55	5.10	1.60
Lubrication	4.85	5.40	1.67
Orgasm	4.32	4.80	1.80
Satisfaction	5.07	5.40	1.22
Pain	5.01	5.60	1.59
FSFI global	27.92	30.40	7.35

M – Mean; SD – Standard Deviation; Me – Median

between life satisfaction and FSFI domains ($p < 0.05$), except for the *desire* domain ($p > 0.05$). The higher the life satisfaction, the better the sexual functioning in individual FSFI domains (Tab. 5).

Table 5. Relationship between life satisfaction score (SWLS and Female Sexual Function Index (FSFI) domains

FSFI domains	Life Satisfaction Score	
	<i>r</i>	<i>p</i>
Desire	0.07	0.22
Arousal	0.26	< 0.0001
Lubrication	0.15	0.01
Orgasm	0.19	0.001
Satisfaction	0.34	< 0.0001
Pain	0.19	0.002
FSFI global	0.26	< 0.0001

DISCUSSION

The literature on this subject lists a number of factors affecting satisfaction with life, including demographic, economic and health-related variables [15–17]. The presented study attempted to identify the determinants of satisfaction with life among women of reproductive age, in terms of selected aspects of their sex life.

Female sexual satisfaction is a complex phenomenon, which may be assessed with a variety of predictors, including social and psychological factors. It can be treated as an important indicator in the field of sexual health and a crucial determinant of well-being and the quality of life [8, 18, 19]. The study showed that satisfaction with life of the Polish women surveyed reached the average level reported in other economically developed countries. The average score was 23.75, which places it at the upper end of the medium level. This means that the respondents were generally satisfied with their life, but there improvement was needed in certain areas. The obtained correspond with those obtained by other researchers [20]. A study by Cipora et al. [21] in a group of women with breast cancer demonstrated that their satisfaction with life was significantly affected by age and residence. Another study [22], identified BMI, time from diagnosis, having children and socio-economic status as determinants of satisfaction with life. Bień et al. [23] found satisfaction with life among childless women to be affected by age, place of residence, education, marital status and financial standing. The present findings are consistent with the above, as satisfaction with life among women of reproductive age was associated with their age, education, and marital status.

What is important in studies on the present subject is a comprehensive approach to life, satisfaction, and health, including sexual health, which should comprise a number of aspects, including age, relationship with the partner, and a variety of other psycho-social factors that may have an impact on satisfaction with one's sex life, and potentially on the incidence of sexual dysfunctions [2, 7, 9, 12]. The present results also demonstrated that higher levels of satisfaction with life in the women of reproductive age studied were associated with discussing one's expectations regarding sex life with their partner, as well as with the willingness to change one's sex life.

Women who declared higher sexual satisfaction had more frequent sexual thoughts, were more interested in sex and more likely to initiate sexual activity [24]. Research has shown that in assessing their sexual satisfaction, the participants gave the highest scores to the statements: *sex is a source of pleasure for me* and *I find my sexual life fulfilling*. Women find their sexual life satisfactory when a number of psychological criteria are fulfilled. Among these are safety, intimacy and close bond between partners [25].

Analysis of the correlation between socio-demographic data and sexual satisfaction showed that women who had children were less satisfied with their sexual life than those who were childless. Research by Leeman et al. [26] suggests that sexual desire decreases after giving birth to a child. This may be caused by a number of different factors, such as the new psychological situation, change of social roles or fear of another pregnancy [26]. Having children, listed above, was not the only demographic determinant of women's sexual satisfaction. In the literature, the main demographic determinants of sexual satisfaction include age, education, financial standing, and, as stated above, having children [27, 28]. Regarding the current study, the factors associated with sexual satisfaction in women of reproductive age were: place of residence and having children.

A study by Wróbel [29] has shown that women who consider their sexual life unsuccessful are more likely not only to think about changes in their sexual life, but also discuss their sexual expectations with their partner less frequently. The current study suggests that discussing sexual expectations with the partner and lack of willingness or need to introduce changes in one's sexual life, are both correlated with higher life satisfaction and sexual satisfaction scores. Willingness to build a healthy sexual relationship should be expressed through interpersonal communication [30, 31].

The number of sexual intercourses per month varies and is determined by many factors. Those which predispose women to engage in sexual activity are: the feeling of safety and trust, and the need for tenderness and confirmation of one's femininity. Another important factor is the need to be close to the partner and strengthen the bond with him. Increased frequency of sexual intercourse and experiencing orgasm not only improve sexual satisfaction, but are also related to better quality of life, relations between partners and psychological aspects of life [32, 33]. In the current study, no correlation was found between frequency of sexual intercourse and life satisfaction. However, a correlation was found between the number of sexual intercourses and sexual satisfaction. Analysis of the relationship between life satisfaction and sexual satisfaction confirmed the results of the study by Woloski-Wruble et al. [34], who found a positive correlation between sexual satisfaction and satisfaction with life.

In the next stage of the study, the relationship between aspects related to sexual life and sexual dysfunction in women were analysed, based on the Female Sexual Function Index. The FSFI allows for identification of women at risk of sexual dysfunction. The average FSFI score for the Polish women surveyed was 27.92, which is above the female sexual dysfunction cutoff score, both world-wide and in Poland (cutoff scored proposed for Polish women by the authors of the Polish adaptation of FSFI – 27.50) [13, 14]. One might wonder whether the results obtained could be influenced by the mentality of Polish women and their rudimentary knowledge on sexual behaviour, which makes certain

sexual problems go unnoticed or be seen as normal sexual functioning. As Izdebski noticed [35], sexuality is still a taboo subject in Poland; most people do not address this subject at all or do not admit to having sexual problems.

Sexual satisfaction is an important part of women's health, life satisfaction, quality of life and general well-being. Aspects of female sexual life touched upon in the presented study require further research. Although sexuality is still a taboo subject in Polish society, the possibility to express it is one of the basic needs of every human being. It often happens that sexual health is treated as a marginal issue, both by female patients and by professionals who ought to provide holistic health care. Caring for women's sexual health is all the more important in view of the study results, which have demonstrated that higher life satisfaction is strongly correlated with lack of sexual dysfunction. Another crucial aspect of sexual satisfaction is its essential role in preventing risky sexual behaviours, depression, social crime or even divorces [36, 37]. Helping women to solve difficulties resulting from sexual problems may increase their sexual satisfaction and thus improve their general health. In view of the above, more emphasis should be placed on this element of women's health care.

CONCLUSIONS

1. A higher level of sexual satisfaction and sexual health is related to better satisfaction with life.
2. Factors affecting sexual satisfaction include place of residence, having children, discussing one's sexual expectations with their partner, feeling no need to change one's sex life, and frequency of sexual activity.
3. Satisfaction with life in women of reproductive age is determined by their age, education, marital status, discussing one's sexual expectations with their partner, and feeling no need to change one's sex life.

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REFERENCES

1. Hounkpatin HO, Boyce ChJ, Dunn G, Alex MW. Modeling Bivariate Change in Individual Differences: Prospective Associations Between Personality and Life Satisfaction. *J Pers Soc Psychol.* 2018; 115(6): e12-e29. DOI: 10.1037/pspp0000161
2. Huang H, Liu S, Sharma A, Zou F, Tian F, Wu H. Factors associated with life satisfaction among married women in rural China: a cross-sectional study based on large-scale samples. *Psychol Res Behav Manag.* 2018; 11: 525–533. DOI: 10.2147/PRBM.S179052
3. O'Brien LB, Berry HL, Hogan A. The structure of psychological life satisfaction: insights from farmers and a general community sample in Australia. *BMC Public Health.* 2012; 12: 976. DOI: 10.1186/1471-2458-12-976
4. Jan M, Masood T. An assessment of life satisfaction among women. *Stud. Home Comm Sci.* 2008; 2(1): 33–42. DOI: 10.1080/09737189.2008.11885250
5. Kim SI, Lee Y, Lim MC, Joo J, Park K, Lee DO, Park SY. Quality of life and sexuality comparison between sexually active ovarian cancer survivors and healthy women. *J Gynecol Oncol.* 2015; 26(2): 148–154. DOI: 10.3802/jgo.2015.26.2.148
6. Theofilou P. Quality of Life: definition and measurement. *Eur J Psychol.* 2013; 9: 150–162. DOI: 10.5964/ejop.v9i1.337
7. Jiann BP, Su CC, Yu CC, Wu TT, Huang JK. Risk factors for individual domains of female sexual function. *J Sex Med.* 2009; 6(12): 3364–3375. DOI: 10.1111/j.1743-6109.2009.01494.x
8. Darski C, Barbosa LJ, Paiva LL, Vieira A. Association between the functionality of pelvic floor muscles and sexual satisfaction in young women. *Rev Bras Ginecol Obstet.* 2016; 38(4): 164–169. DOI:10.1055/s-0036-1580708
9. Milhausen RR, Buchholz AC, Opperman EA, Benson LE. Relationships between body image, body composition, sexual functioning, and sexual satisfaction among heterosexual young adults. *Arch Sex Behav.* 2015; 44(6): 1621–1633. DOI 10.1007/s10508-014-0328-9
10. Nomejko A, Dolińska-Zygmunt G, Zdrojewicz Z. Poczucie jakości życia a satysfakcja z życia seksualnego. *Seksuologia Polska.* 2012; 10(2): 54–60.
11. Pavot W, Diener E. Review of the Satisfaction with Life Scale. *Psychol Assess.* 1993; 5(2): 164–172.
12. Nomejko A, Dolińska-Zygmunt G. Sexual satisfaction's contribution to a sense of quality of life in early adulthood. *Pol J Appl Psychol.* 2011; 9(1): 65–73.
13. Wiegel M, Meston C, Rosen R. The female sexual function index (FSFI): cross-validation and development of clinical cutoff scores. *J Sex Marital Ther.* 2005; 31(1): 1–20.
14. Nowosielski K, Wróbel B, Sioma-Markowska U, Poręba R. Development and validation of the Polish version of the Female Sexual Function Index in the Polish population of females. *J Sex Med.* 2013; 10(2): 386–395. DOI: 10.1111/jsm.12012
15. Gebuza G, Kaźmierczak M, Mieczkowska E, Gierszewska M: Social support as a determinant of life satisfaction in pregnant women and women after surgical delivery. *Psychiatr Pol.* 2018; 52(3): 585–598. DOI: 10.12740/PP
16. Sarid O, Slonim-Nevo V, Pereg A, Friger M, Sergienko R, Schwartz D, et al: Coping strategies, satisfaction with life, and quality of life in Crohn's disease: A gender perspective using structural equation modeling analysis. *PLoS One.* 2017; 12(2): e0172779. DOI: 10.1371/journal.pone.0172779
17. Jankowiak B, Sekmistrz S, Kowalewska B, Niczyporuk W, Krajewska-Kulak E. Satisfaction with life in a group of psoriasis patients. *Postepy Dermatol Alergol.* 2013; 30(2): 85–90; DOI: 10.5114/pdia.2013.34156
18. Dundon CM, Rellini AH. More than sexual function: Predictors of sexual satisfaction in a sample of women age 40–70. *J Sex Med.* 2010; 7(2 pt 2): 896–904.
19. Nomejko A, Dolińska-Zygmunt G. Psycho-social determinants of sexual satisfaction in young, middle and late adulthood. *Pol J Appl Psychol.* 2015; 13(2): 47–68.
20. Dogan T, Tugut N, Golbasi Z. The Relationship Between Sexual Quality of Life, Happiness, and Satisfaction with Life in Married Turkish Women. *Sex Disabil.* 2013; 31(3): 239–247. DOI: 10.1007/s11195-013-9302-z
21. Cipora E, Konieczny M, Karwat ID, Rocznik W, Babuška-Rocznik M. Satisfaction with life among women with breast cancer – selected demographic and social factors. *Ann Agric Environ Med.* 2018; 25(2): 314–319. DOI: 10.26444/aaem/82622
22. Rzońca E, Bień A, Wdowiak A, Szymański R, Iwanowicz-Palus G. Determinants of Quality of Life and Satisfaction with Life in Women with Polycystic Ovary Syndrome. *Int J Environ Res Public Health.* 2018; 15(2): e376. DOI: 10.3390/ijerph15020376
23. Bień A, Rzońca E, Iwanowicz-Palus G, Lecyk U, Bojar I. Quality of life and satisfaction with life of women who are childless by choice. *Ann Agric Environ Med.* 2017; 24(2): 250–5. DOI: 10.5604/12321966.1235181
24. Davison SL, Bell RJ, LaChina M, Holden SL, Davis SR. Sexual function in well women: Stratification by sexual satisfaction, hormone use, and menopause status. *J Sex Med.* 2008; 5(5): 1214–1222.
25. Zhang H, Ho P, Yip P. Does similarity breed marital and sexual satisfaction? *J Sex Res.* 2012; 49(6): 583–593.
26. Leeman LM, Rogers RG. Sex after childbirth: postpartum sexual function. *Obstet Gynecol.* 2012; 119(3): 647–655. DOI: 10.1097/AOG.0b013e3182479611
27. Shahhosseini Z, Gardeshi ZH, Pourasghar M, Salehi F. A review of affecting factors on sexual satisfaction in women. *Mater Sociomed.* 2014; 26(6): 378–381. DOI: 10.5455/msm.2014.26.378-381
28. Fahs B, Swank E. Social identities as predictors of women's sexual satisfaction and sexual activity. *Arch Sex Behav.* 2011; 40(5): 903–914. DOI: 10.1007/s10508-010-9681-5
29. Wróbel B. Selected sexuality features among married women – research results. *Ginekol Pol.* 2008; 79(2): 99–107.
30. Agustus P, Munivenkatappa M, Prasad P. Sexual Functioning, Beliefs About Sexual Functioning and Quality of Life of Women with Infertility Problems. *J Hum Reprod Sci.* 2017; 10(3): 213–220. DOI: 10.4103/jhrs.JHRS_137_16

31. Fuentealba-Torres M, Cartagena-Ramos D, Fronteira I, Lara LA, Arroyo LH, Arcoverde MAM et. al: What are the prevalence and factors associated with sexual dysfunction in breastfeeding women? A Brazilian cross-sectional analytical study. *BMJ Open*. 2019; 25; 9(4): e025833. DOI: 10.1136/bmjopen-2018-025833
32. Brody S, Weiss P. Simultaneous penilevaginal intercourse orgasm is associated with satisfaction (sexual, life, partnership, and mental health). *J Sex Med*. 2011; 8(3): 734–741. DOI: 10.1111/j.1743-6109.2010.02149.x
33. Yoo H, Bartle-Haring S, Day RD, Gangamma R. Couple communication, emotional and sexual intimacy, and relationship satisfaction. *J Sex Marital Ther*. 2014; 40(4): 275–293. DOI: 10.1080/0092623X.2012.751072
34. Woloski-Wruble AC, Oliel Y, Leefsa M, Hochner-Celnikier D. Sexual activities, sexual and life satisfaction, and successful aging in women. *J Sex Med*. 2010; 7(7): 2401–2410. DOI: 10.1111/j.1743-6109.2010.01747.x
35. Izdebski Z. Sexuality of the Poles at the beginning of the 21st century. Research study. Jagiellonian University Press, Kraków, 2012.
36. Hajivosough NS, Tavakolizadeh J, Rajayi A, Atarodi A. The effect of cognitive-behavioral teaching on improvement of women's sexual function with hypoactive sexual desire disorder. *Zahedan J Res Med Sci*. 2012; 14(10): 100–102.
37. Peleg-Sagy T, Shahar G. The prospective associations between depression and sexual satisfaction among female medical students. *J Sex Med*. 2013; 10(7): 1737–1743. DOI: 10.1111/jsm.12176



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