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How Married Couples Cope with Sexual Behavior Changes During Pregnancy

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Abstract

Background: Sexual health plays an important role for the quality of life. Most partners are sexually active both before and during pregnancy but they are concerned about their sexual activities that affect the fetus or pregnancy. **Method**: This study was conducted to explore sexual behavior changes during pregnancy and to identify factors related its changes. This study used systematic review based on the PRISMA Protocol. The literature search was conducted from April 14th to April 17th, 2017 by electronic databases such as Proquest, Scopus, JSTOR and Google Scholar using relevant keywords. The initial screening was conducted by reading the titles and abstracts. The relevant studies were further selected using inclusion and exclusion criteria. **Result:** Ten studies included in this review. Two studies were conducted by a qualitative approach, eight studies by cross-sectional, and two studies by cohort. Sexual intercourse frequency, coitus positions, desire, and orgasm was changed during the gestational stage due to parents' fear of adverse effects, socio-cultural factors and maternal conditions. **Conclusions:** Factors associated to sexual behavior changes were maternal age, knowledge, marital status, level of education, perception, socio-cultural factors, religious factor, access to information, and social support.

Keywords: Fear, beliefs, Sexual dysfunction, Sexual behavior changes, Pregnancy

1. Introduction

Sexuality is defined as "although not vital, a necessity and a basic instinct needed to survive and to contin¬ue human species". Sexual health plays an important role for the quality of life. Sexual dysfunction affects a woman's mood of well-being, social interactions with others, and often leads to emotional stress. Most partners are sexually active both before and during pregnancy and many women feel worried about their sexual activities that affect the fetus or pregnancy.[(1);(2);(3)]

Previous studies identified a decrease in sexual desire and frequency of sex among pregnant women and their partners in the first, second or third trimester. Sexual dysfunction increases as pregnancy progresses.[(3);(4);(5);(6);(7);(8)] Decreased sexual activity may be attributable to fear of adverse effects and concern about the safety and health of the fetus and pregnant women.[(5)] The main reasons for couples to stop sexual activity during

pregnancy such as low libido and no sex drive (35,5%), doctor's advice (29%), and concerned about the safety and health of the fetus (29%).[9] Most pregnant women feel the need to seek help and discuss about sexual activity during their gestational age, but they rarely discussed it with doctors or midwives. Sexual activity decreases during pregnancy and by each trimesters due to increased fear and anxiety and poor access to improve and enrich the knowledge about this matters. Many couples reduce their sexual activity for fear of endangering the fetus and their lack of access to adequate information. Health workers play an important role in providing information to partners, but consultation regarding sexual activity issues is rarely given to partners.[10] 63.5% of pregnant women cite the internet and other media as the main source of information about sexuality during pregnancy, while another 30% obtain information from health workers.[9] The more support a pregnant woman receives, including support from her partner and siblings, the lower the level of stress experienced by the pregnant woman compared to those with minimal support.[11];[12] A quasi experimental study found sex education provided to couples would be effective to reduce their sexual dysfunction and improve their sexual satisfaction.[13] The factors causing the decrease of sexual desire in pregnant women include biomedical factors, psychological factors, and social factors of marriage.[5];[14] These biomedical factors include hormonal changes, fatigue, dyspareunia, back pain, nausea, vomiting, and the physical condition of women who are less than optimal. Psychological factors include the emergence of mental symptoms such as feelings of depression, history of sexuality before pregnancy, fear and fantasy, and anxiety about the process of childbirth. While the relationship factors include low satisfaction of husband and wife relationship, ambivalent attitude of pairs, and length of marriage age.[14]

Decreased sexual desire cause problems and may contribute to anxiety, fear, and stress, which can disrupt maternal and fetal health status and leads to decreased harmony between partners. Reduced sexual activity may be one of the causes of husbands seeking unprotected sexual intercourse outside marriage.[1];[5];[7] Problematic sexuality can be one of the factors causing the breakdown of marital relationships between 4-28% of husbands having affairs, and increasing the risk of sexually transmitted diseases that have a negative impact on maternal, spouse and fetal health status.[11] Previous studies have discussed more changes during pregnancy and its impacts but only a few of them revealed what factors contribute to these changes, especially from aspects of social support such as husbands and health workers. Changes that occur during pregnancy are natural and normal so that it cannot be avoided, but the social factors associated with it can be intervened to support the achievement of what is desired and expected by a married couple during pregnancy. Therefore, this study aimed to identify sexual behavior changes during pregnancy and to determine factors related to sexual behavior changes.

2. Method

This study used a systematic review based on the Protocol PRISMA. The literature search was conducted from April 10 to April 24, 2017. The restriction of the search includes the availability of complete and articles. The search focused on electronic databases by using remote-lib.ui.ac.id website. We searched ProQuest, Scopus, JSTOR, and Google Scholar. Inclusion criteria for choosing research articles to be studied are articles in English, articles are research results and articles of systematic review of the keywords used and articles published from 2007 to 2017. The keyword is “belief OR anxiety OR fear AND sexual intercourse AND pregnancy”. Articles associated with relevant papers were also thoroughly searched. Exclusion criteria is an article with the keywords above, but the article can not be openly accessed.

The search results of articles from several databases found 1.377.465 articles that match the keywords used. The next stage is to screen by including inclusion criteria and generate 526,235 articles, then filtered with exclusion criteria and as many as 526,183 articles removed from the database. The next stage is the assessment of article eligibility, 52 articles read by the author and finally the remaining 10 articles to be reviewed. The first author screened and selected the articles. Then, the second authors reviewed for their eligibility. Full-text articles were reviewed for acceptability and discussion was carried out for finalization. Because this study is a systematic review of published studies, ethical clearance is not applicable

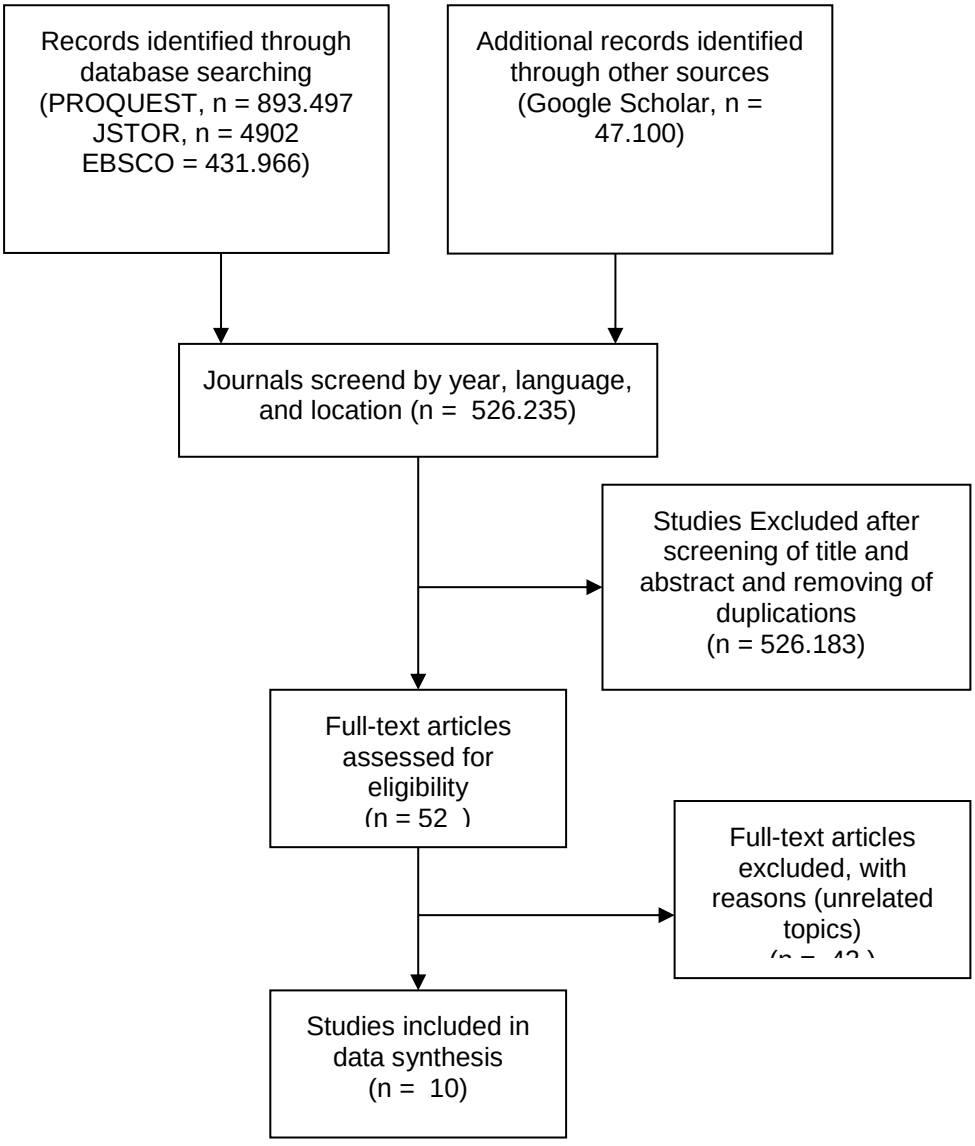

Figure 1. Search strategy used for the systematic review of sexual behavior changes during pregnancy among married couples.

3. Resulth and Discussion

3.1 Hasil

Ten studies included in this review. Two studies were conducted by a qualitative approach, eight studies by cross-sectional, and two studies by cohort. All studies published

from 2007 to 2017 and showed about sexual behavior changes during pregnancy. The sample sizes in the quantitative studies examined in this systematic review vary from 51 to 1,087 respondents. 4 out of 10 studies from Iran, 2 from Turkey and 1 from Nigeria, Malawi, and Egypt. Both authors read the text several times to discover common and specific findings of each research articles. The common findings of the studies included in this review are summarised and described in the following Table 1.

Table 1. Summary of Systematic Review Results

Categories	Sub Categories	Description
Sexual Behavior Changes	Frequency	Less than usual, decreases with the development of gestational age.
	Duration	The duration is shortened than before pregnancy.
	Position	Most pregnant women reported a change of position and prefer a comfortable sexual intercourse position.
	Initiator	Sexual activity during pregnancy is generally initiated by the husband. Husbands are more tolerant when their wives refuse to have sex.
Reasons	Reasons of Abstinance	Parents' fear of adverse effects, low sexual desire, sexual myths, religious factors, socio-cultural factors, and maternal condition such as fatigue, nausea, and vomiting.
	Reasons for Having Sexual Intercourse	Marital harmony, facilitation of delivery, cultural obligation, and afraid of being infected with HIV if their husband have sex with another person.
Factors Related to Sexual Behavior Change	Age	- Married couples who have intercourse during pregnancy are those whose average age is younger. - The level of sexual desire is higher in nulliparous women compared to other groups of pregnant women
	Knowledge	Most pregnant women do not have adequate information about sexual behavior during pregnancy, thus caused the emergence of a false understanding of sexual behavior during pregnancy
	Education	Women's education level has a variable influence on sexual dysfunction
	Marital Status	- The current status of marriage and cohabitation is a predictor of sex in pregnancy - Women who are more than 10 years married show more sexual satisfaction than those who are less than 10 years after marriage.
	Myths and Beliefs	Myths and beliefs caused a sexual activity changes during pregnany. For example, the belief that no sex is allowed between the sixth and eighth months of pregnancy
	Religion	Religious factor caused the abstinance of coitus activity during pregnancy
	Culture	Cultural aspects caused both the abstinance of coitus activity and the obligation of women to obey their husband wishes
	Information Exposure	Sufficient exposure to information about intercourse during pregnancy helps to reduce fear and anxiety for couples to have sexual intercourse
	Social Support	Social support from family and healthcare workers is associated with less fear and anxiety for sexual intercourse and improved perceptions of sexual intercourse during pregnancy

3.2. Discussion

Sexual behavior changes in pregnant women are consistent in the literature. Sexual intercourse frequency, coitus positions, desire, and orgasm was changed during the

gestational stage. Most studies revealed the frequency of couples having sex during pregnancy due to several reasons such as parents' fear of adverse effects such as membrane rupture and abortion, low sex desire, anxious of harmfulness, religious factors, socio-cultural factors, and maternal condition such as fatigue, nausea, and vomiting.[6];[7];[15];[16];[17];[18] Factors related to sexual behavior change during pregnancy are age, gestational age, marital status, knowledge, level of education, belief, myths, perception, religion, culture, access of information, and social support.[6];[7];[15];[18];[19];[20] The results of this systematic review revealed there is a significant difference between trimester or gestational age with sexual intercourse, where the frequency of intercourse decreased significantly during the last trimester.[16];[21];[22] A study revealed 36.5% having sex once a week in the first trimester, 32.9% once a month in the second trimester, and 49.7% did not have sexual intercourse during the third trimester.[7] The study conducted by Leite et al (2009) revealed that women have the same sexual function patterns in the first and second trimesters, but a significant reduction in the third trimester.

There are differences in sexual dysfunction experienced by pregnant adolescents and pregnant adults. Sexual dysfunction among pregnant adolescents is lower in each trimester compared with the group of pregnant adults.[16] While the results of the study by Hanafy et al (2014) revealed low sexual desire in the first and third trimesters, but the pattern varied in the second trimester. Sexual dissatisfaction increased significantly in the first trimester.[22] The most common causes of reduced intercourse frequency in the first trimester are nausea and fear of miscarriage, in the second trimester due to low libido and sex drive, and in the third trimester for fear of rupture membranes and an enlarged abdomen.[6];[7];[15] A high prevalence of sexual dysfunction and sexual dissatisfaction are identified in the first and third trimesters of pregnancy. Men are generally in control to initiate and continue sexual activity during pregnancy. The commonest reasons for coitus among pregnant women were to please their husbands, to maintain marital harmony, facilitation of delivery, cultural obligation, and afraid of being infected with human immunodeficiency virus (HIV) if their partners have sex with other women.[7];[15];[17];[19] Most women feel more committed and sincere than before, while some face conflict and contention. Lack of sexual activity or a reduced frequency may adversely affect the couple's emotional connection, reducing affection, and making them irritable. A review of the literature Johnson (2011) has shown that while there are concerns and stories about sexual activity during pregnancy, the maintenance of sexual activity during and after pregnancy can improve physical health, well-being, and intimacy.[23] The frequency of coitus changes from the first trimester to the third trimester.[1];[2];[3];[4];[15] In this systematic review, the causes of sexual practice changes during pregnancy vary as afraid of something happening to the fetus, nausea, physical changes, and for the comfort of husband and wife and the safety of the mother. Differences in sexual activity in each trimester were found in this study, where married couples rarely and or never had sexual intercourse in the first trimester, and only began to relate in the second trimester. This may be due to increased sex hormone production which causes high libido and leads to sexual satisfaction when entering the second trimester and they feel comfortable and not afraid to have sex.[19]

The results of this systematic review found most pregnant women claimed a change of position and prefer a comfortable sexual intercourse position. Most have sexual intercourse with a woman on top position, although there are also pregnant women who have sex with a missionary position and a tilted position.[15];[19];[20] Previous studies stated most participants change their position during intercourse where 45% of participants prefer 'rear position' or 'rear penetration.[15] Another study revealed that man-on-top or missionary positions become less practiced during pregnancy, increased masturbation and anal sex, while oral sex decreases during pregnancy.[19] There were no significant coitus position

changes by trimesters. However, sexual satisfaction is more common in women who have sex with woman-on-top, face-to-face, and abdominal-supportive sexual positions.[24] The duration of intercourse also changed, where most pregnant women feel the duration of having sex faster during pregnancy. The majority of research in this systematic review showed that the one who asks for sexual intercourse is the husband. Men generally hold the control to initiate and continue sexual activities, both before and during the pregnancy.[19];[25] More variation in sexual positions is found in spouses who both initiate to have sexual activity.[25] Most pregnant women reported that their husbands were more tolerant and willing to cooperate in changing sexual activity practices during pregnancy for fear of harming the fetus, the comfort of a wife, and the increasing status of pregnant women.[15];[25]

This systematic review found that age and marital status related to the changes in sexual behavior during pregnancy. Married couples who have intercourse during pregnancy are those whose average age is younger and is the first pregnancy.[7] The current status of marriage and cohabitation is a predictor of sex in pregnancy. While the dyspareunia and infidelity of her partner becomes a barrier factor.[19] Women who are more than 10 years married show more sexual satisfaction than those who are less than 10 years after marriage.[20] The study by Küçükdurmaz et al (2016) revealed an increased levels of sexual desire and satisfaction were identified in nulliparous women compared to older pregnant women due to previous bad memories of pregnancy. Other reasons such as excessive concern in women suffering from nausea, vomiting and the risk of preterm labor in their previous pregnancy.[18] In this systematic review, only a few couples get information about sexual activity during pregnancy from a physician or other health care professional.[6];[8];[18];[21] Knowledge is closely related to the exposure to information which is one of the enabling factors of behavior. Most pregnant women have an inadequate information and lack of knowledge about sexual behavior during pregnancy.[6];[8]

The results of the study by Shooja et al (2009) stated most women need and expect discussion and counseling and want to get more information, but there are still many couples who do not seek information or visit doctors and midwives for consultation because they feel abashed to talk about sex.[6] Previous studies identified that women obtained information related to sexuality during pregnancy mainly through the book (57%), internet and other media (63,5%) and only a small proportion get information from health workers (≤30%).[8];[9];[26] Counseling about sexuality and sexual behavior during pregnancy is rarely carried out in a clinical setting, but discussions about the issue should occur at regular meetings during antenatal care visits.[26] This systematic review found that Women's education level has a different effect on the incidence of sexual dysfunction. The results of the study by Küçükdurmaz et al (2016) identified that among demographic variables, partner education significantly associated with female sexual dysfunction (FSD). The higher the level of male education the lower the FSD level. Highly educated couples may become aware of the risks and encourage themselves to seek advices regarding their sexual lives with professionals before or during pregnancy. Hence they are able to reduce the risk of sexual dysfunction among pregnant women. Meanwhile, a research by Hanafy et al (2014) found education of women, work, gravidity, and parity not related to sexual dysfunction of pregnant women.[22]

Belief, culture, and myths found to be related with sexual behavior changes during pregnancy in this systematic review. The religious factor is one of the most frequent concerns by women about coitus other than the fear of illness and the risk of miscarriage.[18] Most women believe that coitus should be avoided between the sixth and eighth months of pregnancy and should not be continued until 6 months after giving birth. The results also revealed the conflict between their cultural obligations to not have sex during pregnancy

and fear of being infected by HIV if their partner had sex with others.[17] The fetus will know and feel when their parents have sex is one of the most commonly identified sexual myths during pregnancy. Other findings that pregnant women should avoid sex after the seventh month of pregnancy due to fear of causing membrane rupture.[6] The results of Ribeiro et al's (2017) study suggested that making labor easier, maintaining and strengthening marital harmony, preventing infidelity, and improving fetal health are the main positive beliefs perceived by couples. Having sex endangers children, pregnancy, and pregnant women is a negative belief that is often expressed by couples.[27]

Information exposure is the next factor found to be related in this systematic review. 54.7% of women identified health professionals are the main source of information, 16.3% decided on their own without external influences and other respondents based on their respective beliefs in other sources, such as friends, mothers, cultural practices, media, and books.[18];[21];[19] Doctors are the primary source of information, followed by information from nurses and midwives.[21] A trial by Afshar et al (2012) demonstrated provision of sex education during scheduled antenatal visits can maintain and strengthen sexuality and sexual life of partners during pregnancy.[13];[28]

Attention from the husband is one of the important expressions of love during pregnancy. The results of this systematic review indicate that the husband is increasingly concerned and tolerant with the wife shown by following the will of the wife during the period of pregnancy and willing to change sexual activity during pregnancy.[11];[15];[19];[21] Most women told the problems they face when having sex with their husbands during pregnancy. Then they tend to apply short term solutions such as stopping coitus and not asking for advice or help from professionals, doctors, or midwives.[21] When couples are unable to solve their problems, they express their need for a place that guarantees their privacy and confidentiality to discuss these barriers. Personal issues are sometimes more comfortable to discuss with others than family members for fear of stigma and the risk of disclosure problems experienced by the spouse to others.[11]

In this systematic review, supports from health personnel are counseling and education support regarding sexual activity during pregnancy. However, few couples visit physicians or other health care providers to share the problems they experience about intercourse during pregnancy because they feel embarrassed and consider taboo to talk about sex with others.[6];[15];[21] A discussion of the expected sexuality changes should be done routinely by health professionals to adjust the couple's perception of possible sexual modifications caused by pregnancy.[29] Accurate counseling with a partner about sexuality during pregnancy would omit distrust, anxiety and thus increase the level of sexual function among pregnant women.[18] 79.5% of respondents stated their need for consultation regarding sex during pregnancy when they made antenatal visits.[19] Couples need counseling regarding physical and psychological changes during and after pregnancy that affect their sexual activity. Counseling helps them strengthen the bonds of marriage, maintain family harmony, and create a conducive and supportive environment for raising children.[19];[25]

Education was found to have a treatment role in the present study, as the couples with a sexual function disorder were treated after education and showed an improvement in their sexual function. Education can be conducted personally or in group. Group education is also cost effective, can cover a high number of participants, and can be applied depending on specific time and conditions.[30] This study has several limitations. This study only examined articles written in English. This study also consists of various research designs and varied research objectives thus made it impossible to conduct analyzes of effect sizes. Some of the research included in this systematic study did not consider confounding factors, which may cause confusion bias. Furthermore, 8 studies were cross-sectional and studies with this design did not analyze cause-effect relationships.

4. Conclusion

Sexual behavior changed during pregnancy including frequency, coitus positions, duration, and orgasm due to parents' fear of undesirable effects, socio-cultural factors, and maternal conditions. Men are generally in control of initiating and continuing sex during pregnancy. The main reasons for having sex during pregnancy are maintaining and strengthening marital harmony, facilitating childbirth, fulfilling cultural obligations, and preventing HIV infection if her husband is looking for another partner. Sexual behavior during gestational age is affected by many factors such as age, knowledge, marital status, level of education, belief, perception, culture, religious factor, information exposure, and social support. The results are important for health professional and health care providers. Providing sufficient information and proper counseling to couples about physical and psychological changes in pregnancy and the possibility of having sex in normal pregnancy may reduce the concerns and misbeliefs and help them to achieve more sexual satisfaction.

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5. Daftar Pustaka

1. Coskun B, Coskun BN, Atis G, Ergenekon E, Dilek K. Evaluation Of Sexual Function In Women With Rheumatoid Arthritis.*Urol J*.2013:10;108 1-7.
2. Hosseini L, Iran-Pour E. Sexual Function Of Primiparous Women After Elective Cesarean Section And Nor- Mal Vaginal Delivery.*Urol J*.2012: 9; 498-504.
3. Aydin M, Cayonu N, Kadihasanoglu M, Irkilata L, Atilla MK. Comparison Of Sexual Functions In Pregnant And Non-Pregnant Women. *Urol J.*2015: 12(5) 2339-2344
4. Ninivaggio C, Rogers RG, Leeman L, Migliaccio L, Teaf D, Qualls C. Sexual Function Changes During Pregnancy. *Int Urogynecology J*. 2017 Jun;28(6):923–9.
5. Sacomori C, Cardoso F L. Sex In Pregnancy. *CMAJ*. 2011;183(7):815–8.
6. Shojaa M, Jouybari LM, Sanagoo A. Common Myths Among A Group Of Iranian Women Concerning Sexual Relationships During Pregnancy. *Arch Med Sci*. 2009;5.
7. Torkestani F, Hadavand S, Khodashenase Z, Besharat S, Davati A, Karimi Z, Et Al. Frequency And Perception Of Sexual Activity During Pregnancy In Iranian Couples. *Int J Fertil Steril*. 2012;6(2):107–10.
8. Serati M, Salvatore S, Siesto G, Cattoni E, Zanirato M, Khullar V, Et Al. Female Sexual Function During Pregnancy And After Childbirth. *J Sex Med*. 2010 Aug;7(8):2782–90.
9. Staruch M, Kucharczyk A, Zawadzka K, Wielgos M, Szymusik I. Sexual Activity During Pregnancy. *Neuro Endocrinol Lett*. 2016; 37 (1); 53-8
10. Mlotshwa L, Manderson L, Merten S. Personal Support And Expressions Of Care For Pregnant Women In Soweto, South Africa. *Glob Health Action*. 2017 Jan;10(1):1363454.
11. Glazier R, Elgar F, Goel V, Holzapfel S. Stress, Social Support, And Emotional Distress In A Community Sample Of Pregnant Women. *J Psychosom Obstet Gynecol*. 2004 Jan;25(3–4):247–55.
12. School Of Nursing, Babcock University, Ogun State, P. M. B. 21244 Ikeja, Lagos, Nigeria, Mosunmola RN S, Adekunbi RN F, Foluso, RN O. Women's Perception Of Husbands' Support During Pregnancy, Labour And Delivery. *IOSR J Nurs Health Sci*. 2014;3(3):45–50.

13. Heidari M, Amin Shokravi F, Zayeri F, Azin SA, Merghati-Khoei E. Sexual Life During Pregnancy: Effect Of An Educational Intervention On The Sexuality Of Iranian Couples: A Quasiexperimental Study. *J Sex Marital Ther*. 2018 Jan 2;44(1):45–55.
14. H B, Weiss P, J Z. Human Sexuality During Pregnancy And The Postpartum Period. *Pubmed*. 2019;110(07):427–331.
15. Shojaa M, Jouybari L, Sanagoo A. The Sexual Activity During Pregnancy Among A Group Of Iranian Women. *Arch Gynecol Obstet.* 2009 Mar;279(3):353–6.
16. Leite APL, Campos AAS, Dias ARC, Amed AM, De Souza E, Camano L. Prevalence Of Sexual Dysfunction During Pregnancy. *Rev Assoc Médica Bras*. 2009;55(5):563–8.
17. Keating MA, Hamela G, Miller WC, Moses A, Hoffman IF, Hosseinipour MC. High HIV Incidence And Sexual Behavior Change Among Pregnant Women In Lilongwe, Malawi: Implications For The Risk Of HIV Acquisition. Myer L, Editor. *Plos ONE.* 2012 Jun 29;7(6):E39109.
18. Kucukdurmaz F, Efe E, Malkoc O, Kolus E, Amasyali AS, Resim S. Prevalence And Correlates Of Female Sexual Dysfunction Among Turkish Pregnant Women. *Türk Ürol Dergisiturkish J Urol*. 2016 Aug 29;42(3):178–83.
19. Bello FA, Olayemi O, Aimakhu CO, Adekunle AO. Effect Of Pregnancy And Childbirth On Sexuality Of Women In Ibadan, Nigeria. *ISRN Obstet Gynecol*. 2011;2011:1–6.
20. Nik-Azin A, Bavojdan MR. Evaluation Of Sexual Function, Quality Of Life, And Mental And Physical Health In Pregnant Women. *J Family Reprod Health*. 2013; 7 (4); 171-176
21. Erenel AS, Eroglu K, Vural G, Dilbaz B. A Pilot Study: In What Ways Do Women In Turkey Experience A Change In Their Sexuality During Pregnancy?. *Sex Disabil*. 2011 Sep;29(3):207–16.
22. Hanafy S, Srour NE, Mostafa T. Female Sexual Dysfunction Across The Three Pregnancy Trimesters: An Egyptian Study. *Sex Health*. 2014;11(3):240.
23. Johnson CE. Sexual Health During Pregnancy And The Postpartum (CME). *J Sex Med*. 2011 May;8(5):1267–84.
24. Lee JT, Lin CL, Wan GH, Liang CC. Sexual Positions And Sexual Satisfaction Of Pregnant Women. *J Sex Marital Ther*. 2010 Sep 30;36(5):408–20.
25. Sacomori C, Cardoso FL. Sexual Initiative And Intercourse Behavior During Pregnancy Among Brazilian Women: A Retrospective Study. *J Sex Marital Ther*. 2010 Feb 23;36(2):124–36.
26. Corbacioglu Esmer A, Akca A, Akbayir O, Goksedef BPC, Bakir VL. Female Sexual Function And Associated Factors During Pregnancy: Sexuality And Pregnancy. *J Obstet Gynaecol Res*. 2013 Jun;39 (6):1165–72.
27. Chebabe M, Bouhilal R. Opinions And Practices Of Pregnant Women About Sexuality During Pregnancy. *European Journal Of Research In Medical Sciences*. 2019;7(1):9.
28. Afshar M, Mohammad-Alizadeh-Charandabi S, Merghti-Khoei E-S, Yavarikia P. The Effect Of Sex Education On The Sexual Function Of Women In The First Half Of Pregnancy: A Randomized Controlled Trial. *J Caring Sci*. 2012. EISSN 2251-9920 .
29. Pauleta JR, Pereira NM, Graça LM. Sexuality During Pregnancy. *J Sex Med.* 2010 Jan;7(1):136–42.
30. Bahadoran Parvin, Muhammadimahdiabadzade M, Nasari H. the Effect of Face-To-Face or Group Education During Pregnancy on Sexual Function of Couples In Isfahan. *Iran J NUrs Midwifery Res*. 2015;20(5):582–7.