

INSTRUMENTS FOR ASSESSING THE SEXUALITY OF PREGNANT WOMEN: INTEGRATIVE REVIEW

INSTRUMENTOS PARA EVALUAR LA SEXUALIDAD DE MUJERES EMBARAZADAS: REVISIÓN INTEGRATIVA

INSTRUMENTOS PARA AVALIAÇÃO DA SEXUALIDADE DE MULHERES GRÁVIDAS: REVISÃO INTEGRATIVA

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ABSTRACT

Objective: To identify instruments used to assess aspects inherent to the sexuality of pregnant women. **Method:** Integrative literature review occurred from August to September 2022. LILACS, MEDLINE, BDNF, IBECs, CINAHL databases, and the SciELO library were the chosen databases for the search. The descriptors Pregnancy; Surveys and Questionnaires; Quiz; Forms; Instruments; Sexuality; Sexual behavior; Sexual Dysfunction, Physiological; Sexual Function; and Sexual Dysfunction. **Results:** 5,632 studies were identified. After applying the inclusion and exclusion criteria and reading the texts in full, the sample consisted of 27 articles. We identified 14 instruments in the studies. The use of questionnaires predominated, with emphasis on the Female Sexual Function Index (FSFI) associated with another tool for data collection. The approaches were directed primarily to the sexual function of pregnant women and occurred in health services assisting this public. **Conclusions:** Applicable instruments investigate aspects inherent to the sexuality of pregnant women, useful for application in the context of clinical nursing care during prenatal care, which can contribute to the comprehensiveness of sexual health care.

Keywords: Pregnancy; Sexuality; Women's Health.**RESUMEN**

Objetivo: Identificar instrumentos utilizados para evaluar aspectos inherentes a la sexualidad de las mujeres embarazadas. **Método:** revisión integrativa de la literatura realizada de agosto a septiembre de 2022. Las bases de datos LILACS, MEDLINE, BDNF, IBECs, CINAHL y la biblioteca SciELO fueron las bases de datos elegidas para la búsqueda. Los descriptores Embarazo; Encuestas y Cuestionarios; Prueba; formularios; instrumentos; Sexualidad; Comportamiento sexual; Disfunción Sexual Fisiológica; función sexual; y disfunción sexual. **Resultados:** Se identificaron 5.632 estudios. Después de aplicar los criterios de inclusión y exclusión y leer los textos en su totalidad, la muestra quedó constituida por 27 artículos. Se identificaron 14 instrumentos en los estudios. Predominó el uso de cuestionarios, con énfasis en el Índice de Función Sexual Femenina (FSFI) asociado a otra herramienta de recolección de datos. Los abordajes estaban dirigidos principalmente a la función sexual de las mujeres embarazadas y ocurrieron en los servicios de salud que atendían a ese público. **Conclusiones:** Los instrumentos aplicables investigan aspectos inherentes a la sexualidad de la gestante, útiles para su aplicación en el contexto de la atención clínica de enfermería durante el prenatal, que pueden contribuir a la integralidad de la atención a la salud sexual.

Palabras clave: Embarazo; Sexualidad; Salud de la Mujer.**RESUMO**

Objetivo: Identificar instrumentos utilizados para avaliar aspectos inerentes à sexualidade de mulheres grávidas. **Método:** Revisão integrativa da literatura realizada de agosto a setembro de 2022. A busca ocorreu nas bases de dados LILACS, MEDLINE, BDNF, IBECs, CINAHL e na biblioteca SciELO. Foram utilizados os descritores *Pregnancy; Surveys and Questionnaires; Quiz; Forms; Instruments; Sexuality; Sexual behavior; Sexual Dysfunction, Physiological; Sexual Function; e Sexual Dysfunction*. **Resultados:** Foram identificados 5.632 estudos. Após aplicação dos critérios de inclusão e exclusão e leitura dos textos na íntegra, a amostra foi composta por 27 artigos. Foram identificados 14 instrumentos. Predominou a utilização de questionários com destaque para o *Female Sexual Function Index (FSFI)* por vezes associado a outro instrumento de coleta de dados. As abordagens direcionaram-se prioritariamente à função sexual de mulheres grávidas e ocorreram em serviços de saúde direcionados ao atendimento desse público. **Conclusões:** Evidenciaram-se instrumentos aplicáveis para investigar aspectos inerentes à sexualidade de mulheres grávidas úteis para aplicação no contexto do cuidado clínico de enfermagem durante a assistência pré-natal, o que pode contribuir para a integralidade da atenção à saúde sexual.

Palavras-chave: Gravidez; Sexualidade; Saúde da Mulher.

INTRODUCTION

In the gestational cycle, anatomical and physiological changes occur, which, in most cases, are without interferences. However, they can interfere with aspects of sexuality, especially as the pregnancy progresses⁽¹⁾. As a result of the hormonal changes typical of pregnancy, the social and cultural contexts, experiences, and individual meanings attributed to the exercise of sexuality⁽²⁻³⁾ the woman goes through a process of adjustment in the physical, emotional, existential, and sexual areas, which can reverberate in changes in sexual behavior and sexuality throughout pregnancy^(1-2,4-5).

During care, prenatal professionals, including nurses, must address issues inherent to sexual health, recognize changes, and build adaptive strategies in the face of difficulties experienced, highlighting aspects of sexuality to guide care in clinical practice⁽⁶⁾, which requires evaluation using validated instruments that support appropriate guidelines and conduct.

The evaluation and integrated approach to aspects inherent to sexual health by professionals in prenatal consultations, perinatal visits, health education, counseling, and support contribute to inciting adaptive sexual behaviors⁽⁷⁾, and promoting sexual and marital satisfaction, which positively impacts the quality of sexual life⁽⁸⁾.

In contrast, the failure to identify changes in aspects of the sexuality of pregnant women and consequently the absence of sexual counseling during pregnancy perpetuates myths, taboos, and false beliefs, which, along with

physical changes, concerns about risks and fluctuations in sexual interest, result in less sexual activity⁽⁹⁾.

Literature review studies on the subject focus on the following: identifying validated instruments to address the sexuality of men and women with spinal cord injury⁽¹⁰⁾, sexual function⁽¹¹⁾ or female sexual function⁽¹²⁾ in clinical trials⁽¹³⁾; to evaluate the correlation between scores from the International Consultation on Incontinence Questionnaire–Urinary Incontinence Short Form (ICIQ–UI SF) and the Female Sexual Function Index in the female population⁽¹⁴⁾; to measure the psychometric properties of instruments that measure sexual desire⁽¹⁵⁾, sexual addiction, compulsivity¹⁶ and sexual dysfunctions⁽¹⁷⁾.

We observed a gap in the scientific knowledge regarding the review of validated instruments to assess aspects of sexuality during pregnancy. Thus, we aimed to identify instruments to assess aspects inherent to the sexuality of pregnant women to help fill this gap.

METHODS

Integrative literature review that followed six steps: 1) Definition of guiding question; 2) Search and selection of primary studies; 3) Data extraction; 4) Critical evaluation; 5) Summary of results; 6) Presentation⁽¹⁸⁾.

From the guiding question (What instruments are presented in the literature to assess aspects inherent to the sexuality of pregnant women?) We used the PVO (Population, Variable of interest, and Outcomes)

strategy and selected the search descriptors according to Table 1.

Table 1 - Subject descriptors of the guiding question.

Strategy itens	Components	Descriptors
Population	Pregnant women	Pregnancy
Variable of interest	Instruments	Surveys and Questionnaires Quiz Forms Instruments
Outcomes	Sexuality	Sexuality Sexual behavior Sexual Dysfunction, Physiological Sexual function Sexual dysfunction

Source: Elaborated by the author

The searches were conducted in August and September 2022 in pairs and independently, with the search equations applied simultaneously by the researchers and later compared to check the methodological rigor, reproducibility, and reliability of the identified results.

To expand the scope of the search, we used the Journal Portal of the Coordination for Higher Education Personnel Improvement (CAPES) to access publications available in the Medical Literature Analysis and Retrieval System (MEDLINE®) databases via EBSCO, Latin America and Caribbean Health Sciences Literature (LILACS), Nursing Database (BDENF), Index Bibliográfica Español en Ciencias de la Salud (IBECS), Cumulative Index to Nursing and Allied Health Literature (CINAHL) via EBSCO Information Services, and in the Scientific Electronic Library Online (SciELO).

The associations of Medical Subject Headings (MeSH) and uncontrolled descriptors (Table 1) were used with the Boolean operators AND and OR, adjusting the search strategies to the data sources.

The results were exported to the Rayyan-Rayyan Intelligent Systematic Review®⁽¹⁹⁾, removing duplicates (the same study identified more than once in the same database or different databases or data libraries). Two reviewers blindly and systematically analyzed titles, abstracts, and the application of inclusion and exclusion criteria. To resolve disagreements, the researchers met to deliberate on the selection by re-reading and meticulous analysis. If the discrepancy persisted, a third reviewer analyzed it.

Articles that used instruments to assess aspects inherent to the sexuality of pregnant women, published in English, Portuguese, or Spanish, and with no time frame were included. Duplicate and repeated studies, qualitative studies, literature reviews, studies not available in full text for download, and those with other populations in the same sample were excluded.

To extract data from primary studies, we used an instrument, previously prepared by the researcher, including identification data (authors, year of publication, country, journal); methodological aspects (objective, type of study,

number of participants, research locus, instrument used for data collection, level of scientific evidence) and results.

The classification of the level of evidence occurred in seven levels: Level 1: systematic review or meta-analysis of relevant randomized controlled clinical trials; Level 2: evidence derived from at least one well-designed randomized controlled clinical trial; Level 3: evidence obtained from well-designed clinical trials without randomization; Level 4: evidence from well-designed cohort or case-control studies; Level 5: systematic descriptive and/or qualitative review; Level 6: evidence from descriptive or qualitative studies; Level 7: evidence from the opinion of authorities and/or report of expert committees⁽²⁰⁾.

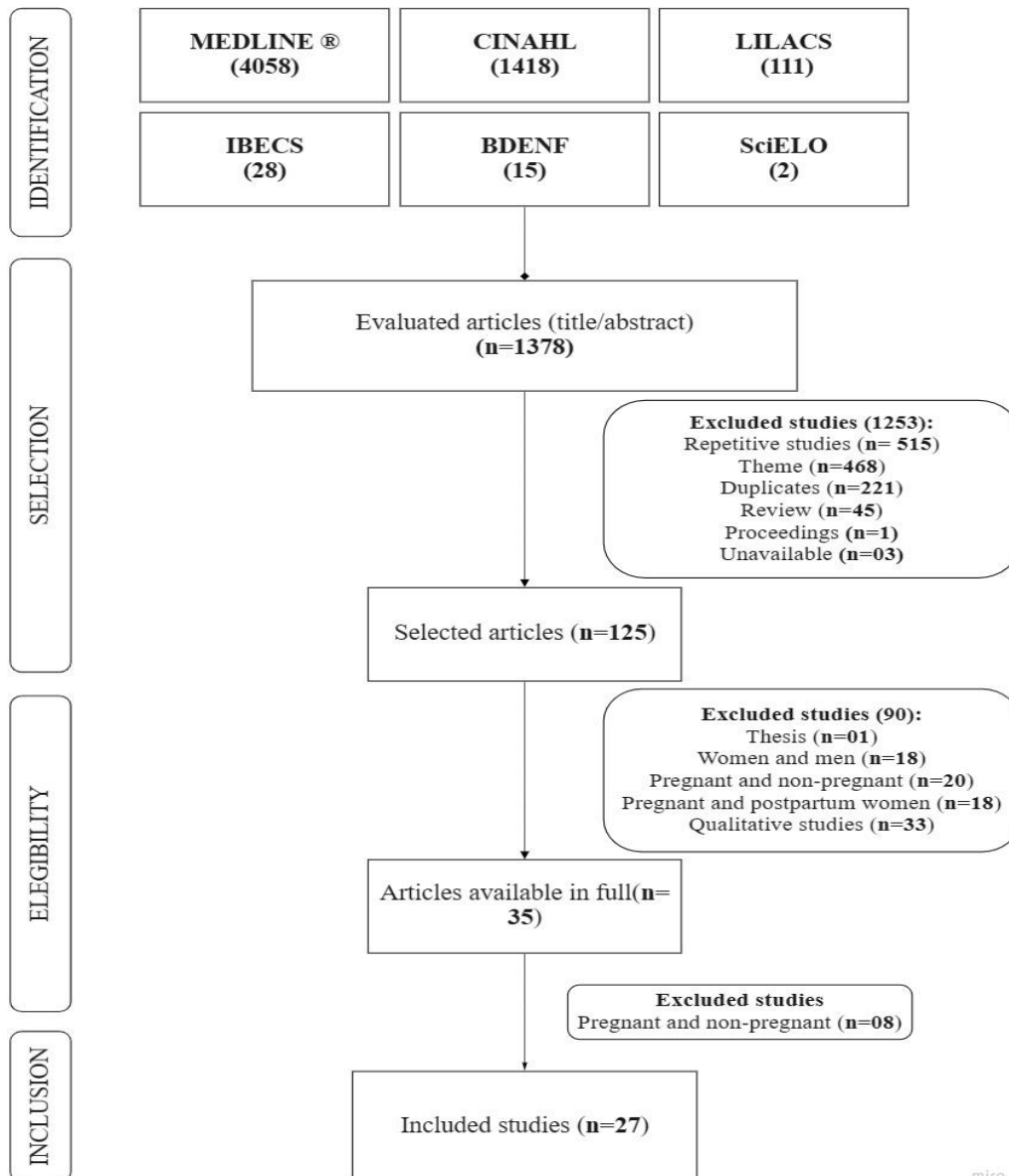
We used the Microsoft Office Word Professional Plus 2019® software for data organization. The data reduction method was used by careful reading, classification

techniques, and division into subgroups of primary sources following the approach and methodological aspects to organize the data obtained from the studies⁽²¹⁾.

After investigating the selected literature, we performed a descriptive synthesis of the data and chart. This procedure has the most relevant information evidenced in the analysis of the primary studies included, allows the identification of knowledge gaps, and makes it possible to direct future research⁽¹⁸⁾. An interpretative analysis and discussion of the findings were carried out.

RESULTS AND DISCUSSION

During the search, the articles underwent a process of identification, screening, and selection considering databases and data library, being represented in the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) flowchart (22) (Figure 1):

Figure 1 – Primary studies selection flowchart.

Source: The authors

We retrieved a total of 5.632 studies. After removing duplicates, repetitions, and language selection, the title and abstract of 1378 studies were read, applying the inclusion and exclusion criteria, resulting in 125 studies. We excluded ninety studies due to the population and method chosen. Therefore, for full reading, there were 35 articles. Among these, eight were excluded for presenting non-pregnant women

concomitantly in the sample. Thus, a total of 27 articles were selected.

The characterization data obtained from the primary studies is summarized in Table 2:

Table 2- Instruments for evaluation of sexuality in pregnant women.

Identification*	Objective	Study design	Instruments
Fuchs <i>et al.</i> (2022) ⁽²³⁾ - <i>Int. j. environ. res. public health (Online)</i> . - Poland - NE 4	-To investigate the sexual function during twin pregnancy	- Prospective study with a quantitative approach - 100 pregnant women -Department of Pregnancy Pathology, the Department of Woman's Health in the School of Health Sciences at the Medical University of Silesia, Katowice, Poland	-Female Sexual Function Index (FSFI)
Cassis <i>et al.</i> (2021) ⁽²⁴⁾ - <i>Eur. j. obstet. gynecol. reprod. biol.</i> - England - NE 6	-Clarifying sexual function during pregnancy	-Cross-sectional study with a quantitative approach - 85 pregnant women - Antenatal clinic from a tertiary hospital	-Female Sexual Function Index (FSFI)
Nakip <i>et al.</i> (2021) ⁽²⁵⁾ - <i>Arch. gynecol. obstet.</i> - Turkey - NE 6	- To adapt the Pregnancy Sexual Response Inventory (PSRI) into Turkish and determine psychometric properties for pregnant women	-Cross-sectional study with a quantitative approach -139 pregnant women -Outpatients Clinic of the Gynaecology and Obstetrics Department	-Pregnancy Sexual Response Inventory (PSRI)
Branicka-Wozniak <i>et al.</i> (2020) ⁽²⁶⁾ - <i>Int. j. environ. res. public health (Online)</i> . - Poland -NE 6	- To assess the sexual and life satisfaction of pregnant women	- Cross-sectional study with a quantitative approach - 181 pregnant women -Pregnancy pathology ward, Independent Public Clinical Hospital	-Self-developed questionnaire -Sexual Satisfaction Questionnaire -Satisfaction with Life Scale (SWLS)
Fuchs <i>et al.</i> (2019) ⁽²⁷⁾ - <i>Int. j. environ. res. public health</i> - Poland - NE 6	- To establish women's sexual activity during each trimester of pregnancy	-Longitudinal study with a quantitative approach - 624 pregnant women -Department of Pregnancy Pathology, the Department of Woman's Health in the School of Health Sciences at the Medical University of Silesia, Katowice, Poland	-Self-administered questionnaire for sociodemographic and obstetric characterization -Female Sexual Function Index (FSFI)

<p>Erbil (2019)⁽²⁸⁾ -<i>International Journal of Caring Sciences</i> - Turkey - NE 6</p>	<p>- To investigate the relationship between sexual function, body image, and the body mass index (BMI) in pregnant women</p>	<p>- Cross-sectional study - 179 pregnant women - Antenatal policlinics of public hospital</p>	<p>-Socio-demographic, obstetric and reproductive characterization questionnaire -Turkish version of Female Sexual Function Index (FSFI) - Body Image Scale (BIS)</p>
<p>Bataglia <i>et al.</i> (2018)⁽²⁹⁾ -<i>Arch. sex. behav.</i> - Italy - NE 4</p>	<p>- To examine modifications in sexual function during pregnancy by means of translabial ultrasonography and administration of questionnaires on sexual activity.</p>	<p>- Quantitative prospective study - 31 pregnant women - Counseling about sexuality in pregnancy - Ultrasonographic and Color Doppler Examination -Ultrasonographic Obstetric Clinic of S. Orsola-Malpighi Hospital</p>	<p>-Italian McCoy Female Questionnaire (MFSQ) -Female Sexual Function Index (FSFI)</p>
<p>Rudge <i>et al.</i> (2018)⁽³⁰⁾ -<i>Rev. bras. ginecol. obstet.</i> - Brazil - NE 6</p>	<p>- To establish the Pregnancy Sexual Response Inventory (PSRI) scores for each domain before and during pregnancy, and to publish the Brazilian Portuguese version of the PSRI.</p>	<p>- Observational, cross-sectional, single-center study - 244 pregnant women - Pregnant women were recruited during antenatal care at Faculdade de Medicina de Botucatu, at Universidade do Estado de São Paulo</p>	<p>-Pregnancy Sexual Response Inventory (PSRI)</p>
<p>Rodrigues-Rubio, Coll-Navarr, Gimenez-Gómez (2017)⁽³¹⁾ -<i>Matronas prof.</i> - Barcelona - NE 6</p>	<p>-To determine the perception of pregnant women about their sexuality</p>	<p>-Observational, descriptive, longitudinal, prospective and multicenter study with a quantitative approach - 213 pregnant women -3 midwives and 4 specialists - Instrument adaptation -Nine sexual and reproductive health care centers</p>	<p>-Questionário autoelaborado -Female Sexual Function Index (FSFI)- modified and adapted version to pregnancy</p>
<p>Dinc, Beji (2017)⁽³²⁾ -<i>International Journal of Caring Sciences</i> - Turkey - NE 6</p>	<p>-To examine the Turkish validity and reliability of The Body Exposure during Sexual Activities Questionnaire (BESAQ), which was developed by Cash et al, on pregnant women and to adapt the questionnaire into Turkish</p>	<p>-Methodological validation study - 10 professors - 169 pregnant women - Obstetrics polyclinic of a training and research hospital in Istanbul between December 2009 and December 2010</p>	<p>-Body Exposure during Sexual Activities Questionnaire (BESAQ)</p>
<p>Ninivaggio <i>et al.</i> (2017)⁽³³⁾ -<i>Int. urogynecol. j. (Print)</i>. - Mexico - NE 4</p>	<p>- To describe sexual function during pregnancy in a large prospective cohort of healthy nulliparous women using a valid measure of sexual function, the Female Sexual Function Index (FSFI)</p>	<p>-Prospective cohort of healthy primiparous women - 623 pregnant women -University of New Mexico Midwifery Service for Prenatal Care</p>	<p>-Socio-demographic and obstetric characterization questionnaire -Female Sexual Function Index (FSFI)</p>



<p>Penã, Blanco (2016)⁽³⁴⁾ -<i>Rev Obstet Ginecol Venez</i> - Venezuela -NE 6</p>	<p>- To evaluate evolution of the function and sexual pattern in pregnant women attending the Prenatal Service Concepción Palacios Maternity.</p>	<p>-Prospective, descriptive, comparative, cross-sectional study with a quantitative approach - 345 pregnant women - Maternity Hospital</p>	<p>-The sexual pattern form -Female Sexual Function Index (FSFI)</p>
<p>-Iliyasu <i>et al.</i> (2016)⁽³⁵⁾ -<i>African Journal of Reproductive Health</i> December - Nigeria -NE 4</p>	<p>-To examine prevalence and factors associated with vaginal intercourse during pregnancy in Kano, Nigeria.</p>	<p>-Cohort, cross-sectional -336 pregnant women -Teaching Hospital</p>	<p>- The Pregnancy Sexual Response Inventory (PSRI) (PSRI) was adapted according to the objectives</p>
<p>-Mazón (2016)⁽³⁶⁾ -<i>Matronas prof.</i> - Spain - NE 6</p>	<p>-To describe the changes that occur in women's sexual desire during pregnancy</p>	<p>-Descriptive, longitudinal, prospective study with a quantitative approach - 50 pregnant women -Obstetric consultations at the Hospital San Agustín de Avilés, hospital regional nível III, located in the Health Area III of the Principado das Astúrias</p>	<p>-Questionnaire with 23 questions -Female Sexual Function Index (FSFI) -Función Sexual de la Mujer (FSM)</p>
<p>Abouzari-Gazafroodi <i>et al.</i> (2015)⁽³⁷⁾ -<i>Reprod. health.</i> - Iran - NE 6</p>	<p>-To assess the factors that affect women's sexual functioning during pregnancy</p>	<p>- Cross-sectional study - 518 pregnant women - 10 specialists -Five prenatal clinics of public health services</p>	<p>-Structured questionnaire prepared by the authors with 17 questions</p>
<p>Kisa, Zeyneloglu, Guner (2014)⁽³⁸⁾ -<i>J. sex marital ther.</i> - Turkey - NE 6</p>	<p>-To examine the impact of sexual life on the marital adjustment of healthy pregnant women using standardized, validated and self-administered questionnaires.</p>	<p>- Descriptive, cross-sectional study with a quantitative approach - 607 pregnant women -Obstetrics clinics</p>	<p>-Sexual Quality of Life Questionnaire-Female (SQLQ-F) -Marital Adjustment Scale (MAS)</p>
<p>-Amaral, Monteiro (2014)⁽³⁹⁾ -<i>Rev. bras. ginecol. obstet.</i> - Brazil - N6</p>	<p>-To adapt the Pregnancy and Sexual Function Questionnaire (PSFQ) for use in Brazil, in addition to assessing its psychometric properties.</p>	<p>-Methodological study with a quantitative approach - After evaluation by specialists, a pre-test was carried out with 30 pregnant women -352 pregnant women were interviewed for validation analysis -Basic Health Unit on prenatal and maternity consultation days</p>	<p>-Pregnancy and Sexual Function Questionnaire (PSFQ) applied in face-to-face interview</p>

Bomfim, Melro (2014) ⁽⁴⁰⁾ -UNOPAR Cient., Ciênc. biol. saúde. - Brazil - NE 6	- To assess the sexual function of women during the gestational period	-Descriptive, cross-sectional and quantitative study - 41 pregnant women -Outpatient clinic of a maternity school	-Female Sexual Function Index (FSFI)
González, González, Paneque (2012) ⁽⁴¹⁾ -Enferm. glob. - Spain - NE 4	- Evaluate the level of knowledge about sexuality in pregnancy before and after pregnancy training program performed by a group of pregnant women in the second and third trimesters	-Quasi-experimental study -40 normal-risk pregnant women in the second and third trimesters of pregnancy -Application of a sex education program - Instrument validated by judges - Three health centers for the population of Huelva	-Structured questionnaire prepared by the authors with 15 closed questions according to the purpose of the study
Ferreira <i>et al.</i> (2012) ⁽⁴²⁾ -Rev. Bras Ginecol Obstet - Brazil - NE 6	-To evaluate in healthy pregnant women, in the second trimester, the association between sexual function and quality of life, as well as between sexual function and sexual satisfaction	- Cross-sectional study with a quantitative approach -51 pregnant women at usual risk - Usual risk prenatal outpatient clinic	-Quotient Female Version (QS-F) -World Health Organization instrument to evaluate quality of life (WHOQOL-bref)
Barbosa <i>et al.</i> (2011) ⁽⁴³⁾ -Rev. eletrônica enferm. - Brazil - NE 6	- To characterize the sexuality of pregnant women	- Cross-sectional, descriptive study with a quantitative approach -108 normal-risk pregnant women, including adolescents - Health Center	-Self-composed form, structured and applied by interview
Naldoni <i>et al.</i> (2011) ⁽⁴⁴⁾ - <i>J. sex marital ther.</i> - Brazil - NE 6	-To assess the sexual function of a group of Brazilian pregnant women and identify associated variables	- Cross-sectional study with a quantitative approach - 137 pregnant women - Two Basic Health Units	-Female Sexual Function Index (FSFI)
Leite <i>et al.</i> (2009) ⁽⁴⁵⁾ -Rev. Assoc. Med. Bras. - Brazil - NE 4	- To assess sexual function and determine the prevalence of sexual dysfunction among adolescents and adult women using the Female Sexual Function Index (FSFI)	- Cohort study - pregnant women - During antenatal consultations without a specific location	-Female Sexual Function Index (FSFI)
-Rudge <i>et al.</i> (2009) ⁽⁴⁶⁾ - <i>Reprod. health.</i> - Brazil - NE 6	-To project and validate the Pregnancy Sexual Response Inventory (PSRI)	- Cross-sectional study - 25 specialists - 105 pregnant women -Prenatal consultations at the Faculty of Medicine of Botucatu	-Pregnancy Sexual Response Inventory (PSRI)
-Leite <i>et al.</i> (2007) ⁽⁴⁷⁾ -Rev. bras. ginecol. obstet. - Brazil	-To translate and validate the Female Sexual Function Index (FSFI) for Brazilian pregnant women	- Prospective study - Quantitative approach - 92 normal-risk pregnant women (first, second and	-Female Sexual Function Index (FSFI)

- N6		third trimesters) - Ambulatory	
Gokyildiz; Beji (2005) ⁽⁴⁸⁾ - <i>J. sex marital ther.</i> - Istanbul - NE 6	- To define the effects of pregnancy on sexual life	- Descriptive study with a quantitative approach -150 pregnant women - Istanbul University Antenatal Polyclinic, Faculty of Medicine	-Self-prepared form
Aslan <i>et al.</i> (2005) ⁽⁴⁹⁾ - <i>Int. j. impot. res.</i> - Turkey - NE 4	-To assess sexual function during pregnancy using the female model.	- Prospective cohort - 40 pregnant women -During antenatal appointments without specifying location	-Female Sexual Function Index (FSFI) -Other (unspecified) about sex life in each trimester

*Level of Evidence (LE)

Source: The authors

As can be seen in Chart 2, the studies were conducted from 2005⁽⁴⁸⁻⁴⁹⁾ to 2022⁽²³⁾ and published predominantly in English^(23-30,32-33,35,37-38,44-46,48-49). As for the country of origin, research developed in South America stood out: Brazil^(30,39,40,42-47), Mexico⁽³³⁾, and Venezuela⁽³⁴⁾ and Level 6 of Evidence^(24-29,31,32,34,36-40,43-44,46-48).

The studies aim to evaluate^(26,34,37,40-42,44,45,49), characterize⁽⁴³⁾, determine perception⁽³¹⁾, investigate^(23,28), examine^(29,35,38), clarify⁽²⁴⁾, describe^(33,36), establish^(27,30), adapt^(25,39), translate and validate⁽⁴⁷⁾, design and validate⁽⁴⁶⁾, examine and validate⁽³²⁾, and define⁽⁴⁸⁾ aspects regarding sexuality^(25,31,41,43,48), sexual function^(23,24,28,29,33,34,37,39,40,42,44,45,47,49), sexual response^(25,30,46), sexual activity^(27,32), sexual desire⁽³⁶⁾, sexual and life satisfaction⁽²⁶⁾, sexual dysfunction⁽⁴⁵⁾, vaginal intercourse⁽³⁵⁾, body exposure during sexual activity⁽³²⁾, marital sexual life⁽³⁸⁾ or sexual life⁽⁴⁸⁾ of pregnant women.

There was evidence of centralization of approaches related to sexual function^(23,24,28,29,33,34,37,39,40,42,44,45,47,49). In this review, there were no instruments with objectives specifically for analyzing sexual practices and positions during pregnancy. Although, in a previous study⁽⁵⁰⁾ the researcher used the Questionnaire on Sexuality in Pregnancy (QSP) with some questions about sexual practices and positions.

We identified 14 instruments validated by other authors or in research⁽²³⁻⁴⁴⁾ with cultural adaptation with translation and validation^(25,32,39,47) and satisfactory evaluation by specialists^(31,32,35-39,41,46,48), using the concept validity index⁽³²⁾ or even assessing reliability through internal consistency, test-retest^(25,39,46,47), reproducibility⁽⁴⁷⁾, kappa assessment between two observers⁽³⁹⁾ and validity (comparison with QS-F⁽⁴⁷⁾; comparison with FSFI⁽²⁵⁾, criterion validity⁽²⁵⁾, factorial analysis⁽³⁹⁾, Cronbach's alpha^(28,32,37,46) and group t-test dependents to test temporal invariance⁽³²⁾ and content⁽²⁵⁾.

The surveys also used pilot studies^(25,27,32,35,37,39,42,43,46-48) and self-prepared instruments^(26,27,29,31,34,36,37,41,43,48) or adapted to the research objectives^(28,31,32,35,38).

The 27 studies included in this review used validated questionnaires, forms, scales, or sheets developed by the authors to contemplate objectives inherent to aspects of the sexuality of pregnant women. The most used instrument is the questionnaires^(23,24,26-29,31,33,34,36-41,44,45,47,49). The Female Sexual Function Index (FSFI) predominated^(23,24,27-29,31,33,34,36,40,44,45,47,49). The following are mentioned: the Pregnancy Sexual Response Inventory (PSRI)^(25,30,35,46); four questionnaires self-developed for the research^(26,31,37,41,49); a questionnaire about sexual life in each gestational trimester⁽⁴⁹⁾ and Sexual Satisfaction⁽²⁶⁾; the Italian McCoy Female Sexuality Questionnaire (MFSQ)⁽²⁹⁾;

the Body Exposure during Sexual Activities Questionnaire (BESAQ)⁽³²⁾; the Sexual Quality of Life-Female (SQLQ-F) and questionnaire and Marital Adjustment Scale (MAS)⁽³⁸⁾; Pregnancy and Sexual Function Questionnaire (PSFQ)⁽³⁹⁾; Quotient Female Version (QS-F)⁽⁴²⁾ and Sexual Pattern Form⁽³⁴⁾.

Studies^(26,28,42) have included an instrument to assess factors that are not specific to sexuality but closely related: the World Health Organization instrument to evaluate quality of life (WHOQOL-bref)⁽⁴²⁾; Body Image Scale (BIS)⁽²⁸⁾ and Satisfaction with Life Scale (SWLS)⁽²⁶⁾.

The use of FSFI predominated in 14 studies^(23,24,27-29,31,33,34,36,40,44,45,47,49) applied individually^(33,36,39,43,45,47,49), depending on the proposed objective, with other instruments^(23,26,27,28,29,31,33,34,40,44) or as a comparison in the process of adapting another tool^(25,39). This reaffirms the validity of the instrument, as it demonstrates applicability and usefulness for assessing the sexual function of pregnant women by highlighting factors that can affect sexual function.

The FSFI instrument is validated and proven to be used to assess the sexual function of pregnant women, as it can measure the results of therapeutic interventions, and providing dialogue between the professional and the patient, offering prenatal assistance in targeting sexuality⁽⁴⁷⁾.

This is a self-administered questionnaire developed in 2000 and used internationally, validated and translated for use in pregnant women in Brazil⁽⁴⁷⁾, consisting of 19 questions divided into six domains (desire, excitement, lubrication, orgasms, satisfaction, and pain), scored from 0 to 5 to evaluate women's sexual functioning. The sum of the six domain scores is the final result. The maximum score is 36, and the lowest is 2. A low score indicates an abnormality in sexual functioning, and an FSFI score less than or equal to 26.55 characterizes FSFI sexual dysfunction^(23,24,27-29,31,33,34,36,40,44,45,47,49).

In the adapted version⁽³¹⁾ of the six FSFI domains, three were partially modified (satisfaction, orgasm, and pain), and excitement and lubrication were eliminated, using 14 of the 19 items of the original questionnaire. The original scale of 0 to 5 points was maintained.

The PSRI^(25,30,35,46) is a validated and reliable semi-structured questionnaire⁽²⁵⁾ consisting of two sessions with 38 questions (12 on sociodemographic characteristics and 26 on sexual behavior activity before and during pregnancy), the questions about sexual response are grouped into ten domains (eight assess women feelings and two their perception of their partner sexual interest). All include items of possible suffering since it is necessary to investigate sexual dysfunction^(25,30,35,46).

For each subscale, there are two periods: before and during pregnancy. There are 11 questions in the first period and 15 in the second. The total score ranges from 0 to 100 points. Scores from 0 to 25 are categorized as “Very bad”, 25-50 as “Bad”, 50-75 as “Good” and 75-100 as “Excellent”⁽²⁵⁾.

The variables of *Función Sexual de la Mujer* (FSM) are not mentioned, making it impossible to analyze their relationship with the object of this study⁽³⁶⁾. Four self-developed questionnaires^(26,36,37,41) and three forms^(28,43,48) were also cited, which include sociodemographic data, obstetric-gynecological questions, and information about the sexual relationship/functioning of the couple and the pregnant woman. One of the forms⁽⁴⁸⁾ considered the stages of sexual response (desire, excitement, plateau, orgasm, and resolution) for elaboration. Data were collected for the sociodemographic, obstetric, and reproductive characterization of the participants^(23,24,26,28,30-33,35-42,45,47-49) and Body Mass Index (BMI)^(24,25,28,29,33).

The Sexual Satisfaction questionnaire developed by M. Plopa consists of a standardized research instrument that includes ten statements about the intimate aspects of the relationship divided into three dimensions (caress, closeness, and sex). In the mentioned study, it was used together with the SWLS to classify the answers on a scale⁽²⁶⁾.

The MFSQ is a validated two-factor Italian tool to compare women with and without sexual dysfunction, being measured by a Likert scale of up to 7 points with two dimensions: sexuality (desire, orgasm, excitement, pain, satisfaction) and partnership (sexual health of the partner, feeling, relationship), categorizing the suspected dysfunction when the final score for sexuality was <35 points^(29,31).

The BESAQ scale was developed by Cash and collaborators in 2004, consisting of 28 items that assess self-awareness concerning the body during sexual intercourse, sexual intercourse experiences, anxiety formed by focusing on body image, and a woman who avoids her sexual partner because of her body image. The scale can be applied to women and men over 18 years. Each item is Likert type scored from 0 to 4. Scores are 0=Never, 1=Rarely, 2=Sometimes, 3=Often, and 4=Always or almost always. The total score is the quotient of the total score obtained from all items by the number of items⁽²⁸⁾. Higher scores on the scale reflect conscious focus on avoiding sexual intercourse due to the influence of body image⁽³²⁾.

The PSFQ consists of a questionnaire with 27 questions related to sexual activity that, in addition to assessing the body's perception of the couple's intimate life, presents domains regarding changes in female sexual life during pregnancy, frequency of

sexual intercourse and sexual satisfaction, lubrication and dyspareunia. After adaptation and analysis of psychometric properties, it proved to be reproducible and effective in the applicability of the instrument to assess sexual function during pregnancy or in the immediate postpartum period⁽³⁹⁾.

The SQLQ-F aims to measure the quality of women's sexual life, consisting of 18 items with responses on a 6-point Likert scale ranging from 0 (completely agree) to 5 (completely disagree). Positive items 1, 5, 9, 13, and 18 were reverse scored. The total score ranges from 0 to 100. Higher scores indicate better quality of sexual life⁽³⁸⁾.

The MAS is a 15-item scale developed by Locke and Wallace in 1959, widely used to assess marital relationships, classifying them as satisfied and dissatisfied. The scale is composed of a question about general adherence; a single item scored from 0 (very unhappy) to 35 (perfectly happy); eight questions about possible areas of agreement, six of them scored on a 6-point Likert scale ranging from 0 (always disagree) to 5 (always agree); a single item scored on a 6-point Likert scale ranging from 0 (always disagree) to 8 (always agree); one item scored ranging from 0 (always disagree) to 15 (always agree) on the same scale; and six questions to measure conflict resolution, commitment, and communication. Scale scores increased from incompatible to compatible. The cutoff point

is 43.5 to distinguish individuals with compatible and incompatible marriages⁽³⁸⁾.

The QS-F evaluates sexual function, consisting of 10 questions that verify each phase of the sexual response cycle and includes other domains: desire and sexual interest; preliminary; personal excitement and attunement with the partner; comfort; orgasm and satisfaction. Also, it allows the identification of specific dysfunctions of desire, excitement, orgasm, dyspareunia, or vaginismus. Each question has alternatives with scores ranging from zero to five. The global sexual performance/satisfaction is evaluated by the final score calculated based on the ten individual questions resulting in a value ranging from zero (minimum) to one hundred (maximum) points. Global sexual performance/satisfaction is calculated by multiplying the sum of the values of the questions by 2 and is interpreted as follows: 82–100 points (good to excellent); 62–80 points (fair to good); 42–60 points (unfavorable to regular); 22–40 points (bad to unfavorable) and 0–20 points (none to bad)⁽⁴²⁾.

Finally, the sexual pattern sheet⁽³⁴⁾ consists of six simple selection questions that include sexual orientation, sexual activity, sexual positions, source of information on the subject, frequency, and the reasons that hinder sexual activity during pregnancy.

The instruments used to assess aspects of sexuality were predominantly self-

administered^(23,24,27-29,32,33,38,41,42,45,49) or applied in an interview format^(26,30,34,35,39,43,46-48).

Although the instruments have been applied to pregnant women, only the sexual form⁽³⁴⁾, the PSRI^(25,35,30,46), PSFQ⁽³⁹⁾, and an elaborate form⁽⁴⁸⁾ contain specific questions about pregnancy, and only the last two analyses aspects by gestational trimesters. It is worth mentioning that using specific instruments is an advantage because it considers particularities and conditions experienced during pregnancy.

Although most of the primary studies did not mention which professional categories applied instruments of data collection (only one study referred to an obstetric nurse)⁽³³⁾ it is important to mention that these can be used by prenatal professionals, including the nurse, to analyze changes and implications during pregnancy, and to guide adaptive solutions that consider singularities and subjectivities.

Considering the importance of sexual health for maintaining self-esteem, relationships, and the quality of life of pregnant women, health professionals need to evaluate the impacts of pregnancy on female sexual function⁽⁶⁻⁹⁾. Thus, it is necessary to use instruments that allow analyzing safely and practically the nuances of sexuality during pregnancy.

However, in only two studies⁽³⁰⁻⁴⁸⁾ the instruments used were fully presented⁽³⁰⁾ or partially⁽⁴⁸⁾, which limited the comparison

and detailed analysis. Thus, the information was identified in the method objectively and succinctly. The importance of facilitating access to data collection instruments used in research is highlighted to enable analysis and use in further studies.

Study participants ranged from 31⁽²⁹⁾ to 623⁽³³⁾ and data collection approaches occurred in places intended for obstetric and prenatal care: hospital^(24,29,36,38), hospital and birthing school⁽²⁶⁾, teaching hospital^(32,35), maternity hospital⁽³⁴⁾, school maternity clinic⁽⁴⁰⁾, clinics^(25,42,47), basic health and maternity unit⁽³⁹⁾, basic health units⁽⁴⁴⁾, health center^(41,43), csexual and reproductive health center⁽³¹⁾, school of health sciences linked to the university^(23,27), during prenatal consultations^(28,30,37,45,46, 49), medical school^(30,46, 48), service clinics⁽³⁷⁾, public hospital⁽²⁸⁾ or without specifying the type of health service^(47,49).

The choice of these locations for data collection can be justified by the ease of contact with the pregnant women since they are at strategic points for the provision of obstetric and prenatal care in which women can have access to longitudinal and referenced care during pregnancy⁽⁵¹⁾.

Pregnancy research is justified by the evidence in the literature^(4,50,52) of pregnant women^(4,50) who are primiparous⁽⁵⁴⁾ have changes in sexual function^(4,50,52) and have significant risk factors for the development or worsening of sexual dysfunction.

Sociodemographic, obstetric and behavioral variables are related to sexual dysfunctions, for example, women between 21 and 30 years old are 4.6 times more likely to have sexual dysfunction; nulliparous and in the third trimester of pregnancy had higher rates of sexual dysfunction; behavioral variables, in addition to the type of health service used by pregnant women (3.8 of the public served in public services are more likely to have sexual dysfunction)⁽⁵⁾.

CONCLUSION

In this research, we identified 14 instruments (questionnaire, form, inventory, scale) applicable in the context of clinical care during prenatal care aimed at investigating aspects inherent to the sexuality of pregnant women, with emphasis on sexual function, with the FSFI being the questionnaire most used.

The use of instruments to assess aspects of sexuality constitutes a strategy for the effectiveness of quality in clinical practice in sexual health, as they allow health professionals, including nurses, to evaluate and intervene to contribute to adaptations and improve the quality of sexual life through the development of targeted interventions.

The restriction of databases and libraries and the language are possible limitations of the study. Despite this, the findings of this review answered the study's question and showed the absence of

instruments aiming at evaluating sexual practices and sexual positions during pregnancy. Therefore, there is a need for the development of specific tools for analyzing this dimension of sexual behavior, as well as conducting research with a view to broad searches in the scientific literature (systematic and scoping reviews) to better understand sexual behavior during pregnancy.

Such propositions contribute to strengthening discussions on the subject and encourage the development of further studies. Based on this understanding, guidelines can be reinforced to promote sexual health during prenatal care, aiming to achieve completeness and quality of health care.

REFERENCES

1. Köhler BSM, Martins MP, Pivetta HMF, Braz MM. Disfunções sexuais nos três trimestres gestacionais. *Conscientiae Saúde (Online)* [Internet]. 2017 [acesso 23 agosto 2020]; 16(3): 360-66. Doi: <https://doi.org/10.5585/conssaude.v16n3.7652>
2. Lopez JSS, Basulto DIC. Sexo y embarazo: ideas de profesionales de la salud. *Psicol soc* [Internet]. 2011 [acesso 23 agosto 2020]; 23(3): 608-615. Doi: <https://doi.org/10.1590/S0102-71822011000300019>
3. Balastena Sánchez JM, Fernández Hernández B, Sanabria Negrín JG, Fernández Alech R. Percepción de la mujer gestante sobre su función sexual. *Rev.cienc med Pinar Rio* [Internet]. 2014 [acesso 23 agosto 2020];18(3):363-74. Disponível em: <http://scielo.sld.cu/pdf/rpr/v18n3/rpr02314.pdf>
4. Pereira EV, Belém JM, Alves MJH, Maia ER, Firmino PRA, Quirino GS. Function,

practices and sexual positions of pregnant women. *Rev. enferm. UFPE on line* [Internet]. 2018 [acesso 23 agosto 2020];12(3):772-780.

Doi: <https://doi.org/10.5205/1981-8963-v12i3a231225p772-780-2018>

5. Soares PRAL, Calou CGP, Ribeiro SG, Aquino OS, Almeida PC, Pinheiro AKB. Sexualidade em gestantes e fatores de risco associados. *Rev bras Enferm* [Internet]. 2020[acesso 23 agosto 2020];73(Suppl 4):1-7e20180786. Doi:

<https://doi.org/10.1590/0034-7167-2018-0786>

6. Guimarães DM, Oliveira ZM. Pregnancy and sexuality: implications in marital relationship. *Rev. enferm. UFPE on line* [Internet]. 2015. [acesso 23 Jul 2020];9(Supl. 4):8029-37. Doi:

<https://doi.org/10.5205/1981-8963-v9i4a10556p8029-8037-2015>

7. Khajehei K, Doherty M. Women's experience of their sexual function during pregnancy and after childbirth: a qualitative survey. *Br J midwifery* [Internet]. 2018. [acesso 23 Jul 2020];26(5):318-328. Doi:

<https://doi.org/10.12968/bjom.2018.26.5.318>

8. Mahmodi Y, Valiee S. A clinical trial of the effect of sexual health education on the quality of life of married Muslim women in Iran. *Women and birth* (Online) [Internet]. 2016.[acesso 23 Jul 2020];29(1):18-22. Doi:

<https://doi.org/10.1016/j.wombi.2015.08.001>

9. Fernández-sola C, Huancara-kana D, Granero-molina J, Carmona-samper E, López-rodríguez MM. Sexualidade durante todas as fases da gravidez: experiências de gestantes. *Acta Paul Enferm* [Internet]. 2014 [acesso 23 Jul 2020];34(4):1982-3703. Doi:

<https://doi.org/10.1590/1982-0194201800043>

10. Moura ACML, Costa PHV, Polese JC. Instrumentos de avaliação da sexualidade em homens e mulheres após a lesão medular. *Acta fisiátrica* [Internet]. 2019 [acesso 23 Jul 2020];26(1):52-8. Doi:

<https://doi.org/10.11606/issn.2317-0190.v26i1a163789>

11. Jones LRA. The use of validated questionnaires to assess female sexual dysfunction. *World J Urol* [Internet]. 2002[acesso 24 Jul 2020];20(2):89-92. Doi: <https://doi.org/10.1007/s00345-002-0268-1>

12. Meston CM, Derogatis LR. Validated instruments for assessing female sexual function. *J Sex Marital Ther* [Internet]. 2011 [acesso 24 Jul 2020];28(Sup.1):155-64. Doi: <https://doi.org/10.1080/00926230252851276>

13. Rosen RC. Assessment of female sexual dysfunction: Review of validated methods. *Fertil Steril* [Internet]. 2002 [acesso 24 Jul 2020];77(Sup. 4):89-93. Doi: [https://doi.org/10.1016/S0015-0282\(02\)02966-7](https://doi.org/10.1016/S0015-0282(02)02966-7)

14. Brasil DMM, Nicolau AIO, Bilhar APM, Karbage SAL, Lucena SV, Carmo TF, et al. Incontinência urinária e função sexual feminina: revisão integrativa de questionários validados. *Acta Paul Enferm* [Internet]. 2018[acesso 24 Jul 2020];31(5):558-63. Doi: <https://doi.org/10.1590/1982-0194201800077>

15. Cartagena-Ramos D, Fuentealba-Torres M, Rebutini F, Leite ACAB, Alvarenga WDA, Arcêncio RA, et al. Systematic review of the psychometric properties of instruments to measure sexual desire. *BMC Med Res Methodol* [Internet]. 2018 [acesso 24 Jul 2020];18(1). Doi: <https://doi.org/10.1186/s12874-018-0570-2>

16. Hook JN, Hook JP, Davis DE, Worthington EL, Penberthy JK. Measuring sexual addiction and compulsivity: A critical review of instruments. *J Sex Marital Ther* [Internet]. 2010 [acesso 25 Jul 2020];36(3):227-60. Doi: <https://doi.org/10.1080/00926231003719673>

17. Corona G, Jannini EA, Maggi M. Inventories for male and female sexual dysfunctions. *Int J Impot Res.* [Internet]. 2006 [acesso 25 Jul 2020];18(3):236-50. Doi: <https://doi.org/10.1038/sj.ijir.3901410>

18. Mendes KDS, Pereira Silveira RCC, Galvão CM. Use of the bibliographic

- reference manager in the selection of primary studies in integrative reviews. *Texto & Contexto Enferm* [Internet]. 2019 [acesso 25 Jul 2020]; 28:1-13. Doi: <https://doi.org/10.1590/1980-265X-TCE-2017-0204>
19. Ouzzani M, Hammady H, Fedorowicz Z, Elmagarmid A. Rayyan-a web and mobile app for systematic reviews. *Syst Rev* [Internet]. 2016 [acesso 27 agosto 2022];5:210. Doi: <https://doi.org/10.1186/s13643-016-0384-4>
20. Melnyk BM, Fineout-Overholt E, Gallagher-Ford L, Stillwell SB. Evidence-based practice, step by step: Sustaining evidence-based practice through organizational policies and an innovative model. *Am J Nurs* [Internet]. 2011 [acesso 25 Jul 2020];111(9):57-60. Doi: <https://doi.org/10.1097/01.NAJ.0000405063.97774.0e>
21. Whitemore R, Knafk K. The integrative review: updated methodology. *J adv nurs* [Internet]. 2005 Dec. [acesso 10 Out 2017];52(5):546-53. Doi: <https://doi.org/10.1111/j.1365-2648.2005.03621.x>
22. Moher DAL, Tetzlaff J, Altman DG and The PRISMA Group. Epidemiology and Reporting Characteristics of Systematic Reviews. *PLoS Med* [Internet]. 2009 [acesso 10 Out 2017];4(3):447-455. Doi: <https://doi.org/10.1371/journal.pmed.0040078>
23. Fuchs A, Dulaska A, Bodziony J, Szul M, Drosdzol-Cop A. Female Sexual Function in Twin Pregnancy. *Int J Environ Res Public Health* [Internet]. 2022 [acesso 25 Jul 2020];19(6). Doi: <https://doi.org/10.3390/ijerph19063546>
24. Cassis C, Mukhopadhyay S, Morris E, Giarenis I. What happens to female sexual function during pregnancy? *Eur J Obstet Gynecol Reprod Biol* [Internet]. 2021 [acesso 25 Jul 2020];258:265-8. Doi: <https://doi.org/10.1016/j.ejogrb.2021.01.003>
25. Nakip G, Gürşen C, Baran E, Üzelpasaci E, Çinar GN, Özgül S, et al. Psychometric properties of the Turkish version of the Pregnancy Sexual Response Inventory. *Arch Gynecol Obstet* [Internet]. 2021 [acesso 25 Jul 2020];304(1):101-7. Doi: <https://doi.org/10.1007/s00404-020-05933-4>
26. Branecka-Woźniak D, Wójcik A, Błażejewska-Jaśkowiak J, Kurzawa R. Sexual and life satisfaction of pregnant women. *Int J Environ Res Public Health* [Internet]. 2020 [acesso 25 Jul 2020];17(16):1-15. Doi: <https://doi.org/10.3390/ijerph17165894>
27. Fuchs A, Czech I, Sikora J, Fuchs P, Lorek M, Skrzypulec-Plinta V, et al. Sexual Functioning in Pregnant Women. *Int J Environ Res Public Health* [Internet]. 2019 [acesso 26 Jul 2020];16(21). Doi: <https://doi.org/10.3390/ijerph16214216>
28. Erbil N. The Relationship between Sexual Function, Body Image and Body Mass Index among Pregnant Women. *Int J Caring Sci* [Internet]. 2019 [acesso 26 Jul 2020];12(2):925-36. Disponível em: <http://search.ebscohost.com/login.aspx?direct=true&db=c8h&AN=138636079&lang=pt-br&site=ehost-live>
29. Battaglia C, Persico N, Zanetti I, Guasina F, Mattioli M, Casadio P, et al. Morphometric and Vascular Modifications of the Clitoris During Pregnancy: A Longitudinal, Pilot Study. *Arch Sex Behav* [Internet]. 2018 [acesso 26 Jul 2020];47(5):1497-505. Doi: <https://doi.org/10.1007/s10508-017-1046-x>
30. Rudge CVC, Calderon IMP, Almeida APM, Piculo F, Rudge MVC, Barbosa AMP. Score establishment and Brazilian Portuguese version of the pregnancy sexual response inventory (PSRI). *Rev Bras Ginecol e Obstet* [Internet]. 2018 [acesso 26 Jul 2020];40(6):322-31. Doi: <https://doi.org/10.1055/s-0038-1656536>
31. Rodríguez-Rubio M, Coll-Navarro E, Giménez-Gómez N. Evolución y cambios de la sexualidad durante la gestación: visión de la mujer embarazada. *Matronas prof* [Internet]. 2017 [acesso 26 Jul 2020];18(3):88-95. Disponível em: <original-evolucion-y-cambios-sexualidad-gestantes.pdf> (federacion-matronas.org)

32. Dinc H, Beji NK. Cultural Adaptation, Internal Consistency and Test–Retest Reliability of the Turkish Version of the Body Exposure during Sexual Activities Questionnaire. *Int J Caring Sci* [Internet]. 2017 [acesso 26 Jul 2020];10(3):1178–86. Disponível em: [8_dink_original_10_3 \(internationaljournalofcaringsciences.org\)](http://8_dink_original_10_3(internationaljournalofcaringsciences.org))
33. Ninivaggio C, Rogers RG, Leeman L, Migliaccio L, Teaf D, Qualls C. Sexual function changes during pregnancy. *Int Urogynecol J* [Internet]. 2017 [acesso 26 Jul 2020];28(6):923–9. Doi: <https://doi.org/10.1007/s00192-016-3200-8>
34. Peña MC, Blanco MG. Función y patrón sexual: características y evolución durante el embarazo. *Rev obstet ginecol Venezuela* [Internet]. 2016 [acesso 26 Jul 2020];76(3):1-11. Disponível em: http://ve.scielo.org/scielo.php?script=sci_arttext&pid=S0048-77322016000400003&lng=es
35. Iliyasu Z, Galadanci HS, Ahmed Z, Gajida AU, Aliyu MH. Prevalence and patterns of sexual activity during pregnancy in Kano, Northern Nigeria. *Afr J Reprod Health* [Internet]. 2016 [acesso 26 Jul 2020];20(4):99–107. Doi: <https://doi.org/10.29063/ajrh2016/v20i4.10>
36. Mazón MG. El deseo sexual de la mujer a lo largo de la gestación. *Matronas prof* [Internet]. 2016 [acesso 27 Jul 2020];17(3):90–7. Disponível em: <https://www.federacion-matronas.org/wp-content/uploads/2018/01/original-deseo-sexual-en-el-embarazo.pdf>
37. Abouzari-Gazafroodi K, Najafi F, Kazemnejad E, Rahnema P, Montazeri A. Demographic and obstetric factors affecting women’s sexual functioning during pregnancy. *Reprod Health* [Internet]. 2015 [27 Jul 2020];12:72. Doi: <https://doi.org/10.1186/s12978-015-0065-0>
38. Kisa S, Zeyneloğlu S, Yilmaz D, Güner T. Quality of sexual life and its effect on marital adjustment of Turkish women in pregnancy. *J Sex Marital Ther* [Internet]. 2014 [acesso 27 Jul 2020];40(4):309–22. Doi: <https://doi.org/10.1080/0092623X.2012.751071>
39. Amaral TLM, Monteiro GTR. Tradução e validação de questionário de função sexual na gravidez (PSFQ). *Rev Bras Ginecol e Obstet* [Internet]. 2014 [acesso 27 Jul 2020];36(3):131-38. Doi: <https://doi.org/10.1590/S0100-72032014000300007>
40. Bomfim IQM, Melro BCF. Estudo Comparativo da Função Sexual em Mulheres Durante o Período Gestacional. *UNOPAR Cient, Ciênc biol saude* [Internet]. 2014 [acesso 27 Jul 2020];16(4): 277-82. Doi: <https://doi.org/10.17921/2447-8938.2014v16n4p%25p>
41. González SG, González LDD, Paneque MCM. Evaluation of a sexual education program on knowledge and sexual behaviour in pregnant [Evaluación de un programa de educación sexual sobre conocimientos y conductas sexuales en embarazadas]. *Enferm Glob* [Internet]. 2012 [acesso 27 Jul 2020];11(4):453–64. Disponível em: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84873268055&partnerID=40&md5=d7aa689a4f991c95f0a0e2fddf398e83>
42. Ferreira DQ, Nakamura MU, Souza E, Mariani Neto C, Ribeiro MC, Santana TGM, et al. Sexual function and quality of life of low-risk pregnant women. *Rev Bras Ginecol Obstet* [Internet]. 2012 [acesso 28 Jul 2020];34(9):409–13. Doi: <https://doi.org/10.1590/S0100-72032012000900004>
43. Barbosa BN, Gondim ANC, Pacheco JS, Pitombeira HCS, Gomes LF, Vieira LF, et al. Sexualidade vivenciada na gestação: conhecendo essa realidade. *Rev Eletrônica Enferm* [Internet]. 2011 [acesso 28 Jul 2020];13(3):464-74. Doi: <https://doi.org/10.5216/ree.v13i3.10407>
44. Naldoni LMV, Pazmiño MAV, Pezzan PAO, Pereira SB, Duarte G, Ferreira CHJ. Evaluation of sexual function in Brazilian pregnant women. *J Sex Marital Ther* [Internet]. 2011 [acesso 28 Jul 2020];37(4):233–40. Doi: <https://doi.org/10.1080/0092623X.2011.611111>



2020];37(2):116–29. Doi:
<https://doi.org/10.1080/0092623X.2011.560537>

45. Leite APL, Campos AAS, Dias ARC, Amed MA, Souza E, Camano L. Prevalence of sexual dysfunction during pregnancy. *Rev Assoc Med Bras* [Internet]. 2009 [acesso 28 Jul 2020];55(5): 563-8. Doi: <https://doi.org/10.1590/S0104-42302009000500020>

46. Rudge CVC, Calderon IMP, Dias A, Lopes GP, Barbosa AP, Maestá I, et al. Design and validity of a questionnaire to assess sexuality in pregnant women. *Reprod Health* [Internet]. 2009 [acesso 28 Jul 2020];6(1):12. Doi: <https://doi.org/10.1186/1742-4755-6-12>

47. Leite APL, Moura EDA, Campos AAS, Mattar R, De Souza E, Camano L. Validation of the female sexual function index in Brazilian pregnant women. *Rev Bras Ginecol e Obstet* [Internet] 2007 [acesso 28 Jul 2020];29(8):396-401. Doi: <https://doi.org/10.1590/S0100-72032007000800003>

48. Gökyıldız Ş, Beji NK. The effects of pregnancy on sexual life. *J Sex Marital Ther.* [Internet]. 2005 [acesso 28 Jul 2020];31(3):201-15. Doi: <https://doi.org/10.1080/00926230590513410>

49. Aslan G, Aslan D, Kizilyar A, Ispahi C, Esen A. A prospective analysis of sexual functions during pregnancy. *Int J Impot Res* [Internet]. 2005 [acesso 28 Jul 2020];17(2):154-7. Doi: <https://doi.org/10.1038/sj.ijir.3901288>

50. Pereira EV, Belém JM, Alves MJH, Torquato JAS, Firmino PRA, Fialho AVM, et al. Factors associated with sexual practices and positions performed by pregnant women: a cross-sectional study. *Revista Brasileira de Enfermagem* [online] [Internet]. 2022 [acesso 22 Jul 2022], v. 75, n. 3, e20210162. Doi: <https://doi.org/10.1590/0034-7167-2021-0162>

51. Ministério da Saúde (BR). Atenção ao pré-natal de baixo risco [Internet]. 2013 [acesso 14 nov 2019]. Disponível em:

http://bvsms.saude.gov.br/bvs/publicacoes/cadernos_atencao_basica_32_prenatal.pdf

52. Lara LAS, Scalco SCP, Troncon JK, Lopes GP. A Model for the Management of Female Sexual Dysfunctions. *Rev Bras Ginecol Obstet* [Internet]. 2017 [acesso 3 Out 2022];39(4):184–94. Doi: <http://dx.doi.org/10.1055/s-0037-1601435>

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