

Women's Knowledge About Intrauterine Device Insertion in a Birthing Center

Conhecimento das Mulheres Sobre a Inserção de Dispositivo Intrauterino em uma Casa de Parto
Conocimientos de las Mujeres Sobre la Inserción del Dispositivo Intrauterino en un Centro de Maternidad

RESUMO

Objetivo: Avaliar o nível de conhecimento, percepções e expectativas de mulheres submetidas à inserção do dispositivo intrauterino (DIU) na Casa de Parto de São Sebastião, no Distrito Federal. **Método:** Estudo observacional, analítico, de abordagem quanti-qualitativa, realizado com 19 mulheres, com histórico reprodutivo prévio e sem uso anterior do DIU. Os dados foram coletados por meio de questionário semiestruturado e analisados por estatística descritiva e análise de conteúdo temática, segundo Bardin. **Resultado:** Observou-se predominância de mulheres jovens e de baixa renda. O DIU foi majoritariamente valorizado por sua eficácia contraceptiva e praticidade, embora persistam lacunas importantes no conhecimento sobre seu funcionamento, contraindicações e efeitos colaterais. As expectativas e motivações apresentaram tom predominantemente positivo, mas coexistem receios relacionados à dor, adaptação e complicações. **Conclusão:** Embora o acesso ao DIU esteja consolidado no serviço, há necessidade de fortalecer estratégias educativas que ampliem a compreensão das mulheres e promovam decisões reprodutivas mais informadas. **DESCRIPTORIOS:** Dispositivo intrauterino. Direitos Sexuais e Reprodutivos. Enfermagem obstétrica. Serviços de Saúde da Mulher. Conhecimentos, Atitudes e Prática em Saúde

ABSTRACT

Objective: To assess the level of knowledge, perceptions, and expectations of women undergoing intrauterine device (IUD) insertion at the São Sebastião Birth Center in the Federal District. **Method:** An observational, analytical study with a quantitative-qualitative approach was conducted with 19 women with a history of reproduction and no previous use of IUDs. Data were collected using a semi-structured questionnaire and analyzed using descriptive statistics and thematic content analysis, according to Bardin. **Result:** A predominance of young, low-income women was observed. The IUD was mostly valued for its contraceptive effectiveness and practicality, although significant gaps in knowledge about its functioning, contraindications, and side effects persist. Expectations and motivations were predominantly positive, but fears related to pain, adaptation, and complications coexisted. **Conclusion:** Although access to IUDs is well established in the service, there is a need to strengthen educational strategies that increase women's understanding and promote more informed reproductive decisions.

DESCRIPTORIOS: Intrauterine device. Sexual and reproductive rights. Obstetric nursing. Women's health services. Knowledge, attitudes, and health practices.

RESUMEN

Objetivo: Evaluar el nivel de conocimiento, percepciones y expectativas de las mujeres sometidas a la inserción de un dispositivo intrauterino (DIU) en la Casa de Parto de São Sebastião, en el Distrito Federal. **Método:** Estudio observacional, analítico, de enfoque cuantitativo-qualitativo, realizado con 19 mujeres, con antecedentes reproductivos previos y sin uso previo del DIU. Los datos se recopilieron mediante un cuestionario semiestruturado y se analizaron mediante estadística descriptiva y análisis de contenido temático, según Bardin. **Resultado:** Se observó un predominio de mujeres jóvenes y de bajos ingresos. El DIU fue valorado principalmente por su eficacia anticonceptiva y su practicidad, aunque persisten importantes lagunas en el conocimiento sobre su funcionamiento, contraindicaciones y efectos secundarios. Las expectativas y motivaciones fueron predominantemente positivas, pero coexisten temores relacionados con el dolor, la adaptación y las complicaciones. **Conclusión:** Aunque el acceso al DIU está consolidado en el servicio, es necesario reforzar las estrategias educativas que amplíen la comprensión de las mujeres y promuevan decisiones reproductivas más informadas.

DESCRIPTORIOS: Dispositivo intrauterino. Derechos sexuales y reproductivos. Enfermería obstétrica. Servicios de salud para la mujer. Conocimientos, actitudes y prácticas en materia de salud.

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INTRODUCTION

Contraception plays a central role in reducing unplanned pregnancies and maternal and infant mortality; however, in Brazil, difficulties persist in accessing long-acting contraceptive methods, such as intrauterine devices (IUDs), especially within the Unified Health System (SUS) ⁽¹⁻²⁻³⁾. Misinformation about the method contributes to its low adherence, despite its recognized safety, reversibility, and high effectiveness, remaining underutilized in comparison to developed countries ⁽⁴⁻⁵⁾. Limited knowledge about the IUD is associated with sociodemographic factors such as education, income, and region of residence, resulting in greater acceptance among women who are more educated, white, and residents of more developed areas, while socially vulnerable populations tend to use short-acting methods ⁽⁴⁻⁵⁻⁶⁾. Added to this context are structural barriers in the SUS, including insufficient professional training, bureaucratization of the procedure, and centralization of IUD insertion in the medical field, which limits its dissemination ⁽⁵⁻⁷⁻⁸⁻⁹⁾.

Given this scenario, the literature points to the relevance of educational interventions and public policies aimed at disseminating clear and accessible information about IUDs, with a view to expanding conscious and equitable contraceptive choices ⁽⁸⁻¹⁰⁻¹¹⁾. In this context, the present study proposes to assess the level of knowledge of women treated at the São Sebastião Birth Center (CPSS) in the Federal District and its relationship with sociodemographic factors and educational interventions carried out by obstetric nurses or other health professionals, considering the hypothesis that knowledge may or may not influence adherence to the contraceptive method.

METHODOLOGY

This is an observational, analytical study with a quantitative-qualitative approach, structured according to the recommendations of the STROBE checklist. The study was conducted at the São Sebastião Birth Center (CPSS), Federal District, with data collection between August and November 2025. The sample included 19 women, selected for convenience, who underwent IUD insertion after having their last delivery at the facility. Exclusion criteria included women under 18 years of age and women in socially vulnerable situations. All participants had experienced at least one pregnancy and had no previous experience with IUDs.

Data collection was performed using a semi-structured questionnaire addressing three main areas: social characteristics, reproductive and contraceptive history, and information/knowledge about IUDs. The responses explored aspects such as functioning, benefits, contraindications, side effects, duration of the method, expectations, motivations, and sources of information. The data were organized in an anonymized database, submitted to verification, standardization, and cleaning.

Quantitative variables were treated using simple descriptive statistics, while qualitative responses were subjected to content analysis, according to Bardin⁽¹²⁾. For thematic analysis, floating reading, coding, and construction of analytical categories on knowledge, benefits, contraindications, expectations, and motivations were performed. The level of understanding of the IUD was categorized into five groups: "could not explain," "partial understanding," "understanding based on effects," "uncertainty," and "adequate functional understanding." Sources of information were classified as "health professionals,"

"informal networks," and "others."

Responses regarding expectations and motivations were subjected to sentiment analysis (positive, neutral, or negative tone) and lexical frequency analysis, including the creation of an exploratory word cloud, with the aim of graphically visualizing the most recurrent terms in the interviewees' statements.

Initial data processing was performed in Microsoft Excel®, while statistical, visual, sentiment, and word cloud analyses were conducted in RStudio®. The study was approved by the Research Ethics Committee of FEPECS/SES/DF (opinion no. 7,643,710; CAAE 86013225.5.0000.5553).

RESULTS

The data in (Table 1) show a predominance of young women, with a mean age of 24.7 years, mostly self-declared brown (57.9%) and black (21.1%). Most had completed high school (84.2%) and declared themselves single (84.2%). A higher proportion of women were unemployed (68.4%) and had a family income of up to two minimum wages (78.9%). Less than half received social benefits (42.1%), with Bolsa Família being the most common. In terms of occupation, the category "homemaker" stood out (47.4%), with the others distributed across different service and care activities.

Table 1. Socioeconomic profile of participants. São Sebastião - DF, Brazil, 2025

	n=19	%
Age group		
13 to 19	4	21,1
20 to 24	6	31,6
25 to 29	6	31,6
30 to 34	1	5,3
35 to 39	2	10,5
Color		
Brown	11	57,9
Black	4	21,1
White	2	10,5
Indigenous	1	5,3
Yellow	1	5,3
Education		
High school graduate	9	47,4
High school incomplete	7	36,8
Incomplete elementary education	2	10,5
Incomplete higher education	1	5,3
Marital status		
Single	16	84,2
Common-law marriage	2	10,5
Married	1	5,3
Occupation		
Employed	6	31,6
Unoccupied	13	68,4
Family income		
Up to 1 minimum wage	9	47,4
1 to 2 minimum wages	6	31,6
2 to 3 minimum wages	4	21,1
Social benefit		
Family allowance	6	31,6
Full plate	2	10,5
DF Social	1	5,3
BPC LOAS	1	5,3
None	9	47
Occupation		
Homemaker	9	47,4
Locksmith	1	5,3
School monitor	1	5,3
Manicurist	1	5,3
Store manager	1	5,3
Student	1	5,3
Caregiver for the elderly	1	5,3
Cleaning assistant	1	5,3
Pharmacy assistant	1	5,3
Bakery attendant	1	5,3
Attendant	1	5,3

Source: Own elaboration, 2025.

Reproductive health and contraceptive history data (Table 2) indicate that most participants had not experienced the death of a child (78.9%) and did not report pregnancy loss (68.4%). Low reproductive intention

was observed, with a predominance of women who did not wish to have more children (84.2%). Almost all had already used some form of contraception (94.7%), although almost half had not undergone a gynecological exam-

ination before IUD insertion (47.4%). The first contact with the method occurred mainly through family members and social networks, concentrated in the period of reproductive life outside of pregnancy (57.9%).

Table 2. Reproductive and contraceptive health of participants. São Sebastião - DF, Brazil, 2025.

Some of the children died	n=19	%
Yes	4	21,1
No	15	78,9
Spontaneous or induced abortion		
Yes	6	31,6
No	13	68,4
Desire to have more children		
Yes	3	15,8
No	16	84,2
Gynecological exam before IUD insertion		
No	9	47,4
Preventive	5	26,3
Preventive and ultrasound/transvaginal	4	21,1
Yes (unspecified)	1	5,3
Has used contraception		
Yes	18	94,7
No	1	5,3
Mediator of first contact with IUD		
Family members	6	31,6
Social network	5	26,3
Healthcare professional	4	21,1
Digital media	2	10,5
Healthcare	1	5,3
Don't remember	1	5,3
Life cycle at first contact with IUD		
Reproductive life outside of pregnancy	11	57,9
Undefined/Does not remember	2	10,5
Pregnancy/Prenatal	2	10,5
Active search for information	2	10,5
Postpartum	1	5,3
Early contact/youth	1	5,3

Source: Own elaboration, 2025.

The narratives in (Table 3) revealed a predominance of ignorance or difficulty in explaining how the

IUD works, although some of the participants recognized it as an effective contraceptive method, cited as the main benefit by 11 of the 19

interviewees. Most understood that the IUD does not protect against sexually transmitted infections (78.9%), while ignorance about contraindica-

tions was high (63.2%), with pregnancy being the most cited (21.1%). The most commonly reported side effects were menstrual changes (n=11) and pain or cramps (n=10), in addition to mentions of expulsion, weight gain, and skin changes. The duration of the method was correctly reported by 57.9% of participants, 31.6% did not

know how to answer, and 94.7% perceived minimal interference in sexual practices. Regarding the procedure, 57.9% believed that rest was necessary after insertion, and 63.2% reported fear, mainly related to pain, menstrual changes, expulsion, or failure of the method. Regarding professionals qualified to insert the device, 42.1%

cited general practitioners and nurses, and 31.6% mentioned obstetric nurses. Perceptions regarding the adequacy of the information received were divided, with 10 participants evaluating it as adequate and nine pointing to insufficient guidance, highlighting informational barriers and the need for standardized education about IUDs.

Table 3. Level of understanding and perceptions about IUDs. São Sebastião - DF, Brazil, 2025

Functioning	n=19	%
Adequate functional understanding	3	15,8
Effect-based comprehension	2	10,5
Partial comprehension	1	5,3
Uncertainty	3	15,8
Did not know	10	52,6
Perceived benefit*		
Contraceptive effectiveness	11	57,9
Practicality/convenience	4	21,1
Physical well-being	4	21,1
Alternative to hormonal methods	3	15,8
Long duration	3	15,8
Protection against STIs		
Yes	2	10,5
No	15	78,9
Did not know	2	10,5
Contraindications		
Pregnancy	4	21,1
Specific gynecological conditions	2	10,5
General clinical conditions	1	5,3
Did not know	12	63,2
Side effects*		
Changes in menstrual flow	11	57,9
Pain and cramps	10	52,6
Expulsion or rejection of the IUD	4	21,1
Other physical effects	4	21,1
Did not know	4	21,1
Duration		
Adequate knowledge	11	57,9
Inaccurate knowledge	2	10,5
Did not know	6	31,6

Interference with sexual health		
Yes	1	5,6
No	18	94,7
Need for rest		
Yes	11	57,9
No	5	26,3
Did not know	3	15,8
Fears or anxiety		
Yes	12	63,2
No	7	36,8
Professionals able to insert or remove		
General practitioners	8	42,1
General nurses and obstetric nurses	6	31,6
Gynecologists	3	15,8
Other trained professionals	2	10,5
Sufficiency of information received		
Sufficient	10	52,6
Insufficient	9	47,4

Source: Own elaboration, 2025.

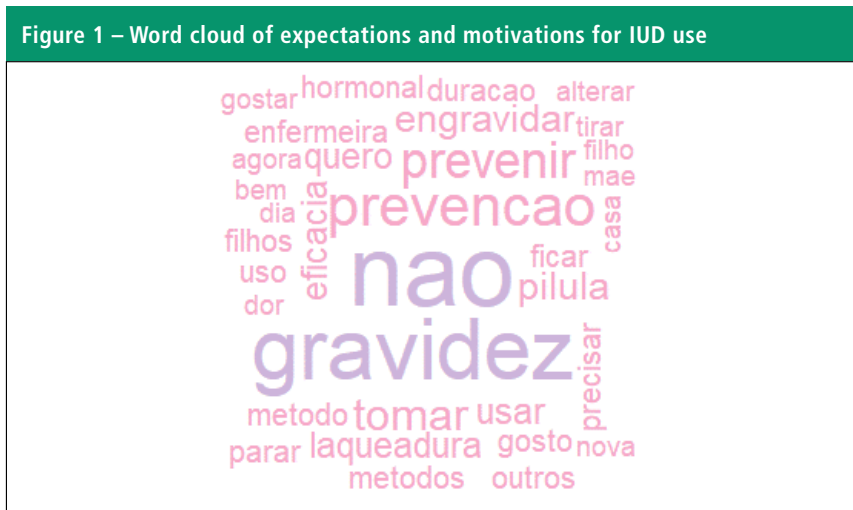
The analysis of (Figure 1) showed pregnancy prevention as the main factor in choosing the IUD, highlighted in the word cloud by terms such as “pregnancy,” “prevention,” and “no,” indicating the centrality of reproductive control. There was also concern about the practicality and daily management of contraception, expressed by words

such as “pill,” “take,” and “use,” suggesting weariness with methods that require continuous adherence, in addition to mentions of bodily experience and characteristics of the method, such as “hormonal,” “pain,” and “duration.” The discourse showed a predominance of positive evaluations (84.2%), with 15.7% neutral positions and no negative evaluations.

DISCUSSIONS

The findings revealed a socioeconomic profile marked by youth, low education, precarious employment, and low income, with a predominance of brown and black women, reflecting the racial composition historically observed in public health services in Brazil and the persistent social and racial inequalities that affect access to information and health services ⁽¹³⁾. Black women are mostly served by the Unified Health System, while white women generally have access to private health plans, exposing black and brown women to greater vulnerability throughout their reproductive lives ⁽¹⁴⁾.

In the field of reproductive health, although the prior use of contraceptive methods is high, there is a lack of follow-up before IUD insertion, such as the absence of gynecological examinations in a significant proportion of participants. Although the guidelines do not require such examinations as a prerequisite for insertion, their absence can generate insecurity and re-



Source: Own elaboration, 2025.



inforce fears related to the procedure, pointing to flaws in communication and standardization of guidelines.

The narratives indicate that IUDs are predominantly offered in contexts of greater contact with health services, especially during hospitalization for childbirth, corroborating the literature that points to this moment as a strategic opportunity to expand access to the method. However, barriers persist related to users' lack of knowledge about the technical capacity of services and the role of nursing in IUD insertion, reflecting the persistence of the current biomedical model⁽¹⁷⁾.

Furthermore, a paradox was observed between high confidence in the effectiveness of the IUD and limited understanding of how it works, a phenomenon also described in other

studies, in which the decision to use the method is based on fragmented information and informal networks. Lack of knowledge about contraindications and side effects, combined with fears related to pain, expulsion, and menstrual changes, reinforces the need for structured and continuous educational strategies, especially in view of the autonomous search for information in digital media⁽¹⁷⁻¹⁸⁾.

Finally, the motivations identified, such as duration, effectiveness, and safety, converge with recent findings that point to these factors as determinants for adherence to the method, indicating that expanding access to IUDs must be linked to the promotion of equity, the confrontation of racial and social inequalities, and the valorization of the role of nursing in sexual

and reproductive health⁽¹⁹⁾.

CONCLUSION

It can be concluded that, although the IUD is widely recognized as an effective and desirable contraceptive method, there are still gaps in information and social and ethnic inequalities that limit full understanding of its use, functioning, and possible effects. These findings highlight the need to strengthen educational actions in sexual and reproductive health, with a focus on equity and communication skills in health services, emphasizing the strategic role of obstetric nursing in expanding access to IUDs, humanizing care, and strengthening women's autonomy within the Unified Health System.

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