

Profile of Patients Undergoing IUD Insertion at a Birth Center

Perfil de Pacientes Submetidas à Inserção de DIU em um Centro de Parto Normal

Perfil de Pacientes Sometidas a la Inserción de DIU en un Centro de Parto Normal

RESUMO

Objetivo: caracterizar o perfil clínico-epidemiológico e social de pacientes submetidas à inserção de DIU de cobre em um Centro de Parto Normal do Distrito Federal. **Método:** Estudo epidemiológico, descritivo, observacional, transversal e quantitativo, realizado por entrevistas com questionário estruturado aplicado imediatamente pré inserções de DIU, entre abril e novembro de 2025. **Resultados:** participaram 50 mulheres, brasileiras, predominantemente entre 28 e 32 anos (média de 27,3 anos), pardas, solteiras e com ensino médio completo. **Conclusão:** fatores sociodemográficos e epidemiológicos influenciam a escolha de métodos contraceptivos, e a inserção de DIU por enfermeiros qualificados amplia o acesso ao método.

DESCRIPTORIOS: Dispositivos intrauterinos; Perfil epidemiológico; Centros de assistência à gravidez e ao parto; Enfermeiro obstetra.

ABSTRACT

Objective: To characterize the clinical-epidemiological and social profile of patients undergoing copper IUD insertion at a Normal Birth Center in the Federal District. **Method:** Epidemiological, descriptive, observational, cross-sectional, and quantitative study conducted through interviews with a structured questionnaire administered immediately prior to IUD insertion between April and November 2025. **Results:** Fifty Brazilian women participated, predominantly between 28 and 32 years of age (mean age 27.3 years), brown-skinned, single, and with complete high school education. **Conclusion:** Sociodemographic and epidemiological factors influence the choice of contraceptive methods, and IUD insertion by qualified nurses increases access to the method.

DESCRIPTORS: Intrauterine devices; Epidemiological profile; Pregnancy and childbirth care centers; Obstetric nurse.

RESUMEN

Objetivo: caracterizar el perfil clínico-epidemiológico y social de las pacientes sometidas a la inserción de un DIU de cobre en un centro de parto normal del Distrito Federal. **Método:** estudio epidemiológico, descriptivo, observacional, transversal y cuantitativo, realizado mediante entrevistas con un cuestionario estructurado aplicado inmediatamente antes de la inserción del DIU, entre abril y noviembre de 2025. **Resultados:** participaron 50 mujeres brasileñas, predominantemente entre 28 y 32 años (media de 27,3 años), de piel morena, solteras y con estudios secundarios completos. **Conclusión:** los factores sociodemográficos y epidemiológicos influyen en la elección de los métodos anticonceptivos, y la inserción de DIU por parte de enfermeras cualificadas amplía el acceso al método.

DESCRIPTORIOS: Dispositivos intrauterinos; Perfil epidemiológico; Centros de asistencia al embarazo y al parto; Enfermero obstetra.

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Received: 01/26/2026

Approved: 02/13/2026

INTRODUCTION

Law No. 9,263/1996 defines reproductive planning as a set of actions aimed at regulating fertility, ensuring reproductive rights⁽¹⁾. Access to safe contraception is essential for reducing unplanned and/or unwanted

pregnancies, unsafe abortions, and maternal and infant morbidity and mortality⁽²⁾.

According to the National Health Survey (2019), oral contraceptives remained the most widely used method (40.6%), followed by sterilization methods (22.9%) and male condoms

(20.4%), while only 4.4% of women used intrauterine devices (IUDs), highlighting their low uptake in the country⁽³⁾.

The IUD is a non-hormonal, reversible, long-acting contraceptive method (LARC) with a failure rate of less than 1% in the first year of use and high satisfaction among users⁽⁴⁾. Although widely used worldwide, it is estimated that only 1.9% of Brazilian women of reproductive age use the copper IUD^(3,4).

Among the main benefits are high efficacy, practicality, long duration, and the absence of hormones, making it a viable option for lactating women and women with contraindications to estrogen. Among the common adverse effects, such as menorrhagia and dys-

menorrhagia, are usually transient and easily managed clinically. Common adverse effects, such as menorrhagia and dysmenorrhea, are usually transient and easily managed clinically.

COFEN Resolution No. 690 of 2022 regulates the role of nurses in reproductive planning, allowing trained nurses to insert, review, and remove IUDs, thereby expanding access to this method in the Health Care Network. Thus, this study aims to characterize the clinical-epidemiological and social profile of patients undergoing copper IUD insertion at a Normal Delivery Center (CPN) in the Federal District.

METHOD

This is an epidemiological, descriptive, observational, cross-sectional study with a quantitative approach, conducted using a structured questionnaire administered immediately before IUD insertion by obstetric nurses. The study was conducted at a peri-hospital NDC located in São Sebastião, Federal

District. Data collection took place between April and November 2025, with a final sample of 50 participants.

Patients who gave birth at the CPN and expressed a desire to use a copper IUD at the time of discharge or during their postpartum checkup were included. Participants under the age of 18 and those who had contraindications to the use of this method at the time of data collection were excluded.

Data collection was performed using a questionnaire developed by the researchers, containing 35 questions, mostly objective, including five binary questions (“yes” or “no”). The instrument was applied at the CPN, after signing the Free and Informed Consent Form, prior to IUD insertion. The data were tabulated and analyzed in a Microsoft Excel® spreadsheet, with quantitative variables described in absolute and relative frequencies.

The study was presented and approved by the Research Ethics Committee of the Health Sciences Teaching and Research Foundation, under

opinion No. 7,409,943 and CAAE No. 84401524.4.0000.5553.

RESULTS

Fifty Brazilian women participated in the study, with a mean age of 27.3 years (SD=2.82), ranging from 18 to 40 years. Most women were brown-skinned (n=27), single (n=32), and had completed high school (n=35). Regarding religion, more than one-third (n=19) stated they were atheists. Most participants (n=39) lived in São Sebastião, and 38% lived in rented homes. More than half (n=27) lived in homes with a total of 4 to 6 residents, and 54% were beneficiaries of some type of government assistance, as shown in Table 1.

Table 1 – Sociodemographic characteristics of study participants, São Sebastião, Federal District, Brazil, 2025.

Variables	Classes	Absolute number (n)	Quantity in %
Age	18 to 22	15	30
	23 to 27	8	16
	28 to 32	20	40
	33 to 37	4	8
	38 to 42	3	6
Gender	Female	50	100
Nationality	Brazilian	50	100
Self-declared ethnicity/color	White	7	14
	Brown	27	54
	Black	16	32
Marital status	Single	32	64
	Married	11	22
	Separated/divorced	2	4
	Common-law marriage	5	10
Education	Elementary school	1	2
	Secondary education	5	10
	High school	35	70

Education	Incomplete higher education	4	8
	Complete higher education	5	10
Religion	Catholic	19	38
	Evangelical/Protestant	6	12
	Spiritist	1	2
	African-based religions	5	10
	No religion/Atheist	19	38
City of residence	São Sebastião	39	78
	Jardins Mangueiral	4	8
	Botanical Garden	2	4
	Itapoã	2	4
	Paranoá	2	4
	Others	1	2
Type of housing	Own home	15	30
	Rented house	19	38
	Settlement	2	4
	House provided by third parties	8	16
	Farm	6	12
Number of residents in the residence	1 to 3	19	32
	4 to 6	27	60
	7 or more	4	8
Recipient of government assistance	Yes	27	54
	No	23	46

Source: own work (2025).

Regarding occupation, 46% were unemployed or performed household duties, followed by students (10%) and salespeople (8%), with the remaining occupations distributed in lower frequencies.

Regarding health and lifestyle habits, the majority (88%) denied previous comorbidities and continuous medication use (98%). Among the comorbidities reported, obesity (4%) and others

such as gestational hypertension, anxiety, bronchitis, and a history of venous thrombosis (8%) stood out. The most frequently cited risk behaviors were alcoholism (15%) and smoking (12%).

Regarding obstetric history, almost all (n=49) had been pregnant before, with 81% having had 1 to 3 previous pregnancies. More than half (66%) stated that they had not planned any pregnancies. The majority had 1 to 3 previous vaginal deliveries (n=45), no

previous cesarean sections (n=43), and no abortions (n=42). Almost all (n=45) had 1 to 3 living children, and 70% of the patients had their last delivery at the CPN in the last 45 days.

More than three-quarters of the study participants reported having a steady sexual partner, but only 26% reported using condoms in all sexual relations, and 74% did not use any contraceptive method at the time, as shown in Table 2.

Table 2 – Gynecological and obstetric history of study participants, São Sebastião, Federal District, Brazil, 2025.

Questions	Classes	n	%
Have you ever been pregnant?	Yes	49	98
	Number of pregnancies:		
	1 to 3	40	81,63
	4 to 6	8	16,33
	7 or more	1	2,04
	No	1	2

Planned pregnancies?	Yes	16	32
	How many?		
	0	33	66
	1	14	28
	2 or more	3	6
Previous normal deliveries	No	34	68
	0	1	2
	1 to 3	45	90
Previous cesarean sections	4 to 6	4	8
	0	43	86
Abortions	1	7	14
	0	42	84
	2	1	2
Living children	0	1	2
	1 to 3	45	90
	4 to 6	3	6
	7 or more	1	2
Last delivery at CPN in the last 45 days?	Yes	35	70
	No	15	30
Do you have a steady sexual partner?	Yes	38	76
	No	12	24
Do you use condoms during all sexual encounters?	Yes	13	26
	No	37	74
Are you currently using any form of contraception?	Yes	13	26
	No	37	74

Source: own work (2025).

Before the insertion of the copper IUD, the most commonly used methods were condoms (40%) and oral contraceptives (30%). Only one patient had used a copper IUD previously. Most patients (72%) reported hav-

ing learned about the method during a postpartum consultation at the CPN.

Among the reasons for choosing the IUD as a contraceptive method, almost half (n=24) reported that all options motivated them, namely: insertion by nurses, easy maintenance

and practicality, few side effects, free of charge, long duration, and high effectiveness. Only 3% cited other reasons, such as "non-hormonal method," "positive experience of a friend," and "having stopped oral contraceptives," as shown in Table 3.

Table 3 – Contraceptive history of patients and knowledge about copper IUDs, São Sebastião, Federal District, Brazil, 2025.

Questions	Classes	n	%
Contraceptive method used before the copper IUD	Condom	20	40
	Oral contraceptive	15	30
	Injectable contraceptive	2	4
	Copper IUD	1	2
	Patch	1	2
	Natural methods	2	4
	None	9	18

How did you learn about the copper IUD?	Consultation with a nurse	3	6
	Consultation with another health professional	1	2
	Postpartum care at the CPN	36	72
	Friend	7	14
	Internet/social media	3	6
Reason for choosing the copper IUD as a contraceptive method	High effectiveness	5	10
	Long duration	5	10
	Free	5	10
	Easy insertion	1	2
	Few side effects	5	10
	Easy maintenance and practicality	2	4
	Insertion by nurses	1	2
	All of the above	24	48
Other	3	6	

Source: own work (2025).

Regarding the guidance received, 54% reported receiving guidance on copper IUD insertion, and only 28% reported receiving guidance on the risks of the method. More than half were not advised about benefits or side effects (72%), and 24% reported

receiving guidance on self-care and follow-up after insertion. Among those who received guidance, the most frequently cited risks were uterine perforation and bleeding (n=11 each), while the benefits were long duration (n=15) and high efficacy (n=13). The most frequently mentioned side ef-

fects were increased cramping (n=14) and increased menstrual flow (n=12). Among the most frequently mentioned post-insertion precautions were sexual abstinence for 24 hours (n=6) and the use of painkillers for cramps (n=5), as shown in Table 4.

Table 4 – Risks, benefits, side effects, and post-insertion care for copper IUDs according to participants who answered “YES” to the questions mentioned above, São Sebastião, Federal District, Brazil, 2025.

Questions	Classes	n	%
Name 2 risks of insertion	Perforation	11	78,5
	Bleeding	11	78,5
	Cramps and pain	4	28,5
	Don't know/can't remember	1	7,1
	Total	14	100
Name 2 benefits	High effectiveness	13	56,5
	Long-lasting	15	65,2
	Free	6	26
	Convenience	1	4,3
	Non-hormonal method	6	26
	Does not interfere with breastfeeding	3	13
	Avoids the use of oral contraceptives	1	4,3
	Few side effects	1	4,3
	Total	23	100

List 2 side effects	Increased menstrual flow	12	85,7
	Increased menstrual cramps	14	100
	Expulsion of copper IUD	1	7,1
	Fainting	1	7,1
	Dizziness	1	7,1
	Escape	1	7,1
	Total	14	100
List two precautions to take after insertion	Sexual abstinence for 24 hours	6	50
	Painkillers for cramps	5	41,6
	Check positioning	3	25
	Self-check of IUD strings	1	8,3
	Follow-up appointment	1	8,3
	Rest	1	8,3
	No specific care	1	8,3
	Don't know/can't remember	3	25
Total	12	100	

Source: own work (2025).

DISCUSSION

In the present study, the predominant sociodemographic profile of patients seen at the CPN was young, brown-skinned, single women with a high school education, corroborating findings from other studies conducted at Brazilian CPNs⁽⁶⁾. There are still gaps in access to LARCs, especially among women who are more socioeconomically vulnerable, where lower education levels are associated with less knowledge about contraceptive methods and sexual and reproductive rights^(3,14).

The predominance of residents in the CPN coverage area reinforces the importance of this service for access to reproductive planning, while the lower representation of women from rural areas reflects inequalities already described in the literature, associated with lower income and education, with an impact on the use of LARCs⁽²⁾.

The influence of religion on sexual and reproductive health proved to be relevant, especially in conservative

circles, which tend to discourage the use of contraceptive methods, impacting female autonomy and decisions about contraceptive use⁽⁷⁾.

The predominance of multiparous women without comorbidities is consistent with other studies in Brazilian CPNs⁽⁶⁾. The most commonly used methods before IUD insertion were oral contraceptives and male condoms, reflecting their greater availability in primary care. However, these are short-term methods and depend on the user for their effectiveness, favoring failures, a scenario similar to that observed in other Latin American countries⁽⁸⁾.

The low prevalence of previous IUD use and knowledge of the method only in the postpartum period reinforce the relevance of health counseling and the role of nursing in reproductive planning. Factors such as long duration, high effectiveness, absence of hormones, and free availability were decisive in the choice of copper IUDs, corroborating studies that show greater satisfaction among users of LARCs compared to short-acting methods⁽⁹⁾.

Despite the previous use of other contraceptive methods, a high frequency of unplanned pregnancies was observed. The preference for non-hormonal methods, especially during the postpartum period and breastfeeding, may favor the acceptance of the copper IUD^(9,10).

Uterine perforation was the risk most cited by participants, although evidence indicates that this is a rare event, with no increased risk if inserted by trained nurses, reinforcing the safety of the procedure⁽¹¹⁻¹³⁾. The side effects reported were consistent with the literature and did not negatively impact user satisfaction^(6,12,14).

There is no evidence to support the need for sexual abstinence or rest after copper IUD insertion. Cramps are common symptoms in the first few months and can be managed with nonsteroidal anti-inflammatory drugs⁽⁴⁾. Post-insertion follow-up is essential for assessing adaptation to the method and providing guidance on warning signs, since simply checking the strings does not prevent expulsion of the IUD⁽¹⁵⁾.

CONCLUSION

The study provided insight into the factors associated with the choice of copper IUD by patients seen at the CPN, highlighting the role of these services in guaranteeing sexual and reproductive rights. Sociodemographic and epidemiological factors influence the choice of contraceptive

method, with low education, limited knowledge about methods, and socioeconomic vulnerability being potential barriers to the use of safe and effective methods.

Although they receive guidance, patients lack qualified counseling on risks and side effects, reinforcing the need for continuous health education. The role of obstetric nurses in CPNs

ensures safe and humanized insertions, expanding access to LARCs. The study's limitations include the sample being restricted to a single service, making it impossible to generalize the findings, which indicates the need for further studies on users' knowledge and satisfaction with copper IUDs.

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