







# Prenatal care for pregnant women who use psychoactive substances: perceptions of primary care nurses

## Pré-natal de gestantes em uso de substâncias psicoativas: percepções de enfermeiros atuantes na atenção primária

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### ABSTRACT

**Objective:** to understand the perceptions of nurses regarding prenatal care for pregnant women who use psychoactive substances. **Methods:** this was a qualitative study conducted with nurses working in Primary Health Care. Data collection was performed through an electronic form using the snow-ball sampling technique via WhatsApp®. Thematic content analysis was employed for data analysis. **Results:** the study included 21 female nurses, aged 25 to 54 years, with over 10 years of professional experience. Three thematic categories emerged from the analysis: "Learning gaps and structural challenges in the prenatal care of pregnant substance users"; "Care practices and difficulties in the prenatal care of pregnant substance users"; and "Proposals for qualifying perinatal mental health care". **Conclusion:** the provision of care is permeated by a lack of specific undergraduate training, a scarcity of continuing education, weaknesses in referral pathways to the psychosocial care network, and insecurity in approaching the topic. Despite this scenario, nurses suggest that the creation of referral flows, permanent education programs, and clinical guidelines could enhance the quality of care. **Contributions to practice:** understanding the experiences of nurses who provide care to this population can inform public policies aimed at strengthening professional practice and improving the quality of care. **Descriptors:** Primary Health Care; Prenatal Care; Nursing; Pregnant Women; Psychotropic Drugs.

### RESUMO

**Objetivo:** compreender as percepções de enfermeiros sobre a assistência no pré-natal às gestantes usuárias de substâncias psicoativas. **Métodos:** estudo qualitativo conduzido com enfermeiros atuantes na Atenção Primária à Saúde. A coleta de dados foi realizada por meio de formulário eletrônico, utilizando a técnica bola de neve via WhatsApp®. Para análise dos dados utilizou-se o método da análise temática de conteúdo. **Resultados:** participaram 21 enfermeiras, com idade entre 25 a 54 anos, com mais de 10 anos de atuação. Da análise temática emergiram três categorias: "lacunas de aprendizagem e desafios estruturais na assistência pré-natal de gestantes usuárias"; "práticas de cuidado e dificuldades na assistência pré-natal de gestantes usuárias"; "propostas para qualificação do cuidado em saúde mental perinatal". **Conclusão:** a assistência é permeada pela ausência de formação específica na graduação, escassez de capacitação continuada, fragilidade nos fluxos de encaminhamento para a rede de atenção psicossocial e insegurança na abordagem do tema. Apesar do cenário, enfermeiros apontam que a criação de fluxos de encaminhamento, educação permanente e manuais podem qualificar a assistência. **Contribuições para a prática:** compreender a experiência de enfermeiros ao público pode subsidiar políticas públicas que fortaleçam a atuação profissional e qualifiquem o cuidado. **Descritores:** Atenção Primária à Saúde; Cuidado Pré-Natal; Enfermagem; Gestantes; Psicotrópicos.

## Introduction

In general, women exhibit higher rates of mood, anxiety, and borderline personality disorders, whereas men present higher rates of substance use disorders. Factors such as social inequalities associated with the historically attributed role of women in society, domestic violence, lower access to education and employment, and a multitasking routine may contribute to an increased risk for the development of mental disorders<sup>(1)</sup>.

However, substance use among young women has progressively approached the levels observed in men and, in certain cases, surpasses male rates, depending on the substance analyzed<sup>(2)</sup>. Among pregnant and postpartum women, the use of licit or illicit substances has also shown an increase in recent years. Among licit drugs, tobacco is the most prevalent during gestation, followed by alcohol. Regarding illicit substances, the most frequently used are marijuana, hashish, skank, cocaine, and crack<sup>(3)</sup>.

This evidence highlights the need for interventions focused on women's mental health, particularly during the perinatal period, given that the use of alcohol and other substances during pregnancy can negatively affect the health and well-being of both women and their children<sup>(4)</sup>. Due to intrinsic metabolic differences, the effects of psychoactive substances are more harmful to women, especially during pregnancy, as these substances cross the placental barrier and affect the fetal brain development<sup>(5-6)</sup>.

Tobacco use during pregnancy has been associated with outcomes such as premature birth, low birth weight (<2500g), intrauterine growth restriction, and neonatal respiratory and gastrointestinal diseases. Excessive consumption ( $\geq 20$  cigarettes/day) has also been linked to intrauterine death and neonatal infection<sup>(7)</sup>. Cannabis use has been associated with cases of low birth weight and reduced length<sup>(8)</sup>, while alcohol consumption has been linked to low birth weight, premature birth, and stillbirth<sup>(9)</sup>.

Considering the worldwide increase in psychoactive substance use among women, particularly those of childbearing age, it is necessary to address this issue throughout reproductive planning to reduce the impact of these substances on both mother and baby<sup>(10)</sup>.

Therefore, the promotion of female reproductive health in Primary Health Care (PHC) must be based on harm reduction strategies for the harmful use of psychoactive substances, involving early identification, especially during prenatal care. However, attitudinal issues, stigmatizing beliefs, incipient knowledge, and interpersonal communication styles represent potential barriers in the care provided by multidisciplinary teams to pregnant women who use psychoactive substances<sup>(11)</sup>. In addition to these barriers, there is a clear knowledge gap among health professionals in approaching this population, demonstrating the need for continuing education and the abandonment of prohibitionist and abstinence-centered care practices<sup>(12)</sup>.

Health professionals often perceive these women as incapable of performing maternal care, underestimating their desires and efforts to change their habits<sup>(11)</sup>. Nevertheless, Primary Health Care Units should be environments where pregnant women feel welcomed and connected for their gestational follow-up. The nurse is an essential component of the team, providing qualified listening, conducting educational activities and nursing consultations, and promoting a strong bond with pregnant women<sup>(13)</sup>.

Thus, it is crucial to understand the perceptions of the professionals who monitor these women to identify gaps in care and design new approaches that enable the construction of person-centered care. This understanding can also inform training initiatives for the nursing team and guide the development of public policies. Therefore, the objective of this study was to understand the perceptions of nurses regarding prenatal care for pregnant women who use psychoactive substances.

## Methods

### Study design and period

This is a qualitative study grounded in the framework of thematic content analysis<sup>(14)</sup>, conducted from April to May 2025. The study reporting adheres to the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines.

### Participant selection and setting

The study participants were nurses who are currently or were previously employed in PHC in the municipality of Fortaleza, State of Ceará. The municipality has 134 primary care units distributed among its six regional districts, and the study included professionals from all of them. It is estimated that the municipality of Fortaleza has approximately 1,726 nurses. Of these, 37 with the minimum required experience were invited, and 21 agreed to participate; the remainder did not respond to the contacts. The initial contacts were selected as seeds and forwarded the invitation link to other professionals.

Inclusion criteria were professionals with more than six months of experience in low-risk prenatal care currently working in PHC. Exclusion criteria were individuals with limited access to digital technologies and social networks, such as the WhatsApp® application, or those participating in a similar study, to reduce the possibility of bias. The six-month experience threshold was chosen because municipal contracts are for a minimum of 12 months, with the first six months serving as a probationary period, which is considered the minimum time to establish contact with the health team and the community.

The data collection method adopted was the viral “snowball” sampling technique, which begins with a friendly request for recipients to share the participation invitation with their respective contact networks, thereby promoting sample multiplication through the

virtual social network<sup>(15)</sup>. WhatsApp® was used as the dissemination platform, given its previously demonstrated benefits in conducting research, especially in management, work, and meeting the needs inherent to healthcare delivery<sup>(16)</sup>.

After obtaining authorization from a co-participating research institution, one of the researchers made initial in-person contact with two continuing education technicians from the municipality. These technicians disseminated the access link and the data collection instrument via WhatsApp® to the target audience (PHC nurses). These professionals were considered the “seeds” for the study’s referral network, as their department holds the contact information for all nurses working in the public PHC service of Fortaleza. Additionally, nurses who received the form were recruited as multipliers for the research.

### Data collection

The links sent by the continuing education technicians to the primary care nurses via WhatsApp® led to a Google Form, which yielded 21 responses. It is noted that all participants agreed to access the survey after reviewing the Informed Consent Form. The instrument, divided into two parts with objective and discursive questions, took between 10 to 20 minutes to complete and was structured in three sections: 1) sociodemographic and employment data; 2) open and closed-ended questions about prenatal care for pregnant women who use psychoactive substances in PHC.

The questions used were: Do you typically ask pregnant women about drug use during prenatal consultations? Which psychoactive substances are most prevalent during your prenatal consultations? Which psychoactive substances do you most frequently identify during prenatal care? Do you use any strategy to screen for substance use in prenatal care? If so, what is it? What difficulties do you experience or have you experienced in providing prenatal care to pregnant women who use psychoactive substances?

## Methodological orientation and saturation

The sampling for this study was convenience-based; however, we estimated that up to 17 interviews would faithfully represent the research proposal, based on a homogeneous population of nurses working in the same municipality<sup>(17)</sup>. For the theoretical saturation process, an adapted eight-step method was used<sup>(18)</sup>: close reading of the material, identification of core meanings, compilation of themes and statement types, grouping into categories and pre-categories, data naming, aggregation of categories/recall of existing categories, and confirmation of saturation. Thus, data collection was concluded when the obtained data began to show redundancy or repetition, without adding new insights relevant to the study's objective<sup>(18)</sup>.

Following data processing, the content was analyzed using the thematic analysis technique, which comprises three phases: pre-analysis, exploration of the material, and treatment of the results and interpretation<sup>(14)</sup>. To operationalize the thematic analysis, each phase was segmented: pre-analysis (data collection, literal transcription of content), material exploration (researcher familiarization with results and structuring), treatment (arrangement of discourse fragments and identification of context units), and interpretation (identification of core meanings of the themes)<sup>(19)</sup>.

## Data analysis

In the pre-analysis phase, the participants' statements were condensed into a single text file, classified according to the codes assigned to each professional for operationalization. Subsequently, extensive readings of the material were conducted to classify units of registration, context, significant excerpts, and categories. This approach sought to identify the meanings conveyed by the study participants.

In the material exploration stage, conceptual and analytical structures were developed by connec-

ting the theme with the experiences of both the participants and the researcher, and by identifying a lexical structure suitable for analysis, applying what was defined in the previous phase. During the data treatment, the breadth of the themes and the frequent repetition of topics related to the object of analysis were observed. The aim here was to uncover the underlying content of the analyzed context, extrapolating from the statements to a level of abstraction.

In the interpretation phase, we classified potential categories/themes according to their similarities and differences, grouping statements based on thematic proximity and content similarity. Finally, the results were organized, synthesized, and classified to provide a clearer understanding of the analyzed material.

## Ethical considerations

As the study was conducted in the capital of the state of Ceará, participants were assigned pseudonyms based on the names of local tourist attractions (e.g., Águas Belas, Cumbuco Beach, Ferreira Square, Lagoinha Beach, Jericoacoara, Mundaú, Chapada do Araripe) to ensure anonymity and preserve data confidentiality. The research adhered to the principles set forth in Resolution 466/2012 of the National Health Council, which governs research involving human subjects. The study was approved by the Research Ethics Committee of the Ceará School of Public Health under protocol number 7,440,693/2025 and Certificate of Presentation for Ethical Consideration 86244025.7.0000.5037.

## Results

The study included 21 nurses. Regarding the participants' profile, the majority were between 25 and 54 years of age (n=14). Most were married (n=13) and identified as Catholic (n=10). Concerning professional experience, 14 participants had been providing prenatal care for over 10 years. Regarding their aca-

demic training level, most held a specialization degree (n=15), followed by a master's degree (n=6). However, a significant majority (n=18) reported never having participated in specific training or continuing education on the care of pregnant women who use psychoactive substances.

Regarding the most frequently used psychoactive substances by pregnant women during prenatal care, the professionals highlighted the consumption of alcohol and tobacco (n=12), followed by psychotropic drugs (n=9), crack (n=8), and cocaine (n=5).

The results were organized into three thematic categories: 1) Learning gaps and structural challenges in prenatal care for pregnant women using psychoactive substances in PHC; 2) Difficulties in prenatal care for pregnant substance users in PHC; and 3) Proposals for qualifying perinatal mental health care for women who use psychoactive substances.

### **Learning gaps in prenatal care for pregnant psychoactive substance users in PHC**

In this category, nurses reported feeling unprepared to address the topic of psychoactive substance use with pregnant women during prenatal care. They pointed out gaps in their undergraduate academic training on this subject, as illustrated by the following statements: *In our training, we only superficially cover the harms of medications for pregnant women (Cumbuco Beach). I think that in the undergraduate program, they could intensify this theme, as it is something nurses may constantly encounter in prenatal care (Águas Belas).*

The absence of continuing education was another gap identified by the interviewees: *Since we've never had training to deal with these pregnant women, we should have specific training on the subject, because the demand exists (Ferreira Square). As there is no continuing education in this area, I think training should be provided for the nurses who care for these pregnant women (Lagoinha Beach). Since there has never been training on the subject, I think it is important to implement continuing education for professionals (Jericoacoara).*

### **Difficulties in prenatal care for pregnant psychoactive substance users in PHC**

Regarding the difficulties identified in the care of pregnant women using psychoactive substances during prenatal consultations, low adherence to appointments and discontinuity of the therapeutic plan were prominent. The following statements reflect this perception: *Adherence to follow-up. Timely completion of recommended exams. Difficulties in treating Sexually Transmitted Infections (STIs) when necessary, and non-use of vitamin supplements (Chapada do Araripe). Adherence to prenatal care, the understanding that the use harms the baby, and when referred to high-risk care, they don't want to go (Mundaú). Adherence to regular follow-up, undergoing diagnostic exams, and using supplementation (Cumbuco Beach).*

Another aspect identified as a difficulty was the insecurity regarding breastfeeding guidance for these women and the potential impacts of psychoactive substance use on fetal growth and development, as demonstrated by the following quotes: *The risk is immense, both for the health of the pregnant woman and the developing child (Guaramiranga). An important situation that must always be analyzed with empathy and dignity, following scientific evidence for management given the impact on the mother-baby dyad (Praia do Futuro).*

The nurses also cited issues related to structural challenges, such as difficulties in making referrals to the Psychosocial Care Network. The following statements illustrate this issue: *There is a need for the construction of a Psychosocial Care Network with safe assistance and available slots. We don't have slots; the pregnant woman is placed on a waiting list (Chapada do Araripe). We need specific training on the subject, and to improve the referral logistics to the Psychosocial Care Network (Jericoacoara).*

The context of social vulnerability in which these pregnant women live, as well as the dynamics of their family relationships and support networks, were also listed as difficulties by the nurses: *Indiscriminate use of substances, very vulnerable people, chemical dependency, and lack of a support network (Águas Belas). Pregnant women on medication have more difficulty during prenatal care. They don't always have a*



support network to assist with guidance during the prenatal period (Canoa Quebrada).

### Proposals for qualifying perinatal mental health care for women using psychoactive substances

When asked what could improve mental health care for women using psychoactive substances in PHC during the prenatal period, most nurses mentioned the need for continuing education for professionals and the creation of clear referral pathways to specialized services, as shown below: *Specific training on the subject, improving the referral logistics to the Psychosocial Care Network (Jericoacoara). Psychotherapeutic follow-up for these women. And the training of professionals who are working directly with them (Majorlândia). Trained and sensitized professionals for this type of care (Passeio Público). Conduct training with nurses and clarify the care pathway (Arco do Triunfo). Matrix support services and training for doctors, nurses, and dentists to care for these pregnant women (Ferreira Square).*

Some nurses also mentioned the need to adopt protocols or manuals to qualify perinatal mental health care, which should include assessment tools, appropriate approaches, and information on the effects of psychoactive substance use on maternal and child health: *We need assessment instruments, signs of severity, most common disorders and treatments, and information on psychoactive substances (Praia do Futuro). We need to know the deleterious effects for the mother and child, where to refer, treatment for acute intoxication cases, and a person-centered approach (Jericoacoara). Information on types of substances, adverse reactions in pregnancy, drug interactions. Guidance on approach, counseling, and follow-up of pregnant women (Cumbuco). We need to know the risks of use during pregnancy for the fetus and for the pregnant woman's health. How to stop using during the nine months of gestation (Lagoinha Beach).*

## Discussion

Prenatal care for pregnant women who use psychoactive substances is a relevant issue for health professionals<sup>(12)</sup>. However, this care is directly impacted

by difficulties experienced by professionals, such as doubts, assistance-related challenges, and knowledge gaps. Furthermore, professionals report that while they do question pregnant women about substance use during prenatal care, they feel insecure after identifying the problem and, at times, fail to make the necessary referrals<sup>(11)</sup>.

In this study, the findings reveal a scenario similar to what has been previously reported<sup>(11,12,20)</sup>. The nurses providing prenatal care do not feel confident in their approach to women who use psychoactive substances. This exposes a situation of insecurity and precariousness in the care offered, permeated by a lack of knowledge, which in turn generates insecurity and signifies a critical challenge for the implementation of effective care practices. This is particularly concerning given that these professionals are essential for health promotion and disease prevention within the PHC context<sup>(20)</sup>.

This finding becomes more significant as it highlights the perception among health professionals that their undergraduate education did not adequately prepare them to handle the demands related to psychoactive substance use by pregnant women. This perception aligns with the national literature, which also points to gaps in professional training that can lead nurses to adopt moralizing stances, develop a belief in their own inability to act, and demonstrate limitations in their knowledge of available interventions<sup>(11)</sup>. Internationally, it is noted that although perinatal mental health issues have become a global concern, the qualification of nurses in this area still has significant deficiencies<sup>(21)</sup>.

Among the difficulties identified in the care of pregnant substance users in the investigated context, the nurses' limitations in making referrals to the Psychosocial Care Network were prominent. This finding indicates that inter-institutional articulation remains a challenge. Despite the expansion of the network, access to mental health care is still fragmented and limited. Furthermore, the absence of clear pathways and protocols, coupled with communication

difficulties with primary care, hinders the articulation and coordination of care for this population<sup>(22)</sup>.

The risk of low adherence to prenatal consultations was also cited as a barrier to implementing care. Specifically, psychoactive substance use during pregnancy can reduce the likelihood of these women accessing health services, as drug consumption is commonly stigmatized, and they may be perceived as “inadequate” or “bad” mothers. In this context, it is important for nurses, in collaboration with the multidisciplinary team, to reinforce care guidance during pregnancy to promote women’s adherence to best practices for maintaining the well-being of the mother-infant dyad<sup>(13)</sup>. However, this guidance should begin during the reproductive planning phase, led by the nurse, to minimize the use and impact of psychoactive substances during gestation<sup>(12)</sup>.

Regarding breastfeeding guidance for this population, the professionals reported feeling insecure. This is a concerning aspect, considering that literature indicates that proper breastfeeding management during prenatal care is associated with its continuation postpartum. Specifically, in the context of care for pregnant women using psychoactive substances, an individualized risk-benefit assessment of drug use during lactation—including amphetamines, heroin, cocaine, marijuana, alcohol, and tobacco—is recommended to guide decisions about interrupting, weaning, or maintaining breastfeeding<sup>(23)</sup>. Therefore, it is essential that nurses are trained to make better-informed decisions.

Regarding the difficulties noted by nurses concerning the impacts of psychoactive substance use on fetal growth and development, there is evidence of structural brain alterations, as well as risks for sudden infant death syndrome, premature placental abruption, and low birth weight. For pregnant women, substance use also represents an increased risk of morbidity and mortality. The adverse effects vary according to the type of substance used, and there is no consensus in the scientific literature regarding a safe amount for consumption<sup>(24)</sup>. Likewise, prolonged

substance exposure during the prenatal period contributes to the development of sleep problems and depressive, cognitive, and behavioral symptoms in early childhood<sup>(25)</sup>.

The absence of a support network for these women was also highlighted as a problem by the participants, given that family support is indispensable for promoting well-being and mitigating gestational stress<sup>(26)</sup>. However, it is not uncommon for pregnant women who use psychoactive substances to be part of family units with extensive histories of addictive behavior and conflictual relationships stemming from drug use<sup>(27)</sup>. Thus, it can be inferred that the lack of support for these women creates a risk to maternal and infant mental health, making it crucial to implement actions that alleviate this context, such as developing alternative support networks, establishing groups for pregnant women, providing qualified listening, and ensuring referrals to specialized services.

The nurses’ statements emphasized the need for continuing professional education to improve care for this population, especially since they reported never having received specific training on the subject. Continuing health education is an essential tool for improving work within the Unified Health System, with the potential to transform reality through the collective construction of new knowledge and care practices<sup>(28)</sup>.

The creation of a clear pathway for referring patients to specialized services was also cited as a positive step toward improving the quality of care. These findings corroborate a study involving 36 PHC professionals, who mentioned the scarcity of spaces for dialogue to promote integrated network care and the absence of pathways that objectively define which cases should be referred to the Psychosocial Care Center and which should be managed within PHC<sup>(29)</sup>. It can be inferred that the lack of structured pathways negatively affects the confidence of professionals in providing care to these pregnant women.

Furthermore, the adoption of protocols or manuals was reported by most nurses as a necessary

strategy. Although the application of such resources in the field of public health may not encompass the relational complexity of reception and bond-building, these technologies can serve as facilitating devices for bringing professionals closer to the population they serve<sup>(30)</sup>.

Despite the identified difficulties, this study points to possibilities for qualifying health care for pregnant women who use psychoactive substances. Recognizing the gaps in initial training and continuing education regarding the specificities of prenatal care for this population allows for the design of continuing education strategies that can mitigate the lack of knowledge on the topic. Moreover, understanding the structural limitations can support the development of clinical protocols that include inter-institutional articulation to ensure the operationality and effectiveness of health care.

Thus, future studies should focus on developing protocols, roadmaps, and care guides for pregnant women who use psychoactive substances. Additionally, information management and continuing education are necessary to meet the needs of this population, serving as important activities for renewing care practices and generating indicators.

## Study limitations

A limitation of this research is the use of an on-line form, which, due to its asynchronous nature, may restrict the richness and depth of the narratives, as there was no opportunity for follow-up questions or the exploration of emergent themes. Another limitation pertains to the cultural and social particularities of the researched region, which limits the extrapolation of the findings to other contexts.

## Contributions to practice

Understanding the learning gaps of nurses who provide prenatal care to women using psychoactive substances in primary care, combined with an analysis of the difficulties faced in this care and the

proposals for improvement, can contribute to the planning of institutional public policies. Such policies can strengthen health units, ensuring that nurses can practice safely with technical and scientific support, and that this population receives qualified and humanized care.

## Conclusion

Nurses' perceptions of prenatal care for pregnant women who use psychoactive substances highlight challenges related to professional training, the articulation of care within the Psychosocial Care Network, low adherence to consultations, and discontinuity of the therapeutic plan. Furthermore, prenatal care for this population is permeated by insecurity and a lack of continuing education.

However, the nurses proposed measures to qualify this care, such as participation in continuing education initiatives, the creation of clear pathways for referral to specialized services, and the adoption of protocols or manuals to guide clinical practice.

## Authors' contributions

Conceptualization and design or analysis and interpretation of data; Drafting of the manuscript or relevant critical revision of the intellectual content; Agreement to be responsible for the accuracy and integrity of any part of the manuscript: Maia AC. Conceptualization and design or analysis and interpretation of data; Drafting of the manuscript or relevant critical revision of the intellectual content: Cruz Neto J, Sousa AAS, Nogueira MRN, Sombra Neto LL. Drafting of the manuscript or relevant critical revision of the intellectual content; Final approval of the version to be published: Chaves AFL.

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