

Descriptive Study on the Characteristics of Pregnant and Postpartum Women with Problematic Psychoactive Substance Use in a Public Hospital in the Province of Buenos Aires

Micaela Paolucci¹ , Daniela Daglio² , Antonella Ciafardini¹ , Daiana Vidal¹  and Alejandra Brandone³ 

1. Servicio de Obstetricia, Hospital Dr. A. Piñeyro de Junín. Buenos Aires, Argentina.
2. Servicio de Trabajo Social, Hospital Dr. A. Piñeyro de Junín. Buenos Aires, Argentina.
3. Servicio de Laboratorio, Hospital Dr. A. Piñeyro de Junín. Buenos Aires, Argentina.

ABSTRACT

Introduction: Substance use among pregnant and postpartum individuals is a growing socio-health concern, associated with multiple biopsychosocial determinants that require a comprehensive approach.

Objectives: To characterize pregnant and postpartum individuals with problematic substance use treated at a public hospital in the Province of Buenos Aires during 2022–2023.

Materials and Methods: Observational, descriptive, retrospective, cross-sectional study. Pregnant and postpartum individuals with problematic substance use who attended a public hospital in the Province of Buenos Aires were included.

Results: In 2022, tobacco use predominated (64.8%), followed by marijuana and cocaine (17.6% each), with no alcohol use reported. In 2023, an increase in cocaine use (46.3%) was observed, with a lower proportion of tobacco (34.1%), marijuana (19.5%), and alcohol (2.4%).

Discussion: Findings show a shift in consumption patterns and an increase in problematic use, particularly cocaine, posing challenges for healthcare systems in terms of detection and comprehensive care.

Conclusion: An increase in problematic substance use was observed, highlighting the need to implement comprehensive, accessible, and biopsychosocially oriented strategies for the care of pregnant and postpartum individuals.

Keywords: problematic use, pregnant women, postpartum women, psychoactive substances.

Estudio descriptivo sobre las características de personas gestantes y puérperas con consumo problemático de sustancias psicoactivas en un hospital público de la provincia de Buenos Aires RESUMEN

Introducción: el consumo de sustancias psicoactivas en personas gestantes y puérperas constituye una problemática creciente en el ámbito socio-sanitario, asociada a múltiples determinantes biopsicosociales que requieren un abordaje integral.

Objetivos: caracterizar a las personas gestantes y puérperas con consumo problemático de sustancias atendidas en un hospital público de la provincia de Buenos Aires durante 2022 y 2023.

Author for correspondence: miica.33.mp@gmail.com, Paolucci M.

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Materiales y métodos: estudio observacional, descriptivo, retrospectivo y de corte transversal. Se incluyeron gestantes y puérperas con consumo problemático de sustancias que consultaron en un hospital público de la provincia de Buenos Aires.

Resultados: en 2022 predominó el consumo de tabaco (64,8%), seguido de marihuana y cocaína (17,6% cada una), sin consumo de alcohol. En 2023 se observó un aumento del consumo de cocaína (46,3%), con menor proporción de tabaco (34,1%), marihuana (19,5%) y alcohol (2,4%).

Discusión: los resultados evidencian un cambio en el patrón de consumo y un incremento del consumo problemático, particularmente de cocaína, lo que plantea desafíos para los sistemas de salud en términos de detección y abordaje integral.

Conclusión: se observa un aumento del consumo problemático de sustancias psicoactivas, lo que refuerza la necesidad de implementar estrategias integrales, accesibles y con enfoque biopsicosocial para la atención de personas gestantes y puérperas.

Palabras clave: consumo problemático, gestantes, puérperas, sustancias psicoactivas.

INTRODUCTION

Problematic substance use, defined by National Law 26934 as use that negatively affects health and social relationships, includes the abuse of psychotropic drugs (both legal and illegal), alcohol, and tobacco¹.

Care during pregnancy, childbirth, and the postpartum period for pregnant women and their newborns has traditionally focused on physical aspects, with less emphasis on mental well-being. Psychoactive substance use is an important risk factor within the biopsychosocial sphere of pregnant women, and a comprehensive approach should take into account health determinants such as access to healthcare services, socioeconomic and cultural level, social inclusion, and the availability of social support networks, among others. Pregnancy and the postpartum period constitute stages of crisis and transformation in the lives of pregnant women and may represent, for both the pregnant woman and her family, an opportunity to change patterns of psychoactive substance use².

Regarding health consequences, psychoactive substance use during pregnancy is associated with numerous adverse outcomes. These include an increased risk of fetal death, neonatal abstinence syndrome, and sudden infant death syndrome³. Prenatal exposure to illicit substances significantly increases the risk of intellectual disability and attention-deficit/hyperactivity disorder (ADHD) in children, highlighting the urgent need for preventive measures and interventions for both mothers and children⁴.

With regard to the available information on substance use among pregnant women and during the postpartum period, data are limited. The growing concern in the healthcare setting regarding problematic substance use among pregnant and postpartum women is driven by several factors. Among these are the social stigma faced by mothers who use drugs. A study conducted in Argentina between 2018 and 2019 found that pregnant women often face social taboos related to substance use, leading to underreporting and lack of support. This

multicenter study, carried out in three general hospitals, also reported that 30.6% of pregnant women continued smoking tobacco and 25.8% consumed alcohol during pregnancy, while 11.3% used cannabis and 12.9% cocaine⁵. Consistently, a recent study conducted at a hospital in Buenos Aires found that 46.3% of pregnant women consumed alcohol, 12.1% tobacco, 5.6% cannabis, and 4.8% cocaine, with a significant impact on birth weight and gestational age of newborns⁶.

In other countries, such as France, cannabis is the most commonly used illicit substance among pregnant women, and significant adverse effects have been reported, including psychiatric disorders and intrauterine growth restriction⁷.

With the aim of identifying strategies to address this issue through the Obstetrics Department, in coordination with different stakeholders within the healthcare system and the subsequent establishment of an integrated care network, the objective of this study was to characterize pregnant and postpartum women with problematic psychoactive substance use who received care at a public hospital in Buenos Aires Province during 2022 and 2023. Two consecutive years were analyzed in order to describe the recent evolution of characteristics and patterns of substance use in this population.

MATERIALS AND METHODS

An observational, descriptive, and retrospective study was conducted at a regional referral public hospital located in Buenos Aires Province. The institution provides coverage to a large healthcare area in the northwest of the province, with approximately 550 births per year and referrals from primary care centers and municipal hospitals. The Obstetrics Department includes outpatient clinics for prenatal care, postpartum care, and breastfeeding support, where cases of problematic substance use are identified and managed.

The study period from January 1, 2022, to December 31, 2023, was selected as it corresponded to the two most recent years with complete records in the Perinatal

Information System (SIP) and in the institutional medical records at the time the study was initiated.

All pregnant and postpartum women who, in 2022 and 2023, received care at the Obstetrics Department (prenatal, postpartum, and breastfeeding outpatient clinics) and were recorded in the SIP with a diagnosis of problematic psychoactive substance use based on a positive urine drug test were included. The absence of duplicate records across the different clinics (prenatal, postpartum, and breastfeeding) was verified, ensuring that each individual was counted only once during the study period. This study focused exclusively on pregnant and postpartum women recorded with a diagnosis of problematic psychoactive substance use, without including the general population treated at the institution.

Both those who attended prenatal or postpartum care and those who consulted for breastfeeding or completed their pregnancy at the institution were considered. Cases without complete clinical records or with insufficient information to determine problematic substance use were excluded.

The following variables were analyzed: age, marital status, educational level, prenatal care, and type of substance used. The diagnosis of problematic use was defined by the presence of a positive urine drug test recorded in the SIP and confirmed in institutional laboratory reports.

Data were obtained from the SIP and institutional medical records. The SIP integrates data from prenatal care, delivery, and the postpartum period, completed by healthcare personnel and validated by the Hospital Statistics Department, ensuring data consistency. Cases recorded as problematic substance use in the SIP were verified against corresponding laboratory results.

Statistical analysis was performed using Epidat 4.2[®]. Measures of central tendency (mean) and dispersion (standard deviation) were calculated for quantitative variables, and absolute and relative frequencies (percentages) were calculated for qualitative variables.

The study was approved by the Research Ethics and Animal Use Committee of the National University of the Northwest of Buenos Aires Province (COENOBA), under protocol number 007/2023. The ethical principles outlined in the Declaration of Helsinki and current regulations governing research involving human subjects were adhered to.

RESULTS

A total of 39 pregnant and postpartum women with problematic psychoactive substance use who received care at the institution during the 2022-2023 period were included. Of these, 13 (33%) corresponded to 2022 and 26 (67%) to 2023.

Age

The mean age was 29 ± 7 years in 2022 and 27 ± 6 years in 2023.

Marital status

In 2022, 11 (84.6%) were in a stable partnership, and 2 (15.4%) were single. In 2023, 18 (69.2%) were in a stable partnership, and 8 (30.7%) were single.

Educational level

In 2022, 1 (7.7%) had incomplete primary education, 6 (46.2%) had completed secondary education, and 6 (46.2%) had incomplete secondary education. In 2023, 5 (19.2%) had completed primary education, 3 (11.5%) had completed secondary education, 16 (61.5%) had incomplete secondary education, and 2 (7.7%) had missing data.

Prenatal care

In 2022, 8 (61.5%) received adequate prenatal care, and 5 (38.5%) received limited care. In 2023, 10 (38.5%) received adequate care, 7 (26.9%) received limited care, 6 (23.1%) received no prenatal care, and 3 (11.5%) had missing data.

Substance use patterns

In 2022, substance use patterns were distributed as follows: 8 (61.5%) tobacco, 2 (15.4%) tobacco and cannabis, 1 (7.7%) cocaine and cannabis, 1 (7.7%) cocaine and tobacco, and 1 (7.7%) cocaine only.

In 2023, the following patterns were observed: 6 (23.1%) combined use of tobacco, 1 (3.8%) These findings reinforce alcohol, tobacco, and cocaine, 5 (19.2%) cocaine and cannabis, 1 (3.8%) cocaine and opioids, 4 (15.4%) cocaine and tobacco, 1 (3.8%) tobacco and cannabis, 6 (23.1%) cocaine only, and 2 (7.7%) cocaine, cannabis, and tobacco.

Predominant substance

In 2022, the most frequent substances were tobacco ($n = 11$; 64.8%) and cannabis ($n = 3$; 17.6%). In 2023, the main substances were cocaine ($n = 19$; 46.3%) and tobacco ($n = 14$; 34.1%) (Fig. 1).

DISCUSSION

The results of this study provide evidence on the sociodemographic profile and patterns of problematic psychoactive substance use among pregnant and postpartum women receiving care at a public hospital in Junín during 2022 and 2023. These findings allow for a partial characterization of a poorly documented issue at the local level, in line with national literature highlighting the limited visibility of this population within the healthcare system⁵.

An increase in the number of recorded cases was observed between 2022 and 2023, along with a higher frequency of cocaine use in the latter year. This pattern is consistent with recent reports from other urban centers in the country, where cocaine use shows an upward trend among women of reproductive age⁶. These findings reinforce the need to strengthen prevention strategies and early detection in prenatal care.

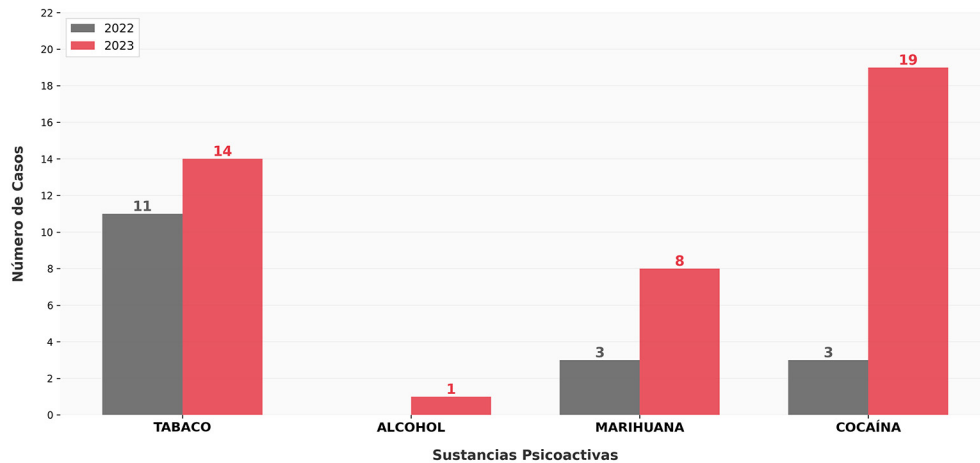


Figure 1. Predominant psychoactive substances among pregnant and postpartum women with problematic substance use treated at a public hospital in Buenos Aires, Argentina, during 2022 and 2023. Figure prepared by the authors based on data from the Perinatal Information System (SIP) and institutional medical records.

From a sociodemographic perspective, most participants were in a stable partnership and had intermediate or incomplete levels of education. This profile is similar to that reported in Argentine and Brazilian studies, which describe an association between substance use, unfavorable socioeconomic conditions, and limited access to education and formal employment⁵⁻⁹. These social determinants may act as vulnerability factors that favor the continuation of substance use during pregnancy.

Analysis of prenatal care showed that a significant proportion of participants did not receive adequate care. This finding is consistent with studies highlighting discontinuity in obstetric follow-up among women with problematic substance use, often associated with stigma, fear of institutional sanctions, or lack of social support networks⁷. Early detection within healthcare services and the creation of stigma-free care pathways are essential to address this issue.

The predominance of tobacco and cocaine use observed in our sample reflects the pattern identified in other national and international studies^{5,6}. Cocaine, in particular, represents a significant obstetric and neonatal risk, associated with low birth weight, preterm birth, and neonatal abstinence syndrome¹⁰. This underscores the importance of interdisciplinary coordination among obstetrics, mental health, and social work.

This study is based on institutional records and did not include interviews or direct clinical assessments; therefore, its results should be interpreted with caution. Nevertheless, it represents an initial approach to this condition among pregnant and postpartum women in the northwest of Buenos Aires Province.

These findings may contribute to guiding future lines of research and to strengthening institutional perinatal

support programs within the public healthcare system at the provincial level.

Overall, the results of this study highlight the need to strengthen comprehensive, context-adapted care strategies for addressing problematic psychoactive substance use during pregnancy and the postpartum period. Such strategies should include not only early detection and healthcare support, but also interdisciplinary coordination among obstetrics, mental health, and social work, incorporating spaces for listening, counseling, and information aimed at pregnant and postpartum women. Furthermore, it is essential to promote prevention and health promotion actions targeting women of reproductive age, in order to reduce the impact of problematic substance use on maternal and neonatal health. Future studies should further explore the evolution of these patterns of substance use and the associated maternal and neonatal outcomes.

Limitations

This study has several limitations that should be considered when interpreting the results. First, it is a descriptive study based on institutional records; therefore, the available information depends on the quality and completeness of clinical records and the Perinatal Information System.

Second, the diagnosis of substance use patterns was established based on clinical records and urine drug screening tests, without the inclusion of structured interviews or direct clinical assessments that would allow for a more in-depth evaluation of consumption patterns and associated psychosocial determinants.

Additionally, the study was conducted in a single healthcare institution in the northwest of Buenos Aires Province; therefore, the results cannot be generalized to other regions or healthcare settings.

Finally, the sample size was small, and the descriptive design does not allow for the establishment of causal associations or statistical inferences regarding the evolution of the phenomenon in the general population.

CONCLUSIONS

This study allowed for the description of the sociodemographic characteristics and patterns of psychoactive substance use among pregnant and postpartum women receiving care at a public hospital in the northwest of Buenos Aires Province during 2022 and 2023. The results demonstrate the presence of substance use in this population and a higher number of cases recorded in the last year of the study period. These findings provide relevant local evidence on a problem that has been poorly documented in the regional setting.

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