# Involvement with psychoactive substances by pregnant women attended at an ambulatory

Envolvimento com substâncias psicoativas por gestantes atendidas em um ambulatório Involucramiento con sustancias psicoactivas de mujeres embarazadas atendidas en un ambulatorio

#### RESUMO

Objetivo: investigar o perfil sociodemográfico, gineco-obstétrico e o envolvimento com substâncias psicoativas por gestantes atendidas em um ambulatório no Sul do Brasil. Método: pesquisa transversal, com amostra de 431 gestantes. A coleta de dados ocorreu no período de agosto de 2018 a julho de 2019, por meio do instrumento padronizado Alcohol, Smoking and Substance Involvement Screening Test e um questionário sociodemográfico e gineco-obstétrico. Na análise de dados foi empregado o teste qui-quadrado. Resultados: a prevalência de uso de substâncias psicoativas entre as gestantes foi de 28,7%, com destaque para o álcool e tabaco. O derivado do tabaco constitui a substância com maior frequência de uso diário (12,3%); que desencadeia maior desejo/urgência de consumo diariamente (11,4%); maior taxa de tentativas de controle nos últimos três meses (9,0%). Conclusão:o uso de substâncias psicoativas suscita o desenvolvimento de ações educativas que estimulem a conscientização sobre suas consequências na gestação, assim como a captação precoce das gestantes para construção de estratégias de redução e/ou abstinência. **DESCRITORES:** Saúde materno infantil; Gravidez de alto risco; Usuários de drogas; Enfermagem.

#### **ABSTRACT**

Objective: to investigate the sociodemographic, gynecological and obstetrical profile and involvement with psychoactive substances by pregnant women assisted at an outpatient clinic in southern Brazil. Method: cross-sectional study, with a sample of 431 pregnant women. Data collection took place from August 2018 to July 2019, using the standardized instrument Alcohol, Smoking and Substance Involvement Screening Test and a sociodemographic and gynecological-obstetric questionnaire. The chi-square test was used for data analysis. Results: the prevalence of psychoactive substance use among pregnant women was 28.7%, with emphasis on alcohol and tobacco. Tobacco derivatives constitute the substance with the highest frequency of daily use (12.3%); that triggers greater desire/urge to consume daily (11.4%); highest rate of control attempts in the last three months (9.0%). Conclusion: the use of psychoactive substances encourages the development of educational actions that encourage awareness of its consequences during pregnancy, as well as the early identification of pregnant women to build reduction and/or abstinence strategies. **DESCRIPTORS:** Maternal and child health; High-risk pregnancy; Drug users; Nursing.

### RESUMEN

Objetivo: investigar el perfil sociodemográfico, ginecoobstétrico y el envolvimiento con sustancias psicoactivas de gestantes atendidas en un ambulatorio del sur de Brasil. Método: estudio transversal, con una muestra de 431 gestantes. La recolección de datos ocurrió de agosto de 2018 a julio de 2019, utilizando el instrumento estandarizado Alcohol, Smoking and Substance Involvement Screening Test y un cuestionario sociodemográfico y ginecoobstétrico. Para el análisis de los datos se utilizó la prueba de chi-cuadrado. Resultados: la prevalencia de consumo de sustancias psicoactivas entre las gestantes fue de 28,7%, con énfasis en el alcohol y el tabaco. Los derivados del tabaco constituyen la sustancia con mayor frecuencia de consumo diario (12,3%); que desencadena mayor deseo/ganas de consumir diariamente (11,4%); tasa más alta de intentos de control en los últimos tres meses (9,0%). Conclusión: el uso de sustancias psicoactivas incentiva el desarrollo de acciones educativas que favorezcan la concientización de sus consecuencias durante el embarazo, así como la identificación precoz de las gestantes para construir estrategias de reducción y/o abstinencia. DESCRIPTORES: Salud maternoinfantil; Embarazo de alto riesgo; Drogadictos; Enfermería.

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## INTRODUCTION

he continuous and progressive use of psychoactive substances during pregnancy interrupts the body's physiological course, leading to the appearance of pathologies, irreversible injuries and even death, which has an impact on the increase in the number of miscarriages, premature displacement of the placenta, as well as high rates of maternal and neonatal mortality.(1)

Research points out that the abusive consumption of psychoactive substances has increased significantly in recent decades, resulting in a complex and challenging problem for government officials and being notorious even in the pregnancy-puerperal period.

A cohort study, carried out in Maranhão, with 1,447 pregnant women, identified that 1.45% used psychoactive substances (cannabinoids and derivatives and/or cocaine and derivatives), 22.32% used alcoholic beverages and 4.22% used cigarette. (2) In the research carried out in Australia with 104 pregnant women who used the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) as a form of data collection, it was found the prevalence of consumption of psychoactive substances, the most consumed being derivatives of tobacco (94.23%) followed by alcohol (35.57%) and marijuana (25%).(3)

According to United States Substance Abuse and Mental Health (2018), the largest source of information in the United Kingdom, in 2018, 5.4% of women reported using illicit drugs during pregnancy, observing a substantial increase when compared to 2010, with

4.4%. (4) Substance use by pregnant women causes far-reaching consequences, which may cause irreversible damage to the mother and fetus, such as premature displacement of the placenta, the appearance of pathologies and even maternal and neonatal death.(1)

The situation is not limited only to problems of a biological nature, but there are psychosocial repercussions, such as social vulnerability and an unstable socioeconomic condition. Init is reported that women users of psychoactive substances tend to be in a situation of vulnerability, unfavorable economic condition, culminating in inadequate housing, low level of education, disqualification in the labor market or with low wages.30874<sup>(5,6)</sup>

Furthermore, pregnant women who use psychoactive substances are often discriminated against due to the association of use with irresponsibility and delinquency, which contributes to the denial of use and non-adherence to prenatal care. (7) It is not rare for professionals to find such difficulties to identify and monitor pregnant women involved with psychoactive substances throughout the pregnancy-puerperal period.

It is noteworthy that the tracking of the consumption of psychoactive substances during the gestational period is uncommon and does not integrate the daily life of most health professionals due to the imposed stigma and lack of knowledge regarding the prevalence and therapeutic resources. In addition, pregnant women who use substances are insecure to report such consumption with their caregivers due to the judgment of health professionals.

Given this context, the present study

aimed to investigate the sociodemographic, gynecological and obstetrical profile and involvement with psychoactive substances by pregnant women assisted at an outpatient clinic in southern Brazil.

## **METHOD**

Quantitative, cross-sectional study, developed in a medium-sized city, Pelotas, in the state of Rio Grande do Sul, in southern Brazil, from August 2018 to July 2019

The sample was calculated from an estimated population of 493 high-risk pregnant women, using a sampling error of 2%, a confidence level of 99% and considering a 28% prevalence of pregnant women using psychoactive substances, licit and illicit. (2) A sample of 430 pregnant women would be needed to represent the number of visits annually by the service for this population. It is noteworthy that in the investigated period it was possible to capture beyond the estimated sample, obtaining data from 431 pregnant women.

The sample selection was non-probabilistic due to the convenience of arriving at the outpatient clinic for care, meeting the inclusion criteria: being a high-risk pregnant woman undergoing prenatal care at a federal university outpatient clinic and communicating verbally using Portuguese. The exclusion criteria were high-risk pregnant women with communication difficulties due to some comorbidity, such as dyspnea and abstinence from psychoactive substan-

Data collection was carried out using two instruments: a semi-structured

artigo

questionnaire, which aimed to capture information regarding the sociodemographic and gynecological-obstetric aspects of the sample, addressing age, education, marital status, work activity, gestational age, number of pregnancies, number of children, psychological treatment/monitoring, health care in other services. Next, o Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) which was developed by the World Health Organization (WHO) with the aim of directing the assistance provided, so that its use marks out their work routines for assessing alcohol consumption. psychoactive substances. Its psychometric properties of the Brazilian version of the ASSIST are satisfactory, being validated and adapted for its application in Brazil, suggesting its usefulness in detecting the abuse of alcohol and other psychoactive substances.

The instrument contains eight questions that provide information about the use of psychoactive substances in life; frequency of use in the last three months; the desire or urge to consume; problems related to use; impaired performance of expected tasks; concern about use by people close to the user; attempts to cease or reduce use; feeling of compulsion and use via injection; and the risk of dependence after the calculation of the score with multiple school responses. (9)

The score for Total Substance Involvement is given by the sum of the scores (global risk continuum) related to questions 1 to 8 for all drug types The sum total can be up to 31 for tobacco derivatives, and 39 for other substances. Obtaining a final score of zero to three, it is called low risk, that is, although they use substances, they still do not have problems related to this use. A score of four to 26 is called a moderate risk of developing problems from use. Women with scores above 27, on the other hand, are at high risk of substance dependence and should be referred to a specialized service.

The ASSIST showed good sensiti-

vity and specificity in detecting abuse and dependence on alcohol, marijuana and cocaine, considering the diagnosis of the International Neuropsychiatric Interview (MINI-Plus) as the gold standard. The instrument's reliability was good (Cronbach's alpha of 0.80 for alcohol, 0.79 for marijuana and 0.81 for cocaine).(9)

Absolute frequency, calculation of percentages and confidence intervals (99%CI) were calculated for the categorical variable, and mean (or median) and standard deviation for numeric variables. To analyze the association between the frequency of psychoactive substance use and health, social, legal or financial problems, the chi-square test was used, with a statistical significance level of 5% (p≤0.05). Such an association was verified in each type of psychoactive substance.

Ethical precepts were respected, in accordance with Resolution 510/2016 do of the National Health Council of the Ministry of Health, the Terms of Free and Informed Consent and Free and Informed Assent were delivered and read with the pregnant and puerperal women, which were signed by them and by the researcher, leaving a copy for the researcher and another for the participant. The research project was approved by the Research Ethics Committee of the Faculty of Nursing under Official Letter No. 2.843.605 and Certificate of Presentation for Ethical(CAAE) No. 96034518.6.0000.5316.

## **RESULTS**

The mean age of pregnant women was 28.4 years (SD=6.9 years), ranging from 13 to 46 years. When separately

Table 1- Sociodemographic data of pregnant women and the use of psychoactive substances in the last three months. Pelotas-RS, 2018-2019, N=43, 2020.

Variables	Use of psychoactive substances in the last three months						
	No - N (%)	Yes - N (%)	Total	P* value			
Age (in years)*							
≤ 18 years old	24 (8,4)	8 (5,6)	32 (7,5)				
19 to 29 years old	143 (50,2)	73 (50,7)	216 (50,3)	0,525			
30 to 39 years old	99 (34,7)	49 (34,0)	148 (34,5)	0,525			
≥ 40 years old	19 (6,7)	14 (9,7)	33 (7,7)				
Education							
Elementary School Incomplete	57 (19,9)	37 (25,7)	94 (21,8)				
Elementary School Complete	31 (10,8)	19 (13,2)	50 (11,6)				
High School incomplete	44 (15,4)	26 (18,0)	70 (16,3)	0,379			
High School complete	98 (34,3)	44 (30,5)	142 (33)				
Higher Education Incomplete	27 (9,4)	9 (6,3)	36 (8,4)				
Higher Education Complete	24 (8,4)	6 (4,2)	30 (7,0)				
Graduate Studies	5 (1,8)	3 (2,1)	8 (1,9)				
Marital Status*							
Single	150 (52,6)	81 (56,3)	231 (53,8)				
Common-law marriage	54 (18,9)	32 (22,2)	86 (20,1)				
Married	79 (27,7)	30 (20,8)	109 (25,4)	0,513			
Divorced	1 (0,4)	1 (0,7)	2 (0,5)				
Widow	1 (0,4)	0 (0,0)	1 (0,2)				

analyzing the sociodemographic profile of pregnant women who did not consume any psychoactive substance (N=286; 66.4%) with those who used it in the last three months (N=144; 33.6%), it was found that the predominant age group in both groups it was 19 to 29 years old (50.2%; 50.7%), single (52.6%; 56.3%), having no work activity (52.7%; 56.3%), with high school education (34.3%; 30.5%), as shown in Table 1.

Regarding the gynecological-obstetric profile, the pregnant women's gestational age ranged from seven to 41 weeks, with an average of 24 (SD=8.6). The number of pregnancies had an average of 2.5 (SD=1.5), ranging from one to nine pregnancies. Pregnant women who used psychoactive substances in the last three months were multiparous, with four or more pregnancies (N=47; 32.7%), unlike those who did not use substances, most of whom were primiparous (N=100; 35.2 %). The number of children ranged from zero to eight, with an average of 1.28 (SD=1.3). Both variables, number of pregnancies and number of children, were statistically significant when associated with the use of psychoactive substances, when applying the chi-square test, p value < 0.001.

It should be noted that, of the pregnant women who used some substance in the last three months, 135 (93.8%) did not undergo any psychological treatment/monitoring and 54 (47%) did not seek care in other health services.

When analyzing the profile of the pregnant women who used psychoactive substances in the last three months, 20.8% had none or one consultation until the date of the interview, a higher number when compared to pregnant women who did not use, 14.3%. Considering the pregnant women who had four or more prenatal consultations, those who did not use had a significantly higher number (65.7%), when compared to those who used psychoactive substances in the last three months

Has Work Activity*								
No	149 (52,7)	80 (56,3)	229 (53,9)					
Yes				0,518				
res	134 (47,3)	62 (43,7)	196 (46,1)					
Gestational Age*								
1st quarter	29 (10,2%)	26 (18,6%)	55 (12,9%)					
2nd quarter	111 (38,9%)	57 (40,7%)	168 (39,5%)	0,027				
3rd quarter	145 (50,9%)	57 (40,7%)	202 (47,5%)					
	Number of p	oregnancies*						
One	100 (35,2%)	31 (21,5%)	131 (30,6%)	p<0,001				
Two	78 (27,5%)	32 (22,2%)	110 (25,7%)					
Three	51 (18,0%)	34 (23,6%)	85 (19,9%)					
≥ Four	55 (19,5%)	47 (32,7%)	102 (23,9%)					
Miscarriages*								
Zero	203 (71,5%)	93 (65,%)	296 (69,3%)					
One	60 (21,1%)	31 (21,75)	91 (21,3%)					
Two	16 (5,6%)	16 (11,2%)	32 (7,5%)	0,161				
Three	5 (1,8%)	2 (1,4%)	7 (1,6%)					
≥ Four	O (O,O%)	1 (0,7%)	1 (0,2%)					
	Number of children*							
Zero	109 (38,4%)	37 (26,1%)	146 (34,3%)					
One	84 (29,6%)	38 (26,8%)	122 (28,6%)					
Two	63 (22,2%)	31 (21,8%)	94 (22,1%)	p<0,001				
Three	15 (5,3%)	24 (16,9%)	39 (9,2%)					
≥ Four	13 (4,6%)	12 (8,4%)	25 (5,9%)					
Treatment/psychological follow-up*								
No	267 (94,3%)	135 (93,8%)	402 (94,1%)					
Yes	16 (5,7%)	9 (6,9%)	25 (5,9%)	0,062				
Assistance at other health services*								
No	105 (47,3%)	54 (47,0%)	159 (47,2%)	0,004				
Yes	117 (52,7%)	61 (53,0%)	178 (52,8%)					
Source: Survey data, 2020. *n < 431 due to missing data.								

(47.9%).

Regarding the use of psychoactive substances in the last three months prior to the interview, 53 (12.3%) pregnant women reported daily use of tobacco products; the use of alcohol was used by 68 (15.8%) pregnant women, with a frequency of once or twice in the last three months. As for illicit substances, three (0.7%) pregnant women reported having used marijuana once or twice, twice (0.5%) weekly and twice (0.5%) daily. Cocaine/crack was used daily by two (0.5%) pregnant women. A similar proportion was observed in relation to the feeling of a powerful desire or urgency to consume psychoactive substances, with a predominance of the use of licit substances, specifically tobacco, when compared with illicit ones in the last three months. It should be noted that, with regard to tobacco derivatives, alcohol, marijuana, cocaine/crack and hypnotics, the desire or urgency for daily consumption was reported by 57 (13.2%) pregnant women.

Regarding the frequency with which they failed to do something that was normally expected of them, two pregnant women mentioned daily damage due to the use of tobacco derivatives (0.2%) and alcohol (0.2%) and seven (0.9%) injury once or twice in the last three months by the same substances.

As for the concern of relatives and friends due to the use of psychoactive substances, 47 (10.9%) reported in the last three months because of tobacco derivatives. Alcohol was reported by 30 (7.0%) pregnant women, however not in the last three months. With regard to illicit psychoactive substances, five pregnant women reported concern for relatives or friends due to the use of marijuana and cocaine/crack in the last three months (0.7%; 0.5%).

The attempt to control, reduce or stop the use of tobacco derivatives in the last three months of the interview was mentioned by 45 (10.4%) pregnant women and 15 (3.5%) pregnant women referring to alcohol. It should be noted that eight pregnant women mentioned attempts to control, reduce or stop the use of the following illicit substances, four (0.9%) of marijuana, three (0.7%) of cocaine/crack and one (0.2%) of hypnotics and sedatives in the last three months (Table 2).

Regarding the risk of dependence, 91 (21.2%) pregnant women had a moderate and elevated risk for tobacco products. As for alcohol, 18 (4.2%) pregnant women were at moderate risk and one (0.2%) at high risk. With regard to illicit substances, marijuana was observed as a moderate risk of dependence for nine (2.1%) pregnant women, followed by four (0.9%) for cocaine/ crack with moderate to high risk, two (0.5%) %) with moderate risk for hypnotics and sedatives and one (0.2%) for hallucinogens.

Most pregnant women at low risk for addiction had gestational problems. However, it should be noted that, of these, 74 (17.2%) had a moderate to high risk of tobacco dependence, requi-

Table 2 – Characteristics of involvement of pregnant women with psychoactive substances. Pelotas-RS, 2018-2019, N=431, 2020.

Variables	No, never - N (%)	Yes, in the last three months - N (%)	Yes, in the last three months - N (%)			
Other people's concerns about use						
Tobacco derivatives	348 (80,7)	47 (10,9)	36 (8,4)			
Alcohol	384 (89,1)	17 (3,9)	30 (7,0)			
Marihuana	423 (98,1)	3 (0,7)	5 (1,2)			
Cocaine/Crack	425 (98,6)	2 (0,5)	4 (0,9)			
Amphetamine/Ecstasy	431 (100)	-	-			
Inhalants	431 (100)	-	-			
Hypnotics/ Sedatives	431 (100)	-	-			
Hallucinogens	430 (99,8)	-	1 (0,2)			
Opioids	431 (100)	-	-			
Attempted to control, reduce, or stop use and failed						
Tobacco derivatives	347 (80,5)	45 (10,4)	39 (9,0)			
Alcohol	399 (92,6)	15 (3,5)	17 (3,9)			
Marihuana	421 (97,7)	4 (0,9)	6 (1,4)			
Cocaine/Crack	425 (98,6)	3 (0,7)	3 (0,7)			
Amphetamine/Ecstasy	429 (99,5)	-	2 (0,5)			
Inhalants	429 (99,5)	-	2 (0,5)			
Hypnotics/ Sedatives	429 (99,5)	1 (0,2)	1 (0,2)			
Hallucinogens	429 (99,5)	-	2 (0,5)			
Opioids	430 (99,8)	-	1 (0,2)			
Injection use of psychoactive substances						
	431 (100)	-	-			
Source: Survey data, 2020.						

ring intervention, therefore they should be referred to a specialized care service. Also, there was a significant number of pregnant women with a moderate risk of alcohol dependence (N=17; 3.9%)

The use of licit substances was associated with the frequency of health, social, legal or financial problems in high-risk pregnant women who assisted at the outpatient clinic (alcohol p<0.001 and tobacco products p<0.037). With tobacco use, 16 pregnant women reported problems, with daily (N=11; 2.5%) or monthly (N=3; 0.7%) frequency. Regarding alcohol use, three (0.7%) pregnant women had health, social, legal or financial problems once or twice.

## DISCUSSION

Women constitute one third of people who use psychoactive substances in the world, a significant proportion of them are of reproductive age (between 15 and 44 years), which means that use and pregnancy tend to converge.(10) The pregnant women participating in this study they had a mean age of 28.4 years, ranging between 13 and 46 years, with a predominance of 19 to 29 years, mostly single, without work activity and with complete secondary education. A similar profile was observed in a survey carried out in Kenya with 45 pregnant women whose sample had a mean age of 28.5 years, ranging from 19 to 49 years,

single, without formal income and with a low level of education. (10)

Regarding the clinical-obstetric profile, the cases of previous abortion among the pregnant women participating in this study ranged from zero to four, with a higher prevalence in pregnant women who used it in the last three months (35%), when compared to those who did not (28.5%). The cohort study by the Evandro Chagas National Institute of Infectiology of the Oswaldo Cruz Foundation, which included 1,383 women, found that, of these, 42.3% were smokers and 16.6% were users of illicit substances, and identified that one of the factors associated with abortion was the use of any psychoactive substances in life and in the period of egress in the research.(11)

Participants in the present study had an average of 2.5 pregnancies, ranging from one to nine pregnancies. Pregnant women who used psychoactive substances in the last three months were predominantly multiparous; in contrast, of those who did not use substances, most were primiparous.

A study carried out in Porto Alegre, in a mental health inpatient unit, of pregnant women using psychoactive substances, 33 (73.5%) were multiparous, with more than four pregnancies(12), in line with the findings of this research.

Among the pregnant women who used some substance in the last three months, 135 (93.8%) did not undergo any treatment/psychological follow-up. It should be noted that once use is detected during prenatal consultations, the professional must refer them to specialized services such as Psychosocial Care Centers (CAPS).(13) In this sense, the referral system and the Counter-referral in Health is a mechanism that favors the exchange of information in the care network, the transit of the user in the system, and the continuity of care, considered a powerful tool that promotes comprehensive practice in health. Unfortunately, due to the fragmentation of the care system, there are still some difficulties for its effectiveness(14), which are intensified when it comes to pregnant and postpartum women who use psychoactive substances. (15)

Alluding to gestational consultations, 203 (47.5%) pregnant women were in the third trimester of pregnancy, mostly with four or more gestational consultations, in accordance with what is recommended by the Ministry of Health. However, 12 pregnant women (2.8%) reported having none or one prenatal consultation by the date of the interview. On the other hand, the research carried out in Pernambuco with 30 pregnant women observed that predominantly the participants had less than six prenatal consultations, birth (n=16;53,3%),(16)

In this study, the clinical conditions identified were predominantly metabolic, 91 (21.2%), such as gestational diabetes mellitus (81.3%) and hypertensive syndromes, 58 (13.5%) In line with these findings, the study carried out in a high-risk outpatient clinic in Maranhão, with a sample of 95 pregnant women, observed that the most prevalent condition was pregnancy-specific hypertension (17%), followed by hemorrhagic syndromes (12%).(17)

Among the interviewees, 29 (6.7%) pregnant women mentioned the use of more than one substance, configuring them as multiple users. Similarly, research carried out in Campinas with 70 pregnant women, through the application of the ASSIST, showed that most women indicated the use of two or more substances (72.4%), the most used being tobacco derivatives (84.2%), alcohol (74%), cocaine (28%), marijuana (26.3%) and crack (13.1%). It should be noted that 79% of pregnant women who used tobacco derivatives continued during pregnancy; on the other hand, most who used alcohol (79%), cocaine (71.4%) and marijuana (70%) stopped using it during pregnancy.. (18)

Regarding the use of psychoactive substances in the last three months prior to the interview, 53 (12.3%) pregnant women reported daily use of tobacco products; the use of alcohol was used by 68 (15.8%) pregnant women, with a frequency of once or twice in the last three months. As for illicit substances, three (0.7%) pregnant women reported having used marijuana once or twice, twice (0.5%) weekly and twice (0.5%) daily. Cocaine/crack was used daily by two (0.5%) pregnant women.

A study carried out in Maryland, in the United States, with a sample of 500 pregnant women, observed that 29% of them used tobacco derivatives in the month before pregnancy.. During pregnancy, 17% were current smokers, 12% were recent former smokers, and 71% were non-smokers. The overall prevalence of illicit or prescribed drug use during pregnancy was 27%, with marijuana being the most commonly used substance, with a rate of 22%, followed by opioids, 4%, and cocaine, 1%. (19)

In this study, 57 (13.2%) pregnant women reported the feeling of desire or urgency to consume psychoactive substances, with a predominance of licit substances, specifically tobacco derivatives, when compared to illicit ones in the last three months. It should be noted that, in relation to tobacco derivatives, alcohol, marijuana, cocaine/crack and hypnotics, the desire or urgency for daily consumption was mentioned.

A study carried out in Recife, with 111 pregnant women, pointed out that 36 (22.5%) reported a desire and urgency to consume a certain psychoactive substance during pregnancy. Furthermore, 86 (77.5%) were abstinent for a period, and 49 (57%) were abstinent for more than three months. However, of those who were abstinent during pregnancy, approximately 21% reported relapse in the puerperium. (20)

In this research, the concern of relatives and friends due to the use of psychoactive substances was reported by 47 (10.9%) pregnant women because of tobacco derivatives; as a result of alcohol use, 30 (7.0%) pregnant women mentioned concern from relatives and friends, however not in the last three months. With regard to illicit psychoactive substances, five pregnant women reported concern for relatives or friends due to the use of marijuana and cocaine/crack in the last three months (0.7%; 0.5%).

Social support networks are of great importance from the point of view of reconstruction and as a support, gaining importance in the reintegration and rehabilitation of the user in society, as well as in the rescue of her autonomy and reduction of substance. Research carried out with three pregnant women who were followed up at the CAPS-Alcohol and drugs, due to the abusive use of psychoactive substances, pointed out that the largest circle of coexistence is the family, in particular the mother and husband of the pregnant woman, who have a higher degree of concern and care, in addition to being the members who most aim at recovery. (21)

Regarding the frequency with which they failed to do something that was normally expected of them, two pregnant women mentioned daily damage due to the use of tobacco derivatives (0.2%) and alcohol (0.2%) and seven (0.9%) injury once or twice in the last three months by the same substances. Researchers show that the use of drugs by the maternal figure can lead to problems in the family and social spheres, such as disqualification in the labor market due to the effects of use, discontinuity in the marital bond, compromise in the family bond and neglect of children and with work. (5)

Given this panorama, the attempt to control, reduce or stop the use is normal in this period of a woman's life, being observed, in this study, the attempt of 45 (10.4%) pregnant women to abstain from tobacco derivatives and the attempt of 15 (3.5%) pregnant women to abstain from alcohol. It should be noted that eight reported attempts to control, reduce or stop the use of the following illicit substances: four (0.9%) marijuana, three (0.7%) cocaine/crack and one (0.2%) cocaine. hypnotics and sedatives in the last three months.

The study carried out in Espírito Santo, with a pregnant woman and three puerperal women, pointed out that affective aspects act directly on the decision to interrupt or continue the use of crack. During the interruption, feelings of guilt, love and fear emerged; on the other hand, with the continued consumption of the drug, feelings of sadness, pleasure, loneliness, and absence of shame emerged, causing the continuation of use.(22)

In this research, 91 (21.2%) pregnant women were at moderate and high risk for tobacco products. As for alcohol, 18 (4.2%) pregnant women were at moderate risk and one (0.2%) at high risk. Marijuana was observed as a moderate risk of dependence for nine (2.1%) pregnant women, followed by cocaine/ crack, in which four (0.9%) pregnant women were at moderate risk. Two (0.5%) showed moderate risk for hypnotics and sedatives and one (0.2%) for hallucinogens.

Research carried out in Sergipe with 50 users, of which 3 were women who assisted at a psychosocial care center for alcohol and other drugs found that 52% had a harmful degree of dependence, which highlights the need for brief intervention, and 40% fit within the intensive intervention group(15)

The use of licit substances was associated with the frequency of health, social, legal or financial problems (alcohol p<0.001 and tobacco products p<0.037). With tobacco use, 16 pregnant women reported problems, with daily (N=11; 2.5%), monthly (N=3; 0.7%) and weekly (N=2; 0.5%) frequency. Regarding alcohol use, three (0.7%) pregnant women had health, social, legal or financial problems once or twice.

A study carried out in Iran with 657 pregnant women using psychoactive substances pointed out that the continuous and progressive use of these substances interrupts the physiological course of the body, leading to the appearance of pathologies, irreversible injuries and even death, which has an impact on the increase in the number of abortions, greater rate of pre-eclampsia, placental abruption, premature labor and low birth weight.(23)

### CONCLUSION

The sociodemographic profile of the pregnant women in this study, the average age was 28 years old, single, without work activity and with complete secondary education. As for the clinical-obstetric profile, most were in the second trimester, primigravidae and without previous abortion.

Tobacco derivatives were the substances with the highest frequency of use, being identified as the substances that trigger, with greater frequency, desire or urge to consume; higher rate of decrease or abstinence attempts, as well as having a risk of moderate to severe dependence

This panorama exposes that the use of tobacco products and alcohol during pregnancy constitutes a challenge to public health and to health professionals, prompting the development of educational activities that stimulate awareness about the consequences of substance use, even if licit activities, as well as early identification of pregnant women for the joint construction of reduction and/or abstinence strategies, which may have repercussions on adherence to continuous monitoring during pregnancy and the puerperium. Based on these actions, the potential of follow-up developed through prenatal, postpartum and childcare consultations is expanded, with regard to the reduction of complications for mother and baby..

As a limitation of the generalization of the results of this study, carrying out the research in only one outpatient clinic could represent the reality of a certain geographic location, but when comparing the findings with the literature was identified.

## REFERÊNCIAS

1.Reitan T. [Substance abuse during pregnancy: a 5-year followup of mothers and children]. Rev Drugs [Internet] 2019 [Cited 2021 jan 22];26(1): 219-28. Avaliable from: https://www.tandfonline.com/ doi/pdf/10.1080/09687637.2018.1432568?needAccess=true&

2.Rocha PC, Alves MTSSB, Chagas MDC, Silva AAM, Batista RFL, Silva RA. [Prevalence of illicit drug use and associated factors during pregnancy in the BRISA cohort]. Cad. Saúde Pública [Internet] 2016 [cited 2021 jun 14]; 32(1): e00192714. Avaliable from: https://www.scielo. br/j/csp/a/wS3gjWCYsWnZPcGsZ5qr4qK/?lang=pt&format=pdf

3. Hotham E, Ali R, White J. [Analysis of qualitative data from the investigation study in pregnancy of the ASSIST Version 3.0 (the Alcohol, Smoking and Substance Involvement Screening Test)]. Midwifery [Internet] 2016 [cited 2021 jun 13];34(1):183-97. Avaliable from: https://sci-hub.se/10.1016/j.midw.2015.11.011

4. Substance Abuse and Mental Health Services Administration (SAMHSA). [Key substance use and mental health indicators in the United States: Results from the 2018 National Survey on Drug Use and Health] SAMHSA [Internet] 2019 [cited 2020 Sept 02]. Available from: https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHNationalFindingsReport2018/NSDUHNationalFindingsReport2018.pdf

5.Reis LM, Sales CA, Oliveira MLF. [Narrativa de filha de usuária de drogas: repercussões no cotidiano familiar]. Esc Anna Nery Rev Enferm [Internet] 2017 [acesso 2021 jun 17];21(3):e20170080. Disponível em: https://www.scielo.br/j/ean/a/3xHkrXLLVfNF866rFwJVvdx/?lang=pt&format=pdf

6.Metz V, Brown Q, Martins S, Palamar J. [Characteristics of drug use among pregnant women in the United States: Opioid and non-opioid illegal drug use] Drug Alcohol Depend [Internet] 2018 [cited 2021 jun 20];183(1):261-66. Avaliable from: https://www.ncbi.nlm.nih. gov/pmc/articles/PMC5803362/

7. Soccol KL, Terra MG, Ribeiro DB, Siqueira DF, Lacchini AJB, Canabarro JL. [Motivos da recaída ao uso de drogas por mulheres na perspectiva da fenomenologia social]. Enferm. Foco [Internet] 2019 [acesso em 2021 jun 16];10(5):117-122. Disponível em: http://revista.cofen. gov.br/index.php/enfermagem/article/view/2540/677

8.Kanada SBFM. [Linha de cuidado como dispositivo para a adesão de gestantes usuárias de drogas aos cuidados do pré-natal][Dissertação]. São Paulo: Pontifícia Universidade Católica de São Paulo; 2019. Disponível em: https://repositorio.pucsp.br/jspui/bitstream/ handle/22461/2/Sibeli%20Bandoni%20Ferreira%20de%20Mello%20

9. Henrique IFS, Michele D, Lacerda RB, Lacerda LA, Formigoni MLOS. [Validação da versão brasileira do teste de triagem do envolvimento com álcool e outras substâncias (ASSIST)]. Rev. Assoc. Med. Brasil [Intenet] 2004 [acesso 2021 fev 05];50(2):199-206. Disponível em: https://www.scielo.br/j/ramb/a/TkCS3f3b5Nrm49tYRxW45Dm/?format=pdf&lang=pt

10. Mburu G, Ayon S, Mahinda S, Kaveh K. [Determinants of Women's Drug Use During Pregnancy: Perspectives from a Qualitative Study]. Matern. child health j [Internet] 2020 [cited 2021 jan 14];24(1):1170-78. Avaliabre from: https://www.ncbi.nlm.nih.gov/ pmc/articles/PMC7419458/

11.Domingues RMSM, Silva CMFP, Grinsztejn BGJ, Moreira RI, Derrico M, Andrade AC, et al. [Prevalência e fatores associados ao aborto induzido no ingresso em uma coorte de mulheres vivendo com HIV/aids, Rio de Janeiro, Brasil, 1996-2016]. Cad. Saúde Públic [Internet] 2020 [acesso 2021 fev 16];36(1):e00201318. Disponível em: https://www.scielo.br/j/csp/a/SFMRjJPVmpNdgwwKvNw39t-M/?lang=pt&format=pdf

12. Santin J. [Perfil de gestantes usuárias de drogas internadas em

uma unidade de saúde mental do município Porto Alegre]. Porto Alegre: Universidade Federal do Rio Grande do Sul, 2018. Trabalho de Conclusão de Curso. Disponível em: https://lume.ufrgs.br/bitstream/ handle/10183/184596/001079694.pdf?sequence=1&isAllowed=y

13. Peters AA, Cruzeiro HR, Bertolini OGP, Assis GP, Silva AD, Peres MAA. [Gestantes em uso de substâncias psicoativas atendidas por enfermeiros na Atenção Primária à Saúde]. Rev. Eletrônica Saúde Mental Álcool Drog [Internet] 2020 [acesso 2021 jan 20];16(2):66-74. Disponível em: http://pepsic.bvsalud.org/pdf/smad/v16n2/ v16n2a09.pdf

14.Soccol KLS, Marchiori MRCT, Santos NO, Rocha BD.[Rede de atenção à saúde de gestantes e puérperas: percepções de trabalhadores da saúde]. Saúde Coletiva (Barueri)[Internet] 2022 [acesso 2022 out 14];12(72), 9382-93. Disponível em: https://doi. org/10.36489/saudecoletiva.2021v12i72p9382-9393

15.Andrade FT, Santos NME, Lima ACR, Porto YCB, Santos AD. [Grau de dependência em usuários de um centro de atenção psicossocial álcool e outras drogas]. J. nurs. Health [Internet] 2020 [acesso 2021 jan 15];10(3):e20103005. Disponível em: https://periodicos.ufpel. edu.br/ojs2/index.php/enfermagem/article/view/18505/11650

16.Melo DEB, Silva SPC, Matos KKC, Martins VHS. [Consulta de enfermagem no pré-natal: representações sociais de gestantes]. Rev. Enferm. UFSM [Internet] 2020 [acesso 2021 jun 29];10(18):1-18. Disponível em: https://periodicos.ufsm.br/reufsm/article/ view/37235/html

17. Santos AKS, Soares MZP. [Perfil de encaminhamentos ao pré-natal de alto risco do município de Aracaju/SE]. Scire Salutis [Internet] 2018 [acesso 2021 fev 15];8(1):44-52. Disponível em: https:// sustenere.co/index.php/sciresalutis/article/view/CBPC2236-9600.2018.001.0006/1088

18.Tamashiro EM, Milanez HM, Azevedo RCS. ["Por causa do bebê": redução do uso de drogas por gestantes]. Rev. Bras. Saúde Mater. Infant [Internet] 2020 [acesso 2021 jan 28];20(1):313-17. Disponível https://www.scielo.br/j/rbsmi/a/ZtDq9FFk9nxjHYCt4mQnbyv/?lang=pt&format=pdf

19.0ga E, Mark K, Coleman-Cowger V. [Cigarette Smoking Status and Substance use in pregnancy]. Matern. child health j [Internet] 2018 [cited 2021 fev 22];22(10):1477-83. Avaliable from: https://www. ncbi.nlm.nih.gov/pmc/articles/PMC6430977/

20. Arribas CGSM, Carvalho MR, Silva EM, Diniz GTN, Notari JDF, Silva IN. [Positividade ao consumo de álcool e outras drogas por mulheres gestantes em três hospitais públicos do recife a partir da aplicação do teste ASSIST]. In: Anais do Congresso Brasileiro de Saúde Coletiva. Campinas: Galoá. 2018. Disponível em: https://www.arca.fiocruz. br/bitstream/icict/38097/2/Carlos\_Gustavo\_da\_Silva\_Martin\_ de\_Arribas.pdf

21. Wronski JL, Pavelski T, Guimarães AN, Zanotelli SS, Schneider JF, Bonilha ALL. [Uso do crack na gestação: vivências de mulheres usuárias]. Rev Enferm UFPE On Line [Internet]. 2016 [acesso 2019 Jul 30];10(4):1231-39. Disponível em: https://periodicos.ufpe.br/revistas/revistaenfermagem/article/viewFile/11108/12577

22.Silva JDC, Carvalho FSS, Silva MVRS, Silva EAC, Santos JC. [Pré-Natal de alto risco: dados sociodemográficos e intercorrências durante a gravidez]. Reas [Interent] 2019 [acesso 2021 jul 25];23(1):e451. Disponível em: https://acervomais.com.br/index.php/saude/article/ view/451/441

23.Aghamohammadi A, Zafari M. [Crack abuse during pregnancy: maternal, fetal and neonatal complication]. J Matern Fetal Neonatal Med [Internet] 2015 [cited 2021 jan 11];29(5):795-Avaliable from: https://www.tandfonline.com/doi/ abs/10.3109/14767058.2015.1018821?journalCode=ijmf20