Original article

TEXTO & CONTEXTO ENFERMAGEM
TEXT & CONTEXT NURSING TEXTO & CONTEXTO ENFERMERÍA

VULNERABILITY OF PREGNANT WOMEN USING ALCOHOL AND OTHER DRUGS IN LOW-RISK PRENATAL CARE

Sônia Regina Marangoni[1]
Aroldo Gavioli[1]
Lashayane Eohanne Dias[1]
Maria do Carmo Fernandes Lourenço Haddad[2]
Fátima Büchele Assis[3]
Magda Lúcia Félix de Oliveira[1]

[1]Universidade Estadual de Maringá, Programa de Pós-Graduação em Enfermagem. Maringá, Paraná, Brasil.
[2]Universidade Estadual de Londrina, Programa de Pós-graduação em Enfermagem. Londrina, Paraná, Brasil.
[3]Universidade Federal de Santa Catarina, Programa de Pós-Graduação em Saúde Coletiva. Florianópolis, Santa Catarina, Brasil.

ABSTRACT

Objective: to verify the contexts that enhance the dimensions of individual, social, and programmatic vulnerability associated with the use of alcohol and other drugs during pregnancy.
Method: qualitative, descriptive, and exploratory, cross-sectional study. Participants were 38 pregnant women who used alcohol and other drugs, at a moderate and severe level, in low-risk prenatal care in the Primary Health Care of two cities in the Metropolitan Region of Maringá - Paraná. Data was collected from, December 2019 to March 2020. The Vulnerability analytical framework guided the discussion.
Results: at the individual level, the vulnerability contexts were issues of gender, brown and black ethnicity/color, low education, reproductive period, and high parity. At the social level, the lack of insertion in the job market, family income below the poverty line, abusive intra-family relationships, addictive behavior in the family, and violence in the living community. In the programmatic plan, there was a low demand for health services, lack of welcoming for the treatment of drug use, screening for deficient drug use, low bond with family health teams, absence of dental, psychological, and social services, insertion in the inadequate level of prenatal care, usual risk, while they should have been classified as high risk, and mean prenatal consultations below recommended.
Conclusion: the study made it possible to advance in the contexts of the vulnerability of these pregnant women. Recognizing these contexts makes it possible to formulate strategies to reduce harm and damages to maternal and fetal health related to drug use during pregnancy, leading to a favorable gestational outcome.

DESCRIPTORS: Pregnant women. Drugs of abuse. Addictive behavior. Prenatal care. Nursing in public health. Vulnerability analysis.

HOW CITED: Marangoni SR, Gavioli A, Dias LE, Haddad MCFL, Assis FB, Oliveira MLF. Vulnerability of pregnant women using alcohol and other drugs in low-risk prenatal care. Texto Contexto Enferm [Internet]. 2022 [cited YEAR MONTH DAY]; 31:e20210266. Available from: https://doi.org/10.1590/1980-265X-TCE-2021-0266en

VULNERABILIDADE DE GESTANTES USUÁRIAS DE ÁLCOOL E OUTRAS DROGAS EM PRÉ-NATAL DE BAIXO RISCO

RESUMO

Objetivo: verificar os contextos que potencializam as dimensões de vulnerabilidade individual, social e programática associadas ao uso de álcool e outras drogas durante a gravidez.
Método: estudo qualitativo, descritivo e exploratório, com corte transversal. Participaram 38 gestantes usuárias álcool e outras drogas, em nível moderado e grave, em atendimento pré-natal de baixo risco na Atenção Primária à Saúde de dois municípios da Região Metropolitana de Maringá - Paraná. Os dados foram coletados de dezembro de 2019 a março de 2020. O referencial analítico da Vulnerabilidade pautou a discussão.
Resultados: no plano individual, os contextos de vulnerabilidade eram questões de gênero, raça/cor parda e preta, baixa escolaridade, período reprodutivo e alta paridade. No plano social, a ausência de inserção no mercado de trabalho, renda familiar na linha da pobreza, relações intrafamiliares abusivas, comportamento aditivo na família e violência na comunidade de convivência. No plano programático encontraram-se baixa procura a serviços de saúde, ausência de acolhimento para o tratamento do uso de drogas, rastreio para o uso de drogas deficitário, baixo vínculo com as equipes da saúde da família, ausência de atendimento odontológico, psicológico e do serviço social, inserção no nível de assistência pré-natal inadequado, risco habitual, enquanto deveriam ter sido classificadas como alto risco, e média de consultas pré-natal abaixo do preconizado.
Conclusão: o estudo permitiu avançar nos contextos de vulnerabilidade dessas gestantes. O (re)conhecimento destes contextos possibilita a formulação de estratégias de redução de danos e de agravos à saúde materno fetal relacionados ao uso de drogas durante a gravidez, conduzindo a um desfecho gestacional favorável.

DESCRITORES: Mulheres grávidas. Drogas de abuso. Comportamento aditivo. Cuidado pré-natal. Enfermagem em saúde pública. Análise de vulnerabilidade.

VULNERABILIDAD DE GESTANTES QUE CONSUMEN ALCOHOL Y OTRAS DROGAS EN EL PRENATAL DE BAJO RIESGO

RESUMEN

Objetivo: verificar los contextos que potencian las dimensiones de vulnerabilidad individual, social y programática asociadas al consumo de alcohol y otras drogas durante el embarazo.
Método: estudio cualitativo, descriptivo y exploratorio, transversal. Participaron 38 gestantes que consumían alcohol y otras drogas, en grado moderado y severo, en el prenatal de bajo riesgo en la Atención Primaria de Salud de dos municipios de la Región Metropolitana de Maringá - Paraná. . Los datos se recopilaron desde diciembre de 2019 a marzo de 2020. El marco analítico de Vulnerabilidad orientó la discusión.
Resultados: en el plano individual, los contextos de vulnerabilidad detectados fueron: cuestiones de género, raza/color pardo y negro, baja escolaridad, período reproductivo y alta paridad. A nivel social, la falta de inserción en el mercado laboral, ingresos familiares por debajo de la línea de pobreza, relaciones intrafamiliares abusivas, conductas adictivas en la familia y violencia en la comunidad de convivencia. En el plano programático se constató baja demanda de servicios de salud, falta de acogida para el tratamiento del consumo de drogas, rastreo por consumo deficiente de drogas, escasa vinculación con los equipos de salud de la familia, falta de atención odontológica, psicológica y del servicio social, inserción en nivel inadecuado de atención prenatal, clasificación como riesgo habitual, cuando correspondía la clasificación de alto riesgo, y promedio de consultas prenatales por debajo de lo recomendado.
Conclusión: el estudio permitió avanzar en los contextos de vulnerabilidad de estas gestantes. El (re) conocimiento de estos contextos permite formular estrategias para reducir los daños y perjuicios a la salud materna y fetal relacionados con el uso de drogas durante el embarazo, lo que conduce a un resultado gestacional favorable.

DESCRIPTORES: Mujeres embarazadas. Abuso de drogas. Comportamiento adictivo. Cuidado prenatal. Enfermería de salud pública. Análisis de vulnerabilidad.

INTRODUCTION

Regardless of the engagement, using alcohol and other drugs impacts women's lives, especially during pregnancy. The operationalization of vulnerability contexts can be used to understand what this involvement entails, enabling visibility and identification of female specificities[1–2].

In its origins, the term "vulnerability" defines groups discriminated against or excluded and needing protection. In the health field, the construction of the vulnerability framework took place together with the Human Rights movement in the 1980s and was initially used for its explanatory potential in the face of the outbreak of the AIDS epidemic[3–4]. It appears in opposition to the idea of risk, indicating the expansion of the verification of chances and forms of involvement of a disease by the entire population[1–2].

Vulnerability is a theoretical framework that aims to respond to social and health needs that demand knowledge and transformation of reality[4–5]. It has multidetermination in its genesis, as it is not strictly conditioned to the absence or precariousness of access to income; however, the phenomena of poverty and vulnerability are intertwined[2]. Contexts that promote or perpetuate vulnerabilities can only be discussed by examining the person in their environment as they intertwine[1].

Vulnerability encompasses the complex relationships between the individual, social and programmatic levels of life contexts, which, when integrated and articulated, show greater or lesser vulnerability. The individual component considers knowledge about the disease and the existence of behaviors that provide opportunities for its occurrence; the social considers obtaining information and the power to incorporate it into practical changes; and the programmatic, institutional actions such as access to health services, actions for the prevention and control of diseases and the existing social resources in the area covered by the health service[3].

Currently, it encompasses multiple meanings, from those developed in bioethics, highlighting weaknesses inherent to every human being, to those affiliated with human rights, denouncing social inequalities[6]. It can be applied to the analysis of life contexts of women who use drugs of abuse during pregnancy, considered a *priori* as a differentiated subgroup in the female universe, with their specific characteristics and needs.

Women involved with drugs, whether as protagonists of consumption and/or trafficking or as a partner and/or family member of someone who consumes and/or traffics some type of drug, experience different situations of vulnerability at biological and social levels[7]. The use of drugs of abuse during pregnancy represents a maternal and fetal toxicological risk, and the complications resulting from its use are widely discussed in the literature[8–11].

Pregnant women with a *vulnerability status* resulting from drug use perform less prenatal care[7,10,12]. The quality of prenatal care is one of the governmental prerogatives in maternal and child health care. Pregnant women who misuse drugs during pregnancy require special attention from health professionals, due to the multiple impacts on the health of pregnant women, for the safe progression of their pregnancy, which represents a condition for high-risk prenatal care[10,13–14].

Drug use by women of childbearing age should be investigated. Nevertheless, this is not a reality in Brazil, so prenatal care should be considered a critical moment to address problematic drug use in women. Constant monitoring of health services during prenatal care can expand the bond with the care team and minimize prejudice and shame directly related to underreporting drug use during pregnancy[9–10]. It is known that vulnerability is not a permanent condition. It has a dynamic character and contexts can be minimized or reversed[3,7].

However, there are gaps in the national literature of research addressing the daily life of this population subgroup in their histories, subjectivities, and vulnerabilities[7–8]. Academic productions, in their majority, emphasize the impacts caused by the drug on a physical level and on the epidemiological

contingent, that is, they emphasize the risk and distance themselves from the vulnerabilities regarding the direct and/or indirect involvement with alcohol and other drugs[9].

Considering that involvement with drugs is a factor that makes the experience of motherhood vulnerable in the obstetric, perinatal, family, and social context, it is considered that the study of these factors from the analytical plans of vulnerability will provide a theoretical basis for nurses to plan care aimed at the needs of the pregnant drug user and the child.

The development of this study was outlined by the following question: what are the contexts that enhance the dimensions of individual, social, and programmatic vulnerability presented by pregnant women who use alcohol and other drugs during pregnancy? To answer the guiding question, the objective was to verify the contexts that enhance the dimensions of individual, social, and programmatic vulnerability associated with the use of alcohol and other drugs during pregnancy.

METHODS

The present study results from an investigation linked to a multifocal, multicenter, and interinstitutional research project - Contexts of Alcohol, Tobacco, and Drug Consumption by Pregnant Women and Associated Factors in a Metropolitan Region of Brazil, developed by the Graduate Program in Nursing from the State University of Maringá (PSE/UEM), the Center for Poisoning Control of Maringá, the National Metropolis Observatory Network, and the National Institute of Science and Technology/National Council for Scientific and Technological Development (INCT-CNPq).

This qualitative, descriptive, and cross-sectional study uses the conceptual basis of vulnerability in the individual, social, and programmatic analytical plans[3]. The analysis of secondary data and the interview were used to approach the object under study.

The scenario was 16 basic health units (BHU) in the cities of Maringá and Sarandi, located in the Metropolitan Region of Maringá (RMM), the northwest region of the State of Paraná, whose social structure follows the center-periphery urbanization model, which decreases in this sense, in quality of urban infrastructure and income of residents[15].

In 2020, the city of Maringá was considered a destination for a set of socioeconomic activities by the inhabitants of the cities of the RMM, which maintain integration processes among themselves and mainly as a center of Maringá. While Sarandi was planned as a support city, it was the city in the region that presented the largest demographic increase: 101.5%, between 1991 and 2019, and experienced the spatial and social segregation resulting from implementing the urban policy around the hub city. Both cities have strong population integration and socioeconomic and demographic differences between the inhabitants. There is a population arrangement characterized by commuting for work and study greater than 10 thousand people a day in these cities[15].

The BHU, a communication center with the entire Health Care Network, and preferential contact for users of the Unified Health System, was considered the research location. It is the gateway for pregnant women to the health network as a strategic point of care to better accommodate their needs and for a longitudinal and continuous pregnancy monitoring[14].

The study participants were 38 pregnant women enrolled in low-risk prenatal care at seven BHU in Maringá, and nine in Sarandi attended from December 2019 to March 2020, when data collection took place. Eligibility criteria were: pregnant women attending low-risk prenatal care; aged over 18 or under, if accompanied by a legal guardian; residence in the cities of Maringá and Sarandi; and positive screening - harmful or damaging substance use (moderate risk) and higher scores, considered severe - which indicate dependence (high risk), for the use of one or more drugs screened by Alcohol, and Substance Involvement Screening Test - ASSIST 3.1. As exclusion criteria, occasional drug use was adopted - low riskof developing problems related to substance use, according to the tool used[16].

Pregnant women were excluded according to the answers to questions 1 (use in life) and 2 (use in the last 3 months) of ASSIST 3.1. Those who answered "NO" for the nine drug classes screened in question 1 were automatically excluded. For question 2, the participant's exclusion criterion was given by indicating the occasional frequency of drugs screened in the last three months as it indicated a low risk for drug use. Occasional use occurs when the drug is used sporadically when it is easily available or in a favorable environment for use, without affective, social, and professional disruptions, in specific situations or leisure, according to the current pattern of use[16].

According to these criteria, 58 pregnant women were eligible for this study, and 20 refused to participate in this stage of the research when the pregnant women were informed that the interview questions after the screening would discuss health and social aspects related to drugs. Effective participants were 38 pregnant women in moderate or severe use of one or more drugs, licit or illicit - 12 lived in Maringá and 26 in Sarandi.

The data source for sociodemographic and gestational characterization was the phase 1 database, with 38 pregnant women selected. The data collection tool was an interview script with semi-structured questions with three thematic axes: addictive behavior in the family, the social life of the family and in the living community, and health/social indicators, selected from the perspective of the individual, social, and vulnerability program.

Data collection was conducted through a face-to-face interview, which took place at the premises of the BHU where the pregnant woman was linked, on the date and time she attended for prenatal care. It was conducted by the researchers in a private place, individually, in a single meeting that lasted an average of 15 minutes.

The pregnant women's narratives were recorded on digital media. The data captured during the interviews were organized according to the thematic content analysis technique[17], which unfolds in three stages: pre-analysis – comprising skimming the text, constitution of the corpus, formulation, and reformulation of hypotheses or assumptions; exploration of the material or coding – where the reports are read exhaustively and repeatedly to identify and highlight the aspects defined for the study, as well as the recurring themes, highlighting the cores of meaning. Finally, the treatment of the obtained results/interpretation and the grouping in thematic categories, establishing articulation between the data and the theoretical references of the research. The theoretical framework vulnerability[3] was adopted and operationalized in individual, social, and programmatic vulnerability plans.

RESULTS

At the individual level of vulnerability, the individual's knowledge of the disease and the existence of behaviors that provide opportunities for its occurrence are considered. The contexts found were related to sociodemographic and obstetric issues, the age of drug experimentation, and the maintenance of use during pregnancy, as shown in Chart 1.

The age of the 38 pregnant women ranged between 15 and 43 years old, with a mean of 26.8 (SD± 6.4), 84.2% of the interviewees were between 18 and 35 years old, with the possibility of a new pregnancy in the context of drugs of abuse. There were pregnant women outside the ideal age to give birth, both under 18 (5.3%) and over 36 (10.5%), representing an additional risk to the pregnancy.

Concerning ethnicity/color, the less wealthy social classes in Brazil still have "face and color". They are brown and black, have low education, represented by elementary school. And the religious practice manifested by pregnant women did not reduce their vulnerability to drugs since only seven of them reported not being adept at any religious practice.

Among the study participants, no substantial differences were found between the contexts of individual vulnerability in pregnant women in the two municipalities. Nevertheless, those in Maringá, for the most part, were formally inserted in the labor market. This situation was not verified in Sarandi,

Chart 1 - Individual analytical plan and contexts of the vulnerability of pregnant women who use alcohol and other drugs in low-risk prenatal care. Maringá, Sarandi, PR, Brazil, 2021.

Vulnerability contexts		
Individual Analytical Plan	**Sociodemographics and Gestational**	
	Age	Gestational risk < 18 years and ≥ 36 years Young adults in the reproductive period
	Ethnicity/skin color	Brown and black
	Religion	Catholics and Evangelicals
	Schooling	Low education level
	Insertion in the labor market	Housewives and maids
	Relationship *status*	With a partner, high % of drug users
	Parity	Multiparous (2 to 11 pregnancies)
	Drug use by women	
	Beginning of drug use	Precocity. Alcohol - 6 years; tobacco - 7 years; marijuana, cocaine, sedatives, and hallucinogens - 12 years
	Use in lifetime	Addictive behavior and polyuse - alcohol, tobacco, marijuana, cocaine, sedatives, and hallucinogens
	Use during pregnancy	Gestational/fetal complications

where most referred to as “housewives”, which may reflect the greater number of women with low education reported in this city.

Most of the women were multiparous, between the second and third trimester of pregnancy and had a mean of 4.7 (SD± 3.8) prenatal consultations. The precocity with which they started to use drugs was verified, through alcohol and tobacco, still in childhood, followed by illicit drugs, starting at 12 years of age. They maintained addictive behavior throughout life and polyuse (concurrent drug use) during pregnancy, including illicit drugs, mainly represented by marijuana. There was a higher prevalence of consumption of alcohol and other drugs among pregnant women in Sarandi, where there is a higher rate of pregnant women in the context of social vulnerability.

Chart 2 shows the social vulnerability plan, which considers the individual obtaining information and the power to incorporate it into practical changes. The contexts of vulnerability found were related to the family’s social life in the community, income, drug use and intra-family relationships, and violence in the family and the community.

The women came from nuclear and extended families. The narratives denoted a high percentage of family members with addictive behavior in up to three generations and abusive intra-family relationships due to drug use.

Although the relationship status of most pregnant women (31 of them) was with a partner, these men did not play a protective role for the woman/family: 29 of them consumed alcohol abusively;27, tobacco derivatives;17, marijuana; and four, snorted cocaine. The drugs were similar to those used by pregnant women.

The addictive behavior observed in the families of pregnant women is a phenomenon with impulsive-compulsive characteristics in relation to drugs that can put an individual’s work and personal life at risk. A reflection of the abusive use of drugs was the change in family behavior reported by the pregnant women since their husbands were not undergoing addiction treatment, and the frequency of consumption was daily for most drugs.

Chart 2 - Social analytical plan and contexts of the vulnerability of pregnant women who use alcohol and other drugs in low-risk prenatal care. Maringá, Sarandi, PR, Brazil, 2021.

Vulnerability contexts		
Social Analytical Plan	**Family social life in the community**	
	Family classification	Nuclear and extensive, but high % of drug users
	Main friendships	Family members and neighbors
	Community meeting	Do not attend (33 pregnant women)
	Family income	No income and ≤ 2 minimum wages
	Drug use and intra-family relationships	
	Partner drug use	Daily addictive behavior - alcohol, tobacco, marijuana, cocaine
	Drug use by family members - grandparents, fathers, mothers, uncles, and siblings	Intergenerational additive behavior (three generations), in 34 people
	Family behavior	Violent intra-family relationships
	Violence in the family and community	
	Violent death in the family in the last year	Eight pregnant women
	Death of children ≤ 5 years of age in the family	Three pregnant women
	Perception of drug use in the community	26 pregnant women
	Classification of the perception of drug use in the community	Maringá - very much Sarandi - little and moderate
	Interference of drugs in the social life of the family	Maringá - yes Sarandi - no
	Drug-related violence in the community	Yes, in both cities

Family financial life was below salary expectations for both cities, restricted by the repercussions of drug use, which in most cases deprived people of the exercise of economic activity. Family income of less than two minimum wages prevailed, especially for women in Sarandi, where, in many families, it was less than one minimum wage, below the poverty line.

In terms of friendships, the social life of pregnant women was impaired due to the addictive behavior in the families. As such, most of them reported that their friendships were only the members of their own family, in a closed social circle. The narratives denoted difficulty in developing new bonds, given that she is a woman, has multiple drug use, and cannot abstain during pregnancy. Thirty-three pregnant women did not participate in community meetings, such as groups for pregnant women, mutual aid, or religious groups.

There were reports of violent deaths in the family, related to the drug trade, by five pregnant women from Maringá and three from Sarandi. Twenty-six pregnant women perceived drug circulation in the neighborhood, and the pregnant women from Maringá classified the presence of drugs as very high. Those from Sarandi considered it moderate or low. In both cities, violence related to the use and trafficking of drugs of abuse was reported.

The programmatic vulnerability plan refers to the social and health resources that pregnant women need. Vulnerability factors were related to issues of accessibility to health services in primary care and the Psychosocial Support Network and the weaknesses of prenatal care and the absence of dental, psychological, and social assistance, as shown in Chart 3.

Chart 3 - Programmatic analytical plan and contexts of the vulnerability of pregnant women who use alcohol and other drugs in low-risk prenatal care. Maringá, Sarandi, PR, Brazil, 2021.

Vulnerability contexts		
Programmatic Analytical Plan	**Accessibility to health services**	
	Care at BHU	Difficulty in 18 families
	Referral to RAPS	Difficulty in 19 families
	Positive referral in RAPS	CAPS (3), therapeutic community (3) and BHU itself (13)
	Dental, psychological, and social assistance	Absent for 38 women
	Addiction treatment	Absent for 37 women
	CHA home visits	Absent for all women/families
	Prenatal care Drug screening	Mean of 4.6 consultations in the gestational period Negative/deficit

Although access to health services for pregnant women is exclusively public, there was a low demand for these services, especially in Primary Health Care and the Psychosocial Support Network (RAPS). No pregnant woman was accompanied by dental, psychological, and social services. Even in those pregnant women who were in the third trimester of pregnancy, there was a low bond with the Family Health Strategy (FHS) teams, including in the city of Maringá, where the FHS coverage exceeds 80% of the population. Pregnant women must be followed up by community health agents (CHA) responsible for the area covered by the team. However, none of them received home visits from the CHA.

A team of professionals conducted low-risk prenatal care - generalist nurses, FHS physicians, and gynecologists/obstetricians in some BHU without FHS coverage, but screening for drug use was deficient, and the mean number of prenatal consultations was below the recommended by the Ministry of Health for low-risk prenatal care - usual risk. Besides, the pregnant women were included in the level of inadequate prenatal care, usual risk, while they should have been classified as high risk.

Also, some pregnant women reported feeling afraid to say that they used drugs of abuse to primary care professionals since they felt insecure due to personal exposure. They also reported that one of the reasons for omitting or minimizing drug use was the referral to high-risk prenatal services, a situation that would require travel to services far from their homes, increasing financial expenses and time.

DISCUSSION

The pregnant women participating in this study showed similarity in socioeconomic and demographic profile with national and international studies[8,18–20], in a pattern of early initiation of drug use and maintenance of moderate or severe use during pregnancy, without recognition and appropriate referral by the prenatal care team.

It is observed that the pattern of drug use, the polyuse of alcohol, marijuana, and tobacco, has increased in recent decades[18,21–22]. Tobacco is the most commonly used substance during pregnancy, along with alcohol, marijuana, and cocaine, in that order[20,23]. The antenatal habit of polydrug use can continue during pregnancy and increase maternal/fetal health problems[19].

The use of alcoholic beverages is concomitantly related to the use of tobacco and its derivatives, and act as vulnerability precursors for using other drugs of abuse[10,24]. Alcohol is a common and potent teratogenic agent that crosses the placental barrier, harming the fetus due to its slow metabolism and detoxification mechanism[22,25].

Approximately 15% of women smoke during pregnancy. These are pregnant smokers who report smoking in response to intrapersonal factors, including mental health conditions such as anxiety and depression. Emotions such as hostility and anger have been associated with persistent smoking during pregnancy[26]. There are social control tactics, that is, influence from close people, categorized into positive (encouragement, persuasion, and positive reinforcement) and negative (disapproval, pressure behaviors, and criticism). In this study, family members and partners showed negative social tactics since drug use was frequent, significantly influencing the pregnant woman's health behavior. The family acted as an adverse contributing factor for continued use during pregnancy concerning the environment.

Family and maternal behaviors, such as lifestyle habits and socioeconomic conditions, can negatively affect the course of pregnancy, including the child's future life. Among these conditions of maternal vulnerability, some are subject to modification, such as the habitual use of drugs – alcohol, tobacco derivatives, and other drugs. These vulnerability factors should preferably be controlled before pregnancy occurs[10,27].

The first trimester of pregnancy is when the fetus is most susceptible to harmful changes[27]. The pregnant women were between the second and third trimester of pregnancy. Most of them had used multiple drugs in the period considered most critical for drug consumption complications and undesirable outcomes for the woman and child[20,25]. The Ministry of Health recommends that during prenatal care, a good bond be established between the pregnant woman and the APS team of professionals, which would facilitate identifying women with a propensity for abusive consumption of alcohol, tobacco, and other drugs and guidance on the consequences of use during pregnancy[14,28].

The usual risk and low-risk prenatal care are characterized by the care of pregnant women who do not present any current and/or previous individual, social, and obstetric risk factors, diseases, or health problems that may negatively interfere with the evolution of pregnancy. The care given to pregnant women in prenatal care must be easily accessible through welcoming behavior integrating actions to promote, prevent, and assist the health of pregnant women and the fetus at all levels of care[14,28].

Many barriers to antenatal care have been identified by pregnant women, including logistical, psychosocial, and empathetic barriers. These barriers are magnified for female drug users[12]. When identifying the condition of dependence, the pregnant woman must be included in the risk pregnancy protocol and referred to a specialized service for appropriate assessments[14,28]. The work of health professionals who provide prenatal care should be guided by harm reduction, minimizing health, physical, mental, and social problems related to drug use[29].

A thorough investigation of the pregnant woman's family history and lifestyle during low-risk prenatal care is recommended. And in the presence of a history of use of alcohol and other drugs, it must be subjected to a detailed assessment to detect chronic use or risk situations, such as acute intoxication, risk of suicide, self-harm, and psychiatric comorbidities[10,21]. In addition, the harm caused by the use of alcohol and other drugs in fetal development should be pointed out to these women to make them aware of co-responsibility in the healthy outcome of pregnancy[9,11,28].

The encouragement of prenatal health professionals aimed at empowering the pregnant woman is essential for the woman to perceive herself as an essential person in gestating, which can motivate her to modify her behavior and favor the cessation and/or reduction in drug use (turning point)[12,28]. However, prenatal care for vulnerable pregnant women is often perceived as a burden by health professionals, as they require complex case management additional care time and often have adverse perinatal outcomes. There are gaps related to obstetric care to be filled due to the lack of a holistic view of the pregnant woman's health, resulting from the fragmentation of information or prenatal care[10,28].

The pregnant women studied met the criteria for high-risk prenatal care. The assessment of the pregnant woman and risk stratification should not be restricted to the first prenatal consultation, it must occur throughout the gestational period, allowing adequate guidance and referrals at each moment of pregnancy[14,30]. Among the factors related to preconditions for high-risk pregnancy, dependence on licit and/or illicit drugs stands out[10,12].

In line with the risk criteria established by the *Mãe Paranaense* Network, almost half of the women residing in Maringá-PR who had their deliveries financed by SUS were risky pregnant women, subdivided into intermediate risk (5.8%) and high risk (43.3%), but the reference to drug use was only 3% - under-identified[27].

This allows us to infer that there is a difficulty for health services to offer minimum access criteria to start and maintain prenatal care, revealing programmatic vulnerabilities in the scope of prenatal care. In general, in Brazil, the prenatal care of women who use alcohol and other drugs is marked by unsatisfactory reception practices, insufficient educational health information, and a fragile bond with the health team. Women who are already in contexts of social vulnerability, such as low family income, abusive relationships, a social network with low affiliation, and living in violent territories and families, have high programmatic vulnerability.

In this sense, the discussion of the results points to contexts of vulnerability in women's lives, considered vulnerable because they lived in a social and family environment with risks and were assisted in fragile prenatal activities.

Although there are limitations imposed by the termination of research data collection in advance due to the coronavirus - SARS Cov2 pandemic, by the research design, where the data are subject to the self-report bias and by the cross-section, the findings demonstrate the importance of recognizing the consumption of alcohol and other drugs by pregnant women attended in primary care, and how the screening of alcohol and other drugs consumption is relevant in low-risk prenatal care.

CONCLUSION

The contexts of vulnerability found among pregnant women in primary health care were related to the consumption of alcohol and other drugs, socioeconomic and cultural factors of women, where there was a predominance of brown and black ethnicity/color, low level of education, early onset of drug use and addictive behavior with use and polyuse in life and during pregnancy, high parity, family income at the poverty line, addictive behavior in the family, abusive intra-family relationships, presence of drugs in the community and violence in the living community, and fragile antenatal services.

In the programmatic field, drug use by these women, in their majority, was invisible to prenatal teams. Some of them were afraid to admit using alcohol and other drugs of abuse to primary health care professionals due to the taboos and prejudices imposed on drug consumption during pregnancy and personal exposure. There was low demand for health services, lack of welcoming for the treatment of drug use, deficient screening, low bond with family health teams, absence of dental, psychological, and social service, insertion in the level of assistance inadequate prenatal care - usual risk and a mean of prenatal consultations below recommended.

The study made it possible to advance in the contexts of the vulnerability of these pregnant women. The recognition of these contexts in the gestational period can be useful in formulating strategies to reduce harm and health problems related to the use of alcohol and other drugs during pregnancy, leading to a favorable gestational outcome. Based on the life contexts of women and families, actions can reach women in the reproductive period in a more humanized way.

There is a need to open space for discussion about the role of nurses in relation to users of alcohol and other drugs, an emerging health problem, in order to improve actions and strategies related to nursing education and care practice. The findings suggest that the work of health professionals needs to be more effective in relation to diagnosis, monitoring, and conduct among pregnant women who use alcohol and other drugs.

REFERENCES

1. Bracken-Roche D, Bell E, Macdonald ME, Racine E. The concept of "vulnerability" in research ethics: an in-depth analysis of policies and guidelines. Heal Res Policy Syst [Internet]. 2017 [cited 2021 Feb 20];15(1):8. Available from: https://doi.org/10.1186/s12961-016-0164-6
2. Carmo ME, Guizardi FL. The concept of vulnerability and its meanings for public policies in health and social welfare. Cad Saude Publica [Internet]. 2018 [cited 2021 Feb 20];34(3):e00101417. Available from: https://doi.org/10.1590/0102-311X00101417
3. Mann JM, Tarantola DJM, Netter TW. Assessing vulnerability to HIV infection and AIDS. In: Mann JM, Tarantola DJM, editors. AIDS in the world, the global AIDS policy coalition [Internet]. Cambridge: Harvard University Press; 1992 [cited 2021 Feb 20]. p. 577-602. Available from: https://www.cnbi.nlm.nih.gov/pmc/articles/PMC2040384/
4. Padoveze MC, Juskevicius LF, Santos TR, Nichita LI, Ciosak SI, Bertolozzi MR. The concept of vulnerability applied to Healthcare-associated Infections. Rev Bras Enferm [Internet]. 2019 [cited 2021 Feb 20];72(1):299-303. Available from: https://doi.org/10.1590/0034-7167-2017-0584
5. Gathron E. Vulnerability in health care: a concept analysis. Creat Nurs [Internet]. 2019 [cited 2021 Feb 21];25(4):284-91. Available from: https://doi.org/10.1891/1078-4535.25.4.284
6. Silva NEK, Ventura M, Paro CA. The potential of the vulnerability and human rights framework for studies and practices in the prevention of arbovirus infections. Cad Saude Publica [Internet]. 2020 [cited 2021 Feb 21];36(9):e00213119:. Available from: https://doi.org/10.1590/0102-311X00213119
7. Marangoni SR, Hungaro AA, Kitagawa T, Rosa OP, Oliveira MLF de. Vulnerability contexts in pregnant women addicted to drugs of abuse. Cien, Cuid e Saude [Internet]. 2018 [cited 2021 Feb 20];17(2):41015. Available from: https://doi.org/10.4025/cienccuidsaude.v17i2.41015
8. Antunes MB, Demitto MDO, Padovani C, Elias KC de M, Miranda ACM de, Pelloso SM. Perinatal outcomes in pregnant drug users attended at a specialized center. SMAD Rev Eletronica Saude Ment Alcool e Drog [Internet]. 2018 [cited 2021 Mar 12];14(4):211-8. Available from: https://doi.org/10.11606/issn.1806-6976.smad.2018.000371
9. Polak K, Kelpin S, Terplan M. Screening for substance use in pregnancy and the newborn. Semin Fetal Neonatal Med [Internet]. 2019 [cited 2021 Mar 12];24(2):90-4. Available from: https://doi.org/10.1016/j.siny.2019.01.007
10. Colciago E, Merazzi B, Panzeri M, Fumagalli S, Nespoli A. Women's vulnerability within the childbearing continuum: a scoping review. Eur J Midwifery [Internet]. 2020 [cited 2021 Mar 12];4:18. Available from: https://doi.org/10.18332/ejm/120003
11. Tamashiro EM, Milanez HM, Azevedo RCS. "Because of the baby": reduction on drug use during pregnancy. Rev Bras Saude Mater Infant [Internet]. 2020 [cited 2021 Mar 12];20(1):313-7. Available from: https://doi.org/10.1590/1806-93042020000100017
12. Azarmehr H, Lowry K, Sherman A, Smith C, Zuñiga JA. Nursing practice strategies for prenatal care of homeless pregnant women. Nurs Womens Health [Internet]. 2018 [cited 2021 Feb 25];22(6):489-98. Available from: https://doi.org/10.1016/j.nwh.2018.09.005

13. Araujo AS, Santos AAP, Lúcio IML, Tavares CM, Fidélis EPB. The context of the pregnant woman in the situation of street and vulnerability: its look at the pre-natal. Rev enferm UFPE on line [Internet]. 2017 [cited 2021 Mar 12];11(Suppl 10):4103-10. Available from: https://redib.org/Record/oai_articulo1359737-context-pregnant-woman-situation-street-vulnerability-its-look-pre-natal?lng=pt

14. Silva AA, Jardim MJA, Rios CTF, Fonseca LMB, Coimbra LC. Prenatal care of habitual- risk pregnant women: potentialities and weaknesses. Rev Enferm UFSM [Internet]. 2019 [cited 2021 Mar 12];9:e15. Available from: https://doi.org/10.5902/2179769232336

15. Rodrigues AL, Leal LD, organizers. Como andam os municípios da Região Metropolitana de Maringá. Estrutura e organização social do município de Maringá [Internet]. Maringá: Nucleo Maringá; 2020 [cited 2021 Mar 15]. Available from: https://0824488b-51dc-4cf3-8b41-ad559ecf8f55.filesusr.com/ugd/ec634b_342d6566eb0b40d8ac999c507107a3fc.pdf

16. Humeniuk R, Henry-Edwards S, Ali R, Poznyak V, Monteiro MG. The alcohol, smoking and substance involvement screening test (ASSIST): manual for use in primary care [Internet]. Rio de Janeiro, RJ(BR): Fundação Osvaldo Curz; 2020 [cited 2021 Jan 17]. 77 p. Available from: https://apps.who.int/iris/handle/10665/44320

17. Minayo MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. 17th ed. São Paulo, SP(BR): HUCITEC; 2017.

18. Hotham ED, Ali RL, White JM. 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 2020 Dec 14];34:183-97. Available from: https://doi.org/10.1016/j.midw.2015.11.011

19. Maia JA, Rodrigues AL, Souza DR, Figueiredo MB. Drug use by women during the gestational period. Rev Enferm Contemp [Internet]. 2019 [cited 2021 Mar 12];8(1):25-32. Available from: https://doi.org/10.17267/2317-3378rec.v8i1.1744

20. 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 Mar 12];24(9):1170-8. Available from: https://doi.org/10.1007/s10995-020-02910-w

21. Qato DM, Zhang C, Gandhi AB, Simoni-Wastila L, Coleman-Cowger VH. Co-use of alcohol, tobacco, and licit and illicit controlled substances among pregnant and non-pregnant women in the United States: findings from 2006 to 2014 National Survey on Drug Use and Health (NSDUH) data. Drug Alcohol Depend [Internet]. 2020 [cited 2021 Mar 21];206:107729. Available from: https://doi.org/10.1016/j.drugalcdep.2019.107729

22. Denny CH, Acero CS, Naimi TS, Kim SY. Consumption of alcohol beverages and binge drinking among pregnant women aged 18-44 years - United States, 2015-2017. MMWR Morb Mortal Wkly Rep [Internet]. 2019 [cited 2021 Mar 12];68(16):365-8. Available from: https://doi.org/10.15585/mmwr.mm6816a1

23. Forray A. Substance use during pregnancy [version 1; referees: 2 approved]. F1000Research Open Sci [Internet]. 2016 [cited 2020 Jul 12];5(F1000):887. Available from: http://f1000research.com/articles/5-887/v1

24. Carvalho EN, Moreira KS, Carvalho ENC, Oliveira PHB, Alamy AHB. Restriction of fetal crowth as consequence of consumption of alcohol and other drugs in pregnancy: a cross-sectional study. Rev Interdiscip Ciências Médicas [Internet]. 2020 [cited 2021 Mar 12];4(1):44-8. Available from: http://revista.fcmmg.br/ojs/index.php/ricm/article/view/302/89

25. England LJ, Bennerr C, Denny CH, Honein MA, Kim SY, Guy GP Jr., et al. Alcohol use and co-use of other substances among pregnant females aged 12-44 years - United States, 2015–2018. MMWR Morb Mortal Wkly Rep [Internet]. 2020 [cited 2021 Mar 12];69(31):1009-14. Available from: https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6931a1-H.pdf

26. Fillo J, Kamper-DeMarco KE, Brown WC, Stasiewicz PR, Bradizza CM. Emotion regulation difficulties and social control correlates of smoking among pregnant women trying to quit. Addict Behav [Internet]. 2019 [cited 2021 Mar 12];89:104-12. Available from: https://doi.org/10.1016/j.addbeh.2018.09.033

27. Novaes ES, Melo EC, Ferracioli PLRV, Oliveira RR de, Mathias TA de F. Gestational risk and associated factors in women cared by the public health network. Cienc, Cuid e Saude [Internet]. 2018 [cited 2021 Mar 12];17(3):e45232. Available from: https://doi.org/10.4025/cienccuidsaude.v17i3.45232

28. Castro LLS, Oliveira IG, Bezerra RA, Sousa LB, Anjos S de JB, Santos LVF. Prenatal care according to professional records from the pregnant woman's book. Rev Enferm UFSM [Internet]. 2020 [cited 2020 Nov 25];10:e16. Available from: https://doi.org/10.5902/2179769231236

29. Santos EO, Pinho LB, Eslabão AE, Medeiros RG. Evaluation of harm reduction strategies in the psychosocial care network. Texto Contexto Enferm [Internet]. 2020 [cited 2021 Mar 15];29:e20190232. Available from: https://doi.org/10.1590/1980-265X-TCE-2019-0232

30. Assunção CS, Rizzo ER, Santos ME, Carvalho JB, Basílio MD, Messias CM. The nurse in prenatal care: the pregnant women expectations. Rev Online Pesqui Cuid Fundam [Internet]. 2019 [cited 2021 Mar 12];11(3):576. Available from: https://doi.org/10.9789/2175-5361.2019.v11i3.576-581

NOTES

ORIGIN OF THE ARTICLE

Extracted from the thesis – Contexts of vulnerability for the use of alcohol and other drugs in pregnant women in primary health care, presented to the Graduate Program in Nursing, at the *Universidade Estadual de Maringá*, in 2021.

AUTHORSHIP CONTRIBUTION

Study design: Marangoni SR, Gavioli A, Dias LE, Oliveira MLF.
Data collection: Marangoni SR, Gavioli A, Dias LE.
Data analysis and interpretation: Marangoni SR, Gavioli A.
Discussion of results: Marangoni SR, Gavioli A, Oliveira MLF.
Writing and/or critical review of the content: Marangoni SR, Gavioli A, Dias LE, Haddad MCFL, Assis FB, Oliveira MLF.
Review and final approval of the final version: Marangoni SR, Gavioli A, Dias LE, Haddad MCFL, Assis FB, Oliveira MLF.

ACKNOWLEDGMENT

To the National Council for Scientific and Technological Development – CNPq, for funding the intercenter research project, to the employees of the basic health units and the women who participated in the study.

FUNDING INFORMATION

The present study was carried out with the support of the Coordination for the Improvement of Higher Education Personnel - (CAPES) - Financing Code 001, Brazil.

APPROVAL OF ETHICS COMMITTEE IN RESEARCH

Approved by the Ethics Committee in Research of the *Universidade Estadual de Maringá*, opinion No.3,255,326/2019. CAAE:10301919.8.0000.0104.

CONFLICT OF INTEREST

There is no conflict of interest.

HISTORICAL

Received: July 12, 2021
Approved: November 24, 2021

CORRESPONDING AUTHOR

Sônia Regina Marangoni
srmarangoni@uem.br