



Perfil das morbidades das gestantes de alto risco na área de abrangência de uma estratégia de saúde da família

Profile of morbidities of high-risk pregnant women in the catchment area of a family health of a family health strategy

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ABSTRACT

Pregnancy commonly represents a watershed in a woman's life, uncertainty with the conduct of the pregnancy is perhaps the most critical point of pregnancies characterized as high risk. Thus, there is a need to analyze the rates of high-risk pregnant women assisted in the Family Health Strategy (ESF) and their associated comorbidities, to devise strategies that reduce possible complications and provide health education. Objective: To determine the epidemiological profile of high-risk pregnant women in the area covered by an ESF. Justification: The collection of these data can be used as a screening tool for the main comorbidities in high-risk pregnant women, enabling action planning. Method: Descriptive cross-sectional study with a quantitative approach carried out by students of the medical course in a supervised internship that reviewed records of all pregnant women attended from January 2020 to November 2022, in an ESF in the city of Blumenau, Santa Catarina, Brazil. In reviewing the records, the following variables were verified: age, gynecological and obstetrical history, pathologies prior to pregnancy and current pathologies. Results: In the studied sample of 71 pregnant women, high-risk pregnancy affected more women between 21 and 25 years old, pointing out as main associated comorbidities, respectively, hypertensive disease, diabetes, thyroid alterations and gestational syphilis. Conclusion: The main associated comorbidities can be optimized and prevented during prenatal follow-up in the ESF. In this sense, the ESF would make a difference in the life of this population as support groups for high-risk pregnant women were created, serving both as an environment for awareness and support and tracking of the most common comorbidities in pregnancies in the area covered by each ESF. The practice suggested in this type of activity would include round tables with an adequate number of pregnant women for the needs of each unit; During these meetings, the services of a multidisciplinary team would be available: nutritionist, physical educator, physiotherapy, psychology, with the aim of making future mothers aware of why they are being classified as "high risk", and how best to address their condition, or by changes in lifestyle related to physical activity and dietary re-education, as examples.

Key-words: High-Risk Pregnancy, Prenatal care, Public health, Women's Health, Health education.

1 INTRODUCTION

Pregnancy is considered high-risk when certain clinical, obstetric, and social conditions arise that can threaten maternal-fetal health (RODRIGUES et al., 2017). In Brazil, according to the Ministry of Health's Manual of High Risk Pregnancy (2022), pregnant women who have some gestational risk should be followed up together in primary care and in an intermediate-risk prenatal unit with the presence of an obstetrician and multidisciplinary team, aiming to provide the woman with a positive experience of pregnancy, thus preventing possible aggravations to her health and that of the newborn (BRASIL, 2022).

Some studies point hypertensive syndromes (HSs) as the main cause of follow-up in PNAR (RODRIGUES et al., 2017; ANJOS; PEREIRA; FERREIRA, 2014; ANTUNES et al., 2017), affecting about 20 to 30% of pregnant women (RODRIGUES et al., 2017). SHs can be classified into chronic hypertension (CHH), pre-eclampsia and gestational hypertension, the occurrence of



which increases the risk of maternal and perinatal morbidity and mortality (ANTUNES et al., 2017). SHs are second only to hemorrhages when it comes to maternal death worldwide (ANTUNES et al., 2017). However, findings point to the absence of the follow-up recommended by the Ministry of Health after the diagnosis of SHs (RODRIGUES et al., 2017).

Contrary to the mentioned studies, other findings point to urinary tract infections (UTI) as the main cause associated with high-risk pregnancy (REIS, 2014; COSTA; CURA; PERONDI et al., 2016). UTI is one of the most common infections in pregnant women, considered an alarm signal because it is associated with increased prematurity, chorioamnionitis and fetal death, increasing maternal and perinatal morbidity and mortality (DA MATA et al., 2014; HEIN; BORTOLI; MASSAFERA, 2016).

Another comorbidity that appears among the main causes of high-risk pregnancy is obesity, a chronic and multifactorial disease, assessed by the body mass index (BMI) that indicates the degree of overweight (from 25.0 to 29.9 kg/m²), grade I or mild obesity (from 30.0 to 34.9 kg/m²), grade II or moderate (from 34.0 to 39.9 kg/m²) and grade III or severe obesity (greater than 40.0 kg/m²) (VALLE; DURCE; FERREIRA, 2008). Overweight can contribute to an unfavorable obstetric outcome and increase the risk of other chronic diseases in adulthood (SILVA et al., 2014). In addition, obese women are at higher risk for other gestational diseases, such as SHs, macrosomia, fetal distress, prolonged labor, cesarean section, intrauterine growth restriction (IUGR), prematurity, and gestational diabetes mellitus (GDM) (SEABRA et al., 2011).

GDM is a multifactorial disease feared by pregnant women, which occurs due to the increase in insulin counterregulatory hormones, being the placental lactogen hormone the main one, added to the physiological stress imposed by pregnancy and genetic or environmental predetermining factors (NETA et al., 2014). GDM is associated with greater maternal fetal complications such as fetal macrosomia, fetal hyperinsulinemia, hypoglycemia after delivery, IUGR, prematurity and the increased risk of pre eclampsia for women (VALLE; DURCE; FERREIRA, 2008).

Thus, monitoring during prenatal care is extremely important for the evaluation of maternal and fetal well-being and early identification of risks and problems for the health of both. In addition, it enables the awareness of women for their future pregnancies in order to explain possible risks involved and appropriate conducts to try to minimize future damage (ANTUNES et al., 2017; MEDEIROS et al., 2019).

In view of this, the survey of characteristics of high-risk pregnant patients corroborates the identification of a typical clinical history, which can be used to identify cases that would be more



susceptible to complications, as well as bring to light the main etiologies of the need for high-risk care.

In this context, knowing the profile of pregnant women within the high-risk group would be of particular importance to better understand which are the main comorbidities present in these women, as well as to have a scope of how to act directly on this problem. Thus, this study aimed to determine the epidemiological profile of high-risk pregnant women in the coverage area of a FHS in the period from January 2020 to November 2022, and which strategies to follow according to the results to be presented.

2 MATERIALS AND METHODS

This is a cross-sectional and descriptive study of quantitative approach, conducted by medical students during supervised internship and developed in the Family Health Strategy of the municipality of Blumenau, located in the State of Santa Catarina - Brazil. The study population was census recruited in a period with data collection from previous records in the health unit, being considered for the study records of all pregnant women assisted by the unit's team in the period from January 2020 to October 2022.

For the purpose of this study, the registration of gestational risks of pregnant women assisted in the health unit was based on the use of the flowchart of the Manual of High Risk Pregnancy of the Ministry of Health (2022) and the Municipal Protocol of Care for Prenatal Care of Habitual Risk and Puerperium used in the municipality of the study.

CLASSIFICAÇÃO DE RISCO GESTACIONAL	
RISCO.....10 ou + Pontos	ALTO
RISCO..... 5 a 9 Pontos	MÉDIO
RISCO..... até 4 Pontos	BAIXO

1 – IDADE: (-) de 15 anos.....1 De 15 a 34 anos.....0 (+) de 35 anos.....1	5. AVALIAÇÃO NUTRICIONAL: Baixo Peso(IMC<18, 5kg/m2) e/ou ganho de peso inadequado e/ou anemia.....1 Peso Adequado (IMC 18, 5-24, 9kg/m2).....0 Sobrepeso(25-29, 9kg/m2).....1 Obesidade (IMC>30kg/m2).....5	7 - PATOLOGIAS DE RISCO ATUAL OBST. + GINEC Ameaça de Aborto.....5 Anom. do trato Genitourinario.....5 Placenta Prévia.....10 Câncer Materno.....10 Doença Hemolítica.....10 Esterilidade Tratada.....5 Isoimunização.....10 Neoplasias Ginecológicas.....10 Mal Formações Congênitas.....10 Crescimento Uterino Retardado.....10 Polihidramnio/Oligoidramnio.....10 Citologia Cervical Anormal(Nci-I-III).....10 Doença Hipertensiva da Gestação.....10 Diabetes Gestacional.....10 Gemelar.....10 Incomp. Istmo Cervical.....10
2 – SITUAÇÃO FAMILIAR Situação Familiar Instável Não.....0 Sim.....1 Aceitação de GRAVIDEZ: Aceita.....0 Não Aceita.....1	6 – ANTECEDENTES OBSTÉTRICOS: Abortos até 2.....5 Abortos espontâneos + 2.....10 Natimorto.....5 Prematuro.....5 Óbito Fetal.....5 Eclampsia.....10 Placenta Prévia.....5 Descol. Prem. de Placen.....5 Incompetência Istmo Cervical.....10 Restrição de Cresc. Intrauterino.....5 Malformação Fetal.....5 Último Parto (-) de 12 meses.....2 + 1 Filho Prematuro.....10 Pre eclampsia.....5	MÉDICAS + CIRURG Cardiopatas.....10 Varizes acentuadas.....5 Pneumopatia Grave.....10 Diabetes Mellitus.....10 Doenças Auto-ímmunes(Colagenose).....10 Doença Psiquiátrica.....5 Doença Renal Grave.....10 Epilepsia e Doença Neurológica.....10 Hemopatas.....10 Hipertensão Arterial.....10 Infecção Urinária de repetição (pielonefrite ou infecções 3x ou +).....10 Infecções Grave.....10 AIDS/HIV.....10 Sífilis.....10 Tuberculose.....10 Toxoplasmose.....10 Dep. de Drogas.....10 Alcoolismo.....10 Trombofilia.....10 Endocrinopatas.....10 Alterações da Tireóide.....10
<p>*Fatores sócio econômicos não são critérios isoladamente para encaminhamento ao Pré Natal de Alto Risco (PNAR). Merecem atendimento diferenciado na Atenção Básica.</p> <p>PNAR: Deve conter obrigatoriamente itens dos quadros 5 e\ou 6 e\ou 7 da classificação acima (somando 10 ou mais pontos).</p> <p>Médio Risco: Somatório de 5 a 9 pontos deve receber atendimento de Pré Natal na Atenção Básica pelo médico intercalado com o enfermeiro.</p> <p>Baixo Risco: Somatório de até 4 pontos deve receber atendimento intercalado de Pré Natal na Atenção Básica pelo enfermeiro e pelo médico.</p> <p style="text-align: center;">Seguir fluxograma de pré natal.</p>		

Fonte: adaptado do Ministério da Saúde (2022)

3 RESULTS AND DISCUSSION

The study sample consisted of 71 pregnant women and, by reviewing the medical records, the following variables were verified: age, gynecological and obstetric history, pathologies prior to pregnancy, and current pathologies.

Chart 01- gestational risk classification, according to the number of pregnant women and average age in the period from January 2020 to October 2022

GESTATIONAL RISK	NUMBER OF PREGNANT WOMEN	AVERAGE AGE
High Risk	38	26.31 years
Medium risk	02	21 years old
Low risk	31	26.8 years

Source: own author.

Of the total of 100% (N = 71) of pregnant women seen at the ESF, 53.52% (N = 38) correspond to high-risk pregnancies, with an average age of 26.31 years.

Chart 02 - Age ranges of high-risk pregnant women, according to the total number of cases in the period from January 2020 to October 2022.

AGE GROUPS	TOTAL CASES
(15-20)	05
(21-25)	14
(26-30)	08
(31-35)	08
(36-40)	03

From the total of 38 pregnancies classified as high risk, it was found that 13.15% (N = 5) corresponded to the age range 15 to 20 years. 36.84% (N = 14) correspond to ages 21 to 25 years. 21.05% (N = 8) correspond to ages 26 to 30 years. 21.05% (N = 8) correspond to ages 31 to 35 years. 7.89% (N = 03) correspond to those aged 36 to 40 years.

It is noted that age was not a determining factor for the development of high-risk pregnancy, since 13.15% were younger than 20 years and 7.89% were older than 35 years. Similarly, it was verified in the study by Rodrigues (2017), in which age was only a risk factor for 16.1% of the evaluated pregnant women.

Chart 03 - Classification of gestational risk factors, according to total cases, in the period from January 2020 to October 2022.

GESTATIONAL RISK FACTORS	TOTAL CASES
Hypertensive disease of pregnancy	09
Gestational Diabetes	08
Gestational Syphilis	04
Thyroid Alterations	04
Obesity (BMI >30kg/m ²)	03
Intrauterine Growth Restriction	03
Recurrent urinary tract infection (pyelonephritis or infections greater than or equal to 3 episodes)	03
Fetal malformations	03
Hemopathies	03

Psychiatric illnesses	02
Abnormal cervical cytology (cytopathological exam)	02
Isoimmunization	02
Changes in amniotic fluid volume	02
Genitourinary tract abnormalities	01
Placental Alterations	01

Source: Own authorship

Of the high-risk pregnant women (N = 38), it was possible to observe the presence of certain gestational risk criteria, which can be observed as follows: 23.68% (N = 9) are carriers of Gestational Hypertensive Disease. 21.05% (N = 8) are carriers of Gestational Diabetes. 10.52% (N = 4) are carriers of gestational syphilis. 10.52% (N = 4) are carriers of thyroid alterations. 7.89% (N = 3) are carriers of obesity (BMI > 30kg/m²). 7.89% (N = 3) have stunted uterine growth. 7.89% (N = 3) were classified as high gestational risk due to repeat urinary tract infection (pyelonephritis or infections \geq 3 episodes). 7.89% (N = 3) are carriers of fetal malformations. 7.89% (N = 3) are carriers of hemopathies.

5.26% (N = 2) have psychiatric illnesses. 5.26% (N = 2) are carriers of abnormal cervical cytology. 5.26% (N = 2) were found to have isoimmunization. 5.26% (N = 2) have abnormal amniotic fluid volume. 2.63% (N = 1) have abnormalities of the genitourinary tract. 2.63% (N = 1) have placental abnormalities. Thus, it is suggested that pregnant women in the studied area are more affected by gestational hypertensive diseases, followed by gestational diabetes, similar to the study of Anjos, Pereira, and Ferreira (2014), in which 40% of pregnant women had DHEG, 7.44% had gestational DM, and only 5.31% had UTI.

While in other studies gestational syphilis was not cited as a main determinant of high-risk pregnancies, in the present study it appears in third place (10.52%), as well as thyroid alterations, which also have no epidemiological evidence in other research. In the studies by Costa, Cura and Perondi (2016) and Gomes et al. (2021), the three main comorbidities affecting pregnant women were Systemic Arterial Hypertension (SAH), obesity and UTI, respectively. Although in the present study SAH is presented as the main aggravating factor, obesity and urinary tract infections appear as minor risk factors.

Finally, support groups for high-risk pregnant women would have an expressive impact within the area of a FHS, since they could act on the fronts of screening and treatment in parallel,



offering a differential support for the mothers contemplated and providing that the first steps of their children can be smoother when they start their walks at your side.

4 CONCLUSION

The study observed that high-risk pregnancy affected more women aged 26 years, with hypertensive disease and diabetes as the main comorbidities present in this group of individuals.

In this sense, the FHS would enter as a differential in the lives of this population to the extent that support groups were created for high-risk pregnant women, serving both as an environment of awareness and support and screening of the comorbidities most seen in the pregnancies in the coverage area of each FHS. The suggested practice in this type of activity would comprise round tables with an adequate number of pregnant women to the needs of each unit; During these meetings, the services of a multidisciplinary team would be available: nutritionist, physical educator, physiotherapy, psychology, with the goal of making future mothers aware of why they are being classified as "high risk", and how best to address their condition, either by changes in lifestyle related to physical activity and dietary re-education, as examples.



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