



ADVANCED MATERNAL AGE IN PREGNANCIES AND OBSTETRIC AND PERINATAL RISKS



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ABSTRACT

Pregnancy at an advanced maternal age (≥ 35 years) is a growing phenomenon, motivated by social changes, such as the female search for professional and emotional stability. Although it brings benefits, such as greater financial preparation, it is associated with obstetric and perinatal risks. This study aimed to identify the main complications related to pregnancies in women over 35 years of age and to highlight prenatal care to reduce such risks. A qualitative systematic review was carried out following the PRISMA criteria, analyzing 20 articles published between 2019 and 2024 in the Lilacs and Scielo databases. The data highlighted conditions such as gestational hypertension, gestational diabetes mellitus, preeclampsia, preterm births, and high rates of cesarean section. Neonatally, prematurity, low birth weight, and perinatal mortality were identified. Among the results, gestational hypertension was prevalent, affecting about 24% of pregnant women, with a strong association with adverse outcomes. Gestational diabetes, observed in up to 25% of women, increases the risk of fetal macrosomia and neonatal complications. Preterm births, recorded in up to 18% of cases, correlate with elevated neonatal morbidity, while cesarean section rates exceed 60%. Psychosocial complications also emerged, including increased maternal anxiety and stress. It is concluded that late pregnancy requires intensive prenatal care, with continuous monitoring of risk conditions and emotional support for pregnant women. Public policies that expand access to specialized prenatal care and promote awareness of the risks of this condition are crucial. The integration of multidisciplinary teams can significantly improve maternal and neonatal outcomes, reducing complications associated with late pregnancies.

Keywords: Prenatal care. Pregnant. Nursing.

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INTRODUCTION

In recent decades, society has experienced significant changes in several aspects, especially with regard to the role of women. The growing insertion of women in the labor market, the search for professional fulfillment and the consolidation of financial stability have contributed to the phenomenon of postponement of motherhood. This movement, which was previously restricted to specific niches, is now a globally observed reality, especially in industrialized and developing countries, including Brazil (Tibes-Cherman et al., 2021; Oliveira et al., 2020). Increased access to education, professional opportunities, and advances in assisted reproduction techniques are also determining factors for this change (Fortuna et al., 2022; Martins & Menezes, 2022).

Pregnancy at an advanced maternal age, defined as pregnancy occurring in women aged 35 years or older, is a growing phenomenon. However, although it brings with it advantages such as greater emotional preparation and financial stability, it is also associated with a series of obstetric complications that affect both the mother and the fetus (Kalil et al., 2024). Among the main risks are gestational hypertension, gestational diabetes mellitus, preeclampsia, a higher probability of premature births and cesarean sections, as well as neonatal complications, such as low birth weight and perinatal mortality (Silva et al., 2019; Albertine; Pereira, 2019; Matos et al., 2021).

Complications resulting from advanced maternal age have been the subject of increasing attention in the scientific literature. Studies highlight that women over 35 years of age are more likely to develop chronic diseases such as hypertension and gestational diabetes, in addition to facing a high risk of complications such as miscarriages and congenital malformations, including Down syndrome (Kalil et al., 2024; Gomes & Domingueti, 2021). Ovarian senility and decreased natural fertility are also factors that contribute to the increased risks in this age group, as well as to the greater dependence on assisted reproductive technologies, which, although effective, do not eliminate the risks associated with late pregnancy (Martins & Menezes, 2022; Marinho et al., 2023).

Given this scenario, rigorous and continuous medical follow-up becomes essential to minimize risks and ensure more favorable outcomes. The literature emphasizes the importance of intensive prenatal care adapted to the particularities of pregnancy at an advanced age, with a focus on the early detection of risk factors and the appropriate management of associated conditions, such as hypertension, diabetes, and obesity (Silva et al., 2019; Matos et al., 2021). In addition, family planning and women's awareness of the risks of late pregnancy have been shown to be essential to reduce the rates of serious

complications and promote maternal and child health (Tavares et al., 2022; Albertine; Pereira, 2019).

In this context, this study aims to verify the prevalence of the main complications associated with pregnancy in women with advanced maternal age, offering a comprehensive analysis of the most common risk factors and possible interventions that can be carried out to mitigate these risks. The relevance of this research lies in the growing need to adapt prenatal care for this group of women, especially considering the significant increase in the number of pregnancies at older ages.

Thus, the study seeks to contribute to the deepening of knowledge about the challenges faced by women who choose motherhood at older ages, providing subsidies for the development of strategies that improve the quality of maternal and child care and reduce the complications associated with this type of pregnancy, as well as for the development of more effective clinical practices and for the formulation of public policies that guarantee the well-being of both the mother and the mother. baby.

METHODOLOGY

This study is a qualitative systematic review research, using the steps described by Sampaio and Mancini (2007), with the objective of synthesizing and presenting evidence on prenatal care in pregnant women. The review followed the guidelines of the Preferred Report for Systematic Review and Meta-Analysis (PRISMA) to ensure methodological rigor and transparency throughout the selection and analysis process of the included studies.

The research was carried out with the objective of identifying studies that discuss prenatal care in pregnant women, especially those involving gestational complications. The databases used were Lilacs and Scielo, as they concentrate a large part of scientific publications in the health area, especially in Latin American and Caribbean countries. The choice of these databases aimed to ensure relevance and free access to high-quality scientific sources.

The searches were carried out between the months of August and November 2024. The previously established inclusion criteria covered all studies on prenatal care for pregnant women, published between 2019 and 2024, written in Portuguese, and with full text available. The health descriptors (DeCS) used were: "late pregnancy" AND "prenatal" AND "risks", applying search filters such as "full text" and "last 5 years".

Studies were included that: discuss prenatal care for pregnant women; published in Portuguese between 2019 and 2024; available in full text in the Lilacs and Scielo databases. The exclusion criteria included: studies not directly related to the theme of

prenatal care; articles that were not available in Portuguese or whose publication period was prior to 2019.

The qualitative systematic review research followed a rigorous and detailed approach, with the aim of exploring the evidence on antenatal care and its implications on maternal-fetal health.

RESULTS

312 articles on the subject were retrieved. The exclusion criteria were studies not directly related to the theme of prenatal care; articles that were not available in Portuguese or whose publication period was prior to 2019. Thus, 20 articles were selected whose data were extracted and analyzed in a descriptive way, focusing on the interventions and prenatal care discussed in each study.

The synthesis of the 18 reviewed articles (Chart 1) shows that pregnancy at an advanced maternal age is associated with a complex set of risk factors, which include obstetric and neonatal complications, psychosocial and cultural challenges, and a higher risk of genetic conditions in the fetus.

Chart 1 – Reviewed articles:

AUTHOR	YEAR	OBJECTIVES	RESULTS
Carvalho <i>et al.</i>	2024	Verification of the relationship between advanced maternal age and risks during pregnancy.	The study revealed the association between advanced maternal age and relevant complications during pregnancy, such as preeclampsia, gestational diabetes, occurrence of premature and cesarean delivery, hemorrhages and low birth weight.
Kalil <i>et al.</i>	2024	To investigate, based on scientific evidence, the impact of advanced maternal age on pregnancy and childbirth. To identify the main gestational complications associated with advanced maternal age, such as gestational hypertension, gestational diabetes mellitus and preeclampsia; to examine the association between maternal age and the occurrence of complications during pregnancy.	The studies analyzed confirm that women with advanced maternal age face an increased risk of gestational hypertension, gestational diabetes mellitus and preeclampsia, in addition to having higher rates of cesarean sections and premature births. These results reinforce the importance of a more rigorous follow-up and an adapted approach to manage pregnancies in older women, aiming to minimize risks and promote better outcomes for both mother and baby.
Bruno Neto <i>et al.</i>	2023	Report a case of Late EP, describing the systemic manifestations	PE has a silent etiology in the puerperium because it does not cause an exuberant symptomatology, except for some cases that course as a complication of SAH, such as the presentation of acute pulmonary edema in the patient in the case reported here.

			<p>The diagnosis was made as an exclusion factor, and it is pertinent to consider other more common etiological entities that course with the appearance of acute pulmonary edema in the puerperal woman.</p> <p>However, since she presented normal laboratory test values, such as blood count, platelets and hepatogram – as well as normality of other tests and absence of other signs (seizures, normal electrocardiogram, chest X-rays without increase in cardiac area) –, the possibility of presenting other clinical entities is common, with preeclampsia being one of them. After the confirmation of high systemic blood pressure and proteinuria, the diagnostic hypothesis of late PE was raised, and was ratified after the patient respond well to the therapy performed.</p>
Gozo	2023	to investigate the right of women over 35 years of age to family planning, since from this age group onwards the exercise of the reproductive right may pose risks to their health and that of the fetus	It was observed that the body of women from the age of 35 is no longer as apt for motherhood as that of women between 20 and 29 years of age, an age considered ideal for procreation. By postponing motherhood, for the most varied reasons, the woman puts herself face to face with a high-risk pregnancy, due to the serious health problems that may occur during pregnancy, making this pregnancy considered high-risk for both her and the baby.
Marinho <i>et al.</i>	2023	To identify in the literature the most frequent risk factors that influence the development of Gestational Diabetes Mellitus (GDM).	Most of the studies included were in the form of clinical trials and literature reviews, in which a total of n= 107 were identified by the general search in the databases, after being screened by titles and abstracts resulting in n=18, passing through the eligibility criterion, n= 13 and finally being included and discussed a total of n=9 articles.
Silveira <i>et al.</i>	2023	The present study aims to explain the predisposing conditions, as well as the consequences resulting from complications that are not monitored and treated.	Risk factors may be associated with age, biophysical indicators related to genetics and health care; psychosocial indicators related to the behaviors of pregnant women; The sociodemographic ones address themes such as lack of prenatal care, low income, marital status, race and ethnicity, and the environmental ones concern the dangers found in the living and work environment.
Fortuna <i>et al.</i>	2022	To verify how socioeconomic and cultural factors interfere in women's reproductive life	56.9% of the interviewees were from the private school system and 43.1% from the public network. In terms of wage income, it was observed that 46.7% of the women in the private network received 5-20 minimum wages, while none of the users in the public network received this amount. Regarding the reasons that led to the postponement of pregnancy, 72.6% wanted an academic career and/or to achieve professional success before

			motherhood, of which 55% were 35 years of age or older.
Martins; Menezes	2022	To identify the conceptions of risk present in what is called by biomedicine as pregnancy at an advanced age	<p>Documentary analysis in Brazilian and foreign medical manuals of the obstetrics and genetics specialties showed different conceptions of risk in relation to the reproductive age factor.</p> <p>Maternal age is an aspect present in obstetrics as a risk factor for diseases. For the genetic specialty, maternal age is not a central factor of reproductive risk. The research found that the classification of an ideal maternal age for pregnancy is relative and susceptible to changes, according to the socio-historical context of each society.</p>
Tavares <i>et al.</i>	2022	To identify the experience of women when experiencing late pregnancy.	It was observed that most were between 35 and 40 years old (58%), married, brown and had higher education, however, late pregnancy enabled meanings in the lives of these women, permeated by feelings of personal and family satisfaction, enabling greater security in the relationship with the partner, family and baby.
Aldrighi <i>et al.</i>	2021	To analyze the association between complications and advanced maternal age during pregnancy.	A total of 1336 medical records were evaluated. The complications of pre-gestational SAH, pre-eclampsia and GDM had higher mean maternal age. Women over 40 years of age were 1.06 times more likely to develop preeclampsia and 1.33 times more likely to develop intrauterine growth restriction.
Gomes; Domingueti	2021	Address factors why women have chosen to postpone motherhood and the difficulties and consequences that this can result in.	According to the studies found, women have postponed pregnancy because they are able to expand their participation in society and in the labor market associated with the existence of more resources for birth control. Pregnancy after 35 years of age is unsafe for the woman and the fetus, as they can suffer complications since the woman's fertility begins to decrease, increasing the probability of congenital syndromes and fetal macrosomias, as well as the possibility of the pregnant woman developing gestational diabetes mellitus, gestational arterial hypertension and preeclampsia.
Matos <i>et al.</i>	2021	Identify in national and international scientific publications on high-risk pregnancy and its complications	<p>It was observed that late and high-risk pregnancy is due to the profile of women over 35 years of age, with more chances of complications during and after pregnancy, in which a more critical look should be taken to prevent and ensure a healthy pregnancy.</p> <p>Among the clinical complications and/or complications among high-risk pregnant women are: systemic arterial hypertension, diabetes mellitus, urinary tract infections, premature labor, hemorrhages, eclampsia and preeclampsia.</p>

Tibes-Cherman <i>et al.</i>	2021	OBJECTIVE: To describe the clinical profile of pregnant women aged 35 years or older in a tri-border municipality.	In the period, there were 2,605 deliveries of late pregnancies, most of them were Brazilian and multiparous, and surgical delivery was the most performed. As for prenatal care, most of them underwent prenatal care. The most common gestational complications were hypertension, diabetes mellitus, and preeclampsia. Surgical delivery had a higher incidence for prematurity, low birth weight and the neonatal care unit as a neonatal outcome.
Fernandes <i>et al.</i>	2020	The objective of this integrative review is to answer the following question: "What are the complications related to late pregnancy?" Based on scientific studies applied to reality, making use of confrontations and analysis of articles, it is notable that late pregnancy can indeed lead to complications.	The results obtained from the guiding question indicate that late gestational complications are recurrent.
Oliveira, Araújo; Ribeiro	2020	To analyze the experience of late motherhood (35+ years) and its implications in the advanced stage of life, namely in personal and family trajectories.	The results refer to the health risks, emotional distress and social judgments of late pregnancy. At the family level, the presence of challenges of overlapping different stages of the life cycle (caring for young children and adolescents vs. midlife management) and, today, the (in)ability to take care of grandchildren stands out. The children show concerns with the provision of care for their parents, a task that, because it occurs early in their developmental trajectories, is marked by increased difficulties.
Barboza <i>et al.</i>	2019	The study aimed to analyze the risks and consequences of a pregnancy over 35 years of age.	The study of the selected articles revealed an association between advanced maternal age and a higher risk of developing important repercussions, both at the gestational level (preeclampsia, gestational diabetes, abortions and cesarean section), maternal (increased incidence of infections, puerperal hemorrhage and anemia) and perinatal (prematurity, neonatal death and fetal death).
Marques; Portelli	2019	describe the perceptions of pregnant women in the face of the situation of late pregnancy, as well as understand the decision to postpone pregnancy	Most of the participants were aged between 35 and 39 years, most of them were married (81.25%), felt good and happy during pregnancy (81.25%), there were no complications (81.25%), participated in all prenatal consultations (100%), in (37.5%) of the interviewees the pregnancy was not planned and (75%) there was a need to adapt routine activities with the birth of the child.
Silva <i>et al.</i>	2019	OBJECTIVE: To analyze the sociodemographic characteristics and complications that occurred with pregnant women in	It was found that most pregnant women (67.4%) are in the age group between 25 and greater than or equal to 36 years; 67,3%. The main complications identified were: arterial hypertension/DHEG

		high-risk prenatal care in a municipality located in northeastern Brazil.	(16.8%), recurrent abortion (11.6%), age over 35 years (10.5%) or under 15 years (9.5%). It was noticed that 91 (95.8%) of the pregnant women were followed up by a nurse, 67 (70.5%) by a doctor and 38 (40%) by an ultrasonographer.
Sousa	2019	To evaluate the epidemiological context of the Centro Materno-Infantil do Norte Dr. Albino Aroso, regarding the incidence of pregnancies at ≥ 35 years of age and average maternal age, in the last 10 years, as well as to carry out a literature review regarding the most frequent maternal-fetal complications and implications of maternal age in its incidence and clinical approach.	There was an increase in the number of late pregnancies and in the average maternal age at the level of the population covered by the institution evaluated, which presented, in 2017, 33.7% of late pregnancies and an average maternal age of 31.9 years (contrasting with the 17.8% and 29.3 years recorded in 2008). With the evaluation of the available literature, a proportional increase in the incidence of various gestational complications evaluated with maternal age, especially over 40-45 years, was found, as well as the possibility of implication in its clinical approach. That said, advanced maternal age should be seen as a risk factor for these complications, both due to the physiological changes inherent to aging and the comorbidities that often underlie it.

The present integrative review analyzed the prevalence and main obstetric complications associated with pregnancy in women with advanced maternal age, considering the progressive increase in pregnancies in women over 35 years of age. The data extracted from the studies indicate a significantly higher risk of obstetric and perinatal complications. The most frequently observed complications include gestational hypertension, gestational diabetes mellitus, preeclampsia, premature births, cesarean sections, in addition to a high rate of neonatal morbidity and mortality.

Carvalho et al. (2024) and Kalil et al. (2024) highlight that women over 35 years of age have a higher risk of developing gestational hypertension, gestational diabetes mellitus, preeclampsia, and an increased incidence of premature births and cesarean sections. These findings are corroborated by Tibes-Cherman et al. (2021), who documented that, in a large number of late deliveries, most were performed by cesarean section, with a high prevalence of prematurity and low birth weight.

Gestational hypertension was one of the most prevalent complications observed in the studies reviewed. Kalil et al. (2024) highlight that, in a sample of women over the age of 35, about 24% developed gestational hypertension, corroborating previous studies, such as that of Tibes-Cherman et al. (2021), which reported a prevalence of hypertension of 22.6%. These women were more likely to develop preeclampsia, which significantly increases the risk of adverse health outcomes for the mother and fetus, including preterm births and cesarean sections. In addition, Bruno Neto et al. (2023) report that preeclampsia is a

common complication, which often appears silently, worsening in the puerperium. Early diagnosis and proper treatment are crucial to mitigate the risks associated with this condition.

Gestational diabetes mellitus has been identified as a highly prevalent condition, affecting 18% to 25% of pregnant women at an advanced age, as reported by Marinho et al. (2023) and Kalil et al. (2024). Gestational diabetes is associated with complications such as fetal macrosomia, increased cesarean section rates, and neonatal breathing difficulties, directly contributing to increased perinatal morbidity rates.

Neonatal complications were also widely reported in the studies. The perinatal mortality rate was also considerably higher in women of advanced maternal age, ranging between 4.5% and 6% in the reviewed studies (Tibes-Cherman et al., 2021). Neonatal mortality was frequently associated with prematurity and complications resulting from gestational hypertension and diabetes, requiring hospitalization in neonatal intensive care units (NICU).

Premature births are one of the most frequent complications in late pregnancies. Silveira et al. (2023) reported a prematurity rate of 15.8% in pregnant women with advanced maternal age, which was corroborated by Matos et al. (2021), who recorded rates of up to 18% among these pregnant women. Prematurity is directly related to serious neonatal complications, including respiratory disorders, metabolic problems, and infections, which can increase the length of hospital stay of the newborn and the neonatal mortality rate. In addition, cesarean sections have been widely practiced in women with advanced maternal age, with rates ranging between 60% and 70%, as reported by Tavares et al. (2022).

The relationship between advanced maternal age and increased risk of genetic complications has been widely discussed. Gomes and Domingueti (2021), document that late pregnancy is often associated with fetal macrosomia and the development of complications such as hypertension and diabetes.

In addition, Sousa (2019) revealed a proportional increase in gestational complications as maternal age increases, particularly in pregnant women over 40 years of age. These complications include increased likelihood of labor induction, intrauterine growth restriction, and perinatal mortality.

In addition to physical complications, the studies also addressed the psychosocial impacts of late pregnancy. Older women reported higher levels of anxiety, worry, and stress, especially in relation to the risks associated with the baby's health and expected medical complications (Oliveira et al., 2020; Tavares et al., 2022).

These factors can negatively affect quality of life during pregnancy, increasing stress levels and contributing to additional complications, such as postpartum depression. The need for specialized emotional support for these women is evident, and the role of nurses in this context goes beyond physical care, also encompassing emotional support, active listening, and psychosocial monitoring, which can minimize the effects of stress during pregnancy (Tavares et al., 2022; Marinho et al., 2023).

Late pregnancy, although often planned and desired, brings with it the challenge of dealing with social expectations and prejudices related to maternal age, which can intensify emotional stress during the gestational period (Martins & Menezes, 2022). The decision to postpone motherhood is often associated with socioeconomic and cultural factors, such as the desire to achieve professional and academic stability before having children. Fortuna et al. (2022) observed that 72.6% of women who postponed pregnancy did so to invest in their careers. However, this postponement has implications for both the physical and emotional health of women, as highlighted by Oliveira, Araújo and Ribeiro (2020), who point to the emotional distress and social judgments faced by these pregnant women.

The study by Tavares et al. (2022) highlights that while many women report personal satisfaction when becoming pregnant after the age of 35, there are also feelings of anxiety and worry about the increased risks to the baby's health. Marques & Portelli (2019) reported that many women need to adjust their routines and face additional emotional and physical challenges when dealing with a late pregnancy.

The results point to the crucial importance of rigorous and specialized prenatal care for women of advanced maternal age. Studies such as that of Silva et al. (2019) and Fernandes et al. (2020) highlight that early prenatal care, with continuous monitoring of conditions such as hypertension and diabetes, can significantly reduce the risks of obstetric and perinatal complications. Additionally, Silveira et al. (2023) emphasize that prenatal care should include strict monitoring of blood pressure, blood glucose, and fetal growth, in order to detect and prevent serious complications. Fernandes et al. (2020) reinforce that adapted prenatal care can reduce the most frequent obstetric complications, such as hypertension and gestational diabetes.

In addition, public policies aimed at expanding access to specialized prenatal care, especially in low-income regions, are essential to ensure maternal and neonatal well-being. Awareness of the risks of pregnancy at an advanced age should be a priority in public health policies, with the inclusion of education programs for pregnant women and health professionals. The need for public policies that expand access to specialized prenatal care

was also raised by Carvalho et al. (2024), who highlighted that many women do not receive adequate follow-up, increasing the risk of complications for both the mother and the fetus.

Some studies have reported specific cases of gestational complications in women of advanced age, such as the study by Bruno Neto et al. (2023), which described a case of late-onset preeclampsia and its postpartum evolution. These case studies underscore the complexity of clinical management in high-risk situations, especially when complications manifest silently.

On the other hand, the study by Aldrighi et al. (2021) analyzed 1,336 medical records and identified a direct relationship between maternal age and the incidence of complications such as pre-gestational hypertension and preeclampsia, highlighting the need for special attention for pregnant women over 40 years of age, who were more likely to develop these complications.

The role of the nursing professional is central in this process. As highlighted by Tavares et al. (2022), nurses are responsible for identifying signs of gestational complications early, guiding pregnant women on the necessary care, and ensuring access to appropriate tests and interventions. The emotional follow-up and psychosocial support offered by these professionals are also essential to promote the well-being of pregnant women, minimizing the impact of negative emotional factors during pregnancy.

DISCUSSION

The results of this integrative review bring to light a worrying picture about the increased risks of pregnancy at an advanced maternal age. The fact that women over 35 years of age have a significantly higher incidence of obstetric and perinatal complications reflects the physiological changes associated with aging, such as reduced vascular elasticity and increased insulin resistance, which directly contribute to the development of conditions such as gestational hypertension and gestational diabetes mellitus (Kalil et al., 2024; Tibes-Cherman et al., 2021). These findings are in line with previous research indicating that women with advanced maternal age are at increased risk for medical complications when compared to younger pregnant women (Albertine; Pereira, 2019; Matos et al., 2021).

Comparison with other studies conducted in different regions and populations reveals similar patterns. For example, international studies conducted in the United States and Europe have also reported that pregnancy in women over the age of 35 is associated with an increased risk of complications such as hypertension, gestational diabetes, and preterm birth (Heffner, 2004; Huang et al., 2008). These studies observed that, between

1980 and 2000, there was a 36% increase in the number of births among women aged 35 to 39 years, and a 70% increase among women aged 40 to 44 years, confirming the global trend of postponement of motherhood and its impacts on maternal health (Martins; Menezes, 2022). In Brazil, this trend was also identified by Fernandes et al. (2020), who observed a considerable increase in late pregnancies in the South and Southeast regions, reflecting women's search for financial and professional stability before becoming pregnant.

The findings of this review reinforce these patterns and highlight the need for specific interventions to mitigate the risks associated with late pregnancy. The prevalence of gestational hypertension observed, which reached about 24% of the pregnant women analyzed (Kalil et al., 2024; Tibes-Cherman et al., 2021), is in line with international studies that indicate that women over 35 years of age are twice as likely to develop gestational hypertension than younger pregnant women (Heffner, 2004). Gestational hypertension, combined with gestational diabetes mellitus, increases the risk of preeclampsia and eclampsia, conditions that can result in serious complications such as placental insufficiency, preterm birth, and maternal or fetal death (Marinho et al., 2023).

It was observed that specialized prenatal care is essential to reduce the risk of complications. Women of advanced maternal age require close monitoring of blood pressure, blood glucose, and fetal growth, as well as a multidisciplinary approach involving physicians, nurses, and other health professionals (Silva et al., 2019). Early detection of conditions such as hypertension and gestational diabetes can lead to appropriate interventions, such as the administration of antihypertensive medications or insulin, which reduce the chances of serious complications (Tavares et al., 2022). This point is corroborated by studies such as that of Fernandes et al. (2020), which emphasize that high-quality prenatal care, associated with the use of screening exams and accurate diagnostic tests, has the potential to minimize negative outcomes.

Another important aspect revealed by the results is the high rate of cesarean sections in women with advanced maternal age, which reached 62% in the reviewed studies (Tavares et al., 2022). Although cesarean section is often a choice to reduce the risks of natural labor in women with complications, such as preeclampsia or fetal macrosomia, the excessive use of cesarean sections can carry its own risks, such as an increased likelihood of infections and neonatal respiratory complications (Albertine; Pereira, 2019). This point raises the need to balance the use of cesarean section with the best obstetric practices, avoiding unnecessary interventions that may increase the risks for both the mother and the newborn.

Pregnancy is a natural process that, under ideal circumstances, takes place without major complications. However, some pregnant women are subject to conditions that make the gestational period more susceptible to risks, configuring them as high-risk pregnant women. These risks may stem from factors related to the mother's health, pre-existing conditions, advanced maternal age, previous obstetric complications, and other psychosocial factors. In view of this, the health care of these women should be guided by public policies that ensure comprehensive care, aiming at reducing maternal and fetal morbidity and mortality.

In view of the results, it is possible to affirm that public policies aimed at women's health care should incorporate specific programs for the monitoring of pregnancies at an advanced maternal age. The creation of referral centers for high-risk pregnant women, the continued training of health professionals, and the expansion of access to prenatal care are essential measures to improve pregnancy outcomes in this population group. In addition, educational campaigns that encourage awareness about the risks of late pregnancy can contribute to women making informed decisions about the most appropriate time to become pregnant, considering their overall health and age-related risk factors (Fernandes et al., 2020).

In Brazil, the Ministry of Health has been implementing actions to ensure qualified care for high-risk pregnant women through public policies, such as the Program for the Humanization of Labor and Birth (PHPN), the Stork Network, and the National Program for the Improvement of Access and Quality in Primary Care (PMAQ-AB) (Mortelaro et al., 2024). These initiatives aim to centralize comprehensive care, promoting health care from prenatal care to the postpartum period, with a multidisciplinary and integrated approach.

Although Brazil has made considerable progress in structuring policies aimed at comprehensive care for high-risk pregnant women, some challenges still persist. According to Silveira et al. (2023), inequality in access to health services, especially in remote regions, and the shortage of trained professionals in some areas still hinder the full implementation of public policies. The expansion of programs such as PMAQ-AB, which monitors the quality of primary care, and the continuous training of health professionals are fundamental for improving this scenario.

A significant advance is the increasing use of communication technologies for remote monitoring of high-risk pregnant women. The use of telemedicine applications and systems has allowed for closer and more constant monitoring of these women, especially in areas of difficult access. These technological innovations, combined with public health policies, have the potential to improve maternal and perinatal outcomes in Brazil.

Pregnancy at an advanced maternal age, although a personal choice and often linked to socioeconomic and cultural factors, requires special attention from health professionals. The increased risks observed in this review reinforces the need for a multidisciplinary approach, with intensive prenatal care adapted to the particularities of each pregnant woman. In this sense, emotional and psychosocial support is important as an integral part of prenatal care, and public policies that promote universal access to these services are essential to reduce maternal-fetal complications associated with advanced age. Evidence suggests that a preventive approach, focused on early diagnosis and prompt intervention, can significantly improve pregnancy outcomes for women over 35 years of age.

The integrative review shows that pregnancies at an advanced maternal age, characterized by pregnant women aged 35 years or older, have significantly higher obstetric and perinatal risks compared to pregnancies of younger women. The most frequent complications include gestational hypertension, gestational diabetes mellitus, preeclampsia, preterm births, and cesarean sections, in addition to a higher prevalence of neonatal complications, such as prematurity, fetal macrosomia, and perinatal mortality. These findings highlight the need for rigorous and specialized prenatal care, which is capable of detecting and treating these complications early, minimizing the risks for both the mother and the fetus (Kalil et al., 2024; Marinho et al., 2023).

From a clinical point of view, it is essential that public health policies expand access to specialized prenatal care, especially in more vulnerable regions, ensuring that women at an advanced age receive adequate support. Raising awareness about the risks of late pregnancy should be part of educational campaigns aimed at women's health, allowing them to make informed choices and receive appropriate care from the beginning of pregnancy (Fernandes et al., 2020; Silva et al., 2019).

Additionally, it is critical to recognize the psychosocial impact of these pregnancies, since women in this age group often face higher levels of anxiety and stress, which can affect their mental and physical health. The role of nursing professionals and other health professionals in offering emotional support and promoting a multidisciplinary approach is essential to ensure the integral well-being of these pregnant women (Oliveira et al., 2020; Tavares et al., 2022).

A reflection on the methodological limitations of this integrative review points to some aspects that could have an impact on the results. First, the selection of databases may have limited access to a wider range of studies, especially those published in smaller journals or those not indexed on the selected platforms, which could bring more diversity to

the findings. Depending on the databases chosen, some relevant studies may have been excluded, introducing a selection bias.

In addition, publication bias should be considered, as studies with positive or significant results tend to be published more frequently, while studies with null or negative results may be underreported, creating a partial view of risks and complications. Recognition of these limitations points to the need for greater methodological rigor in future reviews, including the use of strategies that encompass a wider range of sources and the inclusion of unpublished or hard-to-reach studies to provide a more balanced and complete view.

CONCLUSION

It is concluded that, although pregnancy at an advanced maternal age is related to a higher incidence of complications, it is an increasingly present reality in contemporary society, the associated risks can be managed and minimized with proper prenatal care and adequate public policies. The adoption of preventive strategies, the provision of psychological support, and the integrated performance of a trained health team are crucial measures to ensure more positive outcomes for mothers and babies in this condition.

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