REVIEW

PROFILE OF WOMEN WHO HAD LATE GESTATION

Perfil de mulheres que tiveram gestação tardia

Perfil de mujeres que tuvieron gestación tardía

Nayade Aparecida Gonçalves Fernandes[1], Tatielen Dias Barbosa Queiroz[2], Fernanda Cardoso Rocha[3], Gregório Ribeiro de Andrade Neto[4], Jannayne Lúcia Câmara Dias[5], Selén Jaqueline Souza Ruas[6]

ABSTRACT

Objective: To outline the profile of women who had a late pregnancy, admitted in 2016 to a public maternity hospital in northern Minas Gerais. **Methodology:** This is a documentary research, retrospective, descriptive and quantitative analysis. This study included pregnant women who were admitted to a public maternity ward located in a municipality in the north of Minas Gerais in 2016, through access to medical records. **Results:** 24 complications were found prior to gestation, with the most frequent being hypertension. Of the associated comorbidities the most prevalent was gestational hypertension with 14.75% of the total of women. 41 complications of childbirth and postpartum were identified, and the labor induction was the one that most affected those surveyed. **Conclusion:** It is necessary to improve the information in the database as it allows a better performance of the multidisciplinary team against the binomial mother-baby, thus avoiding possible diseases.

Descriptors: Gestation; Maternal Age; Women's health.

RESUMO

Objetivo: Traçar o perfil das mulheres que tiveram uma gestação tardia, admitidas no ano de 2016 em uma maternidade pública no Norte de Minas Gerais. **Metodologia:** Trata-se de uma pesquisa documental, retrospectiva, descritiva e de analise quantitativa. Fizeram parte dessa pesquisa as gestantes que foram admitidas em uma maternidade pública localizada em um município no norte de Minas Gerais em 2016, por meio do acesso aos prontuários. **Resultados:** Foram encontradas 24 complicações prévias à gestação, sendo a mais frequente, a hipertensão arterial. Das comorbidades associadas a mais prevalente foi hipertensão gestacional com 14,75% do total de mulheres. 41 complicações do parto e pós-parto foram identificadas, sendo a indução do parto a que mais acometeu as

1   Graduated in Nursing from the Faculdades Unidas do Norte-FUNORTE. Montes Claros (MG). Brazil.

2   Graduated in Nursing from the Faculdades Unidas do Norte-FUNORTE. Montes Claros (MG). Brazil.

3   Psychologist graduated from the Faculty of Health Ibiturna-FASI. Specialist in Family Health. Specialist in Methodology and Didactics of Higher Education. Specialist in Hospital Psychology. Montes Claros (MG). Brazil.

4   Graduated in Nursing from the Faculty of Health Ibiturna-FASI. Specialist in Family Health. Specialist in Emergency and Emergency. Teacher of the cursod and graduation in Nursing by the Faculdades Unidas do Norte-FUNORTE. Montes Claros (MG). Brazil.

5   Graduated in Nursing from the Faculdades Unidas do Norte-FUNORTE. Specialist in Labor Nursing. Lecturer in the Nursing Undergraduate course. Department of Nursing, Faculdades Unidas do Norte-FUNORTE. Montes Claros (MG). Brazil.

6   Nurse graduated from the State University of Montes Claros-UNIMONTES. Specialist in Emergency, Emergency, Trauma and Intensive Care. Specialist in Didactics and Methodology of Higher Education. Faculty of Health Ibituruna / FASI and Faculdades Unidas do Norte de Minas / FUNORTE. Professional Master's Degree Primary Health Care (UNIMONTES). Montes Claros (MG). Brazil.

pesquisadas. **Conclusão:** Observa-se a necessidade de aprimoramento das informações em banco de dados como possibilitando a uma melhor atuação da equipe multidisciplinar frente ao binômio mãe-bebê, evitando assim possíveis doenças.

Descritores: Gestação; Idade materna; Saúde da mulher.

RESUMEN

Objetivo: Trazar el perfil de las mujeres que tuvieron una gestación tardia, ingresó en 2016 a un hospital público de maternidad en el norte de Minas Gerais. **Metodología:** Se trata de una investigación documental, retrospectiva, descriptiva y de análisis cuantitativo. Las mujeres embarazadas que fueron admitidas en una maternidad pública ubicada en un municipio en el norte de Minas Gerais en 2016, a través del acceso a los prontuarios. **Resultados:** Se encontraron 24 complicaciones previas a la gestación, siendo la más frecuente, la hipertensión arterial. De las comorbilidades asociadas a más prevalente fue hipertensión gestacional con el 14,75% del total de mujeres. Se identificaron 41 complicaciones del parto y posparto, siendo la inducción del parto la que más afectó a las investigadas. **Conclusión:** Se observa la necesidad de perfeccionamiento de las informaciones en base de datos como posibilitando una mejor actuación del equipo multidisciplinario frente al binomio madre-bebé, evitando así posibles enfermedades.

Descriptores: Gestación; Edad materna; Salud de la mujer.

INTRODUCTION

Since the beginning of humanity, human beings have undergone several changes in their way of living, thinking, and acting. It was no different in the female universe. Since the 1960s, where women have changed their routine of being just mothers and responsible for domestic tasks, becoming more participatory in the family's financial life.[1] In this world where women are valued in their professional careers, it is noticeable the postponement of the desire to be a mother. Gestation is a period in which great emotional and physical changes occur in women, requiring appropriate monitoring by health professionals, especially in cases of late gestation.[2]

Late gestation is defined as pregnancy equal to or above 35 years old, and may be associated with several complications, then requiring differentiated monitoring, high-risk prenatal care.[2] The ideal age for procreation has been considered, in the literature, between 20 and 29 years old, because, at this stage, the best maternal and perinatal results are observed.[3]

In the contemporary world in which we live, it is common for women to spend more time dedicating themselves to studies and qualifications to acquire better economic conditions, postponing the desire to be a mother, thus creating an impasse between the ideal time for the development of professional career and the ideal time to get pregnant.[4]

This group of women is considered to be at high risk due to the increased occurrence of hypertensive syndromes, weight gain, fibroids, diabetes, and abortion. In these pregnant women, there is an increase in obstetric complications such as: prematurity, hemorrhages, prolonged labor, multiple pregnancies, placenta previa, abnormalities of amniotic fluid, rupture of the membrane, ectopic pregnancy, and cesarean delivery.[5,1] In addition to physical complications, these groups

of women can be psychologically damaged. A sense of guilt and fear of not being able to raise their children is often created. There is an idea that these women with advanced age do not have the vitality, energy, and agility to perform the daily activities necessary in the child's early childhood.[6]

The longer the pregnancy is postponed, the greater the chances of the woman becoming susceptible to various obstetric risks, resulting from both chronic diseases and the physiological changes in which the woman's body begins to suffer after 35 years old, caused by senescence ovarian, thus making it a difficult factor for late gestation.[7] Several changes occur in the structure as well as in the ovarian function. The girl is born with approximately two million primordial ovarian follicles, this number declines, on average, to four hundred thousand at puberty and only a few hundred still belong to her, gradually progressing to atresia as age increases.[8]

In late gestation in addition to complications for the mother, there are risks for the newborn as well, such as low vitality at birth, low weight, small fetuses for gestational age, macrosomia, fetal distress, chromosomal abnormalities such as Down syndrome, hospitalization in intensive care units, and neonatal death.[3]

Although most studies show complications and injuries in late gestation, some studies point to benefits in this type of pregnancy. These women have greater financial and psychosocial conditions to become mothers. They enjoy the support of family and friends and seem to have a greater capacity to reconcile their domestic and work tasks. Moreover, women over 35 years old have a greater behavioral and emotional balance, important elements for a good pregnancy.[6]

In addition to the advantages already listed, a study showed that there are positive aspects not only for the mother but also for the child, among them better health and development rates in the first five years of life, lower risk of injury, better level of language development and less emotional difficulty. These results are attributed to the fact that older mothers have a greater tendency to prepare for pregnancy and motherhood, whether in the physical, emotional, social, or financial sphere. These are the most common indicators of this group of women having healthier children than younger ones.[9]

It can be seen that the incidence of late gestation has increased in Brazil, and in the world as well. Therefore, causing bigger risks and complications during pregnancy, often leading to maternal and neonatal deaths.[10]

Having a child after the age of 35 is an increasingly common reality in developed and developing countries. Some of the reasons why more and more women are postponing pregnancy is a greater search for financial stability, reaching higher levels, changing the social role of women in the marketplace and family core.[11]

Late gestation has been increasingly a desire and reality of contemporary women, so it should be a more understood and studied subject, since this type of pregnancy can impact on the health of women and newborns, making knowledge relevant advantages and disadvantages of late gestation.[12]

Bearing in mind that this subject is still poorlyinvestigated and that only so much information is available, the present work becomes important because it addresses this reality, then bringing more information regarding the topic.

This study meantto outline the profile of women who had late gestation and were admitted in 2016 to a public maternity hospital from the northern region of *Minas Gerais* State.

METHODS

It is a documentary, retrospective, descriptive researchwith a quantitative approach, which was performed in a public maternity hospital from the northern region of *Minas Gerais* State.Such hospital is a regional referral for providing care of high-risk pregnant women, those living with HIV and AIDS. The neonatal intensive care unit provide assistance to life-risk newborns, since its implementation in 2002.[13]

There was obtained access to data on maternity indicators for the year 2016, in which it was identified that 234 women aged 35 years old or older were hospitalized for delivery over the period from 01/01/2016 to 12/31/2016. From this total, 24 medical records of women whose data did not correspond to the information indicated by the indicators and 23 medical records where the form was outpatient were then excluded, thus lacking the necessary information to collect the data. Four medical records of women who had their deliveries in December 2015 were also excludedbut were described in the 2016 indicators. Hence, the final sample was 183 medical records.

Data collection took place through a form prepared by the researchers, which addressed information about the socioeconomic profile, gestation, delivery and previous comorbidities and associated with pregnancy and complications in childbirth and postpartum. They were collected through authorized access to medical records in an electronic medium, at times previously scheduled by the hospital's research coordination. The collected data were tabulated and organized using the SPSS software (Statistical Package for the Social Sciences) version 21.0 and the variables were analyzed using descriptive statistics.

This research respected all the ethical precepts addressed by the Resolution No. 466/2012 from the National Health Council, then guaranteeing the preservation of the participating professionals. The project was approved by the Research Ethics Committee from the *Sociedade Educativa do Brasil - SOEBRAS*, under the legal opinion No. 2.216.424.

RESULTS

Herein, the total sample was 183 medical records. **Table 1** shows some variables that define the participants'socioeconomic profile. It can be seen that the most prevalent age group was from 35 to 37 years old with 106 (58%) of the total, followed by 38 to 40 years old with 47 (25.7%), 41 to 43 years old with 25 (13, 6%) and 44 to 46 years old with five (2.7%). Concerning the marital status; 91 (49.7%) were married, 50 (27.3%) maintained a common-law marriage, 38 (20.8%) were single, and only four (2.2%) fit into the other categories.

With regard to theeducation 132 (72.1%) were not informed, 31 (16.9%) of the participants reached high school, ten (5.5%) to elementary school, and ten (5.5%) to college. Among the occupation categories, the most prevalent was "housewife" with 67 (36.6%), the 'not informed'were 51 (27.9%), 14 (7.7%) were service providers, other categories combined account for 51 (27.9%) of the interviewees. Observing this sample, 27 (14.8%) of women were primiparous, 54 (29.5%) had only one child; 46 (25.1%) had two children; 21 (11.5%) with three children; 18 (9.8%) had four children and 17 (9.2%) had 5 to 15 children.

Table 1 – Participants'characterization.

Characterization	N	%
Age (years old)		
35 to 37	106	58
38 to 40	47	25.7
41 to 43	25	13.6
44 to 46	5	2.7
Total	183	100
Marital status		
Married	91	49.7
Single	38	20.8
Common-law marriage	50	27.3
Widow	1	0.5
Not informed	1	0.5
Divorced	2	1.2
Total	183	100
Education		
Elementary school	10	5.5
High school	31	16.9
College	10	5.5
Not informed	132	72.1
Total	183	100
Occupation		
Not informed	51	27.9
Housewife	67	36.6
Service providers	14	7.7
Administrative services	13	7.1
Teaching	9	4.9
Generalservices	12	6.6
Trading goods and services	9	4.9
Self-employed	8	4.4
Total	183	100

Characterization	N	%
Number of children (current excluded)		
0	27	14,8
1	54	29,5
2	46	25,1
3	21	11,5
4	18	9,8
5 or more	17	9,2
Total	183	100

Source: Medical record data of pregnancy women assisted in 2016 in a public maternity hospital from the northern region of *Minas Gerais* State.

There were identified 24 comorbidities prior to pregnancy, all described in **Table 2**. Considering the 183 women, 131 (71.5%) did not have comorbidities, 14 (7.6%) did not contain information in the medical record, and 38 (20.7%) presented comorbidities. Among the associated comorbidities presented, the most prevalent was arterial hypertension with 14 (7.6%), followed by obesity with three (1.6%), uterine fibroids with three (1.6%), the rest of the comorbidities were equivalent to 18 (12.63%) of the total. The percentage above 100% is justified since seven (3.8%) women had two simultaneous comorbidities. Two (1.0%) women had three simultaneous and one (0.5%) woman had four previous simultaneous diseases.

Table 2– Comorbidities before pregnancy.

Comorbidity	Frequency	Percentage
Anemia	1	0.5
Asthma	2	1.0
Ischemic stroke	1	0.5
Renal stone	1	0.5
Heart disease/Chagas disease	1	0.5
Coagulopathy	1	0.5
Cholecystitis	1	0.5
Depression	1	0.5
Diabetes	2	1.1
Epilepsy	1	0.5
Hepatitis B	1	0.5
Arterial hypertension	14	7.6
Hypothyroidism	1	0.5
HIV positive	1	0.5
Uterine fibroids	3	1.6
No	131	71.6
*NI	14	7.6
Nephrolithiasis	1	0.5
Obesity	3	1.6
Renal pathology	1	0.5
Psoriasis	1	0.5
Syphilis	1	0.5

Comorbidity	Frequency	Percentage
Panic syndrome	1	0.5
Mental disorder	1	0.5
**DVT	1	0.5
Pelvic varicose veins	1	0.5
Total	183	101.6%

Source: Medical record data of pregnancy women assisted in 2016 in a public maternity hospital from the northern region of *Minas Gerais* State. *NI: Notincluded. **DVT: Deep vein thrombosis.

Seven comorbidities associated with gestation were identified, described in **Table 3**. Considering the 183 women, 117 did not present comorbidity, 46 presented some comorbidity, and 20 did not contain the information in the medical record. Of the comorbidities associated with pregnancy, the most frequent was gestational hypertension with 27 (14.7%) followed by gestational diabetes with 13 (7.10%) and 7 (3.83%) with urinary tract infection, other comorbidities were equivalent to 9 (4.9%) of the total. The final percentage higher than 100% is justified because three women had 2 previous simultaneous comorbidities.

Table 3 – Comorbidities associated with pregnancy.

Comorbidity	Frequency	Percentage
Anemia	6	3.28%
Gestational diabetes	13	7.10%
*HBsAg positive	1	0.55%
Hyperemesis	1	0.55%
Gestational hypertension	27	14.75%
**UTI	7	3.83%
No	117	63.93%
***NI	20	10.93%
Rh-	1	0.55%
Total	183	105.46%

Source: Medical record data of pregnancy women assisted in 2016 in a public maternity hospital from the northern region of *Minas Gerais* State. *HBsAg positive: Hepatitis B surface antigen. **UTI: Urinary tract infection. ***NI: Not included.

There were identified 41 complications related to childbirth and postpartum. Considering the 183 women, 113 (61.7%) had complications, 65 (35.6%) did not and five (2.7%) did not have the information in the medical record. Among the complications that most affected those women were the need to induce labor with 31 (16.1%), 24 (12.3%) with prematurity, premature amniorrhexiswith 23 (12.5%), prolonged gestation with 22 (12%), oligohydramnios with 20 (10.4%), hypertensive disorders in pregnancywith ten (10.4%), the remaining complications represented 27 (52.5%). The total percentage above 100% is justified, because 22 women (12%) had two simultaneous complications, fourteen had three simultaneous, 13 (7.1%) had four simultaneous, 5 (2.7%) had five simultaneous, 3 (1.6%) had six simultaneous complications and 1 (0.5%) had seven simultaneous complications.

DISCUSSION

Although there is a technological advance concerning the information system of the maternity in question, there were limitations of the results of the study with regard to the deficiency of information regarding the variables: education and occupation were only present in some medical records, since income cannot be studied for not counting this information in any of the 234 records analyzed.

According to previous studies the number of women with late pregnancies has been increasing significantly. According to the database of the *Sistema Nacional de Nascidos Vivos (SINASC)* [Brazilian System of Live Births], data from the year 2013, show that the rate of women who had children over 35 years old is 10.89% for live births, throughout the national territory, which creates concern.[5,14] This is in agreement with this study, since in the maternity hospital appraised in 2016, considering the 1,695 births performed, 234 (13.8%) were women who had children over 35 years old.

Concerning the education, studies indicate that women with higher education level largely opt for late gestation, to the detriment of their professional careers.[15,16] Here, it was not possible to obtain satisfactory information about the participants' education, as in most of the medical records reviewed did not contain such information. Among the previous comorbidities associated with pregnancy, arterial hypertension, diabetes and uterine fibroids were found to be more prevalent in this research, and the complications that most occurred during childbirth and postpartum are prematurity, labor induction, macrosomia, oligohydramnios. These findings corroborate with previous studies, affirming that this group of women is considered to be at high risk, due to the increased occurrence of hypertensive syndromes, weight gain, fibroids, diabetes and abortion. In these pregnant women there is an increase in obstetric complications such as prematurity, prolonged labor, placenta previa, abnormalities of amniotic fluid.[5,1]

CONCLUSIONS

Herein, the number of women with comorbidities before pregnancy was lower when compared to the number of comorbidities during gestation, with gestational hypertension and diabetes mellitus prevailing, with 41 complications of childbirth and postpartum, and among these, the most prevalent was prematurity with the need to induce labor.

Although the study is retrospective with information based on electronic hospital records, which are mostly filled in its entirety, there was a need to improve information in databases such as, for instance, education, marital status, occupation, and there is also the lack of information regarding income, as these are data that allow the multidisciplinary team to perform better in the face of the mother-baby binomial, thus avoiding possible diseases such as postpartum depression, a fact that deserves to be highlighted in the insertion of this mother back into her social environment.

Bearing in mind the aforesaid, this research is particularly relevant, as it brings important information to health professionals who are responsible for providing care to women who choose late gestation on a daily basis. Moreover, this research is important to women who might be informed about the health risks they are susceptible when going through a gestation at an advanced age, besides avoiding obstetric complications.

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Corresponding author
Fernanda Cardoso Rocha
Address: Rua São Roberto, 55, Todos os Santos
Montes Claros/MG, Brazil
Zip code: 39.400-121
E-mail address: nandac.rocha@hotmail.com

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