HIGH RISK PREGNANCY: CHARACTERIZATION OF THE REPRODUCTIVE PLANNING

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ABSTRACT: Knowing the characteristics of reproductive planning in high risk pregnancies. Quantitative, descriptive cross-sectional study nested in a cohort. Research conducted at a public maternity referral for high risk pregnancies. A semi-structured form was used for data collection, which took place from October 2016 to August 2017. Data were analyzed using IBM SPSS Statistics 20.0 software. The prevalent profile was: young adult women (70.7%); complete high school (56.2%); white race (58.7%); income of three or more minimum wages (48.7%); steady partner (86.9%); primiparous (40.5%). Regarding the most evident pathologies were: hypertension (37.3%) and diseases derived from metabolic disorders (21.1%). 52.0% of pregnancies were unplanned, however 51.0% did not use any contraceptive method. The occurrence of pregnancy associated with pathologies indicates the need for awareness about reproductive planning, through information and clarification regarding the use of contraceptive methods.

KEY WORDS: Contraception; Pregnancy, high-risk; Family planning (Public Health); Women's health.

GESTAÇÃO DE ALTO RISCO: CARACTERIZAÇÃO DO PLANEJAMENTO REPRODUTIVO

RESUMO: Conhecer as características do planejamento reprodutivo em gestações de alto risco. Estudo quantitativo, transversal descritivo aninhado ou alinhado? a uma coorte. Pesquisa realizada em uma maternidade pública de referência para alto risco. Foi utilizado formulário semiestruturado para coleta dos dados, que aconteceu no período de outubro de 2016 a agosto de 2017. Os dados foram analisados no software IBM *SPSS Statistics 20.0*. O perfil prevalente na pesquisa foi mulheres jovens-adultas (70,7%); ensino médio completo (56,2%); raça branca (58,7%); renda de três ou mais salários mínimos (48,7%); companheiro fixo (86,9%); primípara (40,5%). As patologias mais evidentes foram a hipertensão (37,3%) e as doenças derivadas de distúrbios metabólicos (21,1%); 52,0% das gestações não foram planejadas, no entanto 51,0% não utilizavam nenhum método anticoncepcional. A ocorrência de gravidez associada aàpatologias indicam a necessidade da conscientização sobre o planejamento reprodutivo, por meio de informações e esclarecimento em relação à utilização de métodos anticoncepcionais.

PALAVRAS-CHAVE: Anticoncepção; Gravidez de alto risco; Planejamento familiar; Saúde da mulher.

INTRODUCTION

In 1996, a bill was passed that regulates reproductive planning (RP), making it mandatory to guarantee women, men and/or couples assistance with conception and contraception. Reproductive planning (RP) is available through the Unified Health System (SUS) and the decision about which contraceptive (CM) should be considered, with the following aspects: the choice of woman, man and or the couple; method characteristics; individual and situational factors[1,2].

In addition to providing the opportunity to choose how many children the woman, man, and/or couple want to have, RP provides the opportunity to choose the ideal time for pregnancy, which is significantly important for those women who have risk factors for a pregnancy, which will be classified as high risk pregnancy[3].

To ensure sexual and reproductive rights of the people and ensure an appropriate time for women with chronic pathologies enjoy pregnancy regulatory policies were developed, bringing the proposed actions in each program in order to assist health care networks for embracement, assistance and management of CM[4,5].

CM can be classified into reversible and irreversible methods. Reversible methods are oral contraceptives (OC); injectable contraceptives (IC); hormonal subcutaneous implants; hormonal patches; vaginal ring; levonorgestrel releasing system; diaphragm; spermicide; sponges; cervical cap; female and male condom, or also known as barrier; copper intrauterine device (IUD) and levonorgestrel IUD; rhythm or calendar-based method (Ogino-Knaus); basal thermal or temperature curve; syntothermic method; Billings (cervical mucus); breastfeeding method; withdrawal and the emergency contraceptive pill. The irreversibles methods include tubal ligation and vasectomy[6].

The Ministry of Health (MH) provides some CMs, which are offered by Basic Health Units: monthly injectable, quarterly injectable, mini-pill, combined pill, diaphragm, emergency contraceptive pill, IUD, definitive methods, in addition to condoms[6].

However, even with CM available in SUS, providing RP, in a survey made by the United Nations (UN) in 2016, of the total births that occurred, only 54% were planned for that moment. Among the remaining 46%, 28% were wanted for later and 18% were not wanted. In Brazil, the unmet demand for contraceptives is estimated between 6% and 7.7%, affecting about 3.5 million to 4.2 million women of reproductive age[9].

Even in the face of policies and a law that regulates RP, we live in a scenario where many pregnancies are not planned. In this sense, health professionals who work with women of reproductive age and at risk of high-risk pregnancies can plan the care for these women with an emphasis on the knowledge and characteristics of the user's needs, according to the specificity of each method, according to user choice, aiming at preventing maternal and neonatal health problems.

In this context, the present study aimed to understand the characteristics of reproductive planning in high-risk pregnancies.

METHODOLOGY

This is a quantitative, cross-sectional and descriptive study, part of a prospective cohort, with high-risk pregnant women, in which postpartum women were followed up during hospitalization, being accompanied in the cohort study up to 42 days postpartum. For the present study, the period of hospitalization for delivery was determined for data collection.

The study was carried out in a public maternity hospital, linked to a state university, which is a reference for obstetric care and complications and for highly complex births.

Data collection took place from October 2016 to August 2017. For sample calculation, the number of 1,447 calls of the institution in 2015 was considered, with a monthly average of 121 women, a sampling error margin of 5% and 95% confidence level, with a sample size of 319 women, using the Bareta formula[12].

Participants were 319 puerperal women during their hospital stay, classified as high-risk pregnant women.

The pilot study was carried out with 20 puerperal women for the adequacy of the questionnaire and, subsequently, data collection started in three stages: identification and approach of the puerperal women; transcription of data from the prenatal card, and hospital records; and individual interview with the participants. Data were collected using a semi-structured instrument produced by the researchers. At the end of each material collected, the form was checked and interview

by telephone in hospital discharge situations, when necessary, in order not to lose data. The collection was performed daily until the composition of the proposed sample.

Data were entered and analyzed using descriptive statistics; absolute and relative frequency, in IBM SPSS Statistics 20.0 software. The following variables were used: socioeconomic, demographic, obstetric and reproductive characteristics; age group, education; maternal race, income, residence, marital status, number of pregnancies, interbirth interval, planned pregnancy, use of CM, characterization according to pre-existing pathologies; characteristics in relation to the use of CM; CM used, main problems with chosen CM, indication of CM and main reasons for not using CM.

The study was approved by the Research Ethics Committee Involving Human Beings, with opinion number 1.757.596 and CAAE 59935716.7.0000.5231. Participants were informed about the research objectives. After accepting to participate in the research, the participants signed the Free and Informed Consent Term in two copies, one copy remaining with the participant and the other with the researcher.

RESULTS

The research included 319 women classified as high risk pregnancies and in relation to the demographic socioeconomic profile: 70.7% were between 20 and 35 years old; with complete high school - 56.2%; predominantly white - 58.7%; with income equal to or greater than three minimum wages - 48.7%; residents in the urban area - 93.5% and with steady partners - 86.9% (Table 1).

Table 1. Socioeconomic, demographic, obstetric and reproductive characterization of women hospitalized in the postpartum period, in a high-risk maternity hospital, Londrina, State of Paraná, Brazil, 2017

Variable	N	%
Age group		
14 to 19	35	10,9
20 to 35	225	70,7
36 and over	59	18,4
Education		
Elementary School	91	28,5
High school	179	56,2
Higher Education	49	15,3
Maternal race		
White	187	58,7
Non-white race	132	41,3
Income (minimum wage) *		
≤ 1	49	15,3
1 to 2	115	36,0
3 and over	155	48,7
Residence		
Urban area	298	93,5
Rural area	21	6,5
Marital status		
With companion	277	86,9
No companion	42	13,1
Number of pregnancies		
Primiparous	129	40,5
Secondiparous	92	28,8
Multiparous	98	30,7
Interbirth interval		
< 1 year	8	2,5
1 and 2 years	13	9,7
> 2 years	169	53,9
Not applicable	129	34,7
Planned pregnancy		
The couple wanted	144	45,1
Only the woman wanted	7	2,1
Only the man wanted	4	1,2
The couple did not want	166	52,0
Used some CM▲		
Yes	156	48,9
No	163	51,0
Total	**319**	**100**

* Minimum wage in 2017- R$937,00

▲ Contraceptive method

Regarding obstetric aspects, 40.5% participants were in their first pregnancy. Women who experienced pregnancy more than twice were 30.7%, with the interbirth interval greater than two years - 53.9%. As for the current pregnancy, 52.0% participants stated that the couple had not planned the pregnancy, but did not use any CM - 51.0% (Table 1).

Figure 1 shows the main reasons why the participants did not use any CM: 52% wanted to become pregnant; followed by 17% who stated that they did not use because of systemic disorders, which the participants believed would interfere with conception; 13% did not justify not using CM; 9% stated that the couple did not like to use CM; 5% did not use CM because they felt sick and 4% reported not having information related to CM.
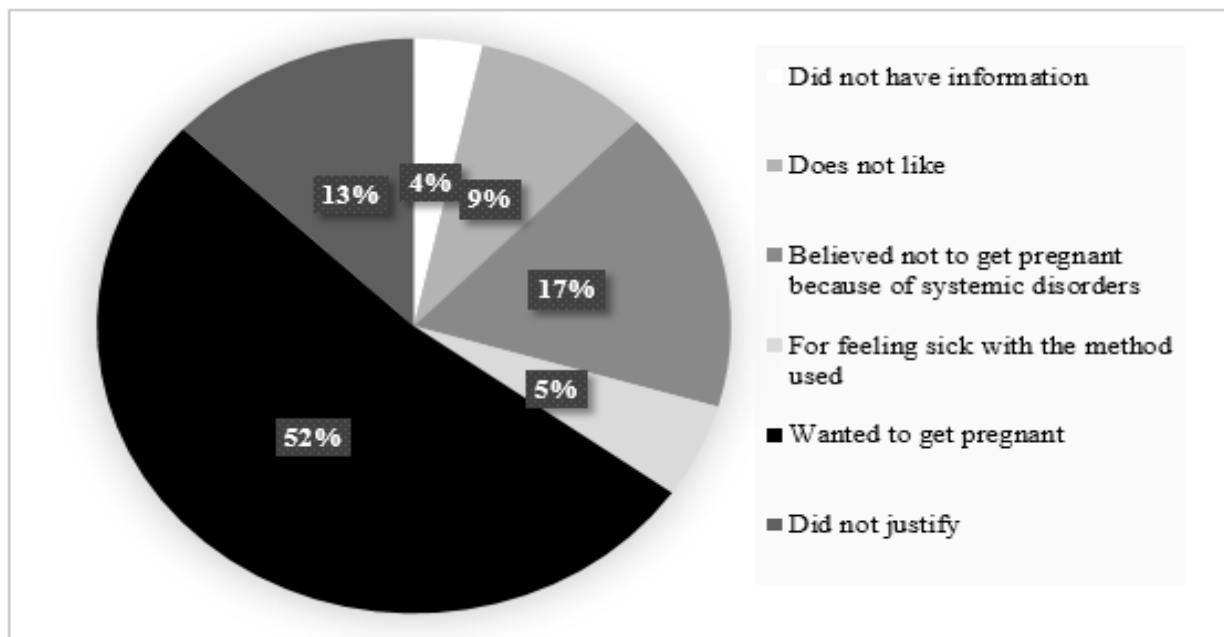

Figure 1. Distribution of the reasons why participants did not use CM▲, Londrina, State of Paraná, Brazil, 2017.

As for the characteristics related to the use of CM, the most used methods include the male condom (barrier) (32.0%); followed by oral contraceptives (OC) (55.1%) and injectable contraceptives (IC) (3.7%) and among the least used methods is the morning-after pill (1.9%); the female condom (barrier) (1.9%); intrauterine device (IUD) (0.6%); tubal ligation (0.6%) (Table 2).

Some problems were reported by the participants regarding the use of CM, among them the most significant were the non-use of OC every day (25.0%) or the use of antibiotic therapy concomitant with the use of OC (16.6%); followed by not using the barrier method during the entire sexual act (10.8%); besides (38.4%) having identified the probability of some problem in the use, but they were not able to specify the problem (Table 2).

In relation to information to start using CM, 67.3% participants stated that health professionals indicated the CM used, followed by information provided by family (8.3%) and friends (7.6%).

Table 2. Distribution of study participants, according to characteristics related to the use of CM , Londrina, State of Paraná, Brazil, 2017

Variables	N	%
Method used		
Female condom	3	1,9
Male condom	50	32,0
Oral contraceptives	86	55,1
Injectable contraceptives	12	3,7
Intrauterine device	1	0,6
Morning-after pill	3	1,9
Tubal ligation	1	0,6
Main problems with chosen CM▲		
Use of antibiotic therapy with ACO•	26	16,6
Did not take ACO• every day	39	25,0
Did not use ACI▼ on the expected date	7	4,4
There was no barrier to the whole sexual act	17	10,8
Barrier burst	5	3,2
Did not perform UGS■ to confirm IUD♦ position	1	0,6
Did not take the necessary precaution after definitive CM ▲	1	0,6
Did not identify the problem	60	38,4
Who indicated the method		
Healthcare professional	105	67,3
Internet	6	3,8
Television/radio	6	3,8
School	7	4,4
Family	13	8,3
Friend	12	7,6
Partner	7	4,4
Total	156	100

▲ Contraceptive methods; ● oral contraceptive; ▼injectable contraceptive;■ ultrasound examination; ♦ intrauterine device.
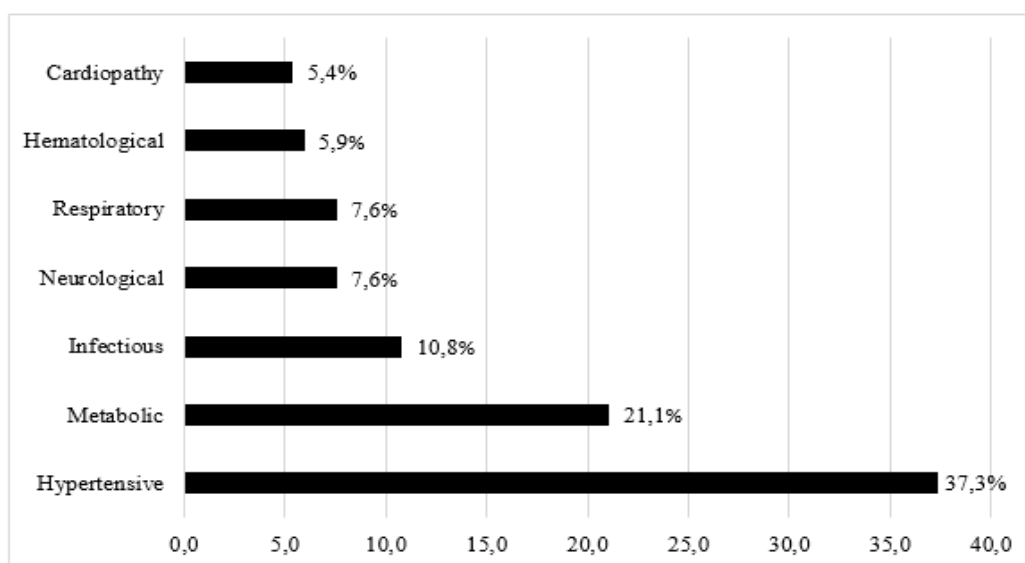

Figure 2. Characterization of the study population according to pre-existing diseases. Londrina, State of Paraná, Brazil, 2017.

Figure 2 illustrates the characterization of the population regarding pre-existing diseases, the most expressive were hypertensive (37.3%), followed by pathologies related to metabolic (21.1%) and infectious (10.8%) disorders, and the least expressive were neurological (7.6%); respiratory (7.6%); hematological (5.9%) and cardiac (5.4%) diseases.

DISCUSSION

The prevalent profile in the research was young adult women, with complete high school, white race, with income of three or more minimum wages, living in an urban area and a steady partner. Regarding the obstetric history, most participants were in their first pregnancy and those who were experiencing pregnancy again, the interbirth interval was longer than two years. Over time, the profile of SUS users has been changing, a reality presented by the current literature[13,14].

The characterization of the profile presented in the study indicates a population with a satisfactory level of education for a good adherence to the RP, thus a significant number of reports confirm this hypothesis when stating that the pregnancy was planned, however most of the participants stated that the pregnancy was not planned by the couple, and even so they did not use any CM to prevent the event, a scenario that corroborates recent research[13].

In relation to the main reasons for explaining the non-use of CM by the participants, the majority stated that they believed it was not possible to become pregnant, as they had disorders related to the reproductive system, such as polycystic ovary syndrome, endometriosis, among other disorders. Among other justifications, the most worrying, even with less significant numbers, was the fact that they do not use CM because they do not like it and because they do not have information about CM. Evidence that points to flaws in the information received by patients in relation to disorders of the reproductive system, as well as guidance on the diversity of CM offered by SUS, and its use. This scenario, as surprising as it is, is still part of the Brazilian reality[14,15].

Regarding the most used CMs, male condoms and hormonal contraceptives stood out, corroborating

the results of another study. However, SUS offers a variety of CMs. No CM is 100% effective, all have a failure rate, but the correct use is significant for the success of the CM. Implants, vasectomy, tubal ligation, copper IUD and levonorgestrel IUD, hormonal methods (monthly and quarterly injectables, combined oral and mini pill), patch and combined vaginal ring are the most effective CMs, with failure rates ranging from 0.05 to 0.6 pregnancies for every 100 women under consistent and correct use in the first year of use[6-10].

With respect to the main problems with the chosen CM, the incorrect use of OC had a significant number, as well as the use of concurrent OC with antibiotic therapy and the non-use of condoms during the entire sexual act. OCs are very effective when used correctly and consistently, some drugs decrease the effectiveness of oral contraceptives, such as antibiotics, and double protection with the use of condoms is recommended. The male condom must be used correctly, in all sexual relations, to be highly effective, it must also be properly stored. Women using OC without proper guidance are more likely to unwanted pregnancies, as they do not know how to take it correctly[6,13,17-19].

Considering the indication of the method used, most participants indicated health professionals as supporters in the choice, an interesting indication, because if these professionals have been instrumental in choosing the CM, users should be receiving all relevant information for using it, but it is not what the research identified. The lack of information or clarification of doubts in relation to CM, are crucial points for the inadequate use of the method and, consequently, its failure[20,21].

RP is not only important for planning family development; it is also interesting to establish the best time for women who have risk factors for pregnancy and can experience the pregnancy experience. Among the participants, some pre-existing pathologies were prevalent, such as hypertension, diseases related to metabolic disorders, such as diabetes and hypothyroidism, followed by infectious diseases, similarly to that found in the literature. Pathologies that when not monitored and controlled can have consequences from the evolution of pregnancy to delivery[3,22-26].

CONCLUSION

The occurrence of pregnancy, associated with the aforementioned pathologies related to pregnancy planning, indicates the need for improvements in reproductive planning and awareness of the importance of this preparation, considering that the participants in this study were likely to develop complications.

It is noticed that the reproductive planning guidelines may not be effective, since the CM indication established by health professionals, associated with the main problems with CM that is directly related to the use, identify that there are flaws in the information passed on.

Actions involving contraception in the Basic Health Units, the active search for women of reproductive age and the orientation of reproductive planning are recommended, including during the puerperal visit. These interventions could bring benefits to the health of the population, with a reduction in the number of unplanned pregnancies, a reduction in hospitalizations due to pregnancy complications and diseases related to risk pregnancy.

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