



Factors related to family planning in border region

Fatores relacionados ao planejamento familiar em região de fronteira

Factores relacionados con la planificación familiar en una región fronteriza

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ABSTRACT

Objective: to identify factors that enhance or interfere with family planning in border region. **Method:** this descriptive, cohort, cross-sectional, quantitative study was performed with 280 puerperal women in Paraná State, Brazil. For data collection, a structured instrument with socioeconomic variables, obstetric antecedents and family planning was applied. For analysis, the chi-square test or the G test complemented by adjusted residual analysis was used, with a significance level of 5% ($p < 0.05$). **Results:** age below 19 years (66%), low income (65.3%) and education (62.6%), absence of a partner (95.6%) and multiparity (74.4%) were the characteristics that interfered with family planning. Greater education level and access to contraceptive methods were favorable to family planning. Women who did not plan for pregnancy more adhered to contraceptive methods six months after the birth of their child. **Conclusion and implications for practice:** low sociodemographic conditions interfere with adherence to family planning in a border region, which refers to adjustments in the primary care service.

Keywords: Family Planning; Primary Health Care; Border Areas.

RESUMO

Objetivo: identificar fatores que potencializam ou interferem no planejamento familiar em região de fronteira. **Método:** pesquisa descritiva, de coorte, transversal e quantitativa, realizada com 280 puérperas, Paraná, Brasil. Para a coleta de dados, aplicou-se um instrumento estruturado com variáveis socioeconômicas, antecedentes obstétricos e planejamento familiar. Para análise, utilizou-se o teste de associação Qui-Quadrado ou o teste G complementado pela análise de resíduos ajustados, com nível de significância de 5% ($p < 0,05$). **Resultados:** idade inferior a 19 anos (66%), baixa renda (65,3%), escolaridade (62,6%), ausência de companheiro (95,6%) e multiparidade (74,4%) foram as características que interferiram no planejamento familiar. Maior escolaridade e acesso a métodos contraceptivos apresentaram-se favoráveis ao planejamento familiar. Mulheres que não planejaram a gravidez aderiram mais aos métodos contraceptivos após seis meses do nascimento do filho. **Conclusão e implicações para a prática:** as baixas condições sociodemográficas interferem na adesão ao planejamento familiar em região de fronteira, o que remete para ajustes no serviço de atenção primária.

Palavras-chave: Planejamento Familiar; Atenção Primária à Saúde; Áreas de Fronteira.

RESUMEN

Objetivo: identificar factores que mejoran o interfieren con la planificación familiar en una región fronteriza. **Método:** investigación descriptiva, de cohorte, transversal y cuantitativa, realizada con 280 puérperas, Paraná, Brasil. Para la recolección de datos se aplicó un instrumento estructurado con variables socioeconómicas, antecedentes obstétricos y planificación familiar. Para el análisis se utilizó la Prueba de Chi-Cuadrado o la Prueba G, complementada con el análisis de residuos ajustados, con un nivel de significancia del 5% ($p < 0,05$). **Resultados:** edad menor de 19 años (66%), bajos ingresos (65,3%), educación (62,6%), ausencia de pareja (95,6%) y multiparidad (74,4%) fueron las características que interfirieron en la planificación familiar. La mayor escolarización y el acceso a métodos anticonceptivos favorecieron la planificación familiar. Las mujeres que no planificaron el embarazo se adhirió más a los métodos anticonceptivos después de seis meses de parto. **Conclusiones e implicaciones prácticas:** las bajas condiciones sociodemográficas interfieren con la adherencia a la planificación familiar en una región fronteriza, lo que se refiere a ajustes en el servicio de atención primaria.

Palabras clave: Planificación Familiar; Atención Primaria de Salud; Áreas Fronterizas.

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INTRODUCTION

Family planning is understood as regulation of fertility and guarantee of rights of constitution, limitation or increase in offspring. It is part of comprehensive health care for women and men (or couples), and must be offered by all spheres of the Unified Health System (SUS – *Sistema Único de Saúde*). Its implementation requires organizing educational practices and overcoming problems related to the provision of contraceptive methods.¹

The right to family planning was established from the Federal Constitution of 1988. Among its guidelines are the couple's freedom of decision-making and the State's responsibility to provide educational and scientific resources to exercise this right.²

The Ministry of Health of Brazil, through Law 9.263/96, referring to the institution of family planning, determines the competence of health professionals to assist with conception and contraception, informing individuals about the options of the available methods. Inadequate knowledge about contraceptive methods is a factor of resistance to acceptability and use of the method.³

Family planning promotes a reduction in maternal and child mortality, prevents teenage pregnancies, increases the time between one pregnancy and another, and prevents unsafe abortion.^{4,5} Therefore, if all women used contraceptive methods correctly, unplanned pregnancy and maternal mortality rates would drop by approximately 70% and 67% per year, respectively.⁶ Still, there is evidence that babies born less than two years old are more likely to die in the first year, when compared to those born after this period, showing the importance of planning a pregnancy.⁷⁻⁹

The prevalence of family planning has been reported to be around 41% in the group of women aged between 18 and 49 years. The explanation for low adherence involves insufficient infrastructure for care, lack of adequate information on female contraception and resistance of partners to seek family planning services.^{4,7-9}

As for deficiencies in infrastructure, it is important to highlight that developing countries, such as Brazil, have less adherence to family planning programs due to the difficulties encountered in assistance. Long waiting lines, high costs of health services and lack of supplies are factors that negatively interfere with the use of contraceptives. Moreover, public health education programs increase population adherence to contraceptive use.⁷

Another factor to consider is that health policies are generally geared towards the female figure. Women become responsible for birth control and choice of contraceptive methods; and the male participation in this process has been low, including in decision-making about conceiving or not their children.¹⁰

Border regions, setting of this study, are considered fragile in terms of health promotion actions, since health practices happen in emergency situations, with the scarcity of structural and human resources for primary health care being a limiting factor. It is possible that, in this way, attention to family planning becomes less relevant to the population and, consequently, inefficient.^{11,12}

Based on the above, when obtaining information about the profile of women attended at the time of delivery and what elements influence family planning, health professionals find possibilities

to develop care strategies according to the real needs of each population. Thus, this study aimed to identify factors that enhance or interfere with family planning in border region.

METHOD

This is a descriptive, cohort, cross-sectional and quantitative research carried out in six of the nine municipalities that make up the 9th Regional Health Center of Foz do Iguaçu, PR: Foz do Iguaçu, Santa Terezinha de Itaipu, Medianeira, Serranópolis do Iguaçu, Matelândia and Ramilândia. The municipalities were chosen because of the relevance and numerical representativeness of births in the said health region, and to contemplate the assistance for women of habitual, intermediate and high risk.

The participating population was composed of puerperal women assisted at hospital institutions in Foz do Iguaçu, Medianeira and Matelândia. Pregnant women residing in Santa Terezinha de Itaipu are seen at the Foz do Iguaçu institution; Ramilândia residents, in Matelândia; and those of Serranópolis do Iguaçu, in Medianeira.

The sample calculation of the population of each maternity clinic was carried out based on the number of total births (6,317) in 2016, which occurred in the 9th Regional Health Center, considering N as population size (number of elements); n as sample size (number of elements); n^0 as the first approximation for the sample size; E^0 as a tolerable sample error.¹³ For knowing the population size, the sample calculation was performed in the following expression:

$$n^0 = 1 / (E^0)^2 \cdot 0,05 = 400 \quad (1)$$

Knowing the population size, we can correct the previous calculation by:

$$n = 6317 \cdot 400 / 6317 + 400 = 376 \quad (2)$$

The survey's margin of error was 5% and confidence level was 95%. A safety margin of 20% was defined; however, considering that this study was a follow-up, and greater losses occurred over the data collection period.

This study included puerperal women submitted to vaginal and cesarean deliveries with live newborns. Postpartum women with mental health problems recorded in medical records, with the impossibility of home visits after three attempts due to their address not being found, telephone changes or absence at visit time were excluded.

Data collection took place from July 2017 to June 2018, carried out by students from 4th and 5th years of a nursing course at a public educational institution, previously trained by nurses with professional and academic experience in maternal and child health. It was organized in two phases: the first in hospital institutions 24 hours after the baby was born, with the participation of 397 mothers; the second phase took place through a home visit, which took place six months after the child's birth, with the participation of 280 people, the population of the present study. The losses of participants between the first and second phases

were justified by change of telephone and/or address and failure after three attempts to home visit.

For the hospital collection phase, a structured instrument containing the following variables was used: I) socioeconomic: maternal age, race, education, marital status, occupation and family income; II) obstetric history: type of delivery, number of live children, parity, abortion, interpartal period less than two years, previous diseases; III) family planning: pregnancy planned according to women's perception, contraceptive method used before pregnancy, method prescribed by which professional, and problems with contraceptives. These problems refer to the participant's justification for not using or the inappropriate use of the method before pregnancy, such as condom misuse or rupture, incorrect ingestion, delays or forgetting oral contraceptives, and long period of use of intrauterine device (10 years).

In addition to these variables, the variables related to information about contraceptive methods and the sources of this information were also investigated in the present study. Considering that participants' responses included more than one source, these results were presented only in textual form.

For the 2nd phase, telephone contact was made with each participant to schedule a home visit. In this phase, a structured instrument was used containing the following variables: use of contraceptive methods, which method used and the prescriber. The presentation of the method used and the prescriber, after

six months of delivery, was also carried out in a textual way, considering that there were participants who described using more than one method.

Data were analyzed using the chi-square test or the G test complemented by analysis of adjusted residuals. Statistical tests were performed using the software Bioestat 5.0 (2007), and the significance level was 5% ($p < 0.05$).

This study was submitted to and approved by the Research Ethics Committee of *Universidade Estadual de Londrina*, under Opinion 2.053.304 and CAAE (*Certificado de Apresentação para Apreciação Ética* - Certificate of Presentation for Ethical Consideration) 67574517.1.1001.5231, meeting the rules of Resolution 466 of December 12, 2012 of the Brazilian National Health Council (*Conselho Nacional de Saúde*), which involves research with human beings.

RESULTS

Of the total of 397 puerperal women in the 1st phase of the survey, there were 117 losses in the 2nd phase due to a change in telephone and/or address, and due to failure after three attempts at home visits. Thus, 280 women participated in the study; of these, 157 did not plan their pregnancy, i.e., more than 50% of the women participating in the research did not carry out family planning. When analyzing sociodemographic factors, (Table 1), although

Table 1- Relationship of sociodemographic factors according to pregnancy planning. Paraná, Brazil, 2018

Variables	Planned Pregnancy		Unplanned Pregnancy		P value*
	n (123)	%	n (157)	%	
Age (years)					
≤19	15	33.3	30	66.6	
20 to 34 years	93	46.9	105	53.0	0.2269
≥35	15	40.5	22	59.4	
Race/color					
White	65	42.7	87	57.2	
Non-white	58	45.6	69	54.3	0.5994
Education (years)					
Up to 9	31	37.3	52	62.6	
10 to 12 years	76	46.9	86	53.0	0.5369
13 and older	15	46.8	17	53.1	
Without education	1	33.3	2	66.6	
Marital status*					
With partner	122	47.4	135	52.5	0.0001
Without partner	1	4.3	22	95.6	
Maternal occupation					
Paid	60	45.1	73	54.8	0.7955
Unpaid	63	42.8	84	57.1	
Family income (MW**)					
Less than 1 wage	18	34.6	34	65.3	
1-2 wages	60	47.6	66	52.3	
2-3 wages	27	40.9	39	59.0	0.1556
4 or more	17	58.6	12	41.3	

Caption: MW - minimum wage. Unreported data was excluded. * $p < 0.05$. ** MW equivalent to the year 2018

there was no statistically significant relationship in the variable maternal age equal to or less than 19 years, it was found that 30 (66.6%) did not plan their pregnancy; and, likewise, education equal to or less than nine years, and without any education, 52 (62.6%) and two (66.6%), respectively.

Analysis of marital status showed a statistically significant result for the relationship between lack of family planning and the fact that women are without a partner ($p < 0.0001$). Meanwhile, for maternal occupation and family income, an important relationship was not found, although women with lower income showed less frequency of pregnancy planning.

With regard to obstetric variables and pregnancy planning, Table 2 shows that the type of delivery, abortions, interpartal period of less than two years and previous diseases had no statistical difference. However, there is a statistical difference regarding parity and pregnancy planning. Analysis of residues from the chi-square test shows that planned pregnancies are higher in the first parity group 62 (52.5%), and unplanned pregnancies were higher in the group of tertiary pregnancies 32 (74.4%). Therefore, the greater the number of children, the lower the pregnancy planning.

Table 3 shows that the proportion of unplanned pregnancy was 157 (56.1%), while for 123 (43.9%) of participants, pregnancy was planned, showing statistically significant results ($p=0.0421$). Among the contraceptive methods used before pregnancy, analysis of the results showed statistical significance, and 103 (38.7%) of participants were not using it because they wanted to become pregnant, and 95 (35.1%) failed or forgot to use it at some point.

Regarding the most used contraceptive method among women before this pregnancy, there were statistically significant results for oral contraceptives, 100 (35.7%); however, 139 (49.6%) participants reported not using any contraceptive method; 27 (9.6%) reported using condoms. There was also a statistical difference between professionals who prescribed contraceptive methods, with physicians being the most frequent - 128 (72.7%).

With regard to problems with the methods used, 33 (34%) referred to Intrauterine Device (IUD), with more than 10 years of use, followed by 26 (26.8%) with hormonal contraceptive, referring to "forget sometime".

It is important to highlight that, of the women participating in the research, 121 (43.2%) did not seek any type of information on contraceptive methods; of those who sought, 105 (37.5%)

Table 2 - Relationship between obstetric variables and pregnancy planning. Paraná, Brazil, 2018.

Variables	Planned Pregnancy		Unplanned Pregnancy		P value*
	n (123)	%	n (157)	%	
Type of delivery					
Vaginal	65	46.4	79	56.4	0.7646
Cesarean	58	43.9	78	59.0	
Live births					
Yes	61	37.6	101	62.3	0.0184
No	62	52.5	56	47.4	
Parity					
1 st	62	52.5	56	47.4	
2 nd	40	46.5	46	53.4	0.0069
3 rd	11	25.5	32	74.4	
4 th or higher	10	30.3	23	69.7	
Abortion					
Yes	21	42.8	28	57.1	0.9937
No	102	44.1	129	55.8	
Interpartal period <2 years **					
Yes	5	26.3	14	73.6	0.2311
No	74	43.5	96	56.4	
Previous diseases**					
Yes	34	39.5	52	60.4	0.9552
No	39	41.0	56	58.9	

* $p < 0.05$. ** Lower n values, justified by the first pregnancy.

Table 3 - Distribution of methods adopted in family planning, according to the reason for not using, type of contraceptive used before pregnancy, professional who prescribed and problems encountered. Paraná, Brazil. 2018

Variables	n	%	P value*
Planned pregnancy (n=280)			
Yes	123	43.9	0.0486
No	157	56.1	
Reason for not using the method (n=266)			
Were not using it because wanted to get pregnant	103	38.7	
Were using, but failed/forgot to use	95	35.1	
Had no knowledge	7	2.6	
Do not like it	18	6.8	
Partner does not like it	2	0.7	0.0001
Had no access	3	1.1	
Religious issues	3	1.1	
They were not using it for another reason	35	13.2	
Method used before pregnancy (n=280)			
Condom	27	9.6	
Oral contraceptive	100	35.7	
Intrauterine device	2	0.7	0.0001
Injectable contraceptives	12	4.3	
Do not use it	139	49.6	
Professional who prescribed the method (n=176)			
Nurse	10	5.7	
Physician	128	72.7	0.0001
By their own	26	14.8	
Other	12	6.8	
Problems with methods used			
<i>Condom:</i>			
Used throughout the sexual act	1	1.0	
Burst	2	2.1	
<i>Hormonal contraceptive:</i>			
Did not take it every day at the same time	8	8.2	
Forgot sometime	26	26.8	0.0001
Did not take the injections on the scheduled dates	7	7.2	
<i>Non-hormonal contraceptive (IUD):</i>			
Over 10 years of use	33	34.0	
Other Issues	3	3.1	

* p<0.05.

were with health professionals and 92 (32.9%), other sources of information - such as the partner himself, family, friends, school, internet and television.

With regards to the use of contraceptive methods, six months after delivery, in the second phase of the research, the group of women who planned the pregnancy previously was not using

it - 70 (56.9%), and the group that did not plan the pregnancy adhered more to the use of any of the contraceptive methods - 88 (56%), as shown in Table 4.

The most used methods six months after delivery were oral contraceptives - 113 (40.3%), followed by injectables - 31 (11.1%), mostly prescribed by gynecologists - 97 (34.6%).

Table 4 - Correlation between pregnancy planning and type of contraceptive method used six months after delivery, Paraná, Brazil

Planned pregnancy	Use of contraceptive method				Total	P value*
	Yes	%	No	%		
Yes	53	43.0	70	56.9	123	0.0421
No	88	56.0	69	43.9	157	
Total	143	100.0	137	100.0	280	

* p<0.05

DISCUSSION

More than half of the participating women did not plan their last pregnancy. The scientific literature describes that unplanned pregnancy results in a negative impact for both mother and child, as they have less adherence to prenatal consultations and are more likely to maintain harmful habits, such as smoking and alcohol consumption.

Considering these findings, there is a likelihood of a risk of developing postpartum depression and of not breastfeeding when compared to women who planned their pregnancy.^{4,9}

With respect to sociodemographic variables, it was found in the present study that there was a predominance of maternal age equal to or less than 19 years, which is considered an age range between intermediate risk and high risk, according to *Rede Mãe Paranaense* (RMP), maternal and child health care policy in force in Paraná State.¹⁴ In adolescence and youth phases, many girls fantasize about motherhood; however, they do not carry out family planning or understand the need to do so.¹⁵ Lack of pregnancy planning is directly related to the time between menarche and the beginning of the first sexual intercourse, i.e., the smaller this space, the greater the chances of not planning it.¹⁶

The majority of women participating in this study who did not plan their pregnancy had low education, corroborating the scientific literature, which recognizes education as a factor that considerably weakens family planning when associated with age.^{6,9,17} School level, marital status and reproductive experience are relevant components for carrying out conceptual preparation. Thus, we can affirm that less education is a factor that interferes with the failure to carry out pregnancy planning,¹⁵ considering the limited understanding of its importance.²

Regarding the marital status of the participating women, the lack of a steady partner in the group with no family planning predominated. Having a partner next to pregnant women is an important factor, as he offers advantages related to psychological and emotional health, in addition to providing better family financial structure, which may be disadvantaged with the arrival of a baby.^{4,18} It is noteworthy that such aspects, in the long run, can culminate in numerous demands that form vulnerabilities and family conflicts. Perhaps this occurs in the scenario under study, because Foz do Iguaçu is a city that lives mainly on tourism and informal commerce where many residents act as *sacoleiros* (people who live by buying goods at low prices in specific locations and transporting them (in suitcases, bags and the like) to sell in the

informal retail trade of small centers) and travel throughout Brazil to deliver goods from Paraguay, thus absent from their homes.¹⁹

Regarding the influence of obstetric variables, it was identified that multiparous women formed the group of women, in a greater proportion, who did not carry out family planning. A similar result was found in a study, in which the majority of women who did not carry out family planning were those who had the greatest number of children.²

As for the contraceptive methods used, almost half of the women described not using them; however, among the women who used it, it was found that the majority preferred the oral route, similarly to the study carried out in five other regions of Brazil.¹⁰ Equally to the study just mentioned, it was found that physicians were the professionals who prescribed more frequently.

As a justification for not using it, most women described their desire to become pregnant, others reported that they were using it, but failed or forgot it. In a study carried out in nine countries, France, Germany, Italy, Spain, Belgium, Ireland, Mexico, Brazil, and the United States, comprising 500 women each, aged between 21 and 29 years, 1,776 participants reported forgetting to take oral contraceptives in the month, 66% said they forgot to take it once or twice, 19% once a week and 15% more than once a week. In Brazil, women had less consistent results with their routine: 45% reported having forgotten to take it once or twice, 30% once a week and 25% more than once a week.⁹

Moreover, regarding the use of contraceptive methods, it was found that the group of women who planned their pregnancy previously was not using it at that time. Researchers point out that the false sense of trust and the fact that they have already experienced a pregnancy leads many women to misuse or even non-use of contraceptive methods.¹⁰

Another important aspect, verified in this research, is that many women did not seek information about contraceptive methods, believing they know enough about its use. Only knowledge about contraceptive methods and methods of use does not necessarily lead to effective contraceptive practices, making their use unsatisfactory, even with the availability of information and knowledge about the ways in which they work.²⁰

With regard to women who sought information, these occurred with health professionals, followed by women who reported seeking information with their partner, family, friends, school, internet and television. A study carried out with adolescent women in Maranhão highlighted that the greatest source of information for them was their mothers, teachers, and friends.²⁰ Thus, in

addition to family guidelines, it is important to highlight the role of the school in pregnancy planning.²¹

When considering this lack of search for information about family planning, nurses' necessary performance in this scenario stands out. Actions such as health education and guidance should be inserted in addition to health units. Through investments in education and surveillance in the home context, women and their families begin to recognize their needs and rights, contributing to a healthy sex life and safe contraception, according to the couple's desire.

Nurses, in these spaces, are known to be agents of change in contraceptive practices, mainly through guidance. Nurses develop their activities in the health system and highlight deficiencies in women's health care; demands adequate care and perceives the population's needs in relation to health, in accordance with the guidelines of the RMP's attention.^{14,22}

Thus, it is assumed that public family planning actions must overcome the common act of delivering contraceptives, and become a comprehensive part of actions in primary health care, especially in a vulnerable context, as observed in border regions.

In these regions, the dynamics of its inhabitants and sanitary measures are seen as being of high complexity, considering the insipience in the attention to maternal and child health with regard to actions of promotion and prevention.^{11,12}

The characteristics of these regions influence health promotion and care, as their inhabitants need to migrate from one country to another in search of resources and guarantee their rights to health. It is necessary to recognize that public policies in this area are essential to meet border populations' demands. Municipal programs and social integration projects - with priority to primary care services - reduce geographical barriers and, consequently, inequalities in access to health promotion practices,^{11,12} such as family planning.

CONCLUSION

Most of the women participating in this research did not carry out family planning. Factors such as lower maternal age, low income and less education - although they have not shown statistical significance - were worrying variables for non-adherence to family planning in the region under study. The fact of not having a steady partner and multiparity showed statistical relevance. Women who did not plan for pregnancy more adhered to contraceptive methods six months after the birth of their child.

The importance of health actions that involve educational practices and quality in family planning services is reinforced, especially in a vulnerable context - as observed in border regions - so that nurses, knowing the diagnosis of their region, can plan effectively actions. And considering the object of study to be complex, it becomes relevant to extend it to other investigations, with health education practices and respect for human rights as a backdrop, in order to strengthen family planning actions.

As a limitation of this study, it was considered the need to give voice to health professionals who work in primary care so that they can point out the determining factors to contemplate

actions' comprehensiveness, with regard to family planning, in border municipalities. However, the research showed important aspects for health practices, which weaken or enhance pregnancy planning, demonstrating the role of nurses as leaders and organizers of health promotion actions.

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REFERENCES

1. Mozzaquatro CO, Arpini DM. Planejamento familiar e papéis parentais: o tradicional, a mudança e os novos desafios. *Psicologia (Cons Fed Psicol)*. 2017 out;37(4):923-38. <http://dx.doi.org/10.1590/1982-3703001242016>.
2. Santos RB, Barreto RM, Bezerra ACL, Vasconcelos MIO. Processo de readequação de um planejamento familiar: construção de autonomia feminina em uma unidade básica de saúde do Ceará. *RECIIS*. 2016 jul;10(3):1-10. <http://dx.doi.org/10.29397/reciis.v10i3.1074>.
3. Santos EV, Frazão RCMS, Oliveira SC. Feeling of woman regarding the use of the billings ovulation method. *Rev Rene*. 2017 out;18(1):11-8. <http://dx.doi.org/10.15253/2175-6783.2017000100003>.
4. Conceição SP, Fernandes RAQ. Influence of unintended pregnancy on breastfeeding duration. *Esc Anna Nery*. 2015 out;19(4):600-5. <http://dx.doi.org/10.5935/1414-8145.20150080>.

5. Rezel-Potts E, Palmer MJ, Free C, Baraitser P. A cohort study of the service users of online contraception. *BMJ Sex Reprod Health.* 2020;46(4):287-93. <http://dx.doi.org/10.1136/bmjshr-2020-200610>. PMID:32371501.
6. Lasong J, Zhang Y, Gebremedhin AS, Opoku S, Abaidoo CS, Mkwandire T et al. Determinants of modern contraceptive use among married women of reproductive age: a cross-sectional study in rural Zambia. *BMJ Open.* 2020 mar;10(3):e030980. <http://dx.doi.org/10.1136/bmjopen-2019-030980>. PMID:32234737.
7. Tiruneh FN, Chuang KY, Ntenda PAM, Chuang YC. Factors associated with contraceptive use and intention to use contraceptives among married women in Ethiopia. *Women Health.* 2016 set;56(1):1-22. <http://dx.doi.org/10.1080/03630242.2015.1074640>. PMID:26212154.
8. Schiavo RA, Rodrigues OMPR, Perosa GB. Variables associated with gestational anxiety in primigravidas and multigravidas. *Trends Psychol.* 2018;26(4):2091-104. <http://dx.doi.org/10.9788/tp2018.4-14pt>.
9. Caetano C, Peers T, Papadopoulos L, Wiggers K, Engler Y, Grant H. Millennials and contraception: why do they forget? Na international survey explore the impact of lifestyles and stress levels on adherence to a daily contraceptive regimen. *Eur J Contracept Reprod Health Care.* 2019 jan;24(1):30-8. <http://dx.doi.org/10.1080/13625187.2018.1563065>. PMID:30689459.
10. Carvalho AA. Demanda por contracepção no Brasil em 2006: contribuição para a implementação das preferências de fecundidade. *Cien Saude Colet.* 2019 set;24(10):3879-88. <http://dx.doi.org/10.1590/1413-812320182410.27252017>. PMID:31577018.
11. Mello F, Victora CG, Gonçalves H. Saúde nas fronteiras: análise quantitativa e qualitativa da clientela do Centro Materno Infantil de Foz do Iguaçu, Brasil. *Cien Saude Colet.* 2015 jul;20(7):2135-45. <http://dx.doi.org/10.1590/1413-81232015207.09462014>. PMID:26132253.
12. Aikes S, Rizzotto MLF. Integração regional em cidades gêmeas do Paraná, Brasil, no âmbito da saúde. *Cad Saude Publica.* 2018;34(8):e00182117. <http://dx.doi.org/10.1590/0102-311x00182117>. PMID:30133667.
13. Pito ALBS. *Epidemiologia aplicada nos serviços de saúde.* São Paulo: Editora Martinari; 2012.
14. Secretaria da Saúde do Estado do Paraná – SESA (PR). *Linha guia rede mãe Paranaense.* Paraná: Secretaria da Saúde; 2018.
15. Silva MJP, Nakagawa JTT, Silva ALR, Espinosa MM. Pregnancy planning in adolescence. *Cogitare Enferm.* 2019;24:e59960. <http://dx.doi.org/10.5380/ce.v24i0.59960>.
16. Queiroz MVO, Vasconcelos MM, Alcântara CM, Fé MCM, Silva ANS. Características sociodemográficas e gineco-obstétricas de adolescentes assistidas em serviço de planejamento familiar. *Rev enferm. UFSM.* 2017;7(4):615-28. <http://dx.doi.org/10.5902/2179769226988>.
17. Gadelha IP, Diniz FF, Aquino PS, Silva DM, Balsells MMD, Pinheiro AKB. Social determinants of health of high-risk pregnant women during prenatal follow-up. *Rev Rene.* 2020;21:e4219. <http://dx.doi.org/10.15253/2175-6783.20202142198>.
18. Felczak C, Ravelli APX, Skupien SV, Ricken MH, Bayer LCD, Almeida EA. Perfil de gestantes cardiopatas: alto risco. *Cogitare Enferm.* 2018;2(23):e49605. <http://dx.doi.org/10.5380/ce.v23i2.49605>.
19. Narita SA, Gomes CL. Lazer nos rios urbanos da tríplice fronteira: transformações, contradições e significados. *Rev Bras Pesq Tur.* 2016;10(3):533-49. <http://dx.doi.org/10.7784/rbtur.v10i3.926>.
20. Ramos LAS, Pereira ES, Lopes KFAL, Araújo Fo CAA, Lopes NC. Use of contraceptive methods by adolescent women of a public School. *Cogitare Enferm.* 2018;3(23):e55230. <http://dx.doi.org/10.5380/ce.v23i3.55230>.
21. Oliveira PC, Pires LM, Junqueira ALN, Vieira MADs, Matos MA, Caetano KAA et al. Conhecimento em saúde sexual e reprodutiva: estudo transversal com adolescentes. *Rev. eletrônica enferm.* 2017;19:1-11. <http://dx.doi.org/10.5216/ree.v19.39926>.
22. Alves CN, Wilhelm LA, Barreto CN, Santos CC, Meincke SMK, Ressel LB. Prenatal care and culture: an interface in nursing practice. *Esc Anna Nery.* 2015;19(2):265-71. <http://dx.doi.org/10.5935/1414-8145.20150035>.