

Use of contraceptive methods during the COVID-19 pandemic

RESUMO | Objetivo: Análise do uso de métodos contraceptivos no período da pandemia. Método: Trata-se de um estudo transversal, descritivo, exploratório, aprovado pelo Comitê de Ética em Pesquisa envolvendo Seres Humanos (número 3.146.657). Foram entrevistadas via chamada telefônica colaboradoras que retiraram contraceptivos em 01/01/2020 à 30/07/2020, excluídas os menores de 18 anos de idade; cadastro incompleto e residência fora da área de abrangência da Unidade Básica de Saúde Aquiles Stenghel (Londrina – Paraná). Resultados: Elaboraram-se tabelas descritivas com as respostas obtidas. Notou-se que quatro colaboradoras não usavam nenhum contraceptivo no momento da entrevista, e oito haviam trocado de métodos contraceptivos. Todas referiram conhecer pelo menos um contraceptivo e tê-lo utilizado em algum momento. Conclusão: O anticoncepcional injetável, apesar dos efeitos indesejáveis mencionados, continuou sendo o mais usado por entre a maioria delas, e observou-se um desuso da camisinha. Ficou evidente a necessidade de ampliar o olhar para as especificidades das mulheres, em especial as que estão em contexto de vulnerabilidades.

Descritores: Contraceptivos; Coronavírus; Pandemia; Planejamento Reprodutivo.

ABSTRACT | Objective: Analyze the use of contraceptive methods during the pandemic. Method: This is a cross-sectional, descriptive, exploratory study, approved by the Ethics Committee for Research involving Human Beings (number 3,146,657). Women, who collected contraceptives in the period between 01/01/2020 to 07/30/2020, over 18 years old, with complete registration and resident in the coverage area of the Basic Health Unit Aquiles Stenghel (Londrina – Paraná) were interviewed by the researchers by telephone. Results: Descriptive tables were created with the interview responses obtained. It was noted that four collaborators were not using any contraceptive at the time of the interview, and eight had changed contraceptive methods. All participants reported being familiar with at least one contraceptive and having used it at some point. Conclusion: Injectable contraceptives, despite the aforementioned undesirable effects, continued to be the most widely used method among the participants, and there was a lack of use of condoms. It is evident that women especially those who are in a vulnerability context need a bit more of pharmacy assistance in order to guarantee correct contraceptives use and its efficiency.

Keywords: Contraceptives; Coronavirus; Pandemic; Reproductive Planning.

RESUMEN | Objetivo: Análisis del uso de métodos anticonceptivos durante la pandemia. Método: Estudio transversal, descriptivo y exploratorio, aprobado por el Comité de Ética para la Investigación con Seres Humanos (número 3.146.657). Se entrevistó por llamada telefónica a mujeres que tomaron anticonceptivos entre el 01/01/2020 y el 30/07/2020; no se incluyeron menores de 18 años; registro incompleto y residencia fuera de la zona de captación de la Unidad Básica de Salud Aquiles Stenghel (Londrina – Paraná). Resultados: Con las respuestas obtenidas se elaboraron tablas descriptivas. Se observó que cuatro colaboradoras no utilizaban ningún anticonceptivo en el momento de la entrevista y ocho habían cambiado de método anticonceptivo. Todas declararon conocer al menos un anticonceptivo y haberlo utilizado en algún momento. Conclusión: El anticonceptivo inyectable, a pesar de los efectos indeseables mencionados, siguió siendo el más utilizado entre la mayoría de las colaboradoras, y se observó desuso del preservativo. Se puso de manifiesto la necesidad de profundizar en las particularidades de las mujeres, especialmente las que se encuentran en contextos vulnerables.

Palabras claves: Anticonceptivos; Coronavirus; Pandemia; Planificación reproductiva.

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INTRODUÇÃO

On March 11, 2020, the World Health Organization (WHO) declared the spread of the new coronavirus, SARS-CoV-2, which causes the disease that was named "COVID-19" (acronym for Corona Virus Disease, of the year 2019¹). There was an operational reorganization of health services in order to meet the demand for care for cases and avoid agglomerations during this period. Consequently, there were limitations in access to essential health services, such as reproductive planning. According to the WHO report (2020), there was an interruption in 68% of the countries of this service². It has been estimated by the United Nations Population Fund (UNFPA) that, in 2020, 1.4 million unintended pregnancies may have occurred before women could return to reproductive planning appointments³.

In Brazil, reproductive planning is supported by the National Policy for Integral Assistance to Women's Health (PNAISM), which establishes the right to access choices, qualified and safe information about contraceptive methods, as well as obtaining available contraceptive methods, in a way free of charge, such as barrier contraceptive methods (male and female condoms), surgical methods (sterilization and vasectomy) and pharmacological methods (intrauterine device, oral and injectable contraceptives)⁴.

Access to the aforementioned rights can have repercussions on sociodemographic and economic issues⁵; families' quality of life; decrease in abortions, sexually transmitted infections, social vulnerabilities, unwanted pregnancies, maternal, infant and fetal mortality⁶.

Therefore, due to these impacts, this study is justified, whose objective was to analyze the use of contraceptive methods during the COVID-19 pandemic.

METHODOLOGY

This is a cross-sectional, descriptive and exploratory study, regarding the use

of contraceptive methods during the COVID-19 pandemic, approved by the Research Ethics Committee (CEP) involving human beings at the State University of Londrina with favorable opinion number 3,146.65⁷ and by the Municipal Health Department of Londrina.

Possible collaborators belonging to the coverage area of a Basic Health Unit (UBS) Aquiles Stenghel, located in the city of Londrina - PR were identified through a report on the distribution of contraceptives made available by the SaúdeWeb program, referring to the distributions of Norethisterone 0.35mg; Ethinylestradiol 0.03mg + Levonorgestrel 0.150mg; Estradiol 5mg/mL + Ethisterone 50mg/mL; Medroxyprogesterone 150mg/mL and the copper IUD, corresponding to the period from January 1, 2020 to June 30, 2020. Those who did not have a telephone record, those under the age of 18 and those belonging to neighborhoods outside the coverage area of the UBS studied were excluded.

Due to the pandemic, data collection was carried out remotely via telephone, ensuring physical distancing. In the telephone call, a structured script of self-authored questions was applied, referring to contraceptive methods. Up to two telephone contact attempts were made on different days and times with the 284 selected women, from the beginning of August to the end of October 2020.

The collaborators were informed and guided about the study and any doubts were clarified. The Informed Consent Form (TCLE) was also read and the res-

pective participation responses were recorded. Throughout the process, the commitment to secrecy and confidentiality of data was maintained.

The results obtained in this study were tabulated in Excel and relative and absolute frequency analysis was performed by the program itself, and descriptive tables were subsequently prepared.

RESULTS

284 women were contacted. Only 17% of them agreed to participate in the research and became a study sample. According to table 1, ages ranged from 19 to 54 years. As for declared skin color, brown and white prevailed (equivalent, with 45% each). Regarding religion, the majority declared themselves Catholic or Evangelical (corresponding to 39%) ,, 41% declared themselves married and 39% single. In addition, 47% declared having completed high school and 22% did not. Part of the sample had not even completed elementary school (16%). More than half of the participants did not have paid work (59%), despite being in productive age group active age for the labor market. Government aid was mentioned by almost half of the interviewees and is often the only source of income for these women..

It was observed that four women were not using any contraceptive method at the time of the interview, one of them was pregnant. In addition, 16% (n=8) of the interviewees at the time of the pandemic changed their contraceptive me-

Table 1 – Sociodemographic data of participants in the survey on contraceptive methods at UBS Aquiles Stenghel, in Brazil, Londrina-PR, 2020.

	S	%
	49	100
Age		
19 – 29 years old	23	47
30 – 39 years old	16	33
40 – 49 years old	7	14
50 – 54 years old	3	6

thods, in which they opted for the IUD, coitus interruptus and Mesigyna (both were two participants), oral contraceptives, and the table method associated with condoms masculine.

There was an association of contraceptive methods by 9 participants, the most common being the use of injectable contraceptives with barrier contraceptive methods. Table 2 details the contraceptive methods used during this period. Contraceptive preferences for injectable contraceptives (64%), followed by condoms (13%), and preference for the table (2%) are visible.

When asked about the contraceptive methods they knew, shown in Table 3, oral contraceptives were mentioned by all respondents (100%), followed by male condoms and injectable contraceptives (equivalent to 98%), the least known being spermicidal ointment (16 %).

Regarding the previous use of contraceptive methods, described in Table 4, injectable contraceptives were mentioned by the majority (90%), followed by oral contraceptives (88%) and male condoms (84%). It is noteworthy that the morning after pill and withdrawal were the third and fourth most mentioned method (47% and 39%, respectively), both indicate that unprotected sexual intercourse both in relation to unwanted pregnancy and the prevention of STIs.

Thirty-seven participants (76%) reported that they had some undesirable effect related to the use of contraceptives. The most frequent complaint was weight gain (44%), followed by nausea and malaise (equivalent to 24%) and the least frequent were fatigue and acne (equivalent to 2%). Most of the women blamed injectable contraceptives (54%) for some of the aforementioned events (Table 5).

Among the setbacks reported by participants in this study as interfering with the use of contraceptive methods, 80% reported difficulties remembering to use oral contraceptives (70%).

Color		
White	22	45
Mixed	22	45
Black	5	10
Religion		
Evangelical	19	39
Catholic	19	39
Does not have	11	22
Marital Status		
Married	20	41
Single	19	39
Common-law marriage	6	12
Divorced	4	8
Education		
Elementary School Incomplete	8	16
Elementary School Complete	5	10
High School incomplete	11	22
High School complete	23	47
Higher Education Complete	2	5
Family income		
< 1 salary	11	22
< 1 salary	17	35
2 salaries	14	29
3 salaries	5	10
Did not want to answer	2	4

*Note: N corresponds to the sample of participants.
Source: elaborated by the authors, 2021.

Table 2 - Contraceptive methods used during the COVID 19 pandemic, in the research on contraceptive methods at UBS Aquiles Stenghel, in Brazil, Londrina-PR, 2020.

	N	%
	55	100
Injectable	35	64
Male condom	7	13
Oral contraceptive	5	9
coitus interruptus	3	5
Sterilization	2	4
IUD	2	4
Standard days method	1	2

*Note: N corresponds to the sample of participants.
Source: elaborated by the authors, 2021.

Thirteen participants associated this difficulty with the occurrence of their unplanned pregnancies.

DISCUSSION

In this study, it was observed that most of the interviewees had a low income and level of education, despite being of working age for the labor market, most were unemployed. It is known that a low level of education can restrict income, work and quality of life⁷, situations that were even more accentuated during the pandemic, leading to the creation of emergency aid to mitigate these impacts⁸, and often constituting the only source of income of these women. Perhaps, the fact of being in this social context, may have influenced the continuous use of contraceptives, in order to avoid childbirth and momentary expenses.

Such an inference is contrary to the Pekkurnaz study (2020)⁹ in which it portrays that women who work are more likely to use a contraceptive method than women who do not work, driven by the cost of raising children, and those who work have financial capacity to pay for modern contraceptive methods. It is known that the methods currently available for free are not innovative. As seen in this work, many were unaware of contraceptive methods that were not offered free of charge, such as the contraceptive implant.

It is assumed that knowledge of contraceptive methods is related to the availability of free access and the wide dissemination of this right¹⁰. It was observed that the best-known contraceptives were also the most used and criticized in terms of possible unwanted effects or difficulties experienced. The most mentioned was injectable contraceptives, often not related to their use in association with barrier contraceptive methods, which highlights possible risks of sexually transmitted infections. This is correlated, with analysis of past use compared to current use, it was noted a great disuse of condoms. What can be justified such an event, by trust in the partner¹¹. According to Santos et

Table 3 - Contraceptive methods known by participants in the research on contraceptive methods at UBS Aquiles Stenghel, in Brazil, Londrina-PR, 2020.

	N	%
	49	100
Vaginal ring	14	29
Contraceptive patch	17	35
Injectable contraceptive	48	98
Oral contraceptive	49	100
Female condom	37	76
Contraceptive implant	11	22
Coitus interruptus	40	82
Diaphragm	13	27
IUD	44	90
Sterilization	45	92
Pill of the next day	44	90
Spermicidal cream	8	16
Male condom	48	98
Standard days method	30	61

*Note: Percentages obtained according to the number of women who cited each method, therefore, the total sum is greater than 100%.
Source: developed by authors, 2021.

Tabela 4 – Previous use of contraceptive methods by participants in the research on contraceptive methods at UBS Aquiles Stenghel, in Brazil, Londrina-PR, 2020.

	N	%
	49	100
Vaginal ring	0	0
Contraceptive patch	0	0
Injectable contraceptive	44	90
Oral contraceptive	43	88
Female condom	1	2
Contraceptive implant	0	0
Coitus interruptus	19	39
Diaphragm	0	0
IUD	3	6
Sterilization	2	4
Pill of the next day	23	47
Spermicidal cream	2	4
Male condom	41	84
Standard days method	7	14

*Note: Percentages obtained according to the number of women who cited each method, therefore, the total sum is greater than 100%.
Source: developed by authors, 2021.

al., 2016, at the beginning of the relationship, women use the male condom and later replace it with oral contraceptives, and at a certain point there is

discontinuation of the pill and inconsistent or absent adoption of methods¹².

It was noted that there were exchanges of some contraceptives during the pandemic, justifying the non-adaptation to the method. This finding is related to the study by Borges et al., 2021, which found that 59.10% of women discontinue contraceptives for reasons related to the contraceptive method itself¹³. Such reasons may be related to perceptions of unwanted effects or difficulties experienced with use.

In this work, the unwanted effects mentioned coincided with the study by Farias et al. (2017) who described the undesirable effects of injectable contraceptives¹⁴, with weight gain (35.3%) being the most cited, followed by amenorrhea (31, 2%), headache (40.0%), nausea (30.8%) and hypermenorrhea (37.5%).

And among the difficulties experienced, forgetting to use oral contraceptives was the most noticeable among women. This can compromise the effectiveness in use, bringing the possibility of an unwanted pregnancy due to indiscipline in use¹⁵, it is important to emphasize that drug interactions¹⁶ and failures during the exchange of contraceptive methods¹⁷ also contribute to unplanned pregnancies, a fact that occurred with a part of the participants.

In addition, it was noticed that low education is a relevant factor in relation to the effectiveness of contraceptive methods, since the importance of understanding the proper way of use, as well as the risks involved when changing methods or using other medications, may reduce the safety of the method¹⁸. Regarding adaptation, many women give up using it, not knowing that in some methods an adjustment period is necessary for the body to adapt to the new contraceptive.

Appropriate care for women's health can generate benefits such as long-term health and well-being, healthy future pregnancies. By expanding the

Table 5 - Perceptions on the use of contraceptive methods in research on contraceptive methods at UBS Aquiles Stenghel, in Brazil, Londrina-PR, 2020.

	N	%
	46	100
Side effects		
Swelling/Weight gain	20	44
Nausea/malaise	11	24
Loss of libido	5	10
Cramps	3	7
Migraine	3	7
Escape	2	4
Acne	1	2
Fatigue	1	2
	37	100
Contraceptive method related to undesirable effects		
Injectable only	20	54
Only oral	8	22
Injectable + oral	8	22
Others	1	2
	25	100
Experienced difficulties		
Remember to use	20	80
Malaise	4	16
Acquisition	1	4
	23	100
Contraceptive method most difficult to use		
Only oral	16	70
Injectable + oral	5	22
Injectable only	1	4
Injectable only	1	4

*Note: N corresponds to the total sum of the cited items.
Source: developed by authors, 2021.

approach to sexual and reproductive planning, they allow qualifying care having health equity as a guiding aspect, which enables the broadening of the look at the specificities of women, especially those who belong to groups in a context of vulnerabilities¹⁹.

CONCLUSION:

The COVID-19 pandemic did not have major repercussions related to the use of contraceptive methods, most of the participants were using a contraceptive method in order to prevent unwanted pregnancies, however, the disuse of condoms was noticed. The preference for injectable contraceptives remained, even with some criticism about their possible adverse effects. It is



believed that the preference is related to ease of use, which does not require daily reminders, compared to oral contraceptives,

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pand care and look at the specificities was evident, especially women who are in a context of vulnerabilities.

It is believed that the degree of prior knowledge about certain contraceptive methods associated with the social context experienced also had an impact on contraceptive choices. It

was clearly evident that all participants knew and used at least one of the methods mentioned at some point in their lives. It was clearly evident that all participants knew and used at least one of the methods mentioned at some point in their lives.

Referências

1. A Organização Mundial de Saúde declara pandemia do novo Coronavírus [Internet]. www.unasus.gov.br. Disponível: <https://www.unasus.gov.br/noticia/organizacao-mundial-de-saude-declara-pandemia-de-coronavirus>. Acesso 08 de novembro de 2022.
2. Inquérito pontual sobre a continuidade dos serviços essenciais de saúde durante a pandemia da COVID-19. Relatório provisório, 27 de agosto de 2020 - OPAS/OMS | Organização Pan-Americana da Saúde [Internet]. Disponível: <https://www.paho.org/pt/documentos/inquerito-pontual-sobre-continuidade-dos-servicos-essenciais-saude-durante-pandemia-da>. Acesso 08 de novembro de 2022.
3. New UNFPA data reveals that nearly 12 million women lost access to contraception due to disruptions caused by the pandemic, leading to 1.4 million unintended pregnancies [Internet]. Disponível: <https://www.unfpa.org/press/new-unfpa-data-reveals-nearly-12-million-women-lost-access-contraception-due-disruptions>. Acesso 08 de novembro de 2022.
4. Política Nacional de Atenção Integral à Saúde da Mulher Princípios e Diretrizes [Internet]. Disponível: https://bvms.saude.gov.br/bvs/publicacoes/politica_nac_atencao_mulher.pdf. Acesso 08 de novembro de 2022.
5. Espírito-Santo DC do, Tavares-Neto J. A visão masculina sobre métodos contraceptivos em uma comunidade rural da Bahia, Brasil. *Cadernos de Saúde Pública*. 2004, Abril;20(2):562–569.
6. Sousa CS de, Terra AE dos S, Bonati PC de R, Sousa ALS de, Romanoel PD, Freitas EAM de. Perfil dos pacientes submetidos ao processo de planejamento reprodutivo. *Brazilian Journal of Health Review*. 2020;3(4): 8858–8873.
7. Conte FA, Conte II, Doll J. Mulheres de baixa renda e alimentos: entre o hábito alimentar e ter para comer. *Revista Cocar*. 2020, Março;14(28):1-19.
8. Auxílio Emergencial [Internet]. Ministério da Cidadania. Disponível: <https://www.gov.br/cidadania/pt-br/servicos/auxilio-emergencial>. Acesso 08 de novembro de 2022.
9. Pekkurnaz D. Employment status and contraceptive choices of women with young children in Turkey. *Feminist Economics*. 2019, Agosto; 26(1):98-120.
10. Dourado I, MacCarthy S, Reddy M, Calazans G, Gruskin S. Revisiting the use of condoms in Brazil. *Revista Brasileira de Epidemiologia*. 2015, Setembro;18(1):63–88.
11. Collado A; et al. Discounting of condom-protected sex as a measure of high risk for sexually transmitted infection among college students. *Archives of sexual behavior*. 2017, Outubro; 46(7): 2187 – 2195.
12. Santos NLB; et al. A percepção de mães adolescentes sobre seu processo de gravidez. *Revista psicologia e saúde [online]*. 2016, 8(2): 83-96.
13. Borges ALV, et al. Descontinuidades contraceptivas no uso do contraceptivo hormonal oral, injetável e do preservativo masculino. *Cadernos de Saúde Pública*. 2021, Fevereiro; 37(2):1-13.
14. Farias AGDS, Lima ACS, Brasil RFG, Cunha M da CDSO, Oliveira GMA, Moura ERF. Satisfaction of combined and exclusive injectable contraceptive users of progestogen and associated factors. *Revista da Rede de Enfermagem do Nordeste*. 2017, Agosto;18(3):345.
15. Brandão ER. Métodos contraceptivos reversíveis de longa duração no Sistema Único de Saúde: o debate sobre a (in)disciplina da mulher. *Ciência & Saúde Coletiva*. 2019, Março;24(3):875–879.
16. Brandt GP, Rodrigues AP, Burci LM. Conhecimento de usuárias de anticoncepcionais orais acerca de hábitos e interações medicamentosas em uma unidade básica de saúde. *Visão Acadêmica*. 2016, Dezembro; 17(4):13-21.
17. Brandão ER. Desafios da contracepção juvenil: interseções entre gênero, sexualidade e saúde. *Ciência & Saúde Coletiva*. 2009, Agosto;14(4):1063–1071.
18. Haidar FH, OLIVEIRA UF, NASCIMENTO LFC. Escolaridade materna: correlação com os indicadores obstétricos. *Caderno de Saúde Pública*. 2001, Agosto; 17(4): 1025-1029
19. Paraná. Secretária da Saúde. Divisão de atenção à Saúde da Mulher. *Linha guia- Atenção Materno Infantil: Gestação/ Secretária de Estado Saúde do Paraná*. 8 ed. Curitiba: SESA, 2022.