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RESEARCH ARTICLE

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## DRUG CONTRACEPTIVE DISPENSATION PROFILE IN A DRUGSTORE IN SOUTHERN MINAS GERAIS

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### ABSTRACT

**Objective:** To evaluate the profile of dispensing contraceptives used by women in a drugstore in southern Minas Gerais. **Methodology:** Exploratory and descriptive field research. The chi-square test was used in the construction of confidence intervals (CI) for proportion and difference between two proportions, at the nominal level of 5% significance. **Results:** It was verified that the most frequent age group was 26 to 35 years (40.00%). When dealing with a medical prescription, 45 (73.77%) reported having been prescribed by the doctor. Regarding the time of use, 23 (37.70%) use 1 to 5 years. Of all the drugs analyzed, Depo - provera was® the only one to present significant side effects. **Conclusion:** Contraceptive use was more frequent in high school, 27 (44.26%), in relation to time of use, of 5 and 10 years, 4 (40.00%). Depo - provera® was the drug that presented significant side effects within the present study. In a total of 40 (88.89%) of 45, they had a side effect of the contraceptive used without a prescription and they are: Depo - provera®, Ciclo 21®, Contracep®, Iumi®, Mirena®, Nactali®, Nordette® e Tãmisa 20®.

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## INTRODUCTION

Currently, the use of hormonal contraceptives is increasing exponentially, according to 2014 data from Febrasgo (Brazilian Federation of Gynecology and Obstetrics Associations), about 100 million women use this contraceptive approach worldwide. However, irrational use grows in the same perspective, and can bring risks to users (SOUZA et al., 2018). It is understood that the beginning of early sexual life, without adequate knowledge about contraceptive methods, can compromise women's lives, leading to unplanned pregnancy and even a possible abortion, although most adolescents are aware of some contraceptive method, few women use it. regularly. Society, over the years, has undergone cultural changes that have contributed to the capture of new thoughts and attitudes regarding sexuality. Such changes have influenced the behavior of many young people (ALMEIDA, et al., 2017). Adolescents make their choices, letting themselves be carried away by friends, neighbors, or even social networks, consequently these users opt for low-cost hormonal contraceptives without a medical prescription (SILVA, et al., 2021). Nowadays, with fast information and technological advances, we have a very uninformed population and when aimed at the female audience, the difficulty gets bigger, because sex education is still a taboo in society. The number of newborns among adolescents between 15 and 19 years of age reaches 15 million per year, being more frequent in low- and middle-income countries.

The difficult access to health services and the lack of family guidance also make the sex education process even slower, with this, we have a scenario of indiscriminate use of hormonal contraceptives, which could be avoided in a simple orientation (FREBASGO, 2019). The chronic use of contraceptives has adverse reactions, which can lead to the occurrence of deep vein thrombosis, having as hereditary or acquired risk factors, such as: hypertensive, smokers or over 35 years of age. Contraindications include patients with diabetes mellitus, cardiovascular disease, thromboembolism, migraine with aura, breast cancer, congenital hyperlipidemia, sickle cell disease (SIQUEIRA, et al., 2018). In this way, prevention gains priority focus. In order to reduce these events in the population, it is first necessary to know to what extent adolescents understand contraception, what their use practices are and the reasons that lead them to adopt unsafe measures (FREITAS et al., 2018).

## METHODOLOGY

The present work is an exploratory and descriptive field research, where a questionnaire with objective questions was used, to analyze the dispensation of hormonal contraceptives used by women in a city in the south of Minas Gerais. This project was submitted to the Universidade José do Rosário Vellano institutional review board. Data collection took place in a drugstore in the city of Monte Belo-MG.

**Inclusion and Exclusion Criteria:** Data were collected using the questionnaire after explanation, reading, and signing of an informed consent. The structured questionnaire consists of 10 closed and multiple-choice questions (ANNEX A). Women aged 18 years or older, users of hormonal contraceptives were selected. The data collection period was between February and May 2022. Women under 18 years of age or who did not accept to participate in the research were excluded from the questionnaire.

**Data Collection:** The approach was made at the time of purchase, obtaining its formulation, time of use, lifestyle habits (physical activity, smoking and alcohol consumption).

**Statistical analysis:** First, frequency and contingency tables were prepared for the organization and presentation of data. In the analysis, the chi-square test was used, at the nominal level of 5% of significance, to verify the relationship between schooling and contraceptive use; time of contraceptive use and side effect; medical prescription and side effect and, medicine and side effect. The chi-square test was used to construct confidence intervals (CI) for proportion and for the difference between two proportions, at a nominal 5% significance level (BUSSAB & MORETTIN, 2017). Statistical analysis was performed using the R® software (R CORE TEAM, 2022).

## RESULTS

Table 1 shows that the most frequent age group was 26 to 35 years old, 40 (40.00%), followed by 18 to 25 years old, 38 (38.00%) and over 35 years old, 22 (22.00%). The level of education of 40 (40.00%) was high school, followed by 37 (37.00%), with higher education; 22 (22.00%), elementary school and 1 (1.00%), without any study. As for health problems, 70 (70.00%) do not have any problems; 18 (18.00%), hypertension and 9 (9.00%), diabetes. It should be noted that 61 (61.00%) participants use contraceptives and 39 (39.00%) do not. Of the 61, 51 (83.61%) use it orally; 4 (6.56%), quarterly injectable; 1 (1.64%), monthly injectable and 5 (8.20%), others. In terms of medical prescription, 45 (73.77%) reported having been prescribed by the doctor, while 16 (26.23%) said that there was no prescription. Regarding the time of use, 23 (37.70%) use it from 1 to 5 years; followed by 17 (27.88%), for less than 1 year; 12 (19.67%), between 5 and 10 years and 9 (14.75%), over 10 years (Table 1). In Table 2, it is observed that 51 (83.61%) mentioned the absence of side effects of the contraceptive used, however, 10 (16.39%) reported having had some side effect. Of the 61 participants, 55 (90.16%) are non-smokers, while 6 (9.84%) are smokers. As for the practice of physical activity, 41 (67.21%) do not perform it and 20 (32.79%) said they practice it. In relation to cases in the family of thrombosis, embolism, coagulation diseases, peripheral arterial disease and stroke, 40 (65.57%) responded that they do not have cases in the family and 21 (34.43%) do. A total of 50 (81.97%) reported knowing the risks associated with the use of contraceptives and thromboembolic events and 11 (18.03%) were unaware of the risks. The question: "would you stop using oral contraceptives because they pose health risks"? 36 (59.02%) answered yes, while 25 (40.98%), no.

Table 3 presents the types of contraceptives used by the participants. It can be seen that 8 (13.11%) use Selene® (ethinylestradiol 0.035mg + cyproterone acetate 2mg), 7 (11.47%) use Ciclo 21® (levonorgestrel 0.15 + ethinylestradiol 0.03), 5 (8.20%), Nactali® (desogestrel 75mcg); 5 (8.20%), Thames 20® (gestodene 75mcg + ethinylestradiol 20mcg); 4 (6.56%), Diane 35® (cyproterone acetate 2mg + ethinylestradiol 0.035mg); 4 (6.56%), Nordette® (ethinylestradiol 0.03mg + levonorgestrel 0.15mg); 3 (4.92%), Mirena® (levonorgestrel 52.00); 3 (4.92%), Iumi® (drospironone 3mg + ethinylestradiol 0.02mg); 2 (3.28%), Yasmin® (drospironone 3mg + ethinylestradiol 0.03mg); 2 (3.28%), Alestra 20® (gestodene 75mcg + ethinylestradiol 20mcg); 2 (3.28%), Depo-provera® (150 mg/ml medroxyprogesterone); 2 (3.28%), Thames 30® (gestodene 75mcg + ethinylestradiol 30mcg); 2 (3.28%), Kyleena®

(levonorgestrel 195mg); 2 (3.28%), Tantin® (gestodene 0.060 mg + ethinylestradiol 0.015mg) and frequency of 1 (1.64%), Cerazette® (desogestrel 75mcg), Amora® (chlormadinone acetate 2mg + ethinylestradiol 0.03mg), Mesygena® (norethisterone enanthate 50mg/ml + estradiol valerate 5mg/ml), Qlaira® (estradiol valerate 2mg + dienogest 3mg), Elaniciclo® (drospironone 3mg + ethinylestradiol 0.03mg), Nick® (drospironone 30mg + ethinylestradiol 0.02mg), Mercilon Conti® (desogestrel 150mcg + ethinylestradiol 20mcg + ethinylestradiol 10mcg) and Microvilar® (levonorgestrel 150mcg + ethinylestradiol 0.03mg) diseases, if you have children

**Table 1. Confidence interval (95%) for proportion and p-values obtained for the variables analyzed**

Variables	n (%)	CI (p; 95%)	p-value
Age group			
18 to 25 years	38 (38.00%)	28.64; 48.29	0.0214*
26 to 35 years	40 (40.00%)	30.48; 50.30	0.0574 ns
over 35 years	22 (22.00%)	14.58; 31.61	<0.01**
Total	100 (100.00%)		
Level of schooling			
Elementary School	22 (22.00%)	14.58; 31.61	<0.01**
High school	40 (40.00%)	30.48; 50.30	0.0574 ns
University education	37 (37.00%)	27.73; 47.28	0.0124*
None	1 (1.00%)	0.05; 6.24	<0.01**
Total	100 (100.00%)		
Health problem			
None	70 (70.00%)	59.89; 78.74	<0.01**
Diabetes	9 (9.00%)	4.43; 16.83	<0.01**
Hypertension	18 (18.00%)	11.29; 27.22	<0.01**
Dyslipidemia	3 (3.00%)	0.77; 9.15	<0.01**
Thrombosis/stroke/infarction	0 (0.00%)	-	-
Breast cancer	0 (0.00%)	-	-
Others	0 (0.00%)	-	-
Total	100 (100.00%)		
Do you use hormonal contraceptives?			
Yes	61 (61.00%)	50.70; 50.44	0.0357*
No	39 (39.00%)	29.56; 49.30	0.0357*
Total	100 (100.00%)		
If yes, which type?			
Oral	51 (83.61%)	71.43; 91.44	<0.01**
monthly injectable	1 (1.64%)	0.08; 9.98	<0.01**
quarterly injectable	4 (6.56%)	2.12; 16.75	<0.01**
transdermal	0 (0.00%)	-	-
Others	5 (8.20%)	3.06; 18.83	<0.01**
Total	61 (100.00%)		
Was it prescribed by the doctor?			
Yes	45 (73.77%)	60.69; 83.83	0.0003**
No	16 (26.23%)	16.17; 39.31	0.0003**
Total	61 (100.00%)		
How long have you been using contraceptives?			
less than 1 year	17 (27.88%)	17.51; 41.03	0.0009**
Between 1 and 5 years	23 (37.70%)	25.89; 51.07	0.0730 ns
Between 5 and 10 years	12 (19.67%)	11.00; 32.22	<0.01**
over 10 years	9 (14.75%)	14.75; 26.67	<0.01**
Total	61 (100.00%)		

ns Not significant at the nominal 5% significance level. (p>0.05). \* Significant at the nominal 5% significance level. (p>0.05). \*\*Significant at the nominal level of 1% significance (p<0.01).

Table 4 shows the related variables and their respective p-values. There was no statistical significance for the relationship between education and contraceptive use (p=0.4134), duration of contraceptive use and side effect (p=0.2314), medical prescription and side effect (p=0.1400) and drug and side effect (0.5002). Despite the non-statistical significance of the associations of the variables of interest (p>0.05), we chose to comment on some results presented in Table 5. Table 5 shows that contraceptive use was more frequent in high school, 27 (44.26%), followed by higher education, 19 (31.15%) and elementary school, 14 (22.95%). Regarding the time of use, a higher frequency was observed between 5 and 10 years, 4 (40.00%), between 1 and 5 years, 3 (30.00%), 2 (20.00%) over 10 years and 1 (10.00%), less than 1 year. A total of 40 (88.89%) of 45 had side effects of the contraceptive used without a prescription and they are: Depoprovera®, Ciclo 21®, Contracep®, Iumi®, Mirena®, Nactali®,

**Table 2. Confidence interval (95%) for proportion and p-values obtained for the variables analyzed**

Variables	n (%)	CI (p; 95%)	p-value
Did you have any side effects?			
Yes	10 (16.39%)	8.55; 28.55	<0.01**
No	51 (83.61%)	71.45; 91.44	<0.01**
Total	61 (100.00%)		
Are you a smoker?			
Yes	6 (9.84%)	4.06; 20.85	<0.01**
No	55 (90.16%)	79.15; 95.94	<0.01**
Total	61 (100.00%)		
Do you do physical activity?			
Yes	20 (32.79%)	21.63; 46.12	0.0104*
No	41 (67.21%)	53.88; 78.36	0.0104*
Total	61 (100.00%)		
In the family, do you have cases of thrombosis, embolism, clotting diseases, peripheral vascular disease, stroke?			
Yes	21 (34.43%)	23.04; 47.78	0.0212*
No	40 (65.57%)	52.22; 76.96	0.0212*
Total	61 (100.00%)		
Do you know the risks associated with the use of oral contraceptives and thromboembolic events?			
Yes	50 (81.97%)	69.60; 90.23	<0.01**
No	11 (18.03%)	9.76; 30.39	<0.01**
Total	61 (100.00%)		
Would you stop using oral contraceptives because of health risks?			
Yes	36 (59.02%)	45.69; 71.20	0.2004 ns
No	25 (40.98%)	28.80; 54.30	0.2004 ns
Total	61 (100.00%)		

ns Not significant at the nominal 5% significance level. (p>0.05). \* Significant at the nominal 5% significance level. (p>0.05). \*\*Significant at the nominal level of 1% significance (p<0.01).

**Table 3. Confidence interval (95%) for proportion and p-values obtained for the variables analyzed**

Variables	n (%)	CI (p; 95%)	p-value
Contraceptive used			
Cycle 21 (Levonorgestrel 0.15 + Ethinylestradiol 0.03)	7 (11.47%)	5.12; 22.83	<0.01**
Diane 35 (cyproterone acetate 2mg + ethinylestradiol 0.035mg)	4 (6.56%)	2.12; 16.75	<0.01**
Cerazette (desogestrel 75mcg)	1 (1.64%)	0.08; 9.98	<0.01**
Blackberry (2mg chlormadinone acetate + 0.03mg ethinylestradiol)	1 (1.64%)	0.08; 9.98	<0.01**
Contracep (medroxyprogesterone acetate 150mg/ml)	2 (3.28%)	0.57; 12.36	<0.01**
Selene (ethinylestradiol 0.035mg + cyproterone acetate 2mg)	8 (13.11%)	6.23; 24.77	<0.01**
Yasmin (drospironone 3mg + ethinylestradiol 0.03mg)	2 (3.28%)	0.57; 12.36	<0.01**
Nactali (desogestrel 75mcg)	5 (8.20%)	3.06; 18.83	<0.01**
Mirena (levonorgestrel 52.00)	3 (4.92%)	1.28; 14.60	<0.01**
Alestra 20 (gestodene 75mcg + ethinylestradiol 20mcg)	2 (3.28%)	0.57; 12.36	<0.01**
Nordette (ethinylestradiol 0.03mg + levonorgestrel 0.15mg)	4 (6.56%)	2.12; 16.75	<0.01**
Depoprovera (medroxyprogesterone 150 mg/ml)	2 (3.28%)	0.57; 12.36	<0.01**
Thames 30 (gestodene 75mcg + ethinylestradiol 30mcg)	2 (3.28%)	0.57; 12.36	<0.01**
Thames 20 (gestodene 75mcg + ethinylestradiol 20mcg)	5 (8.20%)	3.06; 18.83	<0.01**
Iumi (drospironone 3mg + ethinylestradiol 0.02mg)	3 (4.92%)	1.28; 14.60	<0.01**
Mesygena (norethisterone enanthate 50mg/ml + estradiol valerate 5mg/ml)	1 (1.64%)	0.08; 9.98	<0.01**
Qlaira (2mg estradiol valerate + 3mg dienogest)	1 (1.64%)	0.08; 9.98	<0.01**
Kyleena (Levonorgestrel 195mg)	2 (3.28%)	0.57; 12.36	<0.01**
Elani cycle (drospironone 3mg + ethinylestradiol 0.03mg)	1 (1.64%)	0.08; 9.98	<0.01**
Tantin (gestodene 0.060mg + ethinylestradiol 0.015mg)	2 (3.28%)	0.57; 12.36	<0.01**
Nick (drospironone 30mg + ethinylestradiol 0.02mg)	1 (1.64%)	0.08; 9.98	<0.01**
Mercilon Conti (desogestrel 150mcg + ethinylestradiol 20mcg + ethinylestradiol 10mcg)	1 (1.64%)	0.08; 9.98	<0.01**
Microvilar (levonorgestrel 0.15mg + ethinylestradiol 0.03mg)	1 (1.64%)	0.08; 9.98	<0.01**
Total	61 (100.00%)		

ns Not significant at the nominal 5% significance level. (p>0.05). \* Significant at the nominal 5% significance level. (p>0.05). \*\*Significant at the nominal level of 1% significance (p<0.01).

Nordette®, Thames 20 ® and Thames 30®. Although we did not observe a correlation between the side effect variables for 95.6% of the contraceptives dispensed, it can be observed that 4.4% of the medications had a significant side effect. According to the data obtained in this study, Depo - provera® demonstrated a direct relationship between its dispensing and side effects.

## DISCUSSION

Jurema and Jurema (2021) report that oral hormonal contraceptives are effective contraceptive methods that prevent the occurrence of unwanted pregnancies, being classified according to hormonal

composition as combined and minipills. According to FERREIRA *et al.*, (2019) Despite the contraceptive benefits of the contraceptive pill, it has several side effects. However, as oral contraceptives are more accessible and have greater availability in the SUS, they are still the most used. According to CARDOSO, *et al* (2019), the risks related to the use of hormonal contraceptives, arising from inadequate and prolonged use, lead to problems in women's health, the most frequent being: nausea, irregular vaginal bleeding, headache, breast hypersensitivity and changes in the humor. According to data obtained in our research, contraceptive use was more frequent in high school, 27 (44.26%), where many young women still do not know about these harmful effects on health, in relation to the time of use, it was observed higher frequency between 5 and 10 years, 4 (40.00%).

Table 4. p-value obtained from the association between two variables

Variables	Valor-p
Education vs contraceptive use	0.4134 ns
Usage time vs side effect	0.2314 ns
Medical prescription vs side effect	0.1400 ns
Medication vs side effect	0.5002 ns

Table 5. Confidence interval (95%) for the difference between two proportions and p-values obtained for the variables analyzed

Variables	n (%)	n (%)	CI (p; 95%)	p-value
Contraceptive use				
Education	yes	no		
Elementary School	14 (22.95%)	8 (20.51)	16.15; 21.03	0.9684 ns
High school	27 (44.26%)	13 (33.33%)	10.51; 32.38	0.3795 ns
University education	19 (31.15%)	18 (46.15%)	6.58; 36.60	0.1923 ns
None	1 (1.64%)	0 (0.00%)	3.19; 6.46	1.0000 ns
Total	61 (100.00%)	39 (100.00%)		
Side effect				
Usage time	yes	no		
less than 1 year	1 (10.00%)	16 (31.37%)	7.14; 49.90	0.3209 ns
Between 1 and 5 years	3 (30.00%)	20 (39.22%)	28.17; 46.60	0.8469 ns
Between 5 to 10 years	4 (40.00%)	8 (15.69%)	13.63; 62.26	0.1824 ns
over 10 years	2 (20.00%)	7 (13.72%)	0.00; 38.78	0.9809 ns
Total	10 (100.00%)	51 (100.00%)		
Side effect				
Doctor's prescription	yes	no		
Yes	5 (11.11%)	5 (31.25%)	8.59; 48.90	0.1400 ns
No	40 (88.89%)	11 (68.75%)	8.59; 48.90	0.1400 ns
Total	45 (100.00%)	16 (100.00%)		
Side effect				
Medication	yes	no		
Alestra 20	0 (0.00%)	2 (3.92%)	5.33; 13.17	1.0000 ns
Blackberry	0 (0.00%)	1 (1.96%)	3.82; 7.73	1.0000 ns
Wax	0 (0.00%)	1 (1.96%)	3.82; 7.73	1.0000 ns
Cycle 21	1 (10.00%)	6 (11.76%)	0.00; 20.59	1.0000 ns
Contraception	1 (10.00%)	1 (1.96%)	0.00; 32.99	0.7382 ns
Depopulates	2 (20.00%)	0 (0.00%)	10.77; 50.77	0.0228*
Diane 35	0 (0.00%)	4 (7.84%)	5.51; 21.20	0.8277 ns
Elani cycle	0 (0.00%)	1 (1.96%)	3.82; 7.73	1.0000 ns
yumi	1 (10.00%)	2 (3.92%)	0.00; 31.40	0.9895 ns
Kyleena	0 (0.00%)	2 (3.92%)	5.33; 13.17	1.0000 ns
Mercilon Conti	0 (0.00%)	1 (1.96%)	3.82; 7.73	1.0000 ns
mesygena	0 (0.00%)	1 (1.96%)	3.82; 7.73	1.0000 ns
microvillar	0 (0.00%)	1 (1.96%)	3.82; 7.73	1.0000 ns
Mirena	1 (10.00%)	2 (3.92%)	0.00; 31.40	0.9895 ns
Nactali	1 (10.00%)	4 (7.84%)	0.00; 24.32	1.0000 ns
Nick	0 (0.00%)	1 (1.96%)	3.82; 7.73	1.0000 ns
Nordette	1 (10.00%)	3 (5.88%)	0.00; 27.92	1.0000 ns
Qlaira	0 (0.00%)	1 (1.96%)	3.82; 7.73	1.0000 ns
Selene	0 (0.00%)	8 (15.69%)	0.27; 31.65	0.4058 ns
Thames 20	1 (10.00%)	4 (7.84%)	0.00; 24.32	1.0000 ns
Thames 30	1 (10.00%)	1 (1.96%)	0.00; 32.99	0.7382 ns
Tantin	0 (0.00%)	2 (3.92%)	5.33; 13.17	1.0000 ns
Yasmin	0 (0.00%)	2 (3.92%)	5.33; 13.17	1.0000 ns
Total	10 (100.00%)	51 (100.00%)		

ns Not significant at the nominal 5% significance level. (p>0.05). \* Significant at the nominal 5% significance level. (p>0.05).

\*\*Significant at the nominal level of 1% significance (p<0.01).

A total of 40 (88.89%) out of 45 had side effects of the contraceptive used without a prescription and they are: Depo - provera® Ciclo 21®, Contracep®, Iumi®, Mirena®, Nactali®, Nordette®, Thames 20® and Thames 30®. According to Novosartyan (2021), the use of some contraceptives may increase the risk of cardiovascular diseases. The risk of serious illness or death attributable to the use of hormonal contraceptives due to adverse cardiovascular effects is mainly concentrated among women over 30 years of age who have some cardiovascular risk factor, such as being or having been a smoker, among other factors. According to data obtained from the applied questionnaires, regarding health problems, 70 (70.00%) do not have any problems; 18 (18.00%), hypertension and 9 (9.00%), diabetes, while of the 61 participants, 55 (90.16%) are non-smokers, while 6 (9.84%) are smokers and about the practice of physical activity, 41 (67.21%) do not perform it and 20 (32.79%) said they practice it. A total of 50 (81.97%) reported knowing the risks associated with the use of contraceptives and thromboembolic events and 11 (18.03%) were unaware of the risks. According to SILVA (2021), there is a wide variety of contraceptives and methods used in contraception, which can cause many doubts in patients regarding the best choices of use. Data obtained in the case of medical prescription, 45 (73.77%) reported having been prescribed by the doctor, while 16 (26.23%) said that there was no prescription, a total of 40 (88.89%) of 45, had a

side effect of the contraceptive used without medical prescription, the main one being Depoprovera®. Therefore, the relationship between pharmacist and patient becomes essential for successful pharmacotherapy, making it essential that pharmacists pass on information to perform the treatment correctly and effectively, to reduce the risk of adverse reactions. In this sense, pharmacists should establish information and counseling links with women. Depo-Provera® is an injectable hormonal contraceptive that contains medroxyprogesterone acetate in its formulation. This compound has some adverse effects, being alteration in the menstrual cycle, loss of bone mineral density and increase in weight gain. The effects of contraceptives on body weight and blood pressure in women were studied. We selected 50 healthy women who had been using Depo-Provera® for at least 6 months and 50 healthy age-matched controls ( $\pm 2$  years) who visited the health centers that accompanied the patients during the period that the study was carried out (ZERIHUN *et al* 2019). Studies showed that the average weight and body mass index (BMI) of Depo-Provera® users increased significantly. There was no significant difference in the mean blood pressure of Depo-Provera® users compared to controls or their respective pre-treatment values. As a conclusion of the study carried out with these women, it is revealed that there is an increase in the percentage of weight and BMI among users of the contraceptive Depo - provera®. COUTO, *et*

al. (2020) state that the frequency of adverse effects resulting from the use of contraceptives can be minimized with the choice of the appropriate contraceptive, according to the individual health condition, which would facilitate treatment adherence and the minimization of such effects, thus, data obtained was that 51 (83.61%) mentioned the absence of collateral effects of the contraceptive used, however, 10 (16.39%) reported having had some side effect. Most patients who already use the prescription ready, later have diversified side effects, so it is necessary that patients have sufficient information about the medication they use, knowing the risks and benefits offered by each one and, in this way, find the best alternative for choosing the desired method (SILVA, *et al.*, 2021).

CORRÊA, *et al.*, (2017), state that women over 34 years old, separated/divorced, who have a private health plan and low schooling had higher prevalence of contraindication to the use of OAC. Since schooling was a factor of inequity for the use of OAC: there was a higher prevalence of contraindication in women with low schooling. It is expected that the level of education will improve the appropriate choice of ACO. Women with a better level of education used more contraceptive methods. BORGES, *et al.*, (2016), in their research carried out with nursing and medical students from the Faculty of Medicine of São José do Rio Preto, showed that they used oral contraceptives or another hormonal method, 66.8% had a or more side effects and 61.5% use it for a period of 1 to 5 years. Which was also observed in the present work in relation to the time of use, greater frequency between 1 and 5 years. Borges *et al.*, (2016), state that a major reason for abandoning the method is the frequent appearance of adverse effects, and the same ones reported by academics are quite evident in other reported studies, often requiring the change of the method.

## CONCLUSION

The present study demonstrates that despite the variable “education” not being a statically significant versus the variable “use of contraceptives”, the risk factors demand knowledge of the population and given the side effects discussed for medications such as Depo - provera®, it is necessary to raise awareness on the part of the population regarding the aggravating risks of complications and side effects, thus, reinforcing educational approaches. It is concluded that the adverse effects resulting from the use of the drug Depo - provera®, have been the object of studies and investigations and as hormonal contraception is the most used method, the literature has sought to explain the development of weight gain problems, changes in the menstrual cycle, increase in adverse reactions when used without a doctor's prescription and bone loss that Depo - provera® causes as effects on users. However, although the study has shown several correlations between contraceptive use and side effects, not all users have such conditions, so, when used rationally and with medical supervision, Depo - provera®, as well as other classes of contraceptives, can bring benefits to users and help them in contraception, menstrual cycle regulation, family planning, minimize the aggravations and problems of adverse events resulting from the use of hormones. So, it is necessary that the choice of contraceptive is always based on the medical prescription and with pharmacotherapeutic follow-up, thus avoiding frustrations in the lives of users. For those women who have risk factors, other methods can be chosen, and it is always important that they are happy and adapt to the contraceptive of choice, so that high adherence to the method improves their response, thus, there is a low dropout rate. To the method and with the diversity of contraceptives, women can use the method correctly and clearly, also reducing the risks.

However, choosing the method as well as the oral contraceptive must be made by a qualified professional, as the inadequate choice of method brings frustrations to the lives of users, which can be avoided with constant efforts of the health team, to carry out an integrative work and with positive results.

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