

# Use of Hormonal Contraceptives by Women Registered in a Unit of Primary Health Care

ORIGINAL

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## Abstract

**Introduction:** reproductive health and family planning activities are recognized as necessary interventions of health services. Availability of contraceptive methods and access to information are essential for proper choice and these must be guaranteed to the public regardless of socioeconomic, cultural and religious conditions.

**Objective:** to understand the aspects related to the use of hormonal contraceptives for users registered in a Unit of Primary Health Care.

**Method:** this is a descriptive field study with quantitative approach conducted with 70 women enrolled in the family planning activities of a Basic Health Unit in the city of Cajazeiras, Paraíba, Brazil. Data were collected through a structured questionnaire and analyzed in the Statistical Package for the Social Sciences – SPSS.

**Results:** there was a greater number of women aged between 17 and 34 years, with 12 or more years of schooling, married, with a formal partner, asserting to be non-white with respect to race and agriculture workers/housewives with respect to occupation. On personal background, there was a higher occurrence of hypertension, smoking, anemia and gastritis. Regarding health conditions, most of the women had blood pressure considered normal, were overweight/obese and with low or moderate risk of cardiovascular disease. With

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respect to complications during the use of hormonal contraceptives, amenorrhea was more frequent along with pain or swelling in the lower limbs and mastalgia.

**Conclusion:** there is a strong need for improving the monitoring of women in reproductive planning with search for new strategies aiming at greater adherence to the program, as well as carrying out a more precise analysis of the clinical background of women in order to choose the most appropriate contraceptive method. In relation to health conditions, it was evident that most of the interviewed women were found with blood pressure considered normal.

#### Keywords

Contraceptives; Health  
Woman; Family Planning;  
Community Health Services.

## Introduction

Family planning is characterized as a network of assistance actions for contraception and conception, with the purpose to promote reproductive health by ensuring sexual and reproductive rights inherent to each individual [1].

Assistance to family planning in Brazil has support of the 1988 Federal Constitution, art. 226, paragraph 7, which recognizes the access to information and to means to decide and enjoy the highest standard of sexual and reproductive health, free of discrimination, coercion or violence, as a right of every citizen, to whom is ensured the right to decide freely and responsibly on the number of children, the opportunity to conception and adequate time between pregnancies [2-3].

This planning must be understood within a broader context, addressing the various aspects related to its execution, especially regarding the biological, social, psychological, cultural and religious aspects of the individual and the family [4]. Through this context, the importance of detailed clinical evaluation for selection of adequate contraception is noteworthy, as well as advising users about indispensable information for the choice and effective use of the method that best suits their current health conditions [5-7].

Among contraceptive methods, hormonal contraceptives are the most widely used method worldwide, especially in the Brazilian population, given that they have certain characteristics that are more attractive for modern women, such as being available in several formulations and routes of administration, and independence from a more specialized medical intervention [8-9].

The interest in conducting this research stems from the experience of researchers during training in a Unit of Primary Health Care (UPHC), which identified a large number users of hormonal contraceptives and the absence of a thorough assessment of their health conditions and a more effective monitoring by the professionals of this service.

Given the above, the following study questions were raised: What is the profile of women that make use of hormonal contraceptives? What are the risk factors associated with this specific contraceptive method? What are the signs and symptoms related to the use of hormonal contraceptives?

This study becomes relevant for enabling a different view on the use of hormonal contraceptives, besides the lack of studies of this nature in the city investigated. Therefore, the results may assist in the formulation of strategies that guide in a positive and growing manner the quality of life of women using

this contraceptive method. This study aimed to understand the aspects related to the use of hormonal contraceptives for users registered in a UPHC.

## Method

This is a descriptive field survey with quantitative approach, performed in August 2014 in a UPHC located in the city of Cajazeiras/PB. The population consisted of all women registered in the activities of family planning, totaling 238 users.

Inclusion criteria were: registration at the Basic Health Unit field of research, use of hormonal contraceptive for at least three months or, in cases of women using injectable contraceptives every three months the women must have been using it for three consecutive times in nine months.

From this, the sample was established by probabilistic criteria, which makes it representative for the population of women using hormonal contraceptives. For realization of the sample calculation, we used the formula for calculation of finite population sample (**Figure 1**) with 95% confidence level, the sampling error of 5% and a maximum percentage of 75%. Where,  $n$  = sample size;  $Z$  = confidence level;  $P$  = prevalence of the phenomenon;  $Q$  =  $1-p$ ;  $N$  = population and  $E$  = sampling error. The choice of participants was intentional, to meet the researchers' criteria, such as compatibility of time and facility of access.

**Figure 1:** Formula for sample definition for the finite population.

$$n = \frac{N \cdot Z^2 \cdot p \cdot (1 - p)}{Z^2 \cdot p \cdot (1 - p) + e^2 \cdot (N - 1)}$$

Thus, the sample to be investigated amounted to 68 women. However, it was decided to select 70 users for the study, because this is a more appropriate value for the implementation of statistical calculations.

Data collection was conducted through interviews with the aid of a previously prepared script

containing demographic data, personal history, signs and symptoms associated to the use of hormonal contraceptives and general health assessed by measuring blood pressure, body mass index and waist circumference.

Questionnaires were listed and coded for posterior analysis in the Statistical Package for the Social Sciences (SPSS) version 21. During the process of construction of the dataset, data were entered in pairs in order to avoid possible errors in coding and filling of variables. Based on descriptive statistics, tables were prepared containing absolute numbers and percentages and data were discussed in the light of literature relevant to the theme.

The research project was approved by the Research Ethics Committee under CAAE nº 32391014.8.0000.5180 and report number 815,691, obeying all ethical standards stated by Resolution nº 466/2012 of the National Health Council [10].

## Results

The analysis of the age of women showed higher prevalence of women aged between 17 and 34 years (81.4%), with 12 or more years of schooling (70.0%), married (68.6%), with a formal partner (78.6%), professing to be agriculture workers/housewives (50.0%) with respect to occupation and stating to be non-white (71.4%) with respect to race, as shown in **Table 1**.

**Table 2** shows data of personal background reported by women, with higher incidence of hypertension (8.6%), smoking (8.6%), anemia (7.2%) and gastritis (5.7%).

In relation to health, most of the interviewed women had blood pressure considered normal, represented by 87.2% who presented systolic blood pressure (SBP) greater than or equal to 120 mmHg and 94.3% who presented diastolic blood pressure (DBP) between 60 and 75 mmHg. Regarding the mean and standard deviation, this research showed SBP  $110.8 \pm (12.7)$  and  $74.4 \pm$  DBP (8.4) ( $n=70$ ). With respect to body mass index (BMI), 44.3% were

**Table 1.** Sociodemographic profile of the study participants, Cajazeiras/PB, 2014. (n=70).

Variables	n	%
Age (years)		
17 - 34	57	81.4
35 and older	13	18.6
Schooling (years)		
1 - 3	2	2.9
4 - 7	3	4.3
8 - 11	16	22.9
12 or more	49	70.0
Civil status		
Married	48	68.6
Single	22	31.4
Marital situation		
With a formal companion	55	78.6
Without a formal companion	15	21.4
Occupation		
Agriculture worker/ Housewife	35	50.0
Student	24	34.3
Other	11	15.7
Skin colour (race)		
White	20	28.6
Non-white	50	71.4
Total	70	100.00
*: Non-white includes those who declared to be black, brown, yellow (Eastern origin) or red (indigenous). Source: Field survey, 2014.		

**Table 2.** Descriptive analysis of personal background of the studied women, Cajazeiras/PB, 2014. (n=70)

Personal background*	n	%
Hypertension	6	8.6
Smoking	6	8.6
Anemias	5	7.2
Gastritis	4	5.7
Cardiology	1	1.4
Anxiety	1	1.4
Not informed	47	67.1
Total	23	100.00
Source: Field survey, 2014.		

overweight/obese and 4.3% of women had low weight. With respect to abdominal circumference, a significant part of women (34.3%) had a very high risk for cardiovascular disease (**Table 3**).

**Table 4** presents the complications reported by women in the period of use of hormonal contracep-

**Table 3.** Descriptive analysis of blood pressure levels, BMI and abdominal circumference of the studied women, Cajazeiras/PB, 2014. (n=70)

Variables	n	%
Blood pressure		
Systolic	≤ 120 mm Hg	61 87.2
	> 120 mmHg	9 12.8
Diastolic	60 - 75 mmHg	66 94.3
	76 - 90 mmHg	4 5.7
Blood pressure		
Low weight	3	4.3
Proper weight	36	51.4
Overweight/obese	31	44.3
Abdominal circumference		
Low/moderate risk (70-99 cm)	46	65.7
Very high risk (> 100 cm)	24	34.3
Total	70	100.00
Source: Field survey, 2014.		

tion. The most frequent were amenorrhea (35.5%), pain or swelling in the lower limbs (32.3%) and mastalgia (12.9%).

**Table 4.** Descriptive analysis of the signs and symptoms presented by the studied women, Cajazeiras/PB, 2014. (n=70)

Signs and symptoms*	n	%
Amenorrhoea	11	35.5
Pain or swelling in the lower limbs	10	32.2
Mastalgia	4	12.9
Paroxysmal dyspnea	3	9.7
Tachypnea and/or cough	2	6.5
Weakness or numbness in the face, upper and lower limbs	1	3.2
Total	31	100.00
*: Only 31 women had signs and symptoms Source: Field survey, 2014.		

## Discussion

Seventy women enrolled in a UPHC and that were making use of hormonal contraceptives participated in this study. Of these, the majority was aged between 17 and 34 years, which corroborates other studies that also showed a predominance of young women in current or past use of contraceptive methods [11-12].

This finding may be justified by the wide dissemination of knowledge regarding hormonal contraceptives, especially among young people. Furthermore, condom use is still being surrounded by myths and beliefs that this affects the pleasure in sexual intercourse and that it must be used only with partners that the person does not know well or trust [13].

About level of education, most participants have a high educational level, evidenced by 12 or more years of study. This fact becomes relevant because the woman's level of education is directly related to the choice and understanding of the contraceptive method that suits better her daily life, evaluative factors inherent in the use, the search for health services and greater adherence to treatment [14].

Thus, we see the importance of assessing this variable in the context of assistance to family planning, since the expectations for planning, analyzing and choosing a contraceptive method depend on the shared decision-making between the health professional and the woman or couple [15].

When asked about the current occupation, half of the women reported to work with agriculture and to care for household tasks, what leads to the financial dependence of these in relation to the partner and/or family, a fact that directly influences on health, housing and access to products and consumer goods [16].

With regard to color/race, most women reported to be non-white, corroborating data of the last Brazilian census, which shows that most of the country's population is made up of non-white

individuals with higher prevalence of self-declared afrodescendents [17].

With respect to personal background reported by women, reference is made to the distribution of existing clinical factors that are presented as decisive for the choice of hormonal method. Thus, the importance of investigating such a background is assessed as predictive factor for the actual use of the contraceptive, directing health professionals, women and/or couples in this choice. The analysis of this variable is considered essential for clinical evaluation, given that it allows the identification of risk factors for onset of other diseases associated with the use of hormonal contraceptive, such as metabolic, cardiac and cerebrovascular diseases and cancer, among others [12, 18-19].

Regarding the use of hormonal contraceptives by hypertensive women, WHO recommends restraint in their use. However, when this is chosen, it is advisable its composition to be only progestogen, calling attention to the fact that the use of this hormonal method slightly increases average blood pressure levels and may predispose the person to greater chance of ischemic and thromboembolic events when the hormonal method is associated with chronic hypertension [18, 20].

With regard to smoking, a study [21] points out that the harmful effects of smoking associated with the use of hormonal contraceptives greatly increase the risk of developing cardiovascular and respiratory diseases and various cancers. Furthermore, WHO contraindicate the use of hormonal contraceptive method for smokers aged over 35 years [20].

It was observed that proper weight, as evidenced by BMI, prevailed among the investigated women. However, the number of women using hormonal contraceptives considered to be overweight/obese was quite significant. It is recommended to investigate the weight gain every month during administration of drugs in order to observe the development of side effects due to the use of the method, effects such as obesity and overweight [22].

This way, there is an evident need for using measures of abdominal circumference accurately when choosing and re-evaluating the hormonal contraceptive method. This is given particularly to the fact that, in many cases, professionals do not differentiate body fat from muscle mass, and these values may be underestimated in relation to body fat [22-25].

Regarding the complications presented during the use of hormonal contraceptives, amenorrhea was more frequent in the studied population. This is characterized as a frequent event related to the use of such contraceptive methods. However, this occurrence should not exceed three months, and this is why it is important to perform an assessment of these women by skilled professionals [21,24].

## Conclusion

It was observed that the profile of users of hormonal contraceptives registered in their UPHC was composed of young women with high education level, who have a permanent partner, dedicate themselves to agriculture and household activities as main occupation, and declared themselves as non-white.

Regarding personal history, a significant portion of respondents reported to have at least one health problem, especially high blood pressure, smoking and anemia. Concerning health conditions, it was identified that most women had normal blood pressure levels, adequate body mass index and waist circumference with low or moderate risk at the time of conducting the survey. However, it is worth highlighting the high number of women overweight and/or obese.

When signs and symptoms during the use of hormonal contraceptives were investigated, it was noted that much of the sample reported complications related to the circulatory, respiratory and endocrine systems. The choice for hormonal contraceptives was observed to be carried out without base on the analysis of pre-established criteria,

particularly clinical criteria. It is possible to assert that there is no a more complex assessment of the women who want and/or are making use of hormonal contraception.

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