The satisfaction assessment of intrauterine device T CU 380A users followed in the ambulatory of family planning in a teaching hospital in Recife, Pernambuco

Avaliação da satisfação das usuárias do dispositivo intrauterino T CU 380A acompanhadas no ambulatório de planejamento familiar em um hospital escola de Recife, Pernambuco

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ABSTRACT: Objectives: to evaluate the satisfaction of women who are using the IUD T Cu 380 A; to show their sociodemographic profile, and to establish the impact of IMIP`s family planning class in their selection of the IUD T Cu 380 A as birth control method.

Methods: It’s a descriptive, quantitative, and cross-sectional study performed between September 2016 and June 2017 with 97 users of IUD T Cu 380 A followed up at the family planning ambulatory of the Medical Institute Professor Fernando Figueira (IMIP). The patients were interviewed and answered a pre-formulated questionnaire related to their sociodemographic aspects and their experience with the intrauterine device. Results: 93.8% were satisfied with the method, 47.4% were older than 35 years-old, 84.5% were married or had a spouse, 59.7% had about eight to 11 years of education, 59.7% had monthly income up to R$880.00, 67.0% recognized the relevance of the family planning class to select the IUD T Cu 380 A as their contraceptive method.

Conclusion: The higher degree of satisfaction of women using the IUD T Cu 380 A ensures its relevance as a contraceptive method. Lectures about family planning should always be encouraged at women’s reproductive health assistance services.

Keywords: Family planning; Birth control methods; IUD.
INTRODUCTION

In the early 1960s, with the adoption of Brazilian demographic policy and greater social participation of women, there was a greater demand for contraceptive methods. Since 1996, with the creation of Law No. 9,263, the Unified Health System (SUS) was obliged to guarantee the assistance to conception and contraception, as part of the actions that make up comprehensive health care.1,2

In this context, the family planning program emerged as a public health measure to promote women’s health in an integral way, through birth control and consequent reduction in the number of abortions. The professionals of this program began to act in an integrated way, through informative lectures, with the advice of the woman or couple to choose the appropriate contraceptive method (MAC), consultations and necessary exams.3,4

Currently, the National Family Planning Policy, created in 2007, includes the offer of eight free contraceptive methods, including barrier methods (condom, diaphragm), intrauterine device (IUD) and hormonal (combined oral contraceptives, minipill, monthly/quarterly injectables and the emergency pill).5-7. Thus, among these methods provided, the copper IUD stands out, whose first generation began to be used in 1967 in Brazil. Subsequently, it was replaced by a second generation, with several innovations that increased the effectiveness and effective useful life of this method, reducing the incidence of adverse effects. Among the main second-generation IUDs, we highlight the IUD T Cu 380A, made available by SUS.8,9

The mechanism of action of the IUD T Cu 380A is still unknown, however, studies and research indicate several factors for contraception through this method. Copper is considered to modify endometrial morphology and alter its biochemistry, as well as the consistency of cervical mucus, having local and cytotoxic inflammatory actions, preventing sperm rise and modifying its viability. Although the presence of copper in the endometrial cavity may cause damage to oocytes, there is no inhibition in the ovulatory process of users of this MAC.8-10

The advantage of IUD T Cu 380A is that the non-use of systemic hormones allows its use by lactating women, as they do not interfere with breastfeeding, and by patients with personal or family history of breast cancer.10 It is indicated for those who want an effective long-term contraceptive method that is simultaneously reversible.9 Complications due to the IUD insertion procedure are rare, but uterine perforation (at rates of 1-2 for every 1,000 insertions), expulsion of the IUD (common in women under 20 years of age), a possible predisposition to pelvic infectious and inflammatory diseases can be placed, although there is no consensus in the literature for the latter, as well as ectopic pregnancy, for which MAC can be considered a predisposing or protective factor.8

The placement of the IUD is a relatively simple procedure when performed by a qualified medical professional. The procedure takes place in the outpatient clinic itself, without the need for anesthesia or prophylactic use of antibiotics. After the insertion of the IUD, the patient should return after seven days for follow up.9,10 Transvaginal ultrasound is the best method to verify that the IUD has been inserted correctly into the uterine cavity.

Some points are evaluated in the follow up consultation: menstrual flow, the presence of infections and the couple’s satisfaction with the use of the method. Therefore, desiring to continue with the use of the IUD, the patient should be monitored every six months by the doctor. The validity of its use is 10 years and, after this period, it should be removed and exchanged for the same or another method of choice from the patient and according to medical indication.7,12

Thus, it was found that the current data are restricted to the evolution of the family planning program and its influence on statistical improvements based on fertility/birth rates and unwanted pregnancies, as well as sufficient information about the performance of the IUD T Cu 380A. However, literature lacks studies that contain data on the satisfaction of users of this method, correlated with sociodemographic factors.

This study aims to evaluate the satisfaction of users of the IUD T Cu 380A as a contraceptive method, characterize their sociodemographic profile and verify how the classes contributed in the choice of this method.

METHODS

A descriptive, quantitative, cross-sectional study was conducted from September 2016 to June 2017, with women over 18 years of age, assisted at the family planning outpatient clinic of the Center for Women’s Care – (Institute of Integral Medicine Professor Fernando Figueira - IMIP), users of the IUD T Cu 380A, inserted in this service for at least one year.

Data collection was performed through individual face-to-face interviews with all IUD users mentioned during the study period, who agreed to participate in the research, signing the Informed Consent, totaling 97 users. The information obtained was recorded in a previously elaborated questionnaire, validated in the study of Nascimento em 2002.

The interview consisted of sociodemographic data, obstetric background: number of previous pregnancies, number of live children, number of abortions, desire to...
become pregnant and data related to the experience of using the IUD T Cu 380A (time of use, satisfaction with the method, complaints/discomfort after placement, change in the frequency of sexual intercourse, contribution of the IMIP family planning lecture to choose the method and other contraceptive method used before the IUD).

The questionnaires, duly filled with the data provided by the interviews, were reviewed and analyzed electronically. The database was populated on Microsoft Excel 2013, and the analysis was performed through the Public Domain Software (Epi Info version 7.2) with double typing, followed by comparison and correction of errors.

The resulting database was submitted to cleanliness and consistency tests, followed by statistical analysis. Tables were elaborated according to the descriptive analysis of the studied population, presenting frequency, percentage and cumulative percentage of the variables investigated. The association between the satisfaction of the users and the variables surveyed were evaluated using Pearson’s chi square test and statistical significance was considered when p < 0.05

The project was submitted to the Ethics and Research Committee of the Pernambuco Health College, under the number of the Certificate of Presentation for Ethical Appreciation 58675816.0.0000.5569, and obtained approval on November 4, 2016.

RESULTS

The population consisted of 97 patients who were users of the IUD T Cu 380A with insertion for 1 (one) year or more, who returned for follow up consults in the family planning outpatient clinic of the IMIP. In our study, through interviews, sociodemographic variables were surveyed, and it was possible to trace a profile of the users, and 47.4% were 35 years or older, 71.1% came from the Metropolitan Region of Recife, 84.5% were married or lived with a partner, 59.7% studied from eight to 11 years old, 55.7% had paid work and 48.4% lived with a monthly family income of 1 minimum wage (Table 1).

In the data obtained from the users’ gynecological and obstetric history, 38.1% had only one pregnancy, 52.5% had a child and 73.2% did not have an abortion. In addition, 76.2% did not express the desire for a new pregnancy, choosing the IUD Cu T 380A as a contraceptive method, after the family planning lecture. Thus, the contribution of the family planning lecture to the choice of method by 67% of the patients was proven and 51.6% reported using combined oral contraceptives before choosing the IUD (Table 2).

| Variables | N1 | %  |
|-----------|----|----|
| Current age (years) |    |    |
| Variation |    |    |
| 18-24 years old | 15 | 15,5 |
| 25-34 years old | 36 | 37,1 |
| 35 years or older | 46 | 47,4 |
| Origin |    |    |
| RMR² | 69 | 71,1 |
| Other | 28 | 28,9 |
| Civil State |    |    |
| Married/Companion | 82 | 84,5 |
| Single | 13 | 13,4 |
| Divorced | 02 | 2,1 |
| Level Education |    |    |
| 1 to 3 years | 02 | 2,1 |
| 4 to 7 years | 09 | 9,3 |
| 8 to 11 years | 58 | 59,8 |
| >12 years | 28 | 28,8 |
| Work |    |    |
| Yes | 54 | 55,7 |
| No | 43 | 44,3 |
| Monthly family income |    |    |
| Up to 1 Min. Wage | 47 | 48,5 |
| Up to 2 Min. Wage | 30 | 30,9 |
| Up to 3 Min. Wage | 14 | 14,4 |
| Up to 4 Min. Wage | 04 | 4,1 |
| 5 Min Wages or more | 02 | 2,1 |

¹Total sample: 97 patients
²Metropolitan Region of Recife
It was found that the satisfaction of the users is related to six variables investigated (marital status, paid work, presence of some discomfort since the insertion of the method, increased menstrual flow, change in the duration of menstruation and change in the frequency of weekly sexual intercourse), because they obtained the p-value lower than 0.05.

According to the degree of satisfaction of users in relation to the use of the IUD T Cu 380A, 93.8% were satisfied with the method (Graphic 1) and among these, 68% stated that they did not feel uncomfortable since the insertion of the IUD, 42.3% did not show an increase or reduction in the duration of menstruation, while 49.5% reported an increase in menstrual flow since its insertion and 53.6% denied abdominal pain. It was also observed that 54.6% stated that there was no change in the frequency of weekly sexual intercourse (Tables 3 and 4).

### Table 2 - Tocogynecological data of IUD Users T Cu 380A and the contribution of the family planning lecture to the choice of method. Recife, PE, 2017

| Variables                                      | N | %  |
|------------------------------------------------|---|----|
| Abortion                                       |   |    |
| 1 abortion                                     | 13| 13.4|
| 2 abortions                                    | 11| 11.3|
| 3 abortions                                    | 2 | 2.1 |
| No abortion                                    | 71| 73.2|

**Desire to become pregnant**

| Variables   | Total Sample: 97 Patients Planning Planejamento |
|-------------|-----------------------------------------------|
| Yes         | 23 | 23.7 |
| No          | 74 | 76.3 |

**Contribution of the Family Planning**

| Variables                                      | N | %  |
|------------------------------------------------|---|----|
| Yes                                            | 65| 67.0|
| No                                             | 32| 33.0|

**Use of another CM before the IUD**

| Variables                                      | N | %  |
|------------------------------------------------|---|----|
| Oral contraceptive                             | 50| 51.6|
| Injectable contraceptive                       | 15| 15.5|
| Condom                                         | 7 | 7.2 |
| Behavioral                                     | 1 | 1.0 |
| 2 or more methods                              | 10| 10.3|
| No method                                      | 14| 14.4|

1 Total sample: 97 Patients Planning Planejamento
2 Contraceptive method

### Table 3 - Relationship of variables surveyed with significance among IUD Users T Cu 380A. Recife, PE, 2017

| Variables                                      | Satisfied | Unsatisfied | Total |
|------------------------------------------------|-----------|-------------|-------|
| Marital state                                  | 96.3%     | 3.7%        | 100%  |
| Married/ Companion                             | 96.3%     | 3.7%        | 100%  |
| Single                                         | 79.9%     | 23.1%       | 100%  |
| Separated/ Divorced                            | 100%      | 0%          | 100%  |
| Paid work                                      | 98.2%     | 1.8%        | 100%  |
| Yes                                            | 98.2%     | 1.8%        | 100%  |
| No                                             | 88.4%     | 11.6%       | 100%  |
| Discomfort                                     | 83.3%     | 16.7%       | 100%  |
| Yes                                            | 83.3%     | 16.7%       | 100%  |
| No                                             | 98.5%     | 1.5%        | 100%  |
| Increased menstrual flow                       | 88.9%     | 11.1%       | 100%  |
| Yes                                            | 88.9%     | 11.1%       | 100%  |
| No                                             | 100%      | 0%          | 100%  |
| Number of menstruating days                   | 87%       | 13%         | 100%  |
| Increased                                      | 87%       | 13%         | 100%  |
| Decreased                                      | 100%      | 0%          | 100%  |
| Frequency of sexual intercourse                | 70%       | 30%         | 100%  |
| Increased                                      | 70%       | 30%         | 100%  |
| Decreased                                      | 100%      | 0%          | 100%  |
| Frequency of sexual intercourse                | 96.4%     | 3.6%        | 100%  |
| Increased                                      | 96.4%     | 3.6%        | 100%  |
| Decreased                                      | 100%      | 0%          | 100%  |

### Graphic 1. Degree of satisfaction of IUD Users T Cu 380A followed up at the IMIP family planning outpatient clinic. Recife, PE, 2017
Table 4 - Data on the experience of patients using the IUD T Cu 380A monitored at the IMIP family planning clinic. Recife, PE, 2017

| Variables                                           | N   | %    |
|-----------------------------------------------------|-----|------|
| **Used time (IUD)**                                 |     |      |
| Variation                                           |     |      |
| 1 year                                              | 14  | 14,4 |
| Up to 2 years                                       | 17  | 17,5 |
| Up to 5 years                                       | 28  | 28,9 |
| Up to 7 years                                       | 12  | 12,4 |
| Up to 10 years                                      | 26  | 26,8 |
| **Satisfaction with the use of the IUD**            |     |      |
| Satisfied                                           | 91  | 93,8 |
| Unsatisfied                                         | 6   | 6,2  |
| **Discomfort with the IUD**                         |     |      |
| Yes                                                 | 30  | 30,9 |
| No                                                  | 67  | 69,1 |
| **Abdominal Pain**                                  |     |      |
| Yes                                                 | 43  | 44,3 |
| No                                                  | 54  | 55,7 |
| **Menstrual Flow**                                  |     |      |
| Increased                                           | 54  | 55,7 |
| Decreased                                           | 13  | 13,4 |
| No change                                           | 30  | 30,9 |
| **Number of days menstruating**                     |     |      |
| Increased                                           | 46  | 47,4 |
| Decreased                                           | 10  | 10,3 |
| No change                                           | 41  | 42,3 |
| **Frequency of sexual intercourse after use**        |     |      |
| Increased                                           | 29  | 29,9 |
| Decreased                                           | 13  | 13,4 |
| No change                                           | 55  | 56,7 |

1Total sample: 97 patients

**DISCUSSION**

In view of the data obtained, the age group with the highest number of users of the IUD T Cu 380A was 35 years of age or older (47.4%), while 37.1% of the interviewees were in the age group from 25 to 34 years. This data differs from the study conducted by Holanda et al.13, where the average age of the users was 29.4 years of age, reaffirming that the IUD users are young women within the reproductive life period.

Information on the marital status of the interviewees showed that 84.5% were married or had a steady partner, being in agreement with the study published by Regianini14, which showed that 86% of 100 women using this method were married or had a steady partner14. This data remains one of the criteria for eligibility of the use of the IUD as a contraceptive method elaborated by the World Health Organization (WHO) in 200710,15.

Regarding the level of education, it was found that 59.7% had completed 8-11 years of education, similar to the data found in Regianini et al.14, where a percentage of 55% had the same educational level.

Regarding the time of use of the IUD T Cu 380A, most users used the method for a period of two to five years, according to the study by Holland11, where the average use of the IUD was 2.7 years. It is worth mentioning that both are short time intervals when compared to the 10-12 years of preservation of the contraceptive function of the method, as described in the FEBRASGO Contraceptive Manual8, and at 16 years of effectiveness of copper IUD, without exchange, in women with insertion from the age of 35 years, reported in a study by Campinas State University in 20057,11,12.

The information obtained through the toco-gynecological antecedents of the users, showed that 52.5% of the patients had only one child, confirming the remarkable decrease in the fertility rate in Brazil, as observed in studies conducted by Thiery17 and Kismisci18, where the average number of children per woman was six in 1950, going to 1.6 children per woman per year in 2000.

Regarding the general satisfaction of the interviewees, 93.8% expressed satisfaction with the IUD T Cu 380A, corroborating data found in the Netherlands studies12, in which, of the 209 women interviewed, 85% were satisfied with the method. Data that reinforce that IUD is an effective method and well accepted by users due to the longevity of its use, as shown in a study by Grimes19.

Regarding the complaints analyzed, we highlight the increase in menstrual flow (menorrhagia) since the placement of the IUD in 49.5% of the interviewed patients, given that this was also found in a study conducted by Holland11, where the same complaint was found in 44.7% of the participants. This is justified by the fact that IUD remains a foreign body in the endometrium, determining a more exacerbated inflammatory reaction of the same.

In the present study, there was no report of failure in the contraceptive function of the IUD T Cu 380A, reiterating what has already been exhaustively described in the literature, where it is known that it presents failure of 0.3 per 100 women/year, that is, every 1,000 users of this method three became pregnant, a value that is similar to the irreversible method such as that of tubal ligation20.

The present study showed that there was a contribution of the family planning class, offered by IMIP, for 67% of the users, who affirmed their importance in choosing the method. Among them, 95.4% were satisfied with the IUD, evidencing what is described in Silva RM’s qualitative study16, on the relevance of the integrated work.
performed by several health professionals in clarifying and assisting women and couples in the search for adequate contraception. Thus, corroborating for an increasing number of choice for this method.

CONCLUSION

In this study, it was observed that the majority of IUD users T Cu 380A are between the age group of 35 years or more, they are from the metropolitan region of Recife, are married or have a steady partner, studied on average 8 to 11 years, have paid work, live with the monthly family income of a minimum wage, were satisfied with the copper IUD, continuing its use, despite the existence of some discomforts such as increased flow and menstruation days.

Among the variables that presented dependence with the satisfaction of the interviewees with the IUD, we had civil status, paid work, the presence of discomfort after use of the method, the frequency of weekly sexual intercourse, increased flow and menstruation days. In addition, the contribution of the lectures of the IMIP family planning program in the choice of the method in question was showed to be effective. Therefore, this class should be maintained and improved with innovations in the way of addressing the theme, so that a greater number of women can know more about the available contraceptive methods, and being able to choose the method that best adapt.

Authors participation: We inform for due purposes that the article was prepared jointly by the group of authors with the following degree of participation: Figueirêa L and Pottes ML - Data collection; Brito R and Campos C - Organizational orientation and on the essence, argumentation and relevance of the work; Figueirêa L, Pottes ML, Brito R and Campos C - Analysis, research of articles, reading and exclusion of research not pertinent to the involvement of the chosen theme; Figueirêa L, Pottes ML, Brito R, Campos C, Nogueira R, Laurentino D - Reading and writing the content; - Brito R, Campos C, Nogueira R, Lima D Revision of the text regarding integrity and veracity regarding the sources used. Thus, the group of authors certifies joint participation in the preparation of the article, hoping to contribute to the theme in question.

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