

Satisfaction with the use of contraceptive methods among women from primary health care services in the city of São Paulo, Brazil

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Abstract

Objectives: to assess satisfaction with the use of contraceptive methods among women attending primary health care services in São Paulo, Brazil.

Methods: cross-sectional study conducted with a sample of 668 women aged 18-49 years, who were enrolled in 38 primary health care facilities in São Paulo city, Brazil, in 2015. Exclusion criteria were no sexual initiation, use of irreversible contraceptive methods for more than five years, pregnancy and no contraceptive method use. Data were analyzed using chi-square and multivariate logistic regression.

Results: in general, women were satisfied with current contraceptive method (78.7%). The higher percentage of satisfaction was observed among IUD users (94.7%), and female and male sterilization users (93.5% and 91.7%, respectively). Withdrawal users were less satisfied (52.9%). Contraceptive method itself was the only factor associated with satisfaction. Barrier or traditional method users were less likely to be satisfied with their contraceptive methods than irreversible method users.

Conclusions: long acting contraceptive method and irreversible method users were more satisfied with their contraceptive methods. Efforts should be undertaken in order to make these contraceptives available and accessible in primary health care facilities in Brazil.

Key words Contraception, Patient satisfaction, Family planning, Primary health care

Introduction

Despite the high proportion of women using modern contraceptive methods in Brazil,¹ the rate of unintended pregnancies remains high.^{1,2} Numerous aspects may contribute to this supposed contradiction, such as the inadequacy in the supply of contraceptive resources in primary health care services, especially the long-acting reversible (LARC) ones, such as the IUD and the implant; ineffective or even absent educational and counseling activities on contraception; and the lack of defined flows and protocols to meet the contraceptive needs of women, men and couples, among other gaps in contraceptive care in the country.³⁻⁶

From an individual perspective regarding the correlates of contraceptive use, little is known about the satisfaction of Brazilian women with contraceptive methods in use. This is a relevant research topic, given that satisfaction with the contraceptive method is related to a continuous and consistent method use, which in turn affects its real effectiveness.⁷ Moreau *et al.*⁷ estimated that, at least half of the time, women stop using the regular method because they are not satisfied with it, which leads to greater contraceptive vulnerability.

International studies show that satisfaction with the contraceptive method depends largely on the characteristics of the method itself. Methods that are highly effective, offers longer duration and few side effects, for example, are those that users report more satisfaction with.⁸ Therefore, there is greater satisfaction among users of long-acting reversible methods, such as the IUD and the implant^{8,9} and less satisfaction with hormonal methods, which are associated with frequent side effects, such as the pill and the injectable one.^{7,9} Individual characteristics associated with satisfaction with the contraceptive method are little explored in the country so far.

In view of this situation, this study aims to answer whether women are satisfied with the contraceptive method they use and what are the individual correlates of satisfaction with the method. The hypotheses that guided our study are that the proportion of women satisfied with contraceptive methods in use is low among users of short-term reversible methods and that the type of method is associated with satisfaction, but other individual characteristics such as reproductive intention or social-economic status also have an important effect. Thus, our objectives are to describe the proportion of women who report being satisfied with their contraceptive method and to analyze the association of individual characteristics with satisfaction regarding the contra-

ceptive method among women attending primary health care facilities (PHCF) in the city of São Paulo, Brazil.

Methods

This study is part of a larger study that aimed to estimate contraceptive discontinuation in the city of São Paulo, Brazil. This is a cross-sectional quantitative study; the population is a group of women aged 18 to 49, attending PHCF in the city of São Paulo. To determine the sample size, the proportion of women to be estimated equal to 50% was used as parameters; confidence level of 95%; sampling error equal to 5%; and the design effect (*deff*) equal to 2, which means that the sample size should be 768, rounding up to 800. Considering that estimates should be obtained among women using contraceptive methods, the estimated proportion is 80%,¹ and the number of women who should be interviewed was 1,000.

This was a two-stage sample: the first-stage consisted of PHCF being selected by means of the proportional-to-size probability (PPT) method, which was measured by the number of Pap smear tests performed in 2014. Based on this criterion, 38 PHCF out of a total of 441, were selected. The selected PHCF are geographically distributed throughout all regions of the city.

In the second stage of selection, women attending PHCF for either Pap smear tests, medical or nursing consultations were selected to participate in the study. It was not possible to select women randomly, observing that there are multiple combinations of organizing medical appointment attempting to collect Pap smear tests in PHFCs, such as simultaneous scheduling of all of them at the same time or open demand without any kind of scheduling. For this reason, it was decided to invite every women awaiting for medical appointments to collect Pap smear tests in these PHFCs. Interviews were conducted until 27 valid interviews per PHCF were completed.

As the objective of this study is to analyze contraceptive method satisfaction, we considered just a subpopulation of non-pregnant women who reported using contraceptive methods at the time of the interview.

Data were collected through face-to-face interviews by health researchers (nurses, psychologists, and midwives) who were not professionals at the PHCF. Women awaiting medical and nursing consultations or for Pap smears tests were invited to participate in the study. The objectives of the study and the

content of the questions were explained. Women who agreed to participate in the study read and signed formal consent. The interviews were conducted in the PHCF with a structured instrument using the *Census and Survey Processing System - CSPro in tablets*, from October to December 2015.

The dependent variable was the satisfaction with the contraceptive method used. This variable was constructed based on the question "Are you satisfied with the use of [CITE THE NAME OF METHOD]?", which was asked only to women who reported using contraceptives at that time. The following responses were accepted: no, yes and more or less. "Yes" answers were considered "satisfied with the contraceptive method in use" and "no" and "more or less" responses were grouped as "not satisfied with the contraceptive method in use". Therefore, it is a dichotomous variable. For the women who reported using two or more contraceptive methods, the question was asked considering the most effective contraceptive method.¹⁰

The independent variables were age (18-24, 25-34 and 35 and over); schooling (up to 8 years, between 9 and 13 years and 14 years and over); socioeconomic status (A, B, C, D / E, according to Criterio Brasil), paid activity (no and yes); married (no and yes); reproductive intention, if want to have (more) children, want no (more) children, and not sure; consulted health professional before using the method (no and yes); number of contraceptive methods in use (one and two or more); and type of method in use. The latter variable was categorized in two forms: in descriptive analysis, the categories comprised tubal ligation, vasectomy, IUD, oral pill, injectable, male condom and withdrawal; for the analysis of correlates, the categories were irreversible contraceptive method (tubal ligation and vasectomy), LARC (*or long acting reversible contraceptive*, which includes the IUD and implant), hormonal (oral and injectable contraceptives), barrier (male and female condom), and traditional (withdrawal and ovulation calendar). Monthly and 3-month injectable hormonal contraceptive methods were analyzed in the same group.

We analyzed data in Stata 14.0. Correlates of satisfaction with the contraceptive method were analyzed using the chi-square test. We then conducted multiple logistic regression considering significant variables in the chi-square analysis ($p < 0.05$) and age and schooling for adjustment due to its close relation with the use of contraceptive methods.¹¹

The project was submitted and approved by the Research Ethics Committee of the University of São

Paulo School of Nursing (CAAE 1,553,428) and by the Research Ethics Committee from the Municipal Health Department of the Municipality of São Paulo (CAAE 984,976).

Results

Altogether, 1,535 women were invited to participate in the study: 132 refused to participate and 372 met the exclusion criteria. Thus, 1,031 women were interviewed. In this study, women who reported being pregnant were also excluded ($n = 196$), along with women who reported not using contraception at that time ($n = 167$), which resulted in 668 valid interviews.

On average, women were 31.9 years of age ($sd = 8.2$) and had 10.1 years of schooling ($sd = 2.9$). The majority (70.4%), reported being married and just over half had paid job (54.0%). The mean age at the first sexual relationship was 17.2 years. The mean number of previous pregnancies was 2.2 ($sd = 1.4$) and 27.1% reported previous abortion (spontaneous and / or induced). More than half of the interviewees did not want to have any (more) children (59.4%), while 35.0% wanted to have (more) children and 5.6% were not sure about it.

Regarding contraceptive use, oral contraceptives (37.9%), male condoms (23.5%) and the injectable ones (23.4%) were the most frequently reported. Nearly one-fifth of women reported using two or more contraceptive methods (19.5%), and the male condom was the most commonly cited as the second method. The majority reported being satisfied with the contraceptive method (78.7%). Table 1 shows that the highest proportion of satisfaction was observed among IUD users, followed by users of irreversible methods.

In the bivariate analysis, the correlates of contraceptive method satisfaction were the type of method used and having had consultations with a health professional before using the method, as shown in Table 2.

Table 3 shows the results of the multiple logistic regression. Only the type of contraceptive method showed a statistically significant effect regarding the contraceptive method satisfaction. Women using barrier methods or traditional methods were less likely to be satisfied with the method they were using ($OR = 0.25$ and $OR = 0.19$, respectively). Women using LARC or hormonal methods did show statistically significant difference in satisfaction with the method when compared to women using irreversible methods.

Table 1

Proportion of women using contraceptive methods according to the satisfaction with the method in use, São Paulo, 2015.

Contraceptive method in use*	Satisfied with the method		Total
	n	%	
IUD	18	94.7	19
Tube Ligation	29	93.5	31
Vasectomy	22	91.7	24
Oral pill	204	80.0	255
Injectable	122	77.7	157
Male condom	112	70.9	158
Withdrawal	9	52.9	17
Total	526	78.7	668

*Implant: only 1 woman reported the use and was fully satisfied; Ovulation calendar: 6 women reported the use and were also satisfied. No woman reported using female condom.

Table 2

Distribution of women according to their satisfaction with the contraceptive method, São Paulo, 2015.

Variable	Satisfaction with contraceptive method				p
	No		Yes		
	n	%	n	%	
Age (years)					0.161
18-24	36	24.6	110	75.4	
25-34	61	23.0	204	77.0	
35 and older	45	17.5	212	82.5	
Schooling (years)					0.495
Until 8	43	24.3	134	75.7	
9-13	85	20.4	332	79.6	
14 and older	14	19.9	60	81.1	
Socioeconomic status*					0.941
A	4	23.5	13	76.5	
B	71	22.1	250	77.9	
C	64	20.2	252	79.8	
D-E	2	20.0	8	80.0	
Paid activity					0.822
No	69	21.6	250	78.4	
Yes	73	20.9	276	79.1	
Married					0.246
No	31	18.1	140	81.9	
Yes	111	22.3	386	77.7	

continue

*4 women refused to answer; **1 woman did not answer.

Table 2

concluded

Distribution of women according to their satisfaction with the contraceptive method, São Paulo, 2015.

Variable	Satisfaction with contraceptive method				p
	No		Yes		
	n	%	n	%	
Reproductive intention					0.788
Wants to have (more) children	55	22.4	191	77.6	
Does not want to have (more) children	81	20.9	307	79.1	
Not sure	6	17.6	28	82.4	
Contraceptive method in use					0.002
Irreversible	4	7.3	51	92.7	
LARC	1	5.0	19	95.0	
Hormonal	84	20.4	328	79.6	
Barrier	45	28.5	113	71.5	
Traditional	8	34.8	15	65.2	
Number of contraceptive methods in use					0.297
One	110	20.4	428	79.6	
Two or more	32	24.6	98	75.4	
Consulted with a health professional before using method **					0.001
No	50	30.3	115	69.7	
Yes	92	18.3	410	81.7	
Total	142	21.3	526	78.7	

*4 women refused to answer; **1 woman did not answer.

Table 3

Results of multiple logistic regression analyzing satisfaction with the contraceptive method, São Paulo, 2015.

Variable	OR	CI95%
Contraceptive method		
Irreversible	1.00	-
LARC	1.61	0.17 - 15.5
Hormonal	0.35	0.12 - 1.01
Barrier	0.25	0.08 - 0.77
Traditional	0.19	0.05 - 0.75
Consulted with a health professional before using the method		
No	1.00	-
Yes	1.36	0.83 - 2.21
Age (years)		
18-24	1.00	-
25-34	1.01	0.63 - 1.65
35 and older	1.51	0.90 - 2.55
Schooling (years)		
8 years and less	1.00	-
9 to 13 years	1.34	0.86 - 2.10
14 years and more	1.54	0.76 - 3.13

LARC= long acting reversible contraceptive; Hosmer-Lemeshow= 0.734.

Discussion

We analyzed the satisfaction with the use of the contraceptive method among PHCF users in the city of São Paulo, Brazil. In this study, most women were satisfied with the contraceptive they were using, especially with if the method was irreversible or LARC. Satisfaction was associated with the type of contraceptive method, and traditional and barrier methods users were less likely to be satisfied.

Although some studies about contraceptive method satisfaction used different methodology and are not directly comparable to ours, the high rate of satisfaction with LARC and irreversible contraceptive methods observed in this study corroborates other findings.^{9,12,13} In this study, even greater satisfaction was observed when compared to the findings of a study conducted in the United States with more than 5,000 women, in which the satisfaction with IUD use was 80%,⁹ and also with Australian women of various age groups.¹⁴

The high rate of satisfaction with the use of pill and injectable methods is worthy of attention, since some studies show that these are precisely the contraceptives that women declare to be less satisfied with. This dissatisfaction is probably related to the side effects caused by the hormonal methods, to the dependence on self-discipline and to the need of strong motivation of the users.⁷ All these situations may contribute to making hormonal methods highly discontinued.¹⁵⁻¹⁷

However, the difference between our findings and others can be explained by two reasons: either Brazilian women are really satisfied with the methods they use, and this finding is quite positive; or women attending our Unified Health System (SUS) may feel that it is not easy to access more effective methods, such as LARC, and this may affect their satisfaction in some way.¹⁴ For example, the high satisfaction of women who use pills and injectable methods may be more related to the fact that they face barriers to full access irreversible methods^{18,19} and even LARC, such as hormonal IUDs and implants, that are not even available in SUS.²⁰ In addition to this, it is easy to obtain injectable contraceptives and pills in drugstores, even without medical prescription.²¹

Regarding the correlates of contraceptive method satisfaction, our results confirm that it is associated with the type of method used, as well as described in other studies.^{7,8} Traditional and barrier method users were less likely to be satisfied with their contraceptives than tubal ligation and vasectomy users. Similar data were found in an American study in

which traditional and barrier method users were twice more likely to be dissatisfied with their method compared to hormonal and irreversible method users.⁸ Dissatisfaction with barrier and traditional methods approaches may stem from the uncertainty regarding their effectiveness,²² as they are exactly the least effective.¹⁰ On the other hand, it is important to emphasize the reasons that may explain why women continue to use such methods, even though they are relatively unsatisfied. These reasons may include the absence of side effects of traditional methods, non-dependence on a health professional to prescribe or insert, double protection afforded by barrier methods, and, finally, easy access to them.

In the bivariate analysis, women who reported having received contraceptive counseling were more satisfied with their method. It is possible that contraceptive counseling allows women to choose the method that best suits their reproductive needs and intentions, and thus may become more satisfied with the method.²³ In addition, the group of women which had the highest rate of satisfaction are precisely the users of methods that depend on the evaluation and intervention of health professionals, which includes irreversible methods and IUDs. In any case, this variable was not statistically significant in the adjusted analysis.

Contrary to our hypothesis, no individual variable concerning social or reproductive characteristics was associated with the contraceptive method satisfaction. However, no possible influence of the partner was investigated, which is certainly a limitation of this study. The influence of the partner could explain, in part, why traditional and barrier methods (such as male condoms and withdrawal method) are the ones that women reported lower satisfaction, since they depend directly on the partner's action and motivation.

Our findings confirm that the characteristics of contraceptives do determine women's satisfaction with it. For this reason, it has been suggested that LARC methods should be the first to be offered during contraceptive counseling, not just because they are associated with higher satisfaction,⁹ but also because they are highly safe and effective.¹⁰ The offer of LARC at SUS could contribute to the reconfiguration of the Brazilian contraceptive *mix*, currently centered on the pill, male condom and female sterilization,¹ with positive impacts in reducing the occurrence of unintended pregnancies and unsafe abortions.

The way in which the provision of LARC may be routinely incorporated into primary health care services remains unclear, as there are barriers to the

availability of copper IUD in the country^{24,25} and other LARC methods are not available in SUS. The need of being satisfied with the contraceptive is highlighted as dissatisfaction can lead to contraceptive discontinuation, making women and couples vulnerable regarding contraceptive methods. Such implications arising from dissatisfaction with the contraceptive method should be taken into account in the context of family planning programs and actions.

This study has some limitations, like the fact that we measured current contraceptive use. This may have underestimated the use of traditional methods, which are used occasionally together or alternately with hormonal methods. Another limitation arises from the fact that satisfaction among women who were pregnant was not investigated, even though this group comprises a fifth of the interviewees. It may be that many of these women have had unintended pregnancies arising from inconsistencies and discontinuation in the use of contraceptive methods due to

the their dissatisfaction with them. We also used a simple question to measure satisfaction with the use of contraceptive method instead of a validated scale. The reasons why women were not fully satisfied with the contraceptive method were also not investigated.

This study fills the gap on the knowledge regarding the use of contraceptive methods among Brazilian women in a period in which few studies have been recently conducted on the subject. The findings confirm what other studies have shown: users of more effective contraceptive methods - long-term and irreversible - are the most satisfied, and this result may inform the scale-up of the offer of this type of contraceptive at SUS.

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