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Original Research Article

Qualitative assessment of barriers perceived by women using perception scale of barriers in contraceptive use as measurement tool

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ABSTRACT

Background: This study was conducted to determine the barriers and obstacles perceived by women with regard to contraceptive use by using perception scale barriers in contraceptive use (PSBCU) as the measurement tool in women utilizing the family planning services.
Methods: It was a cross-sectional study conducted amongst 300 reproductive age group of women. Perception scale of barriers to contraceptive use was designed as 5-point Likert scale and the scale contains three dimensions. The domains were emotional dimension (10 items), social dimension (8 items) and cognitive dimension (9 items). The scale was administered using face to face interview. Each perceived obstacle was assessed by women using 5-point Likert scale ranging from strongly agree (score 5) to strongly disagree (score 1). The lowest score obtainable from the scale was 27 whereas the highest score was 135. Highest score indicates maximum barriers.
Results: By administering PSBCU scale, a maximum score was obtained for intra uterine contraceptive devices and a minimum score obtained for DMPA. Therefore, this study showed that intra uterine contraception devices have the highest barriers and long acting injectable-DMPA has lowest barriers.
Conclusions: A scale like PSBCU will be useful to know about the experience of current contraception and obstacles perceived and thereby addressing the issues to improve the uptake of contraception services and as well as to reduce the discontinuation rates.

Keywords: Barriers, Contraception, PSBCU scale

INTRODUCTION

Usage of modern contraception effectively prevents unwanted pregnancies and improves the socioeconomic well-being of women and their families.[1] Contraceptive usage indicates how developed a country is and demonstrates the amount of conscious efforts used by couples for the purpose of controlling reproduction rates.[2] Contraception usage is one of the effective primary prevention strategy to reduce maternal mortality in developing countries.[3] In order to reduce the risk of adverse maternal, perinatal and infant outcomes, WHO (2006) recommended proper spacing between pregnancies.[4]

Contraception promotion tailored to the needs of women from low and middle socio-economic status and requires multisectoral efforts.[5] Family planning remains one of the pillars of safe motherhood in reducing maternal mortality in developing countries.[6] Higher national level quality and availability of family planning services reduce average fertility rates.[7]

The definition of unmet need for pregnancy is percentage of women who do not want to become pregnant but are not

using contraception.[8] The potential barriers for contraception are poor access to contraception, insufficient information about free provision of family planning services, fear of side effects, insecurity, cultural and religious disagreements and gender issues.[9]

Modern contraceptive usage has determinative effects on societies and the health status of women. Reliable contraception helps men and women to plan their family sizes, avoiding unintended pregnancies which can cause anxiety and increase maternal mortality.[10] Unmet need for contraception and number of unwanted pregnancies is high in many developing countries.[10]

Very few studies in literature are available on contraception and barriers perceived by women on utilising contraception services. Already available studies do not have a standard questionnaire. A common misconception is that unmet need is measured by simply asking women if/when they want to become pregnant. Hence this study used PSBCU scale to measure the barriers perceived by women utilising family planning services under three domains such as emotional, social and cognitive domains. Taking cognisance of the barriers perceived to the contraception, family planning services could be strengthened.

METHODS

Study design

It was a cross sectional study.

Sample size

Totally 300 women participants. Information gathered from the participants attending Sri Ramachandra Medical College Obstetrics and Gynecology OPD during the period February 2020 to March 2022.

Inclusion criteria

Age group 18 years-49 years (who have not attained menopause and who have not undergone permanent sterilisation), individuals who have used and who have been using contraceptives.

Exclusion criteria

People who aged >49 years and <18 years, who have attained menopause, who have undergone permanent sterilisation.

Procedure

Informed consent obtained and informed that they could end the interview at any point of time. The objective of the study explained and assurance given that the interview would remain confidential. The individual taken to a separate room to fill the forms using face to face interview.

Perception scale of barriers to contraceptive use was designed as 5-point Likert scale. The scale contains three dimensions: emotional dimension, social dimension, cognitive dimension. The total score was calculated by adding up the score from each item. The lowest score obtainable from the scale was 27 whereas the highest score was 135. A highest score indicates a high level of perceived obstacle.

Statistical analysis

The collected data was inspected for completeness before getting into the Microsoft excel spread sheet. Data analysis was performed with an intention to treat approach using Statistical Package for Social Sciences (SPSS IBM) 21. The quantitative data was expressed in frequency and percentage.

RESULTS

Among the study participants involved, 63.3% out of 300 participants in the study belonged to the 26-35 years of age.

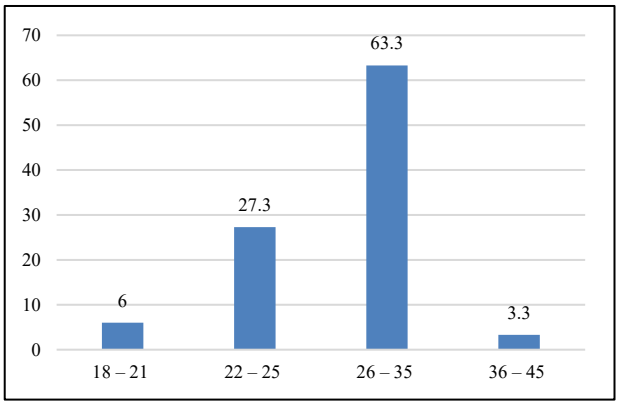

Figure 1: Age distribution among the study participants.

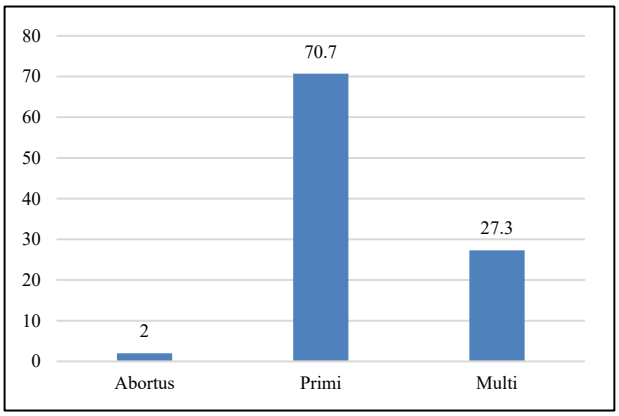

Figure 2: Obstetric score among the study participants.

Among the study group, 70.7% of women using modern contraception methods were having one child.

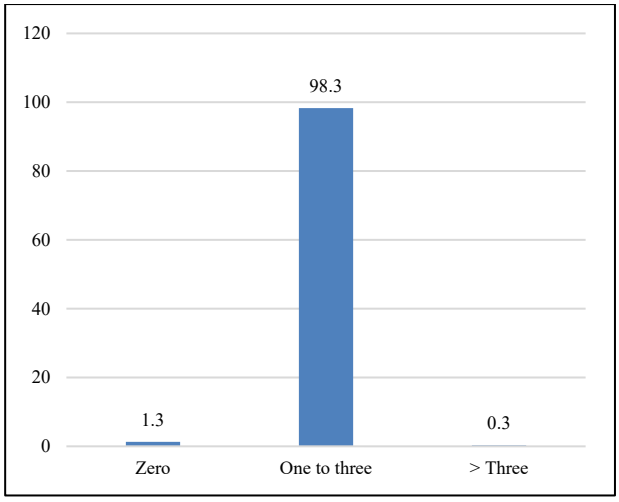

Figure 3: Number of children among the study participants.

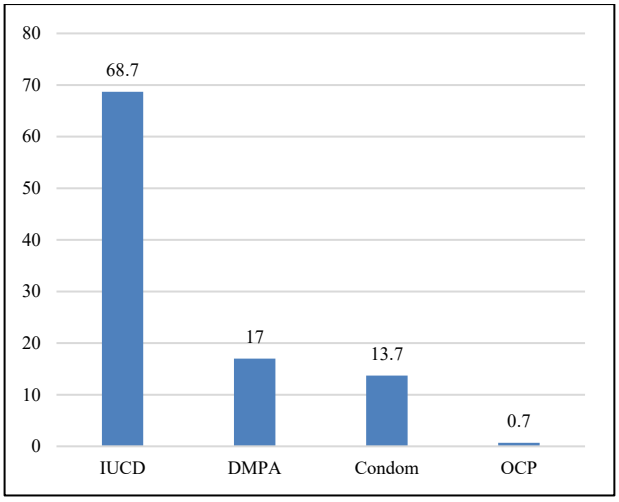

Figure 4: Contraceptive of choice among the study participants.

Table 1: Barriers perceived by IUCD users- emotional domain, cognitive domain, social domain.

Emotional domain	Strongly disagreed (%)	Disagreed (%)	Neutral (%)	Agreed (%)	Strongly agreed (%)
It is not suitable for me	78 (37.9)			52 (25.2)	76 (36.9)
It is painful	5 (2.4)	38 (18.4)		119 (57.8)	44 (21.4)
It is time consuming	173 (84)			33(16)	
It prevents my daily activities	109 (52.9)			70 (34)	27 (13.1)
It disturbs my sex life	206 (100)				
There are lot of risks	107 (51.9)			38 (18.4)	61 (29.6)
It is too expensive	206 (100)				
I'm concerned about side effects	72 (35)			35 1(17)	99 (48.1)
It's scary for me	39 (18.9)			122 (59.2)	45 (21.8)
Prolonged use affects me negatively	40 (19.4)		38 (18.4)	52 (25.2)	76 (36.9)
Social domain					
It affects my working life negatively	205 (99.5)				1 (0.5)
It affects my husband negatively	206 (100)				
It is time consuming to learn about it	206 (100)				
It is time consuming to get used to it	206 (100)				
It is time consuming to get information	206 (100)				
It is time consuming to go to examination	8 (3.9)	1 (0.5)		74 (35.9)	123 (59.7)
It is difficult	154 (74.8)			52 (25.2)	
I have to take long break from work	206 (100)				
Cognitive domain					
I find it strange	168 (81.6)	38 (18.4)			
I find it embarrassing	168 (81.6)	38 (18.4)			
It doesn't fit in with our culture	206 (100)				
It doesn't fit in with my beliefs	206 (100)				
It is difficult to obtain access to it	206 (100)				
It is embarrassing to obtain it	206 (100)				
It is not hygienic	205 (99.5)	1 (0.5)			
My husband doesn't want it	205 (99.5)	1 (0.5)			
I can't talk to male professional about it	176 (85.4)	30 (14.6)			

Table 2: Barriers perceived by DMPA users- emotional domain.

	Strongly disagreed (%)	Disagreed (%)	Neutral (%)	Agreed (%)	Strongly agreedm(%)
Emotional domain					
It is not suitable for me	51 (100)				
It is painful	51 (100)				
It is time consuming	51 (100)				
It prevents my daily activities	51 (100)				
It disturbs my sex life	51 (100)				
There are lot of risks	51 (100)				
It is too expensive	51 (100)				
I'm concerned about side effects	51 (100)				
It's scary for me	51 (100)				
Prolonged use affects me negatively	51 (100)				
Social domain					
It affects my working life negatively	51 (100)				
It affects my husband negatively	51 (100)				
It is time consuming to learn about it	51 (100)				
It is time consuming to get used to it	51 (100)				
It is time consuming to get information	51 (100)				
It is time consuming to go to examination	51 (100)				
It is difficult	51 (100)				
I have to take long break from work	51 (100)				
Cognitive domain					
I find it strange	51 (100)				
I find it embarrassing	51 (100)				
It doesn't fit in with our culture	51 (100)				
It doesn't fit in with my beliefs	51 (100)				
It is difficult to obtain access to it	51 (100)				
It is embarrassing to obtain it	51 (100)				
It is not hygienic	51 (100)				
My husband doesn't want it	51 (100)				
I can't talk to male professional about it	51 (100)				

Among the 300 study participants in this study, 98.3% who were using contraception had at least one to three children.

Among the 300 study participants involved in the study, 68.7% of them were using IUCD as their contraception followed by DMPA (17%) followed by condom and OCP.

In emotional domain, among the study participants who were using IUCD as their contraception, 37.9% strongly disagreed IUCD was not suitable for them. In social domain, 99.5% strongly disagreed using IUCD negatively affected their life. In cognitive domain, 81.6 strongly disagreed that it was strange for them to use IUCDs.

In emotional domain, among the study participants who were using DMPA as their contraception, 100% strongly disagreed that DMPA was not suitable for them. In social domain, 100% strongly disagreed that using DMPA negatively affected their life. In cognitive domain, 100% strongly disagreed that it was strange for them to use DMPA.

In emotional domain, among the study participants who were using male condom as their contraception, 100% strongly disagreed that it was not suitable for them. In social domain, 100% strongly disagreed that using condom negatively affected their life. In cognitive domain, 100% strongly disagreed that it was strange for them to use condoms.

In emotional domain, among the study participants who were using OCP as their contraception, 50% strongly disagreed that it was not suitable for them. In social domain, 100% strongly disagreed that using OCP negatively affected their life. In cognitive domain, 100% strongly disagreed that it was strange for them to use OCP.

Table 3: Barriers perceived by condom users- emotional domain.

	Strongly disagreed (%)	Disagreed (%)	Neutral (%)	Agreed (%)	Strongly agreed (%)
Emotional domain					
It is not suitable for me	41 (100)				
It is painful	41 (100)				
It is time consuming	41 (100)				
It prevents my daily activities	41 (100)				
It disturbs my sex life	41 (100)				
There are lot of risks	41 (100)				
It is too expensive	41 (100)				
I'm concerned about side effects	41 (100)				
It's scary for me	41 (100)				
Prolonged use affects me negatively	41 (100)				
Social domain					
It affects my working life negatively	41 (100)				
It affects my husband negatively	41 (100)				
It is time consuming to learn about it	41 (100)				
It is time consuming to get used to it	41 (100)				
It is time consuming to get information	41 (100)				
It is time consuming to go to examination	41 (100)				
It is difficult	24 (58.5)				17 (41.5)
I have to take long break from work	41 (100)				
Cognitive domain					
I find it strange	41 (100)				
I find it embarrassing	41 (100)				
It doesn't fit in with our culture	41 (100)				
It doesn't fit in with my beliefs	41 (100)				
It is difficult to obtain access to it	41 (100)				
It is embarrassing to obtain it	40 (97.6)			1 (2.4)	
It is not hygienic	41 (100)				
My husband doesn't want it	40 (97.6)			1 (2.4)	
I can't talk to male professional about it	40 (97.6)			1 (2.4)	

Table 4: Barriers perceived by OCP users- emotional domain.

	Strongly disagreed (%)	Disagreed (%)	Neutral (%)	Agreed (%)	Strongly agreed (%)
Emotional domain					
It is not suitable for me	1 (50)				1 (50)
It is painful	2 (100)				
It is time consuming	2 (100)				
It prevents my daily activities	2 (100)				
It disturbs my sex life	2 (100)				
There are lot of risks	2 (100)				
It is too expensive	2 (100)				
I'm concerned about side effects	1 (50)				1 (50)
It's scary for me	1 (50)				1 (50)
Prolonged use affects me negatively	2 (100)				
Social domain					
It affects my working life negatively	2 (100)				
It affects my husband negatively	2 (100)				
It is time consuming to learn about it	2 (100)				
It is time consuming to get used to it	2 (100)				
It is time consuming to get information	2 (100)				

Continued.

	Strongly disagreed (%)	Disagreed (%)	Neutral (%)	Agreed (%)	Strongly agreed (%)
It is time consuming to go to examination	2 (100)				
It is difficult	2 (100)				
I have to take long break from work	2 (100)				
Cognitive domain					
I find it strange	2 (100)				
I find it embarrassing	2 (100)				
It doesn't fit in with our culture	2 (100)				
It doesn't fit in with my beliefs	2 (100)				
It is difficult to obtain access to it	2 (100)				
It is embarrassing to obtain it	2 (100)				
It is not hygienic	2 (100)				
My husband doesn't want it	1 (50)				1 (50)
I can't talk to male professional about it	2 (100)				

DISCUSSION

Reliable contraception avoids unintended pregnancies.[1] The World Health Organization (WHO), in 2006, issued a recommendation that, after a live birth, the interval before attempting the next pregnancy should be at least 24 months, and at least six months after a miscarriage or induced abortion, in order to reduce the risk of adverse maternal, perinatal, and infant outcomes.[4,6,7]

Few studies recommended women should delay their first pregnancy until at least age 18, after a live birth, women should wait at least 24 months and after a miscarriage or induced abortion, women should wait at least 6 months before attempting the next pregnancy to reduce health risks for the mother and baby.[3] As per NFHS-V TFR for India is 2.0. The NFHS-V Survey shows 66.7% use of Contraceptives among married women (aged 15-49 years) and prevalence of modern method 56.5%.[8]

This study explored potential barriers to contraceptive use for women who were already using any modern contraceptive method using PSBCU scale. PSBCU scale has sub scales and these sub-scales determine obstacles perceived by women in relation to contraceptive use as being in the emotional domain, social domain and cognitive domain. Previous studies demonstrated that the "perception scale of barriers to contraceptive use" was valid and reliable to assess the barriers perceived by women to contraception.[2]

DHS defined unmet need for family planning as the percentage of women who do not want to become pregnant but are not using contraception. A common misconception is that unmet need is measured simply by asking women if/when they want to become pregnant and if they are using contraception.[10]

There is a scarcity of published articles on contraception and on contraception barriers perceived by women utilising family planning services. The available articles explored more about the unmet need and studies are deficient to determine the barriers perceived by women. There are some studies which analyse the factors associated with decreased uptake of contraceptive services but the questionnaire used to assess the barriers is not standardized.[1,5,9] Hence the present study aimed to determine the barriers perceived by women utilising family planning services using PSBCU scale.

Our study showed that 63.3% of women aged 26-35 years were using contraception. This is in contrast to previous studies, which showed that age was not a significant factor influencing Family planning use among sexually active women.[1,5] Our current study showed that 70.7% of women utilising family planning services were having one children which is in contrast to other various studies which showed the likelihood of using modern family planning services increases from women who had 3-4 children to at least 5 children compared to women who are yet to have a child.[1,5,7]

Our study was conducted in Urban region and hence this study lacks to find association between residence and uptake of contraception. However other studies in literature also showed no difference.[5] The present study showed greater usage of contraception among who had more education. In this study, 54.7% of graduated women were using contraceptives which is in consistent with few other studies.[11,12] This study showed that there is high prevalence of usage of contraception among lower middle socio-economic status which is in contrast to other studies.[12] The present study showed higher frequency of usage of IUCD as their contraception followed by LARC-injectable progesterone and male condom, among the study participants, which is contrast to the other studies.[13,16]

The present study showed that in emotional domain of PSBCU scale, barriers perceived against using IUCDs were that the women felt that it was not suitable for them and they were worried about pain, feared of risks and side effects. Some studies have stated that women were

reluctant to use IUCDs because of lack of knowledge, poor accessibility, distance and cost.[14,15]

The present study showed that in emotional domain of PSBCU scale, among the condom users (male condom), there was no barriers perceived as such and in social domain, few women felt that using condom as contraception was difficult, whereas in cognitive domain, they had perceived barriers like embarrassment to obtain it, spouse not liking it and few had difficulty in getting advice from a male professional where as other studies stated that Men's participation in family planning and contraceptive use was rare, and participants identified several barriers to condom use, including contraception being the responsibility of the women, socio-cultural issues, the stigma attached to condoms, unfamiliarity with condoms, the limitations of condoms, and issues of security in conjugal life.[16]

This study showed low frequency of usage of OCP as contraception. Among the participants, the barriers perceived concerns about side effects in case of emotional domain, spouse interests in case of cognitive domain, where as other studies showed weight gain, side effects as the barriers to use OCP.[17] The present study showed that the patients using long-acting injectable progesterone has no barriers perceived pertaining to this method in all the three domains of PSBCU scale, which is similar to previous studies.[7]

From the results of this study, method characteristics appeared to stand out. These findings suggest that addressing the barriers hindering access to contraceptive services may increase uptake of contraception and will reduce the rate of discontinuation of modern contraceptive methods. Counselling services for reproductive health and family planning must be strengthened to facilitate the use of contraception by sharing complete information on all available options, how to use them correctly, anticipated health effects and how to manage them. Regular follow-ups with contraceptive users, including inquiring about their health, their experience with current contraception, and information on any new contraceptives, must be conducted and monitored to ensure that quality counselling and information is provided. For this A scale like PSBCU will be useful to know about the experience of current contraception and obstacles perceived and thereby addressing the issues to improve the uptake of contraception services and as well as to reduce the discontinuation rates.

This study suggested that expanding the basket of contraceptive choices by adding new and more contraceptive methods, particularly LARCs, may have a positive impact on reducing unmet need.

This study should be applied to adolescent age group. This study used PSBCU scale from which is modified and validated. It might vary according to the socio-economic status and cultural beliefs of different areas.

CONCLUSION

Barriers perceived by women using contraception measured by PSBCU scale will be helpful to identify the obstacles in utilizing contraceptive services and to address them to increase the uptake of contraception and to reduce the discontinuation rates.

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