



RESEARCH ARTICLE

SOURCE OF KNOWLEDGE AND CHOICE OF CONTRACEPTIVE METHOD AMONG MARRIED RURAL WOMEN OF PAKISTAN

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ABSTRACT

Background: Pakistan is the sixth most populous country in the world, fourth in Asia & 2nd Muslim nation. Pakistan's population is growing by around two per cent a year but the economy has failed to keep pace with the population growth. Even though family planning programme was started in 1951 but rates of contraceptive use are low particularly in rural Pakistan, which is home to two-thirds of the about 180 million people in the nation. There is a wide range of contraceptives including traditional and modern methods. Lack of knowledge about contraceptive methods is the major constraint of acceptability among rural women in Pakistan. The study was intended to explore the choice and source of knowledge of family planning methods among married women in a rural area of Pakistan.

Material & Methods: A quantitative descriptive study of awareness and use of family planning methods among 120 married women aged 18-45 years, attending Reproductive Health Services-A Center (RHS-A) at Taluka Hospital, conducted in Panoaqil, Sindh, Pakistan, between August 2015 to Feb 2016 is reported. Data was collected by trained data collectors through a standardized structured questionnaire. The data were analyzed using IBM SPSS Statistics version 22 and Microsoft excel.

Results: The study sample was young with mean age 29.48 ± 5.05 years. Almost half of the study respondents (44.2%) were illiterate, while 39% were educated up to primary only. Three fourth (73%) respondents were housewives. Majority 91.7% of respondents belonged to rural areas having lower socio-economic status. About 80% of respondents heard about at least one method of contraception but only 26% have used one. Current use of family planning methods was low (9.2%) among them. Most preferred method (37.5%) was intrauterine device (IUD), followed by condoms (31.3%), oral contraceptives (25%), injectable contraceptives (15.6%), sub-dermal birth control implants (21.9%) and withdrawal (12.5%). The sources of knowledge for family planning identified by participants included 38% as Reproductive Health Service (RHS-A) centre, 34% as family planning clinic & 28% as lady health visitor (LHV).

Conclusion: The current study concludes that the knowledge of contraception was high among the women interviewed (80%) although only a small percentage (26%) has used one and even a very low percentage (9%) is currently practicing contraception. Most preferred method of choice was intrauterine device (IUD), followed by condoms, oral contraceptives, injectable contraceptives, sub-dermal birth control implants and withdrawal. Reproductive Health Service (RHS-A) centre, family planning clinic & lady health visitor (LHV) were the most popular sources of knowledge for family planning. Our research suggests that improved educational strategies are needed not only to improve the utilization of family planning among Pakistani women especially rural women but also make them aware of modern, more efficient long term methods for child spacing. The findings of the present study cannot be generalized due to the limited sample. Still, the study provides evidence and guideline for future research to formulate compelling public health interventions.

INTRODUCTION

Pakistan has one of the highest fertility rates in Asia, and the lowest rates of contraceptive use, resulting in poor reproductive health indicators for women and high neonatal mortality (Aga Khan University, 2013). At the onset of the fertility transition in the early 1990s, Pakistan's Contraceptive Prevalence Rate (CPR) showed a promising, albeit late, growth of 1.6 percent per annum after remaining extremely low from the 1950s to 1980s.

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Current use more than doubled from 11 percent in 1990-91 to 28 percent in just a decade. However, this growth spurt was short-lived. The first decade of the new millennium saw the increase in CPR fall to 0.7 percent per year on average. The Pakistan Demographic and Health Survey (PDHS) 2006-07 found that the CPR had actually fallen and contraceptive use had stagnated between surveys. Figures from the latest PDHS indicate only a modest increase in the CPR from 30 percent in 2006-07 to 35 percent in 2012-13. The increase in CPR over these two decades has been due to increases in the uptake of both modern and traditional methods. Both types of methods saw a threefold increase over this time period, with current use of traditional methods increasing from 3 percent to 9 percent

and modern method use from 9 to 26 percent. In 1990-91 a quarter of current users were using a traditional method and by 2012-13 this proportion was the same, the only change was that the rhythm method gave way to withdrawal (Demographic and Health Surveys, 2012-13). Despite increases in prevalence rates, Pakistan continues to have one of the lowest contraceptive prevalence rates in the region, second only to Afghanistan. India, Bangladesh, and even Nepal now have contraceptive prevalence rates of at least 50 percent. Moreover, while the proportion of traditional methods users in Pakistan is similar to those in its neighboring countries (7 to 9 percent), the prevalence of modern contraceptive use remains much lower (26 percent compared to a range of 43 to 53 percent) (Demographic and Health Surveys, 2012-). In 2006-07, close to half of married women of reproductive age in Pakistan had come across a family planning message on the TV, radio or newspaper. By 2012-13 this proportion had halved to only 1 in every 4 women.

Even amongst the small proportion who had been exposed to these messages, less than 30 percent were exposed to messages about using contraception, the others only read, heard or saw messages about the advantages of a smaller family. Up until 2006-07, female sterilization was the most common choice of contraceptive method amongst Pakistani women. This was followed by condoms and withdrawal. Over the next five years, much of the increase in CPR was due to an increase in the uptake of withdrawal and to a lesser degree, condoms. As a consequence, an equal proportion of Pakistani women now currently use these three methods (method-specific CPR ranges from 8.5 to 8.8 percent each). Other modern methods including pills, IUCDs and injectables comprise the remaining portion of the contraceptive method mix. These methods have seen marginal increases in uptake, with the pill actually showing a slight decrease in the last five years.

These trends indicate that overall, a quarter of women use withdrawal and another quarter use condoms, meaning that half of currently married women use couple-methods of family planning. This is very different from the rest of the South Asian region where female-methods are the most common forms of contraception (Demographic and Health Surveys, 2011). The majority of the Pakistani women do not practice contraception currently, not because of the desire to have a child, but because of problems related to the method tried. Dissatisfaction with method, method failure and bad experiences with side effects are all strongly related to a lack of knowledge about how a method works, how to manage its side effects, and which methods are more suited to personal preferences and situations. To increase the use of contraceptives in Pakistan, it is very important to get the perspective of users regarding contraceptive choices. The current study was designed to look into the sources of knowledge and choices being made about family planning methods in married women in a rural area of Pakistan. The area chosen for the current study was Panoaqil which is a taluka of Sukkur District in the Sindh province of Pakistan. PanoAkil is basically a rural agricultural area, PanoAkil's estimated population is 245,187 in an area of 3,193 Square Kilometers (1,233 Sq Miles). It comprises of Muslim and Hindu community while some Christian families also live there. The educational facilities beyond intermediate are not available here.

SUBJECTS & METHODS

Methods

A quantitative approach using a descriptive survey design was chosen for the study.

The instrument

A structured questionnaire was developed following an extensive literature review on the topic (Belay, 2000; Kaba, 2000; Pasha *et al.*, 2001) which ensured validity and reliability of the questionnaire. The socio-demographic details recorded in the questionnaire included the age of women, educational status, occupation, parity, marital status, and monthly family income. Three aspects related to family planning were explored in the questionnaire. The first was awareness and knowledge of modern contraceptive methods. The second was source of information of contraceptive methods. The third was choice of family planning method by the participants. Respondents were asked to indicate their awareness of specific contraceptive methods and the source of their information in relation to family planning. The practice of family planning practice was assessed by two ways. Firstly, Current contraceptive practice for women was assessed by reported current use of any contraceptive methods. Secondly, the respondents' particular contraception method preference was assessed.

Subjects

The participants were recruited using a convenience sampling technique. All married women aged 18 years to 45 years old who came to Reproductive Health Services-A Center (RHS-A) at Taluka Hospital, during six months from August 2015 to Feb 2016, and who had been residing in Panoaqil, Sindh, Pakistan were included in the study. For those women who could not read or write, the data collectors provided assistance.

Pilot

A pretest of the questionnaire was conducted with ten women who met the inclusion criteria and attended the Reproductive Health Services-A Center (RHS-A). The purpose of the pilot was to test the clarity and relevance of the questionnaire and to familiarize the data collectors with the instrument. The responses from the pilot study were checked for completeness and consistency by the principal investigator. The findings from the pilot study did not show potential problems. In order to avoid response biases, the participants in the pilot study were not included in the main survey.

Validity and reliability

The questionnaire was developed in English first and its content validity was assessed by two co-investigators. Then it was translated into Sindhi by the principal investigator, the local language of Panoaqil, and validated by another researcher. Four data collectors were recruited and trained by the principal investigator for data collection. The reliability of the instrument was tested using Cronbach's coefficient alpha, and the overall consistency of the instrument was found to be 0.61.

Ethical considerations

Permission to conduct the study was obtained from Population Welfare Department of Sindh. The Ethical review committee of Faculty of Health Science, at Baqai Medical University, gave ethical approval. Informed verbal consent was obtained prior to each interview. Participation was voluntary and no coercion was used in the data collection process. Respondents were fully informed of the nature of the study and the use of the data. They were free to withdraw from the interview at any stage or refuse to answer any particular question. Participants were also ensured of confidentiality. No personal identifying information was obtained for any part of the investigation.

Data analysis

After completion of data collection, the questionnaire was checked for completeness and consistency by the principal investigator before entering the data. The data were entered and analysed using, Microsoft Excel and IBM SPSS VERSION for Windows 22.0 software. Results were displayed in frequency tables, bar graphs, pie charts etc.

RESULTS

A total of 120 married women of child bearing age (18-45 years) fulfilled the inclusion criteria and consented for the study after assurance of confidentiality of data. The investigators endeavored hard to complete the target sample because most participants were fretful of counter-accusation despite of anonymity assurance. The mean \pm SD age of our respondents was 29.48 ± 5.05 years with a youngest respondent of age 19 years and eldest of 42 years. The mean \pm SD duration of marriage was 10.24 ± 4.56 years. Mean \pm SD parity was 5.11 ± 2.03 children. When age was categorized it was found that majority of respondents (80%) belonged to mid of their reproductive age which is age group of 26-35 Years. About 9% were between 15-25 years while about 11% were of 35-45 years. (See Table: 1).

Table 1. Descriptive statistics of respondents: Age, marital and educational status of the respondents

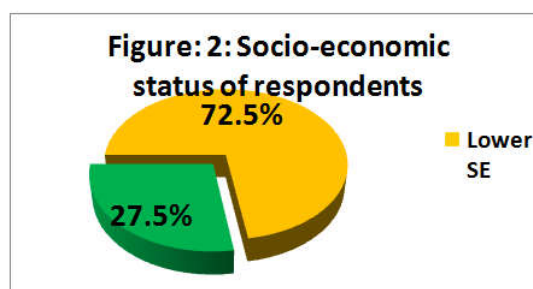
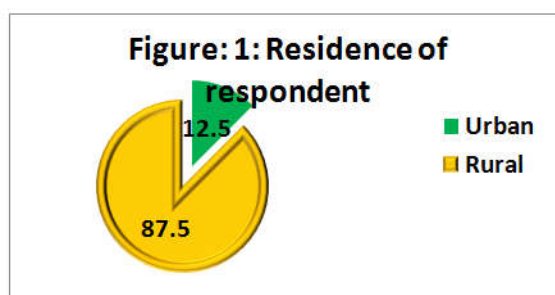
Age category	Frequency	Percent
15-25 Years	11	9.2
26- 35 Years	96	80
36-45 Years	13	10.8
Total	120	100
Educational Status	Frequency	Percent
Illiterate	53	44.2
Primary	47	39.2
Matric	16	13.3
Graduate	4	3.3
Total	120	100
Employed	32	26.7
Daily wages	15	12.5
Contract type job	12	10
Regular permanent job	5	4.2
Housewife	88	73.3
Total	120	100

Being from a rural area, almost half of the study respondents (44.2%) were illiterate, while 39.2% were educated till primary only. Only 3.3% were Graduate. Three quarters of respondents (73.3%) were housewives.

Remaining 26.7% were working included daily wages workers, having a contract job or a regular permanent job. (See table: 1). Majority (87.5%) of respondents belonged to rural areas and 72.5% belonged to lower socio-economic class with monthly income up to fifteen thousand rupees only. (See Table: 2 and Figure: 1 and 2).

Table 2. Descriptive statistics of respondents: other variables

Family Type	Frequency	Percent
Nuclear family	89	74.2
Single family	31	25.8
Total	120	100
Monthly Income	Frequency	Percent
<10,000	33	27.5
11000-15000	54	45.0
16000-20000	21	17.5
21000-25000	12	10.0
Total	120	100



About 80% of respondents heard about at least one method of contraception but only 26% have used one. Most preferred method 37.5% was intrauterine device (IUD), followed by condoms 31.3%, 25% oral contraceptives, 15.6% injectable contraceptives, 21.9% sub-dermal birth control implants and 12.5% withdrawal. According to table 2, 9.2% women were practically using a contraceptive method then. (see Table 3)

Table 3. Information and use of contraceptive method

Use of Contraceptive methods	Frequency	Percent
Heard about any contraceptive method	97	80.33
Ever used a contraceptive method	32	26.7
Condoms	10	31.3
Oral Pills	8	25
IUD	12	37.5
Injections	5	15.6
Implant	7	21.9
Withdrawal	4	12.5
Currently using a contraceptive method	11	9.2

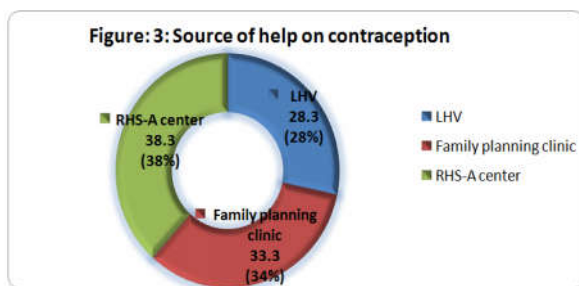
Majority of participants 36% identified Family planning clinic as source of information, 32% as LHV/ Nurse or doctor after child birth, 14% heard from Husband/ Mother-in-law/ family

member, and 12.5% from neighbor while 3% respondents got the information through newspaper, 2.5% through Television or Radio. (see Table 4)

Table 4. Source of Knowledge for FP methods

Source	Frequency	Percent
Husband/ Mother-in-law/ family member	17	14.2
Neighbour	15	12.5
Newspaper	4	3.3
TV/ Radio	3	2.5
Family planning clinic	43	35.8
LHV/ Nurse or doctor After child birth	38	31.7
Total	120	100

Reproductive Health Service (RHS-A) centre was identified by 38% of respondents as a source contraception and help in this regard, followed by a family planning clinic 34% & the lady health visitor (LHV) 28%. (See figure: 3).



DISCUSSION

The current study was designed to look into the sources of knowledge and choices being made about family planning methods in married women in a rural area of Pakistan. Contraceptive method of choice out of the available variety of contraceptive methods ensures continuation of use and reduces the drop-out rate (Jain *et al.*, 2016). The needs and values of individuals change over time and any one method cannot be suitable to an individual's need all the time. So if more than one method is available, and acceptor can switch over to a more suitable method of choice if the first (or previous) method of choice becomes unacceptable. Also the client's satisfaction with the method of choice is very important. Clients are best satisfied when they get the methods of their choice from a broad variety or 'mix' of contraceptive methods offered on a reliable basis (Jain *et al.*, 2016).

Choice of a contraceptive method becomes limited if clients do not have the knowledge of all contraceptive methods. Findings of current study revealed that 80% of respondents were aware of at least one method of contraception but only 26% have used one. In a study conducted by Mansoor ul Hassan (Mansoor, 1995) in 1995, all of the respondents were acceptors of contraceptive methods; all of them had the knowledge of at least one method. According to our study, most preferred method 37.5% was intrauterine device (IUD) which is in agreement with a study done in Nigeria which showed IUCDs as the most commonly used method (74.6%) in females attending family planning centers (Adeyemi *et al.*, 2008), followed by condoms 31.3%, 25% oral contraceptives, 15.6% injectable contraceptives, 21.9% sub-dermal birth control implants and 12.5% withdrawal while a study done in 2012 in

Peshawar (Pakistan) by Raheelah Amin (10) showed that the most preferred method of contraception was injectables 46.7% followed by 17.1% used pills; 17.1% used intrauterine devices; 10.5% came for tubal ligation and 8.6% used barrier methods like condoms. Among the illiterates injectables were popular, followed by IUCDs and tubal ligation but in our study no such correlation was seen (Adeyemi *et al.*, 2008). Raheelah Amin's findings were in agreement with Bhatti (Bhatti *et al.*, 1993) who presented report of National Institute of Population Studies in 1993. According to him Injection was the first choice of 20 percent, but the other consecutive choices are in agreement with our study findings including condom of 14 percent, and the pill of 17 percent respondents while only 4 percent preferred vaginal methods or practiced rhythm or withdrawal. Sub-dermal implants were in trial during that period of time (Raheelah Amin, 2012; Bhatti *et al.*, 1993).

Some studies have concluded that knowledge about specific methods and sources is limited (Pachauri and Santhya, 2002) and the use of modern method varies in different South Asian countries. Majority of participants (36%) in our study identified Family planning clinic as source of information, second most popular source (32%) was LHV/ Nurse or doctor after child birth, 14% heard from Husband/ Mother-in-law/ family member, and 12.5% from neighbor while 3% respondents got the information through newspaper, 2.5% through Television or Radio. Our findings are comparable with Ms. Reshma, who conducted her study in 2015 at Baliyana village (Rohtak). Her sample findings also revealed same sources of information including 12% had the knowledge of family planning through doctors/nurses; 24% of the women source of knowledge was from relatives/ friends.

The media source added to women's knowledge as 44% got the information from the radio/television, 16% had it through the newspapers, while only 4% knew about family planning through chemist attendants (Ms. Reshma, 2015). The leading role of the mass media (TV and radio) in the campaign of family planning cannot be overemphasized according to her but our findings are disappointing regarding media's role in family planning information. Mass media can play a very effective role in this regard because mass media source brings the message of family planning to the people in their language and in a way that is appealing to the listener (Reshma, 2015).

Apart from Reproductive Health Service (RHS-A) centre and family planning clinic, the lady health visitor (LHV) were found to be playing vital role in family planning in our study. Effective role of LHVs was also emphasized by BH Mansoor in 1993 in which he identified that Lady Health Visitors (LHVs) had a strong influence on acceptors in decision-making in Pakistan. It will be worthwhile to make full use of their services as promoters of family planning. Besides, satisfied users can play a vital role in enhancing contraceptive use. Method selection was not really a free choice. Women mostly depended on others' advice to accept a particular contraceptive method and use it. The choice of particular contraceptive method should be freely made, on the basis of the merits of a method. So the quality of services by LHVs should be improved (Mansoor, 1995). Strong advocacy programmes are needed to successfully achieve family planning goals (Kols, 2008). A few limitations in the study were observed as data was based on the respondents attending the Family Planning Centre.

Conclusion

The current study concludes that the knowledge of contraception was high among the women interviewed (80%) although only a small percentage (26%) has used one and even a very low percentage (9%) is currently practicing contraception. Most preferred method of choice was intrauterine device (IUD), followed by condoms, oral contraceptives, injectable contraceptives while sub-dermal birth control implants contraception which is the safest and devoid of failure in terms of birth control is not widely accepted and used. Reproductive Health Service (RHS-A) centre, family planning clinic & lady health visitor (LHV) were the most popular sources of knowledge for family planning. Our research suggests that improved educational strategies are needed not only to improve the utilization of family planning among Pakistani women especially rural women but also make them aware of modern, more efficient long term methods for child spacing. The findings of the present study cannot be generalized due to the limited sample. Still, the study provides evidence and guideline for future research to formulate compelling public health interventions.

RECOMMENDATIONS

- There is need to increase the use of family planning methods in Pakistan mostly in the rural areas where the level of utilization is still low. Provision of family planning choices and information about contraception ensures quality of care which increases the likelihood of the success of the family planning. More exploratory studies are needed to look at strengthening of family planning programme in Pakistan.
- More resources should be used to spread knowledge of FP as the study identified that media was poorly used/ effective in spreading FP related knowledge.
- Neighbourhood meetings, orientation meetings and face to face discussions, interpersonal communication (IPC) at door step to married women of reproductive age (MWRA) through a trained staff can help in adaptation and sustained behaviour towards contraceptives.
- Presence of skilled person/counsellors to clear the myths and rumours about the methods in community.
- To encourage satisfied clients should meet with the women who want long term contraceptives method at clinic setup or in groups at community influencers home.
- Involvement of traditional birth attendants (TBAs) in provision of family planning program can positively affect the contraceptives prevalence rate (CPR) because 78% deliveries conducted and home by TBAs.
- Advertisement through electronic and print media to sensitize the couple who have just started their married life about healthy time and birth spacing.

Limitation of Study

The participation in the study was voluntary so the data gathered for this study may not be generalized.

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Conflict of Interest

We have no pecuniary or other personal interest, direct or indirect, in any matter that raises or may raise a conflict with our duties as researchers.

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