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Changing Perceptions of Females Regarding Contraception & Associated Rights: An Interventional Study

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ABSTRACT

Introduction: There is a strong connection between sovereignty, provision of rights and health status of women. Females from middle and low-income countries have a poor perception of contraceptive choices and rights. **Aims & Objectives:** This study determined change in contraception related perceptions and associated rights in females through behavior change communication strategies. **Place and duration of study:** Basic Health Units of District Lahore, Pakistan during 2011-2016. **Material & Methods:** A community-based, quasi-interventional study was conducted on conveniently selected 100 Muslim married females with parity ≤ 4, attending randomly selected 10 basic health units out of 37 in district Lahore. Self-constructed, structured questionnaire was administered by interviewer in local language for pre and post intervention assessment of knowledge and perception about contraceptives and contraception-associated female rights was used. Religion-based messages which were tailored for this context were imparted using behavior change communication strategies. Reinforcement was done after sixth months and the post BCC assessment was carried out to measure the change in the knowledge, nine months after intervention. **Results:** The mean age of respondents was 28.15 ± 5.35 years, 37.0% were illiterate, 93% had income/capita/month ≤ Rs.3000. 59% of the respondents never used any method of contraception. Out of contraceptive users, 53.7% used condoms while 48.8% made decision of spacing after they had 2 or more children. After imparting BCC, there was significant change ($p<0.05$) in perception about delay in first pregnancy, spacing, and decisions related to planning family, utilization of contraceptive services and contraception on the whole. **Conclusion:** Knowledge and perception about contraceptive use and rights can be significantly improved by using targeted, contextualized, tailored messages through behavior change approach.

Key words: contraceptive use, contraceptive rights, contraception, behavioral change communication, perception, knowledge

INTRODUCTION

Various communication strategies have been deployed by United Nations, one of which is Behavior Change Communication (BCC), which mainly involves interpersonal communication.[1] BCC is a method that commends and indicates an achievable action by changing behaviors at individual levels. This method has played a pivotal role in development practices over a period of five decades and is now playing a central role in the process of development. Several new technological and strategic interventions have been made over a period of time. It is believed that advancement in socio- behavioral changes paves for improvement of development outcomes. Factors which influence BCC include; cultural values, socioeconomic status of the community, conflicting scenarios, implemented policies, legislation etc. Factors affecting the program include type of intervention, formative and summative evaluation, design of the project, human resources and financial coverage etc.[2] Social and Behavior Change Communication (SBCC) interventions have now become a part of project execution plans and more resources are being increasingly assigned for these activities.[3] SBCC is considered an intervention to address society's cultural barriers and attainment of goals for improved health.[4] BCC is a systematic process that involves determinative research and analysis of

the societal behaviors, communication planning, strategies, proper monitoring and evaluation. The materials and messages used are segmented carefully and pre-tested. Change is a gradual and step by step process starting from awareness, raising voice, preparation, planning, implementation, maintenance and culminating in accomplishment of desired targets.[5] There is considerable evidence that a well-designed and well-implemented communication program can influence norms and behaviors, promoting a positive environment required for delivery of health services.[6] SBCC campaigns are designed as such that they address the cognitive, social and emotional factors affecting the individual. 'Ideation' which refers to combination of all the above mentioned factors playing a vital role in bringing behavioral changes by reinforcement and confirmation of the decisions.[7] Family planning is a tool to improve health, reduce poverty and empowerment of women. Above 200 million women of developing countries intend to avoid pregnancy but face hurdles in use of modern contraceptive methods. The obstacles faced include lack of access to information, improper use of health care services, unwillingness of husbands, families, misconceptions about side effects and associated cost. It is documented that by tackling these hurdles we can prevent around 54 million unplanned pregnancies, > 1 million infant deaths and > 79,000 maternal deaths, each year. Families living conditions, education, healthcare and communities' infrastructure could be greatly improved.[8] Promotion of family planning services in countries with high birth rates has a huge potential in reducing poverty, hunger and preventing maternal death around 32% and childhood deaths of 10%.[9] Over the last forty years, family-planning programs have played a major role in the rise of prevalence from less than ten percent to sixty percent and reduction in fertility from six to about three births per woman in developing countries. Unfortunately, in many low-income and lower-middle income countries unmet need for family planning is still high.[10] Pakistan was the last amongst all its neighbors to experience fertility decline but still have very high rates.[11] Pakistan is predicted by the United Nations to move to fifth place of the most populous countries of the world by 2050. A wide gap has been observed between awareness and practice of contraception. Despite having basic knowledge, the compliance is still low. Fear of side-effects is among the main reasons of nonuse of contraception.[12]

Pakistan's contraceptive prevalence rate is 35.4% so the unmet need for contraception and family planning remains high (20.1%).[13] Information and counseling of women for informed choices and for effective use of an appropriate contraceptive method can be critical in overcoming obstacles to contraceptive use.[14] Reproductive rights are essential to be recognized by women as well as the society.[15] Women's health status influences health and wellbeing of children and family and also contributes in health and economy of the society.[16] Community-based studies to explore the change in knowledge of contraceptive use through BCC were few. This study highlighted the actual frequency as well as the change in knowledge of females about contraceptive use and rights. BCC, in the light of faith based education would be the only tool for an effective and measurable change, bringing us closer to achieve the Sustainable Development Goals. Current study determines change in contraception related perceptions through behavior change communication in females.

MATERIAL AND METHODS

A Quasi-experimental study was done at basic health units in Lahore, Pakistan during 2011 to 2016.

A total of 100 women fulfilling the eligibility criteria were selected by taking proper written informed consent. Sample size for intervention was calculated using estimated difference in pre and post intervention perceptions as 0.35 and 0.65 in proportions, with a power of 80% and a confidence level of 0.95. Ten BHUs were randomly selected (draw method) out of 37. 10 females attending each BHU were selected through convenient sampling, making a total of 100 participants. Participants were females in reproductive age (15-49 years), married, Muslim, with a parity≤ to 4, illiterate and belonging to families with ≤ PKR-3000/ income per capita per month. Widows, unmarried gravid females and those with primary infertility were excluded.

Contraceptives usage, types and decision when to start was assessed. Perception and knowledge of contraception and its associated rights were assessed for Interval between pregnancies, decision about spacing, female's involvement in decision making, female's right to decide, duration of spacing, reason and duration of breast feeding. Perceptions and knowledge were assessed before and after BCC to measure change.

BCC Intervention: Contextualized, tailored messages in local language were developed. Intervention was planned and executed in 10 selected BHUs.

Pre-BCC phase, perceptions and knowledge about contraception use and its associated rights were assessed on a self-constructed, structured questionnaire in Urdu, using interviewer-administered approach.

BCC intervention phase, in first intervention session messages were imparted messages through discussion in small groups in a separate area in each BHU. Messages were delivered in Urdu using charts, flash-cards, role play and short vides. Discussion was encouraged during the session and a behavior change commitment was acquired at the end. Monetary incentive and refreshments were served to the participants. First session took almost 2 hours. Participants' attendance was marked. Second session was conducted with the same female groups after 6 months, all participants attended and same training was imparted.

Post BCC phase, females were called after nine months from the 1st phase and were interviewed on the same questionnaire used for baseline.

Confidentiality of information was maintained. Formal ethical approval was obtained from the institution.

Statistical analysis:

Data was entered and analyzed through SPSS version 20. Chi-square test was applied and where needed fisher exact test was used and a change measured through percent point as well. $P \leq 0.05$ was taken as statistically significant. SPSS Version 20 was used for data management.

RESULTS

Participants had a mean age of 28.15, SD + 5.35. 34% were married before the 18th birthday. Mean age at marriage 20.40, SD + 3.257. Out of 100 respondents, 37 % were illiterate and 83% house wives. Spouses of 64 % respondents were laborers. 53.0 % of the respondents had family size less than five. Total 93% females had family income ≤ Rs.3000/- per capita per month. Average members per family were 5.82 + 2.40. Contraceptive usage rate was 41% and out of these only 22 (53.7%) used condoms. Eight (19.5%) females decided to use contraception after first child (Table-1). Difference between Pre BCC and Post BCC perception about delay in first pregnancy was significant ($\chi2$= 5.291, p=0.021) and change in percent point was significant. Difference between Pre BCC and Post BCC perception regarding method of contraception was significant. ($\chi2$ = 56.05, p = 0.000), (Fig-1). Decision making for spacing between pregnancies by female partner, reason for the right and breast feeding were found to be significant (Table-2). Percent point change was observed in decision making on delay of first pregnancy, spacing between pregnancies and breast feeding for two and a half years (Table-3).

Variables	Frequency	Percent
Contraception Usage		
Never used Contraception	59	59.0
Used Contraception	41	41.0
Type of Contraception		
Condoms	22	53.7
IUCD	10	24.4
Inject able	5	12.2
Oral pills	3	7.3
Coitus Interrupts	1	2.4
Decision about Contraception after		
One Child	8	19.5
Two Children	13	31.7
More than two Children	20	48.8

Table-1: Contraception Practices among females (n=100)

Variables	Pre BCC	Post BCC	p- value
What is an ideal Interval between two pregnancies			
Two years	37	44	p= 0.314
More than two years	63	56	
Decision of spacing should be by Female Partner			
Yes	79	85	p= 0.270
No	21	15	
Reason, if female Partner decide for spacing			
Religion and culture	2	25	p=0.004*
Culture	20	21	
Social factors	57	48	
Right of Female to decide for spacing			
Religion	67	97	p= 0.000*
Herself	10	2	
Law	23	1	
Duration of spacing			
One year	3	5	p= 0.000*
Two years	49	83	
Three years	48	12	
Duration of breast feeding suggested by			
Allah Almighty	75	100	NA
Law	4	0	
Individuals	2	0	
Don't Know	19	0	
Reasons of breast feeding			
Only for health of mother & baby	59	35	p= 0.000
Health of mother, baby & spacing	41	65	

**Fischer exact test was applied*

Table-2: Change in knowledge regarding spacing between pregnancies

Variables of Interest	Pre BCC n=100	Post BCC n=100	Percentage Change
Delay in first pregnancy	51	67	31 %
Decision of delay by female herself	55	80	45 %
Decision for spacing by female herself	79	85	7.5%
Religion has given the right to females for decision of spacing	67	97	44.8 %
Breast feeding is for health of mother ,baby and spacing	41	65	58.5 %

Table-3: Percent Point Change in perceptions before and after BCC

DISCUSSION

Family planning practices are still not at the desired level. Modern contraceptive methods use can be enhanced by quality, client-centered services. Family planning centers must be efficiently functioning, monitoring, and evaluating services addressing the unmet needs of family planning.[17] Married women in need of family planning in Pakistan are highest in Balochistan (66%), 65% in FATA, 61% in Azad Jammu and Kashmir and 55% in Khyber Pakhtunkhwa.[18] Another study in Naushahro Feroze, Sindh was revealed that use of modern contraceptive method prevalence was 27.9 percent and was concluded that female's socio-demographic factors were greatly associated with the utilization of novel contraceptive methods.[19]

In our study 37% females were illiterate, 83% house wives and around half were wives of laborers. It was hard to sensitize, motivate and educate them to an extent to bring an observable change in their perceptions and behavior. About 16 million women 15-19 years old girls under- go confinement in India each year, which is about 01 percent of overall births worldwide. Among middle-income states, adolescent average birth rate is 2 times more and among low-income states is 5 times more when compared with high-income states.[20] The use of contraceptive was considerably higher in working females (73.4 percent) than non-working females (33.0 percent). Females engaged in revenue generation were utilizing contraceptives more as compared with non-working females.[21]

This was evident from the current study that behavior change intervention produced a significant change in knowledge regarding contraceptive use and rights. Pre and post BCC differences in perception about delay in first pregnancy, method of choice for delay, decision for delay by female herself and religion's guidance (Islamic perspective on contraception) for making right decision were highly significant. A significant difference was also noticed regarding the decision for spacing, by female herself, right to decide, religious guidance on her right for spacing for two or more than 2 years as well as for breast feeding. A study showed that knowledge deficit, poor living conditions, ambiguity in the choice of contraceptives, and issues in having information on contraception are the key factors which hinder the effective use of contraceptives. Cultural and psychosocial norms and attitudes greatly affect the reproductive choices of people.[22] In another study it was observed that in Pakistan female's access to health services is based on her beliefs, demographic and socio-economic status. Even the decision to seek help in case of reproductive tract infection depends on literacy of female, family income, duration of illness, and sharing problem with husband.[23]

Our study revealed that the provision of appropriate knowledge through BCC can bring an observable and desirable change in knowledge of reproductive health. Therefore BCC strategies should be adapted as an ongoing activity at grass root level to get the positive results regarding reproductive health. For behavior change a demand based reproductive health commodity model is highly cost effective activity with unit cost of US$ 3.0. Similar intervention was carried out in Bangladesh at grass root level with unit cost 3.38 US$. Cost can be further reduced if this model is integrated with existing resources.[24]

A study in Uganda examined the relationships between multimedia BCC campaigns and females' intention to utilize modern methods of contraception in the target areas. Results indicated that exposure to behavior change communication message was related to intention to utilize and enhanced contraceptive usage.[25] Behavior change communication strategies are believed to be a significant part of reproductive health services. Health education through various media has been observed to be useful in both enhancing knowledge and encouraging behavioral change.[26]

Religion-based, tailored messages, fitting the context are a best way to bring an observable behavior change as shown by the findings of current study. In Australian young Muslim females were found to be well-versed with reproductive issues because of the Islamic perspective of contraception and reproductive rights.[27] A complex association is observed between individual's religiosity and reproductive and sexual activities of people in France.[17] Islamic values are shaping reproductive and sexual health of an individual as well as their

health-related behavior.[28] Islam has given a beautiful and comprehensive package of rights to a woman for improvement in reproductive health and wellbeing.[29]

Improvement in knowledge of contraception for change of behavior is still a challenge.[30] A systematic review concludes that clients knowledge is effectively increased by educational tools.[31] Limitation of the study is the short duration of follow up. Practice change could have been assessed again after a certain period of time.

This research demands designing of specific policies and programs to fulfill the communication gap and basic educational needs resulting in promotion of healthy practices among communities.

CONCLUSION

The study concludes that effective logical communication is a useful tool to bring an observable change among females regarding contraceptive use and rights. The average age of females at marriage was younger with low literacy rate. Condoms, IUCD and Injectable contraceptives were the mostly used methods of contraception and the use was high before last pregnancy. There was significant difference in knowledge and perception about rights of females for decision making on reproductive health matters, especially contraception, after intervention through religion-based behavior change communication.

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