

Encouraging Young Married Women (15-24 Years) to Improve Intra-Spousal Communication and Contraceptive Usage through Community Based Intervention Package in Rural India

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Abstract

Background: Inter-spousal communication plays a crucial role in facilitating couples for adopting family planning practices and lowering the risk of early pregnancy and adverse reproductive health consequences. The present study was conducted to understand the effect of a community based intervention package on awareness and motivation for contraceptive use to delay pregnancy among young married couples through improving intra-spousal communication.

Methods: A quasi-experimental research design used for a sample survey of 1680 young married women from two districts of India. The program was developed and implemented to increase knowledge and access to services for improved sexual and reproductive health of young married women through a multi-pronged intervention involving community mobilization, advocacy, micro planning and capacity building of frontline functionaries and district health care providers. The effect of intervention on the reproductive health of young married women was assessed through baseline and end-line evaluation.

Results: The findings suggest that 18 months of community based intervention had significantly improved couple communication on family planning (Intervention area: 43% vs. Control area: 13% point change) as well as utilization of contraception among young married women in the intervention area (27% point change) as compared to control area (5% point change). Regression analysis has indicated that young couples in the intervention area were more likely to discuss about contraceptive use (OR: 3.38; $p < 0.01$) than the control area. In both districts, there was an impressive increase in proportion of women, who reported that they could communicate with their husbands on contraceptives usage. Further the study showed that those women who had communicated about contraceptive use with their husbands were more likely to use contraceptive (OR: 9.53; $p < 0.01$) than those not communicate about it.

Conclusion: Inter-spousal communication is an effective strategy for enhancing family planning practices among young couples, especially, where early marriage is still prevalent, fertility rate is high and contraceptive use rate is relatively low. There is an urgent need to plan interventions through engaging males and facilitating inter-spousal communication for healthy family planning decisions and practices.

Keywords: Inter-spousal communication; Family planning; Young married women

Abbreviations: PHC: Primary Health Centre; OR: Odds Ratio; Sig: Significant; NFHS: National Family Health Survey; IEC: Information, Education and Communication

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Introduction

Family planning remains a key issue particularly in India where youth fertility is (211 million 15-24 years young married women) accounting for more than half of India's total fertility [1]. Data from third round of National Family Health Survey, (NFHS-III) indicated that women aged 20-49 years had a birth before they were 20 years old, and more than one in four become mothers before they were 18 years old. Contraceptive use is considered as one of the important determinants of fertility and fertility transition [2,3]. Although, there has been a significant improvement in the use of family planning methods among eligible couples, yet the contraceptive prevalence rate for condom use remains low (5.2%) at all India level especially in the younger couples (15-24 year old) [4]. The unmet need of contraception is highest among younger women.

In India, marriage before legal age at marriage in some districts is still prevailing resulting in early pregnancies and increased risk of complications contributing to their vulnerability. The median age at marriage for females is 16.7 years and 32% of young married women in the age group of 20-24 years got married before the age of 18. The family pressure for early child-bearing coupled with low education of these young married girls and taboo on discussions on sexuality and reproductive health further leads to low adoption of family planning practices [5]. Studies indicate that most of the young married women find themselves socially isolated and have poor inter-spousal communication [6]. Low male engagement in Government initiatives for promoting family planning practices has led to low uptake of these services especially among young couples. In India, decisions related to family size and contraceptive use are greatly influenced by the choice of husband and family members [7-9]. The importance of engaging men in family planning programs is also recognized for increasing the use of modern contraceptives [8].

There is a lack of data on successful community based interventions on influencing the contraceptive use through inter-spousal communication especially for young married women whose reproductive health needs are quite distinct from the older women [10-12]. There is now growing evidence that suggests involvement of husband as agents of positive change in promotion of inter-spousal communication, which can be an important determinant in decision making process [13,14].

To address the above problem, we conducted a community based intervention to improve the pregnancy planning and contraceptive use among young married couples through a multi-pronged intervention strengthening inter-spousal communication among couples on issues related to contraception. The intervention design focussed on specific interventions for couples, family members along with other community stakeholders towards care of young married women. Moreover, the capacity of frontline functionaries was also enhanced to address the reproductive health needs of young married women. In a quasi-experimental research design as a part of baseline to end-line evaluation, we assessed the effect of community based intervention, especially inter-spousal communication on the use of contraception among young couples.

Methods

Study design

This is a quasi-experimental study with a control arm. Data collection methods include population-based household surveys (baseline and end-line). The data was collected from villages under two intervention PHCs and one control (Comparison) PHC in both districts. The two intervention PHCs were geographically proximate to one another while the control PHC was at a distance to avoid contamination effect of the intervention.

Study settings

The study was conducted in Saharanpur district of Uttar Pradesh and Sri Ganganagar district of Rajasthan, India. Two intervention Primary Health care centres (PHCs) and one comparison PHC from each district (Saharanpur district of Uttar Pradesh and Sri Ganganagar district of Rajasthan) were selected for the study. The intervention area had a population of 60,000 from two PHCs, catchment villages and the comparison arm had 30,000 population from one PHC in each district. Twenty seven villages were selected in two intervention PHCs of Saharanpur district while 12 villages were selected under one control PHC. Similarly, 38 villages were selected under two intervention PHCs and 3 large villages were selected under one control PHC in Sri Ganganagar district. A village mapping was done in both the districts during baseline survey. The end-line evaluation was conducted in same villages to measure the effective of intervention programs on family planning methods.

Delivery of intervention

A multi-level intervention strategy was designed for this to strengthen the capacity of frontline health functionaries and improve knowledge and awareness of young married couples, community members and other key stakeholders. The intervention strategy was based on the findings of a systematic review on community based strategies to improve the reproductive health of young married couples [15].

At young married women level: by strengthening knowledge, and skills on reproductive health choices through group meetings, individual counselling by frontline functionaries. The project has used a segmentation and saturation approach aimed to influence young married couples reproductive choices in terms of family initiation planning on use of contraception, planning first pregnancy and spacing, accessing safe pregnancy, delivery and post natal care, knowledge on available contraception options for safer and informed reproductive choices.

At the spousal level: by improving inter-spousal communication and decision making on health care, and by encouraging partner involvement in understanding reproductive health issues.

At the family level: by sensitizing family members about health risks to early and repeated pregnancies, unsafe abortions, and ways to support daughter-in-law in terms of birth spacing, institutional delivery, ante-natal care etc. thus, ensuring well-being of the daughter-in-law and son.

At the community level: by advocating for young married

women health needs and rights among influential community members like- PRIs, VHSNC members, members from self-help groups, thus, facilitating change toward organizational and social norms that prevent the people to talk on reproductive health issues openly. Involvement of satisfied acceptor couples using contraceptive methods has influenced couples, who are not using any contraceptive method through interpersonal communication within the locale domain.

At the health system level: by strengthening the capacities of health care providers and frontline functionaries to deliver quality care, and widen their reach to the needs of young married women thereby increasing access to essential health services.

Sampling

A multi-stage sampling technique was used to select respondents. At the first stage, the districts and PHCs were purposively selected based on health service indicators. The PHCs were at a sufficient distance from one another. After identification of the PHCs, all households within the catchment area of each PHC were allotted a unique study number in order to select the households for the baseline and end-line survey. The subjects were randomly selected according to the inclusion- exclusion criteria.

Sample size

To observe an expected intervention effect size of 15% on improving the reproductive health choices among young married women, 800 young married women in the age group [from each PHC coverage area (alpha of 0.5%) was estimated. A total of 260 young married women were selected from each study PHC with equal representatives of four groups in different reproductive life stages (married and never pregnant; married and pregnant for the first time; married and the mother of one child; and married and currently pregnant with second or higher order child or mother of two or more children). 841 women were included in end-line evaluation (565 from intervention PHCs area; 276 from comparison PHC area) in Sri Ganganagar while, in Saharanpur 851 women were included (574 from intervention PHCs and 277 from control PHC) in the study. At baseline, the total sample size from both the districts was 1076 from the intervention area and 524 from the control area.

Tool for baseline survey

A survey questionnaire was developed and pre-tested in local language on a sample of respondents to measure its feasibility and assess deficiencies. The finalized questionnaire had two major sections: The first section deals with demographic and socio-economic characteristics of women, and the next section deals with explored contraceptive knowledge, and practices and aspects of reproductive health. The list of variables used for the analysis included- age of the woman and her husband; woman's age at marriage; education and occupation of the woman and her husband; number of the living children the couple have; socio economic status; knowledge, skills, attitudes, practices and barriers on family initiation processes, access to antenatal care, institutional delivery; post natal care, safe abortion and spousal communication regarding family planning and birth spacing.

Data collection procedures

The data collection was conducted by the district project team including field investigators hired locally from the districts. The data collection teams from each district gathered information as per the technical guidance of the head office and supportive supervision of the district coordinator. A rigorous intervention package including couple counselling, group meetings, community mobilization and other behavioural change strategies were also executed by the district project teams to measure the effect of intervention plan.

Statistical analysis

The data was entered to both excel spread sheets and SPSS. This data set was crosschecked by the monitoring and evaluation expert to ensure its quality. Data cleaning, collation and analysis of data were done by a dedicated team of researcher. Data analysis was conducted through frequencies, percentages and regressions using SPSS version 22.0. Comparisons were done for both intervention and comparison groups and between pre-intervention (baseline) and post-intervention (end-line) phases.

Ethical consideration

The study protocol, informed consent form, and baseline household survey questionnaire were reviewed and approved by the MAMTA Ethic & Review Board. A prior approval was obtained from the state and districts health departments before commencement of the study. Informed consent also obtained from the study subjects and the respondents, who were included in the study.

Results

The intervention plan was developed and executed through intensive community mobilization focusing interventions on contraceptive uptake among young married women by involving husbands and family members. The strategies included individual and group meetings for young married women, husband, family members and other community stakeholders to develop better understanding of family planning and its need for the young married women. Couple counselling through outreach activities is one of the major activities of this project. The intervention package also included various behavioural change communication strategies including wall writings, IEC materials, community sensitization, activation of Village Health Sanitation & Nutrition Committees, folk and print media to promote inter-spousal communication among young married women and their husbands.

Demographic data

The end-line evaluation results highlighted that overall respondents from the intervention areas reported higher levels of inter spousal discussion on family planning than those from the control areas. An increase in inter spousal communication resulted in improved knowledge on family planning and utilization of contraceptives to avoid unwanted pregnancy (**Figure 1**).

The result shows that there was considerable improvement in

inter-spousal communication on choice of contraception in the intervention area as compared to control area. 66 percent of women reported that, they could discuss contraceptive methods with their husbands in the intervention area during the end line as compared to 23 percent women during baseline survey (Figure 1). At the same time, there was an increase from 44 percent to 57 percent of women who could discuss contraceptive methods with their husbands in the control area. To assess the net effect of intervention on couple communication, a binary logistic regression has been carried out. The regression results show that, more proportion of young married women are likely to discuss about contraceptives with their husband in the intervention area (OR: 3.38; $p < 0.01$) as compared to control area (Table 1). Thus there was a higher jump in the proportion of women who discussed the contraceptive issues with their husbands in the intervention area as compared to control area.

Contraceptive knowledge and utilization among young married women

There was a significant increase in the level of awareness amongst the target beneficiaries on availability and use of different contraceptives in intervention areas. This could be possible due to the use of demonstration kits of contraceptives during individual interaction and group meetings. Several other contraceptive promoting activities (educational games, videos on inter spousal communication, contraception, family planning, wall writings, media, etc.) were carried out at the intervention site in the district for increasing the knowledge and utilization of contraceptives among target beneficiaries. An increase in knowledge regarding condoms and contraceptive pills was observed at intervention site from baseline to end line, while in control site there was no major change in the awareness level of young married women. There was an notable increase in awareness level of I-pills in comparison to baseline (by 27%) while awareness on IUD increased by 19%. The current contraceptive use was increased from 32% to 59% in the intervention area, while this increase was from 35% to 40% in the control area (Figure 2).

The result of logistic regression highlighted that more proportion of young women who discuss contraceptive issues with their husbands were likely to use contraception (OR: 9.53, $p < 0.01$) as compared to those women, who are not discussing with their husbands, after controlling the effect of other socioeconomic

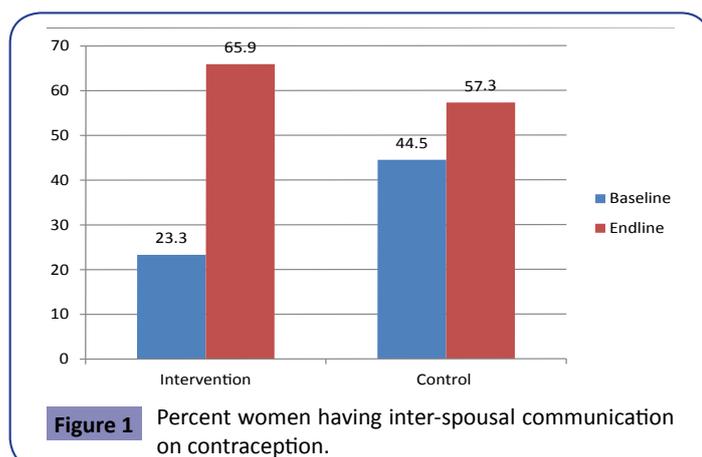


Figure 1 Percent women having inter-spousal communication on contraception.

and regional factors (Table 2). The controlling factors included-religion, caste, monthly income of the family, education of women, type of family and place of residence (district). The results of the study clearly indicate that the intervention strategies were successful in raising the awareness on couple communication and contraception use among the young women. One of the similar studies conducted in Bihar (popularly known as PRACHAR PROJECT) shows that demand for contraception increased from 25% at baseline to 40% at follow-up in the intervention areas but remained virtually unchanged in comparison areas [14].

Discussion

The present study showed higher acceptance of contraceptives among those couples who were not using contraception at baseline and participated in our family planning intervention compared to couples in the control group. Most importantly, young married couples who had higher inter-spousal communication were more likely to use contraceptives to delay their first pregnancy indicating that improving communication

Table 1 Logistic regression analysis showing the net effect of intervention on couple communication.

Background Factors	B	S.E.	Sig.	OR
Intervention Control area				
Intervention area	1.219	0.178	0.000	3.384
Education				
No Education				
Primary and Middle	0.212	0.271	0.433	1.236
Secondary and Higher Secondary	0.455	0.257	0.077	1.575
Age Group				
Below 20 years				
20 and above years	0.911	0.232	0.000	2.487
Caste				
SC/ST				
OBC	0.122	0.209	0.560	1.130
Others	0.133	0.332	0.690	1.142
Religion				
Hindu				
Muslim	-0.281	0.309	0.363	0.755
Others	-0.425	0.328	0.195	0.654
Family				
Nuclear				
Joint	0.631	0.313	0.043	1.880
Occupation of husband Job				
Agriculture worker and labour	0.502	0.269	0.062	1.652
Shopkeeper and other worker	-0.059	0.212	0.783	0.943
Income (in INR)				
5000 and below				
5001-10001	0.341	0.215	0.113	1.406
10001 and above	0.230	0.284	0.419	1.258
Districts				
Saharanpur				
Sri Ganganagar	0.113	0.225	0.616	1.120
Control over money				
No				
Yes	1.035	0.190	0.000	2.814
Decision Making				
No				
Yes	0.488	0.293	0.096	1.629

among couples is a feasible strategy to increase contraceptive use. In particular, the newly-wed couples who reported lack of knowledge as the principal reason for not using contraception seemed to be most benefited from this intervention. The results of the present study were similar to other research findings, that also showed an association between an increase in contraceptive use and increased inter spousal discussion in the community [12,13].

The results of the study led to an increased acceptability of family planning issues amongst young married couples. The intervention carried in the districts led to important findings. One of the important findings of the study included increased individual autonomy among young married women to choose and use family planning methods freely with their own choice and not restricted to get permission from their families on use of contraceptive. The intervention led to an increase in inter spousal communication as male involvement was better at intervention arm in comparison to the control arm. In a similar study, the intervention on family planning education led to an increase in contraceptive use among couples [16,17]. Further, the finding is in agreement with a Nigerian study that elaborated the benefits of family planning education to both husband and wife in encouraging contraceptive use and health family planning practices [18,19]. The present study therefore, focused interventions directly to both wife and husband instead of focusing only on women for fertility change behaviours.

Further, the identification of satisfied acceptor couples (couples who were benefitted after adoption of family planning strategies as designed in intervention) in promotion of contraceptives and facilitating discussion on family planning issues by sharing personal success stories benefitted the other couples in the community and thus, raised awareness and adoption of family planning services and products. The results of the present study not only lead to an increase in use of contraceptives but couples knowledge and uptake of modern contraceptives also increased considerably [20-22]. The findings showed a remarkable increase in awareness level regarding I-pills (emergency contraception) in comparison to baseline (by 27%) while awareness on IUD also increased awareness by 19% amongst target beneficiaries. This clearly indicates favourable attitudes towards family planning. Moreover, the results of the study highlighted that a well-developed intervention plan might lead to increase in knowledge

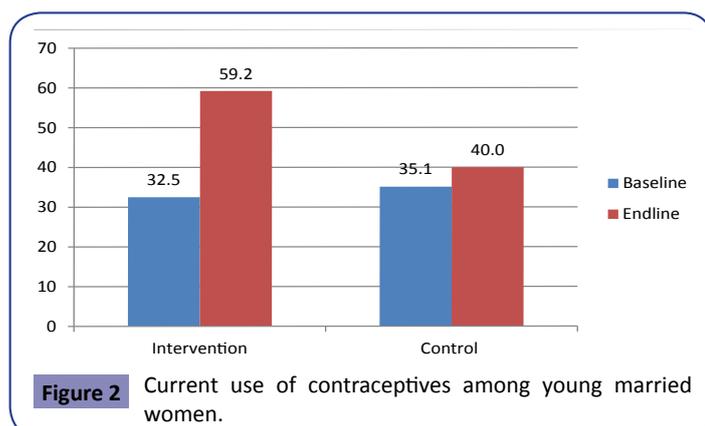


Figure 2 Current use of contraceptives among young married women.

Table 2 Logistic Regression Analysis showing the net effect of couple communication on current contraceptive use among young married women.

Background Factors	B	S.E.	Sig.	OR
Contraceptive use				
No				
Yes	2.254	0.231	0.000	9.529
Intervention				
Control area				
Intervention area	0.851	0.183	0.000	2.341
Education				
No Education				
Primary and Middle	-0.081	0.289	0.780	0.922
Secondary and Higher Secondary	-0.340	0.274	0.215	0.712
Age Group				
Below 20 years				
20 and above years	0.677	0.268	0.012	1.968
Caste				
SC/ST				
OBC	0.260	0.195	0.181	1.297
Others	0.081	0.296	0.784	1.084
Religion				
Hindu				
Muslim	-0.625	0.309	0.043	0.535
Others	-0.556	0.339	0.101	0.573
Family				
Nuclear				
Joint	0.106	0.319	0.740	1.112
Occupation of husband Job				
Agriculture worker and labour				
Shopkeeper and other worker	-0.225	0.201	0.263	0.798
Income (in INR)				
5000 and below				
5001-10001	-0.143	0.207	0.489	0.867
10001 and above	-0.456	0.274	0.096	0.634
Districts				
Saharanpur				
Sri Ganganagar	-0.152	0.210	0.469	0.859
Control over money				
No				
Yes	0.532	0.177	0.003	1.702
Decision Making				
No				
Yes	0.450	0.279	0.106	1.569

and attitudes of spouses towards healthy family planning practices, thus lowering negative attitudes and misconceptions. Similar studies indicate that by providing scientific information through group discussions, use of kits describing use of contraceptives with their benefits, inclusion of folk media relating to couple communication and family planning may widen the knowledge and lower different misconceptions [22].

As desired, the health workers, local stakeholders and community mobilizers do reinforce health messages on use of contraceptives and encourage men in supporting their wives through adoption of family planning methods and encouraging birth spacing. The present study also suggests cost-effective behaviour change efforts in promoting healthy family planning practices and increase in access to health services by young

couples to delay their first pregnancy. Interventions focusing on vulnerable community especially minority groups is also essential in lowering misconceptions and myths related to culture and beliefs regarding contraceptive use and birth spacing. The issue can be tackled through holistic and multi centric efforts by government, nongovernment organizations and communities together. The policymakers should increase male engagement in family planning programs through counseling of couples [20,23]. The key limitation of our findings was that the data was collected through cross –sectional survey limiting to only two PHCs in a district. Secondly, the data collected was limited to only women so the study didn't capture men's perception and intentions regarding contraceptive use and family planning during baseline and end-line evaluation.

Conclusions

The present study highlighted the effectiveness of a community based intervention plan leading to increased inter-spousal communication and increased uptake of contraceptives by young

married couples to delay their first or consecutive pregnancy. There is an urgent need to realise the unmet need of young married women in line with the existing policies of Government of India. The government needs to plan programs with interventions to reach to the vulnerable sections of young married women and their husbands through community mobilisations, family planning counselling centres, availability of relevant IEC materials, community sensitization meets and talks in order to increase awareness and enhance effective inter spousal communication and contraceptives choices.

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