An Appraisal of Husband's Support for Contraceptive Use in Low Resource Setting of Chattogram City, Bangladesh

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Abstract

This study aimed to explore the current status concerning the roles of husbands in family planning and to identify the associated factors in the slum areas of Chattogram city in Bangladesh. A community-based cross-sectional study was conducted among the women living in different slums (N = 400) of Chattogram city. Data were collected using a structured and facilitator-administered questionnaire. Cross tabulation with chi-square tests and multivariate logistic regression analyses were performed using IBM SPSS version 24.0. This study revealed that 70.5% of the husbands supported wives' contraceptive use. This study explored that husbands' having education (OR = 2.45, 95% CI: 1.42-4.22), having two children (OR = 0.37, 95% CI: 0.18-0.76) and more than two children (OR = 0.21, 95% CI: 0.09-0.50), more utility facility in the slum areas (OR = 2.32, 95% CI: 1.15-4.68), a good relationship between husband and wife (OR = 1.97, 95% CI: 1.13-3.44), commencing reproductive health communication after the birth of the second child (OR = 0.43, 95% CI: 0.19-0.99), respondents' having moderate knowledge on RH (OR =4.46, 95% CI: 2.10-9.46) and husbands' visiting any health center to take wives' reproductive health care (OR = 2.08, 95% CI: 1.06-4.09) were the predictors for supporting their wives in terms of contraceptive use.

Keywords: Reproductive health, Male participation, Family planning, Contraceptive use, Low resource setting, Slum, Bangladesh

Introduction

Some reports suggest that urban slums demand particular attention in Bangladesh because they house a significant population (UN-Habitat, 2013; UN-Habitat, 2016). Even though the proportion of Bangladesh's urban population living in slums has reduced from 87 percent in 1990 to 55 percent in 2014, the country's total number of slum residents has increased by over 50 percent (around 10 million people) during the two time periods (Mberu et al., 2016). This population poses a significant challenge to urban development, including public health and health systems already beyond the capacity to meet the current population's needs (Khatun

et al., 2012). Although average health outcomes are better in urban versus rural areas of Bangladesh (NIPORT et al., 2016), there are marked differences between urban slums and non-slum areas (Adams et al., 2015; NIPORT et al., 2015; Nahar et al., 2011). This disparity is caused by a lack of access to affordable health services (Ahmed et al., 2010; Choudhury et al., 2012). A recent study has shown that only 7.3 percent of the slums in Bangladesh have a public health clinic available (UNICEF, 2010). Moreover, significant parts of urban infrastructure, such as water and sanitation, are already inadequate to satisfy demand, and the consequences of these shortages are expected to manifest themselves in terms of public health (NIPORT et al., 2008). The size of the urban dwellers and the significant challenges of healthcare services to urban slum inhabitants make urban health a primary concern for Bangladesh and other analogous nations (Khatun et al., 2012).

Among the many challenges, promoting reproductive health (RH) programs, especially for decreasing maternal and neonatal mortality, is critical in many facets. However, to ensure universal access to healthcare by 2030, the government needs to play a stewardship role in improving the governance of urban health and affordable health care for all citizens. Reaching the slum dwellers with a suitable strategy is needed. In developing countries, since the 1990s, men's participation has been considered immensely crucial in addressing some of the most pressing reproductive health problems (Drennan, 1998). Accordingly, in Bangladesh, population programs address males to understand them, communicate with them, involve them, and support them to get better care for their partners. So, it is essential to investigate the current status of husbands' participation in their wives' family planning (FP) among the slum dwellers of Chattogram city, the commercial capital and the second-largest city of Bangladesh, which is hosting 21.44% of households living in the slum areas of the country (BBS, 2015).

The literature indicates that most previous studies focused on male involvement in women's reproductive health (RH) from Bangladesh's perspective. A study conducted by Nasreen et al. (2012) demonstrated that men participating in the BRAC health program were more likely than nonparticipants to care for their mothers' health, to be knowledgeable about neonatal danger signs, to provide newborn care, and to be more responsive to their mothers' needs during childbirth. As a result, male engagement in family planning provided them with the opportunity to cope with reproductive health issues.

Kamal et al. (2013) investigated the variables that impact male engagement in family planning and reproductive health in the Narsingdi municipality, situated 50 kilometers northeast of Dhaka, Bangladesh's capital. The survey findings found that male involvement in contraceptive usage was substantial, with around 63.2 percent of men participating in this area. On the other hand, the research did not properly justify men's non-participation in family planning and reproductive health practices.

A study on the use of modern contraceptives among urban men found that men had little knowledge or understanding of female methods, which prevented them from actively supporting their spouses in accepting, using, or continuing to use the methods effectively (Jahan et al., 1996). The interviewed males suggested using the media to motivate other males, provide privacy at service centers, and provide individual counseling for males. The study also

revealed that couple communication had a significant impact on male participation in family planning.

Following the findings of a study by Shahjahan et al. (2013), it was discovered that males with a more outstanding education, higher income levels, and those who watched the news were more likely to use reproductive health services in Bangladesh. According to the research findings, males have a significant amount of information about current contraception, including female methods. One of the reasons why contemporary contraceptives are not utilized is a fear of adverse effects, which leads to the employment of older techniques.

To date, as the above review indicated, no study investigated the status of husbands' support for wives' maternal health care and family planning as well. Besides, previous studies focused merely on men's and women's knowledge, attitude, and practice regarding family planning. However, male participation in the broad areas of maternal health, such as-supporting contraceptive use and promoting safe motherhood, has been ignored in the studies. This study attempted to fill this gap.

Conceptual framework

In order to inform our analysis, we used a customized conceptual framework (Figure 1) to understand the determinants of husbands' support in wives' contraceptive use; this builds on existing knowledge on factors associated with maternal health. We hypothesize that factors are associated with husband involvement in family planning at different levels. Our framework considers the socioeconomic and demographic factors, intra-spousal communication and relationship, reproductive health knowledge, and access to healthcare-related factors as the leading potential influencers of male involvement in contraceptive use. We, therefore, fit three models to explore these relationships in multinomial models.

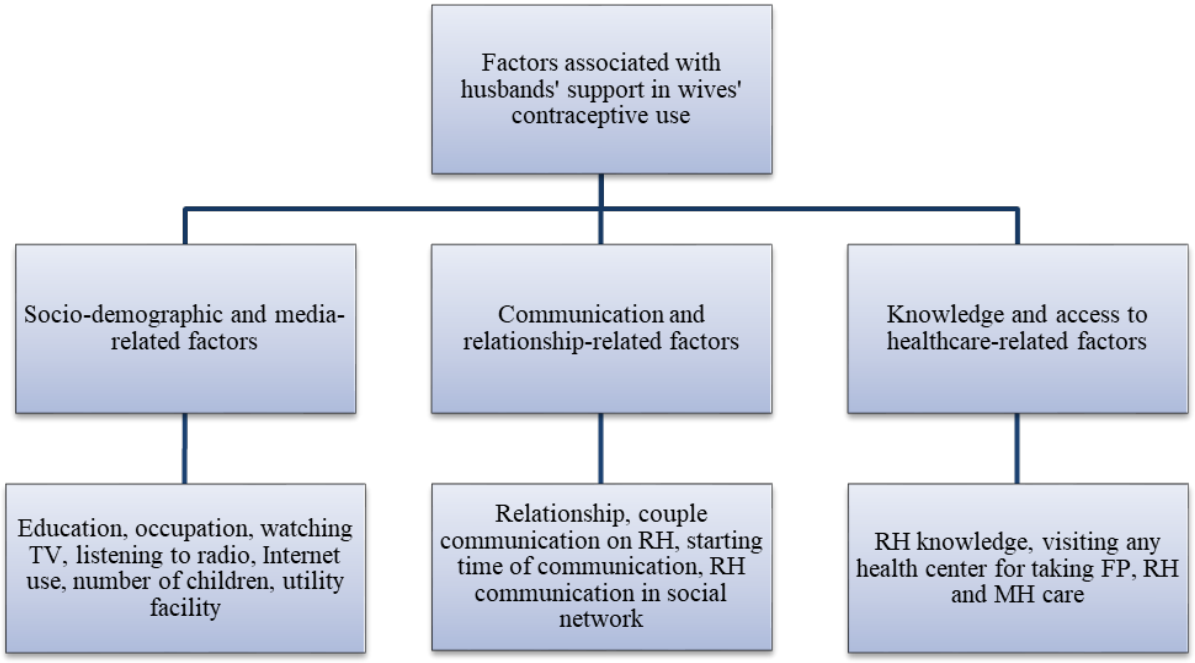

Figure 1 Customized conceptual framework to understand the determinants of husbands' involvement in family planning

Materials and methods

The current study used a quantitative research technique based on a cross-sectional survey of slum residents to achieve the desired research outcomes. This study was conducted in different slums of Chattogram City. The study population was constituted by the married women of reproductive age (19-45 years) living in the slums of Chittagong city during the survey. The study consists of 400 women participants living in different slums of Chittagong city. Study data were collected using a pretested, structured, and facilitator-administered questionnaire. The survey was guided by ten facilitators who were graduate students at the University of Chittagong. They were selected based on their past work experience in data collecting and analysis. The principal researcher trained them before conducting the survey. The data collectors discussed the relevance and goal of the study to the study participants before handing out the questionnaire. Each participant signed an informed formal consent form to participate in the study following the explanation. The facilitators ensured that the information obtained was kept private and anonymous. The need for voluntary participation was also emphasized. Participants in the study had the option to opt-out of the survey at any time.

Husband support in wives' family planning was assessed through four questions (Table 1). Then the responses to these questions were added together to generate the overall score. Afterward, the composite score ranging from 4 to 8 was dichotomized using mean (which was (7.30) as a cut-off value that above means value was coded as 2 depicting high support in family planning and a score below the mean value was coded as 1, showing low support in this regard.

The data gathered using a structured questionnaire, was coded and entered into SPSS version 24.0. Afterward, cross-tabulation and chi-square ($\chi 2$) analyses were used to observe the relationship between predictor and outcome variables. Then, variables with a $p < 0.05$ in the chi-square test were included in the multivariate logistic regression model to assess the contribution of each of these predictor variables. Most of the variables were fitted to the logistic regression. Three models were fitted to predict the determinants of three outcome variables in logistic regression. Model 1 examined the socio-demographic and media-related factors associated with four dependent variables regarding male participation in wives' contraceptive use. Model 2 explored the effects of socioeconomic, and communication, and relationship-related factors. At the same time, Model 3 examined the predictors about socioeconomic, communication and relationship, and knowledge and healthcare-related variables.

All $\chi 2$ and p-values < 0.05 in the omnibus test of model coefficients reported that three models in logistic regression performed well in predicting four dependent variables. In addition, The Hosmer-Lemeshow test was used to check the goodness-of-fit of the model that also supports our models as being worthwhile. Moreover, the classification table reports that the final model correctly classified 78.5% of cases overall, an improvement over the 70.5% in block 0 for husbands' support in wives' family planning. Model fit for husbands' support in wives' family planning: $\chi 2$ (5) = 75.734 for Model 1 ($p < 0.001$) and Nagelkerke $R^2 = 0.25$, $\chi 2$ (10) = 89.816 for Model 2 ($p < 0.001$) and Nagelkerke $R^2 = 0.29$, $\chi 2$ (16) = 115.664 for Model 3 ($p < 0.001$) and Nagelkerke $R^2 = 0.36$. The odds ratios and 95 percent confidence intervals for each variable coefficient in the final model are calculated for each variable coefficient (CI). Significant predictors were defined as variables in the multivariate analysis that had a p-value less than.05 in the analysis. When reporting the strength of the association between socio-demographic characteristics, communication, knowledge, and other variables, odds ratios (OR) with their 95 percent confidence intervals were utilized to indicate the relationship between the target outcome variables.

Results

Husbands' involvement in family planning issues

Table 1 depicts husbands' support in different aspects of family planning issues. Overall, 70% of the respondents reported their husbands' high support in contraceptive use. In particular, more than three-fourth (82.8%) of respondents acknowledged that their husbands supported their contraceptive use. Similarly, 83% of respondents reported husbands' approval of a small family. Moreover, there was a discussion on small families among 85% of couples, while about three-fourths (79.3%) of respondents' husbands provided assistance in spacing two years between two births.

Table 1 Distribution of husbands' participation in different aspects of FP

Variables	Categories	Frequency	Percentage
Husbands' overall support in family planning	High	282	70.5
	Low	118	29.5
Husbands' assistance in wives' contraceptive use	Yes	331	82.7
	No	69	17.3
Husbands' approval of small family	Yes	332	83.0
	No	68	17.0
Husbands' discussion with wives about small family	Yes	340	85.0
	No	60	15.0
Husbands' assistance in spacing two years between two births	Yes	317	79.3
	No	83	20.7

Bivariate analyses of husbands' support in FP by background characteristics

The percentage distribution of the husbands' support in family planning by selected socio-demographic, media, knowledge, and communication-related characteristics of respondents and their partners were presented in Table 2. On the bivariate analyses different variables were found to be significantly related to the frequency of husbands' assistance in family planning. Using Pearson's chi-square test significant predictors of husbands' assistance in family planning were found as husbands' education ($\chi^2 = 15.585$; $p < 0.001$), husbands' TV viewing ($\chi^2 = 14.383$; $p < 0.001$), number of children ($\chi^2 = 29.874$; $p < 0.001$), having the facility in the slum ($\chi^2 = 23.272$; $p < 0.001$), couple relationship ($\chi^2 = 23.433$; $p < 0.001$), spousal communication on FP ($\chi^2 = 6.824$; $p = 0.033$), initiating of spousal discussion on FP ($\chi^2 = 32.747$; $p < 0.001$), husbands' FP knowledge ($\chi^2 = 14.759$; $p = 0.001$), respondents' FP knowledge ($\chi^2 = 30.853$; $p < 0.001$), NGO's FP program in the slum ($\chi^2 = 12.209$; $p < 0.001$), and couples ever visited to any health center for taking SRH care with ($\chi^2 = 9.275$; $p = 0.002$).

Table 2 Bivariate analysis between husbands' support in FP and background characteristics

Variables ($N = 400$)	*n*	Husbands' Support in FP		*χ2*	*p*
		Low (%)	High (%)		
Husbands' education				15.585	<0.001
No education	151	41.1	58.9		
Have education	249	22.5	77.5		
Husbands' occupation				1.591	0.207
Laborer/rickshaw puller/business	284	31.3	68.7		

Variables (*N* = 400)	*n*	Husbands' Support in FP		*χ2*	*p*
		Low (%)	High (%)		
Driver/service/garment worker	116	25.0	75.0		
Husbands' TV viewing				14.383	<0.001
No	199	38.2	61.8		
Yes	201	20.9	79.1		
Husbands' radio listening				2.452	0.117
No	299	27.4	72.6		
Yes	101	35.6	64.4		
Husbands' Internet use				.023	0.879
No	270	29.3	70.7		
Yes	130	30.0	70.0		
Number of children				29.874	<0.001
1	146	15.1	84.9		
2	144	31.3	68.8		
>2	110	46.4	53.6		
Had the facility in the slum				23.272	<0.001
Little	200	40.5	59.5		
More	200	18.5	81.5		
Couple relationship				23.433	<0.001
Not good	145	44.1	55.9		
Good	255	21.2	78.8		
Spousal communication on FP				6.824	0.033
Rare	125	36.8	63.2		
Sometimes	143	30.1	69.9		
Often/regular	132	22.0	78.0		
Initiating of spousal discussion on FP				32.747	<0.001
Just after marriage	155	16.1	83.9		
After the birth of the first baby	126	28.6	71.4		
After the birth of the second baby	119	47.9	52.1		
Husbands' knowledge of FP				14.759	0.001
Poor	113	43.4	56.6		
Moderate	194	23.2	76.8		
Good	93	25.8	74.2		
Respondents' knowledge of FP				30.853	<0.001
Poor	78	55.1	44.9		
Moderate	252	22.6	77.4		
Good	70	25.7	74.3		

Variables (*N* = 400)	*n*	Husbands' Support in FP		*χ2*	*p*
		Low (%)	High (%)		
NGO's FP program in the slum				12.209	<0.001
No	253	35.6	64.4		
Yes	147	19.0	81.0		
Couples ever visited a health center for taking SRH care				9.275	0.002
No	275	34.2	65.8		
Yes	125	19.2	80.8		

Note: Rows against the categories of characteristics sum to 100%. Chi-square (*χ2*) test was performed to find the association.

Logistic regression analyses predicting the husbands' support in FP

The result of multivariate logistic regression models revealed that different socioeconomic, communication, and knowledge variables were statistically significant predictors for husbands' high support in family planning (Table 3). In this study, regarding the exploration of factors associated with husbands' help in family planning, model 1 depicts that husbands' having education (OR = 2.27, 95% CI: 1.39-3.71), watching TV (OR = 1.87, 95% CI: 1.12-3.13) and having more facility in the slum (OR = 2.89, CI: 1.73-4.84) had a higher likelihood to assist in wives' contraceptive use. On the contrary, having two children (OR = 0.36, 95% CI: 0.20-0.66) and more than two children (OR = 0.18 95% CI: 0.10-0.34) were less likely to help in wives' taking contraceptives than those having one child. Model 2 reports that along with the variables that appeared significant in the previous model, having a good relationship between husband and wife also had a higher odd (OR = 1.96, CI: 1.19-3.25) for husbands' participation in family planning.

The final regression analysis model suggests that husbands with education reported a higher likelihood of supporting family planning than those with no education (OR = 2.45, 95% CI: 1.42-4.22). Moreover, respondents having two children and more than two children were 0.37 times (95% CI: 0.18-0.76) and 0.21 times (95% CI: 0.09-0.50) less likely to help in wives' taking contraceptives than those having one child. In addition, the couples' having more utility facilities in the slum areas had a more significant association with their husbands' positive behavior regarding family planning with odds of 2.32 compared with those who had less facility (OR = 2.32, 95% CI: 1.15-4.68). Furthermore, having a good relationship between husband and wife showed significantly higher odds of husbands' support in wives' contraceptive use (OR = 1.97, 95% CI: 1.13-3.44). The odds of husbands' high assistance for their partners' contraceptive use were 0.43 times lower among the couples who commenced reproductive health communication after the second child's birth than those used to communicate after marriage (OR = 0.43, 95% CI: 0.19-0.99). The respondents who had moderate knowledge of RH were 4.46 times more likely to have better support from their husbands regarding contraceptive issues than those who had insufficient knowledge in this

regard (OR =4.46, 95% CI: 2.10-9.46). Furthermore, husbands with their wives showed greater odds while visiting any health center to take reproductive health care (OR = 2.08, 95% CI: 1.06-4.09).

Table 2 Logistic regression predicting husbands' support in FP

Variables (N = 400)	Model 1	Model 2	Model 3
	OR (95% CI)	OR (95% CI)	OR (95% CI)
Husbands' education			
No education (ref.)	1	1	1
Have education	2.27 (1.39-3.71)[b]	2.08 (1.25-3.46)[b]	2.45 (1.42-4.22)[b]
Husbands' watching TV			
No (ref.)	1	1	1
Yes	1.87 (1.12-3.13)[a]	1.86 (1.09-3.17)[c]	1.66 (0.94-2.93)
Number of children			
1 (ref.)	1	1	1
2	0.36 (0.20-0.66)[b]	0.45 (0.23-0.87)[c]	0.37 (0.18-0.76)[b]
>2	0.18 (0.10-0.34)[c]	0.26 (0.12-0.57)[b]	0.21 (0.09-0.50)[c]
Had the facility in the slum			
Less (ref.)	1	1	1
More	2.89 (1.73-4.84)[c]	2.57 (1.47-4.49)[b]	2.32 (1.15-4.68)[a]
Couple relationship			
Not good (ref.)		1	1
Good		1.96 (1.19-3.25)[b]	1.97 (1.13-3.44)[a]
Spousal communication on FP			
Rare (ref.)		1	1
Sometimes		0.88 (0.49-1.59)	0.71 (0.37-1.36)
Often/regular		1.31 (0.67-2.56)	0.82 (0.37-1.80)
Initiating of spousal discussion on FP			
Just after marriage (ref.)		1	1
After the birth of the first baby		0.61 (0.32-1.16)	0.51 (0.26-1.01)

Variables (N = 400)	Model 1	Model 2	Model 3
	OR (95% CI)	OR (95% CI)	OR (95% CI)
After the birth of the second baby		0.54 (0.25-1.16)	0.43 (0.19-0.99)[a]
Husbands' knowledge of FP			
Poor (ref.)			1
Moderate			0.74 (0.37-1.47)
Good			0.40 (0.13-1.20)
Respondents' knowledge of FP			
Poor (ref.)			1
Moderate			4.46 (2.10-9.46)[c]
Good			2.49 (0.75-8.28)
NGO's FP program in the slum			
No (ref.)			1
Yes			1.02 (0.50-2.09)
Couples ever visited a health center for taking SRH care with			
No (ref.)			1
Yes			2.08 (1.06-4.09)[a]
Model Chi-square	75.73[c]	89.82[c]	115.66[c]
-2 Log likelihood	409.52	395.44	369.59
Nagelkerke R^2	0.25	0.29	0.36

Note: Model 1 adjusted for husbands' socio-demographic and media-related variables; Model 2 adjusted for husbands' socio-demographic, media, couple communication, and relationship-related variables; Model 3 adjusted for husbands' socio-demographic, media, spousal communication, and relationship and RH knowledge and health center visit-related variables.
[a]p <0.05, [b]p <0.01, [c]p <0.001

Discussion

Since the early 1990s, there has been growing interest in the role of men in reproductive health. A renewed emphasis on men's motivation and responsibilities in reproductive health gained traction after the 1994 International Conference on Population and Development adopted a Program of Action (Cairo Program of Action, 1994). In conjunction with the International Conference on Population and Development in Cairo, the Fourth World Conference on Women in Beijing in 1995 publicly acknowledged the role of males in

promoting improved reproductive health and gender equality for both men and women. Literature indicates that Men can prevent unintended pregnancies, promote safe motherhood, and perform responsible fatherhood (Drennan, 1998). Moreover, a growing body of literature reports that males with better socio-economic status support their female partners' family planning, maternal health, and reproductive health. This study found that the socio-economic status of the study populations of the survey living in the slum area was lower than the people of non-slum areas (Adams et al., 2015; NIPORT et al., 2015; Nahar et al., 2011; Zakaria, 2015).

Traditionally, family planning is considered a women's concern, which led the clinic-based programs to focus exclusively on women, excluding men (Barua et al., 2004; Rogers, 1973). However, a growing number of researches show that men play an essential role in decisions about family size, permitting their wives to use contraceptives, obtaining contraceptive supplies, and initiating the use of the male method by themselves (Maharaj, 2000). This study found that less than three-fourths of respondents' husbands supported wives' contraceptive use, approval of small family, and spacing two years between births. This finding is similar to a previous study (Zakaria, 2015). For the last few decades, the governments' national population program, awareness across the country, media campaigns, and NGOs' activities contributed to remarkable achievement in low fertility rates. Moreover, women empowerment promoted by the government transformed the parochial attitude of considering the son as an economic asset, resulting in fewer children regardless of their gender. This statement is supported by our study finding illustrating that 40% of the respondents were involved in a different profession. Besides, poverty and the lower socioeconomic status of the slum dwellers also discourage them from limiting their family members.

However, education was reported as a determinant of husbands' participation in family planning consistent with previous studies conducted in Bangladesh (Islam, 2013; Kamal et al., 2013; Sahjahan et al., 2013; Zakaria & Bhuiyan, 2016). Moreover, the number of children appeared as an influencing factor of men's positive behavior regarding contraceptive use, which contradicts a previous study (kamal et al., 2013) that depicted a positive relationship between male involvement and the number of children born. As observed, husbands living in slums with more utility services were more likely to support family planning issues. This finding agrees with a previous study performed in the same context in Bangladesh (Zakaria et al., 2021). Furthermore, we found that couples' knowledge about FP and RH and their visit to a health center for RH care were reported as the factors influencing husbands' assistance to family planning. Our results align with others (Zakaria et al., 2021).

Conclusions

Taken together, our findings underscore the importance of men's involvement in family planning to promote safe motherhood. The importance and urgency for addressing the needs of male participation in family planning are better understood since countries adopted the ICPD agenda. From Bangladesh's perspective, men have many opportunities and scopes to help in promoting every element of women's contraceptive use and maternal health as responsible partners. Traditionally, men play a key role socially and economically in the formation of the

family, in child education, and in the health and nutrition of the family members. The study shows that husbands are more responsible regarding wives' contraceptive use. In particular, our research demonstrates that 71% of the husbands were supportive in terms of wives' contraceptive use. Interestingly, husbands' support in wives' family planning use was high, potentially due to activities of the NGOs to raise awareness on this subject.

This study suggests that messages should be disseminated through television to reach men. Media can expose male audiences to messages that can increase their knowledge, influence perceptions, and prompt action regarding family planning.

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