

THE IMPACT OF MASS MEDIA FAMILY PLANNING PROGRAMMES ON CURRENT USE OF CONTRACEPTION IN URBAN BANGLADESH

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Summary. A sample of 871 currently married urban Bangladeshi women was used to assess the impact of mass media family planning programmes on current contraceptive use. The analyses suggested that radio had been playing a significant role in spreading family planning messages among eligible clients; 38% of women with access to a radio had heard of family planning messages while the figures for TV and newspaper were 18.5% and 8.5% respectively. Education, number of living children and current contraceptive use were important predictors of exposure to any mass media family planning messages. There was a negative relationship between breast-feeding and the current use of contraception indicating a low need for contraception among women who were breast-feeding.

Introduction

Communication is essential and primary to the decision-making process, a key factor at all levels of development planning. Communication, whether through mass media or interpersonal channels, affects the behaviour of persons and groups either directly or indirectly. (Bangladesh, one of the world's poorest countries, provides evidence that fertility can decline even in the midst of endemic poverty.) The Bangladesh Family Planning programme has been remarkably successful and the Contraceptive Prevalence Rate (CPR) has increased from about 8% in 1975 to over 49.2% in 1996 (Bangladesh Demographic and Health Survey, 1996–1997) in a country with high poverty and illiteracy rates. Despite this success, each year about 1.1 million new couples marry because of previous high fertility. Only greater involvement of mass media can accelerate the family planning programme to achieve the demographic targets.

A number of surveys have shown that people want to know more about family planning and a large majority consider radio and television as an appropriate means of conveying these messages (GOB, 1988). Linking mass media approaches with face-to-face contact and readily available services and supplies may offer the most

effective and efficient approach to increasing the use of family planning (Population Reports, 1989). As radio and television reach out to more and more people, they become an increasingly important way to make family planning a household word, a community norm and an individual choice. The movement of people from rural to urban areas, improvements in women's education and the spread of mass media have exposed women to new ideas, new values, new expectations, new economic pressures and new opportunities. Any message delivered through the mass media reaches all over the country; repeated broadcasting of the same message over a period of time may influence behaviour and through this procedure one message may be established as a universal truth. Changing behaviour of people from an accustomed culture to a new one is difficult, however; people do not change their behaviour simply because a health worker, a political leader, or even a family member asks them to do so, even if that person appears on television or in a film (McGuire, 1986). Although the impact of mass media on any one individual may be slight, its cumulative effect on an entire population may be great because it reaches so many people (Gilluly & Moore, 1986). The application of mass communication to influence family size preference is a natural extension of the basic idea that the media can both inform and motivate people, even about such complex subjects as their reproductive means and goals (Westoff & Rodriguez, 1995).

In Bangladesh, access to a radio through ownership and listening at a neighbour's house or a public place is higher than access to television (Rahman & Ali, 1991). Television is the second most important mass media (Rabbani, Rahman & Ahmed, 1989; Ahmed, 1988). Access to television is increasing substantially among urban males and females, but it is of much less importance in rural areas (Mitra & Kamal, 1984; Ahmed *et al.*, 1987; Mitra, Islam & Amanullah, 1996). The primary effect of television viewing is to stimulate interest in learning and acquiring information (Richman & Urban, 1978; Pitrow, 1990). Television offers a more dramatic message environment than radio, and radio can be more dramatic than printed materials (Manoff, 1985). Newspapers and magazines, like television, reach decision-makers and other city dwellers (Pitrow, 1990). Printed materials can communicate through illustration, and picture booklets that serve as a guide to the use of contraceptives or breast-feeding are now used in most countries, sometimes in connection with radio (Population Reports, 1989). Researchers suggest that printed material has one major advantage over both television and radios: copies can be kept for reference.

The purpose of this paper is to assess the exposure of married women via different mass media (radio, television and newspaper) to Information Education and Communication (IEC) activities on Family Planning and Maternal and Child Health (FP-MCH) and to determine to what extent women are able to recall the contents of FP-MCH messages/information delivered to them. An attempt is made to predict use of contraception on the basis of selected independent variables.

Materials and methods

The data used in this study were collected by Mitra and Associates as part of the research programme of the Population Development Evaluation Unit (PDEU) of the Implementation Monitoring and Evaluation (IME) Division, Ministry of Planning,

Table 1. Percentage distribution of currently married urban women by selected background characteristics

Background characteristics	Percentage
Age group (in years)	
15–19	15.5
20–24	23.4
25–29	22.5
30–34	14.6
35–39	10.3
40–44	8.3
45–49	4.4
Mean age	27.87; SD=8.5
Education	
Never attended school	44.2
Less than primary	17.6
Completed primary	10.8
Secondary and above	27.4
Religion	
Muslim	88.4
Non-Muslim	11.6
Employment	
Employed	8.9
Not employed	91.1
Membership	
Member	11.6
Not member	88.4

Government of Bangladesh. The data were collected from a nationally representative sample of respondents selected in two stages. In stage I, 29 sites (150–300 households) were selected. An urban site was composed of one mohalla/block or part of a mohalla/block or more than one mohalla/block (equivalent to a Mouza in a rural area). Within each stratum, the sites were sampled from a mohalla-specific list of household counts of the 1991 census (BBS, 1992) and size measured in a number of households, and from each mohalla 30 households were randomly selected giving a total of 871 currently married women under the age of 50.

Results

Socioeconomic characteristics of the respondents

Table 1 provides background characteristics of the sample women. The majority of women were under 30 years of age (mean 27.9, SD=8.5). The literacy rate was 55.8%, of which 11% and 2% had primary and secondary education respectively. Most respondents were Muslims. Only about 9% of the women were in paid employment while a further 12% were members of urban-based development organizations.

Table 2. Percentage distribution of respondents by access to and reaches of radio, television and newspapers/magazines

Various information about mass media	Radio	TV	Newspaper
Access to the media			
At working condition in household	41.1	23.9	10.6
Access at other place	42.8	34.3	—
Total access	83.9	58.2	10.6
Reaches of the media			
Enjoy the media (at least once a week)	55.1	42.0	5.6
Reaches of mass media FP messages*			
Heard/seen/read FP message (in the last 3 months)	38.1	18.5	8.5
Mass media as sources of FP message	88.8	47.3	2.6

*For those who have access to the mass media.

Exposure to mass media

The common mass media that are used in disseminating family planning messages are radio, television, cinema, mobile cinema, newspapers/magazines, posters/signboards and traditional folk events. In this study, exposure to mass media was assessed in terms of access to radio, television and newspapers/magazines. Among the respondents 41.1% and 23.9% respectively reported that they had a working radio and television (Table 2), while a further 42.8% (radio) and 34.3% (television) of the respondents said that they had access at their neighbour's house or at some other place (e.g. community centre). Therefore, real exposure to radio and television is much higher than that implied by ownership alone. Only 10.6% of the respondents mentioned that they had access to newspapers/magazines; this might reflect affordability as well as illiteracy of the respondents. Just over a third (38%) of respondents with access to a radio reported hearing a family planning message while for television the figure was 18% and only 8% recalled reading such a message in a newspaper. Only 39% of respondents reported hearing about family planning on radio programmes in the 3 months prior to the survey while for television the figure was 18.5% and for newspapers/magazines it was only 8.5%.

The reach of radio, television and newspapers/magazines may also be measured by the percentage of respondents who generally enjoy programmes on radio or television and read a newspaper/magazine once a week. About 55% of the respondents reported enjoying listening to radio programmes at least once a week and the corresponding figures for television and newspapers/magazines were 42.0% and 5.6% respectively.

Table 3, which shows the recall of mass media messages by the respondents, indicates that the messages are not recalled equally across the three media. The rates have been adjusted on the basis of total access and actual exposure to the programmes. The results suggest that radio achieved the highest recall followed by television with newspapers/magazines achieving the lowest. For instance, 'Urging the

Table 3. Recalls of mass media messages among currently married urban women

Messages	Radio		Television		Newspaper	
To have fewer children	32.3*	38.5**	11.5*	19.8**	1.0*	9.4**
A small family is a happy family	44.9	53.5	20.1	34.5	NA	NA
Sons or daughters, two children are enough	39.3	46.8	11.6	19.9	0.8	7.5
Urging eligible to use oral pill	47.0	56.0	24.8	42.6	NA	NA
Urging eligible to use condom	26.3	31.3	13.7	23.5	NA	NA

*Based on the total sample. **Adjusted exposure based on actual access to the media. For instance, access to radio is 83.9%, hence the adjusted exposure is $(32.3/83.9) \times 100 = 38.5$. NA=not available.

eligible to use the oral pill' was the most recalled family planning message received from radio (56%) and television (42.6%) respectively. Messages 'A small family is a happy family'; 'Whether sons or daughters, two children are enough', and 'To have fewer children is good for economic solvency of the family' all showed higher recall from radio than television. Newspapers/magazines did not play a significant role in the dissemination of family planning messages.

Multivariate analysis

Logistic regression developed by Cox and Fox (Cox, 1970; Fox, 1984) was used to determine the influence of exposure variables (such as watching television or exposure to any other media) on current contraceptive use. Table 4 shows the results of three independent logistic regression analyses, which used exposure to family planning radio messages (exposed=1, not exposed=0); family planning television messages (exposed=1, not exposed=0); and finally family planning messages through any media (exposed=1, not exposed=0). In the absence of any information on income, the independent variable education is considered as the proxy variable. The analysis suggests that among the independent variables, education, religion and current use of contraception have a positive effect and age has a negative effect on exposure to family planning messages. Education of the respondents has the largest effect on mass media exposure. Table 5 shows the logistic regression analysis with current contraceptive use status as the dependent variable. The results clearly suggest that exposure to radio family planning messages is more effective than TV messages. The number of living children is statistically significant in all three models, which implies that the higher the number of living children the more likely a woman is to adopt contraception to prevent further pregnancy. There is a negative relationship between breast-feeding and current contraceptive use. Table 5 also shows the logistic regression analysis with any media as a separate model. The higher the exposure to any type of mass media, the higher is the probability that a woman will be a current user of contraception.

Table 4. Logistic regression estimates of demographic and socioeconomic characteristics on exposure to family planning messages through radio, television and through any media

Independent variable	Description of variables	Model for radio		Model for TV		Model for any media	
		Coefficient	Odds ratio	Coefficient	Odds ratio	Coefficient	Odds ratio
Age	Continuous	-0.0346**	0.9660	0.0251**	1.0254	-0.0229	0.9774
Total number of living children	Continuous	0.0144	1.0145	-0.1256**	0.8819	-0.0764	0.9264
Education	0=No school 1=Attended school	0.6730*	1.9601	1.1549*	3.1737	1.2972*	3.659
Religion	0=Non-Muslim 1= Muslim	0.5836**	1.7924	-0.4249	0.6538	-0.3445	0.7086
Employment status	0=Not 1= Yes	-0.2660	0.7664	-0.1310	0.8772	-0.3744	0.6877
Current use of contraceptives	0=Not 1= Yes	0.3735***	1.4528	0.0324	1.0329	0.6382**	1.8931
Constant		1.9637*	—	-1.627*	—	2.8992	—
	-2loglikelihood	χ^2 603.0	Sig. 1.00	χ^2 1124.6	Sig. 0.000	χ^2 437.2	Sig. 0.000
	Goodness of fit	885.6	0.288	867.3		835.4	

Significance level: *p<0.01; **p<0.05; ***p<0.10.

Table 5. Logistic regression analysis having dependent variable 'current use of contraception without breast-feeding' on some selected variables

Independent variable	Description of variables	Model with radio as media exposure		Model with TV as media exposure		Model with any media as media exposure	
		Coefficient	Odds ratio	Coefficient	Odds ratio	Coefficient	Odds ratio
Media exposure	0 = No 1 = Yes	0.5624**	1.7550	0.0865	1.0903	0.9041**	2.4697
Religion	0 = Non-Muslim 1 = Muslim	-0.1314	0.8768	0.0548	1.0563	0.0814	1.0849
Total number of living children	0 = No child 1 = One or more children	0.3205*	1.3778	0.3116**	1.3656	0.3280*	1.3882
Employment status	0 = Not 1 = Yes	0.3152	1.3706	0.2960	1.3445	0.3221	1.3800
Breast-feeding status	0 = Not 1 = Yes	-9.0048	0.0001	-8.9605	0.0005	-9.0115	0.005
Constant		-0.5262***	—	-0.2318*	—	-1.090**	—
	-2loglikelihood	967.6	Sig. χ^2 0.0078	976.2	Sig. χ^2 0.000	966.7	Sig. χ^2 0.000
	Goodness of fit	912.1	0.1244	905.9	0.000	920.14	

Discussion and conclusions

In a developing country like Bangladesh the mass media is an important means of influencing attitude and behaviour. In this analysis, an attempt has been made to assess whether mass media efforts influence reproductive behaviour. Using data collected by PDEU in 1995, the presence of an association has been demonstrated between respondent's reports of having heard or seen messages about family planning on radio, on TV or in newspapers, magazines or posters and contraceptive use. Access to radio among currently married urban women was high with about 84% of women reporting that they have access to a radio as opposed to slightly over 58% who had access to a TV at the time of interview. The percentage for newspapers/magazines was low, with only about 11% of respondents claiming that they had access to newspapers/magazines. Reaches of family planning radio messages were found to be higher than family planning messages through television and newspapers respectively.

Logistic regression analyses suggest that education, number of living children, and current use of contraception were the predictors of mass media exposure to family planning messages. It appears from the analysis that mass media family planning messages on the radio are more effective than those on TV. The effects of mass media exposure on the current use of contraception were also investigated and the analyses suggest that the likelihood of using contraception is higher if the women had access to any type of mass media on family planning messages. Radio family planning messages are more effective in the context of Bangladesh. Family planning messages should be designed taking into account the culture of the society in such a way that they attract larger eligible audiences.

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