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Role of Mass Media in Promotion of Family Planning in Bangladesh

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Abstract: This study has been made to examine the levels, differentials and determinants of female access to mass media in Bangladesh using data from Bangladesh Demographic and Health Survey (BDHS). Studies in access to mass media differentials provide information for assessing inequalities among women with respect to mass media. In response, about two fifths (39.0%) of the respondent listen to the radio weekly. Only 18.0% watch television weekly while only a little proportion of ever-married women read newspaper weekly. Multivariate analysis shows that respondents place of residence, education, economic status, geographical region, ownership of radio and ownership of TV appeared as most significant variables in determining access to mass media. This study helps to identify those underprivileged segments of women who experience lower access to mass media.

Key words: Mass media, family planning, multivariate analysis

INTRODUCTION

Recent research based on nationality representative surveys confirms a strong association between exposure to family messages in the mass media and contraceptive use, even after the effects of social and demographic variables are controlled for. For example, during the last quarter of 1999, 571 women had been interviewed during the 1998 Cameroon Demographic and Health Survey were re-interviewed regarding their exposure to the Gold Circle campaign and their perceptions on and use of contraceptives. More than one-third of the women surveyed reported exposure to the Gold Circle campaign, 52% of which mentioned being exposed to the campaign through television. Those with primary or post-primary education were four and six times as likely, respectively, as those with no education to have been exposed to the campaign. Exposure was associated with a significant increase in the level of family planning ideation, as well as with an increased likelihood of using a modern contraceptive method (80%). The service statistics indicate that the campaign led to a significant increase in the demand for family planning services at Gold Circle clinics, with the number of new clients more than doubling immediately after the campaign launch[1]. A multilevel, multinomial analysis of the 1998 Ghana Demographic and Health Survey data to investigate the effects of exposure to family planning messages on the type of method of contraception a women uses. The results show exposure to family planning messages via the radio and printed sources substantially increase use of modern contraception. While its significant positive effects on the odds of using modern contraception of exposure to family planning messages via the radio and posters, brochures or leaflets are evident, the effects of exposure to messages via television and via newspapers or magazines are small and not significant. This could signal a need to review the effectiveness of television, newspaper and magazine family planning promotion, or for a revision of the promotional mix used for family planning[2]. Again an analysis of the 1989 Kenya Demographic and Health Survey found that contraceptive prevalence was nearly 50% among women who recalled hearing or seeing family planning messages in three media (radio, print and television), compared with 14% among those who did not recall any family planning messages in the media. This significant relationship persisted even after differences in age; residence and socioeconomic status were taken into account[3].

Results of the recently completed Demographic and Health Surveys (DHS) throughout the developing world demonstrate that, despite widespread knowledge about family planning among the married women of reproductive age, there is still a substantial proportion of women with an unmet need for family planning. This leads to a conclusion that mere knowledge about family planning is not enough and there is a need for strong motivation and effective knowledge about family planning methods (such as source of supply, correct use, side effect etc). It is thought that, the most suited intervention for

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transforming these high levels of need into effective demand is intensive Information, Education and Communication (IEC) program[4]. For the last few decades, IEC has been considered as an essential means of promoting family planning in the developing world. In Tanzania, Rogers *et al.*[5]. found that between 1993-1995 there was an increase in self-efficacy as indicated by a respondent's belief in the ability to determine one's family size, increased by 11% in the treatment area and 6% in the comparison area ($p<0.05$).The proportion of married women who practice family planning (always use and sometimes use) increased by 10% in the treatment area and decreased by 11% in the comparison area ($p<0.05$ and $p<0.01$ on two tests used). The objective of the IEC program is to create public awareness about the need for family planning, the legitimacy of contraception, increase public knowledge about contraceptive methods including where to get contraceptive methods and how to use them effectively and motivate eligible couples to start and continue to practice family planning.

Mass media and interpersonal communication are two important components of IEC that are conventionally utilized to promote family planning program. Mass Media utilizes radio, television, posters, billboards, movies etc, while interpersonal communication utilizes individual patient education and counseling, group meetings, home visits etc to promote family planning program. In EL Salvador, over 90% of women have been reached family planning messages via mass or interpersonal channels. While providing information on reach of IEC no information is provided on impact, which in any case would be difficult to ascribe to the IEC because of lack of baseline or controls[6].

The application of mass communications to influence fertility 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. Communication efforts have become increasingly widespread in the developing world as part of international technical assistance and government programs designed to reduce fertility. Recent evaluations of mass media campaigns in three different areas of Nigeria indicated that there were large increases in the number of family planning clients at clinics following the implementation of different communication campaigns, with the authors concluding that mass media interventions can play a major role in promoting family planning use in certain situations[7]. Similar results have been reported in Indonesia and in Trinidad and Tabago[8]. In Latin America, two studies illustrate some of the methodological difficulties involved in interpreting the association between awareness of media messages on family planning and the practice of contraception, an inherent problem that complicates the analysis of Demographic and Health Survey (DHS) data on this subject. However, the investigators emphasize the difficulty of inferring causality: Yet whatever evidence found does not allow to exclude the possibility that those individuals who already use family planning, or know about it, are those likely….to be constant media consumers[9]. The most relevant earlier study and one that corresponds closely with this illustrative analysis and that also underscores these problems of causal inference, was based on an analysis of survey data from Guatemala, EL Salvador and Panama[10].

A first radio survey in Bangladesh assessed the role of radio as a disseminator of information in rural areas and determined listener's preferences attitude. Results showed that most males listened to the radio in a group and that this practice was less prevalent among females.

Although the importance of IEC to family planning is often acknowledged, there has been relatively little evaluation of IEC program in Bangladesh. One of the main reasons for this is the difficulty of measuring the impact of such programs. This study examines the levels, differentials and determinants of access to mass media and its exposure to family planning message. Studies in access to mass media differentials provide information for assessing inequalities among women with respect to access to mass media. Again, data on access to mass media help identify those underprivileged segments of women who experience lower access to mass media. This information is useful for family planning activities.

BDHS DATA

The study utilizes data extracted from the 1993-94 Bangladesh Demographic and Health Survey (BDHS). The 1993-94 BDHS employed a nationally representative, two-stage sample. It was selected from the Integrated Multi-Purpose Master Sample (IMPS), newly created by the Bangladesh Bureau of Statistics on the basis of 1991 census data. The units from the BDHS were sub-selected from the IMPS with equal probability to make the BDHS selection equivalent to selection with probability proportional to size. The survey considers ever-married women of age 10-49 as eligible for interview. Ultimately 9640 women were interviewed successfully who constitute our study population. The fieldwork commenced on 17 Nov. 1993 and was completed in Mar. 1994. The DHS data entry and editing programs were written in ISSA (Integrated System for Survey Analysis). Frequency distribution, cross tabulation, binomial and multinomial logit models[11,12] are used as analytic technique for data analysis.

Again to examine the effects of demographic and socio-economic variables on mass media, age of respondents, age at marriage, place of residence, administrative division, religion, electricity, respondent's educational level, husband's educational level, partner's occupation, socio-economic status and work status of respondents have been incorporated in this study as independent.

TRENDS IN BANGLADESH MEDIA

Radio: Access to radio was in general, higher, than access to television. Rural male has more access radio than female. A major source of awareness about family planning, 69% listened Betar programmes on mother and child health, women's rights and development issue.

Television: Rural people have less access to television. Male access is higher than female access. BTV is the single largest provider of development information, such as child rights, vaccination, iodine deficiency, child rights to education, birth registration, girl's education and others.

Newspaper and periodicals: Accused of failing in their primary function of keeping their readers well informed. Newspaper journalists earned highest praise from general public than politicians and police. In regard to circulation, Bangladesh press has been listed in the media poverty zone meaning the press was unable to reach the readership that was available. Most newspapers tend to exaggerate their circulation figures to gain a share of government advertising and bigger allocation of newsprint. Newspaper journalists suffer most during the time of political conflict. Journalists unions mostly act as pressure clubs. Donor support has attracted a greater space for development news.

ACCESS TO MASS MEDIA

To estimate the extent of assess to mass media, respondents were asked if they usually read a newspaper, listen to radio or watch television at least once a week. In response, about two fifths (39.0%) of the respondent reported that they listen to the radio weekly. Only 18.0% watch television at least once a week, while only a small proportion of ever-married women read newspaper once in a week (Table 1).

Table 1: Percentage of ever-married woman who usually read a newspaper, watch television or listen to radio once a week

Access to mass media	Percentage
Read newspaper or magazine weekly	07.1
Watch television weekly	17.8
Listen to radio weekly	38.7
Total No. of women	9640.0

DIFFERENTIALS IN ACCESS TO MASS MEDIA (RADIO AND TV)

Table 2 presents the interrelationship between selected background characteristics and the access to mass media. Only two mass media-radio and television are taken into account here considering their importance in promoting family planning. The result indicates that younger women are somewhat more likely than older women to listen to the radio. On the other hand, women of age 20-29 watch television more than their younger and older counterparts. Age at marriage shows the strongest and positive relationship with access to mass media. With every increase in the category of age at marriage, access to radio and TV increases among ever-married women. This is probably because women who married at a very young age belong to poorer class of people are therefore have less likely to have access to media messages than the women who married at moderate age. Types of place of residence are found to have substantial differential effect on access to mass media. Rural women are more disadvantaged in access to radio and TV. While 53.0% of women in urban areas listen to the radio weekly, only 37.0% of rural watch television once a week, compared to only 12.0% of women in rural areas.

The results in Table 2 indicate that differences in access to radio and TV by division are not large, although Dhaka division has greater access to both radio and TV than women in other divisions, especially with regard to television viewing. Table 2 shows that access to radio varies little between Islam and other religions. Women with other religions are more likely to watch television than women with Islam. About 26.0% women with other religions watch television once a week, compared to only 17.0% of women with Islam. Among all the backward characteristics considered in the differential analysis, education shows the strongest and positive correlation with access to the radio and TV. Like respondents educational level, husband's education has also strong and positive association with access to the mass media. Women of educated husbands have greater access in mass media than those of illiterate husbands. Table 2 shows that only 28.0% women of illiterate husbands listen radio once a week, compared to 67.0% women of highly educated husbands. Having electricity in the household or not is found to be very important factor in explaining the differential effect in access to radio and TV. Table 2 shows that women having electricity in the household is more likely to listen/ watch radio and TV than household

Table 2: Percentage of ever-married woman ages 10-49 who usually listen to radio once a week or watch television once a week, by selected background characteristics

Background characteristics	Type of media		
	Radio (%)	Television (%)	No. of cases
All	38.7	17.8	9640
Age of mother			
<19	42.6	16.7	1418
20-29	41.4	19.6	4043
30-49	34.7	16.3	4179
Age of marriage			
<14	36.1	13.3	5314
15-19	40.7	21.6	3704
20+	48.0	33.7	622
Type of residence			
Urban	52.6	61.2	1108
Rural	36.8	12.1	8532
Division			
Barisal	36.9	9.8	606
Chittagong	35.5	17.2	2527
Dhaka	41.7	24.6	2963
Khulna	36.1	14.4	1217
Rajshahi	40.0	13.6	2326
Religion			
Islam	38.6	16.6	8468
Others	39.1	26.1	1172
Respondent's education level			
Illiterate	28.5	9.3	5561
Primary	45.6	17.7	2639
Secondary	63.6	45.4	1242
College/University	73.5	82.3	197
Husbands education level			
Illiterate	27.8	8.0	4395
Primary	37.8	13.5	2293
Secondary	51.5	27.5	2039
College/University	67.1	56.8	837
Electricity			
No	33.8	8.2	7770
Yes	58.7	57.3	1870
Middle	55.5	22.1	2556
Upper	79.2	69.0	931
Work status			
No work	39.0	17.8	8109
Work(no earn cash)	35.0	14.1	130
Work (earn cash)	36.9	18.2	1393

without electricity. Access to mass media is found to very with the partners of occupational status. As expected, access to mass media is highest among wives of professional workers, compared to those of other occupations. This may be due to the fact that women whose husbands are involved with professional works are higher educated, more careful and culturally up-to-date. Table 2 shows that wives of cultivator are less likely in access to mass media another followed by laborer. Works status of women also has imported differential effect in access to mass media. The results of Table 2 suggest that working women with earn cash and women with no work have slightly higher access to mass media, compared to working women with earn no cash. Table 2 also indicates that women who are not paid in cash have lower access to radio (35.0), compared to women of other two status (39.0 and 37.0, respectively). Like Educational Characteristics, socio-economic status of the respondents has positive and strong association with access to mass media. Table 2 indicates that the women of poor socio-economic status is the lowest in access to mass media, compared to others socio-economic status. Result also reveals that 79.0% of women with upper socio economic status listen radio once a week, compared to only 25.0% of women with poor socio-economic status are more educated and richer than of others status.

DETERMINANTS OF ACCESS TO MASS MEDIA (RADIO AND TV)

To identify the factors affecting the access to radio and to TV applied logistic regression technique have been applied considering access to radio and access to TV as dependent variables and socio-economic and ownership of radio and TV as independent variables. According

Table 3: Logistic regression estimates of the effect of some demographical and socio-economic characteristics on Radio and TV access

Characteristics	Access to Radio		Access to Television	
	Coefficient	Odds	Coefficient	Odds
Partners occupation				
Cultivator	--	1.00	--	1.00
Laborer	0.208*	1.54	0.430*	1.54
Professional Workers	0.199	1.38	0.320	1.38
Business	0.153**	1.48	0.392*	1.48
Others	0.109	1.46	0.383**	1.46
Type of residence				
Rural	--	--	--	1.00
Urban	--	--	1.07*	2.92
Religion				
Islam	--	1.00	--	1.00
Others	-0.235*	0.790	0.634*	1.88
Division				
Chittagong	--	1.00	--	1.00
Barisal	-0.198	0.820	-0.513*	0.599
Dhaka	0.234	1.26	0.387*	1.47
Khulna	0.267	0.765	-0.158	0.854
Rajshahi	0.219	1.24	0.279*	1.32
Respondent's education level				
Illiterate	--	1.00	--	1.00
Primary	0.472*	1.60	0.441*	1.55
Secondary	0.551*	1.73	0.772*	2.16
College/University	0.408	1.50	1.17*	3.24
Husbands education level				
Illiterate	--	1.00	--	1.00
Primary	188.0*	1.21	0.216**	1.24
Secondary	0.219*	1.24	0.447*	1.56
College/University	0.141	1.15	0.603*	1.83
Electricity				
No	--	1.00	--	1.00
Yes	0.208*	1.23	1.06*	2.88
Work status				
No work	--	1.00	--	1.00
Work (no earn cash)	0.384	1.47	0.024*	1.02
Work (earn cash)	0.143	1.15	0.266**	1.30
Ownership of Radio				
Has no Radio	--	1.00	--	--
Has Radio	2.73*	15.3	--	--
Ownership of TV				
Has no Radio	--	--	--	1.00
Has TV	--	--	3.40*	30.0
Constant	0.181	--	-3.53	--

Significance level, * : p<.01, ** : p<0.05

to the results of logistic regression analysis, both respondents and husband's educational levels, especially primary and secondary level education has positive and significant effect on access to radio (Table 3). Household possession of electricity, husband's occupation i.e., laborer and business, work status (earn cash) and ownership of radio also have positive and significant effect on the access to radio. Among the divisions, Dhaka and Rajshahi have significantly higher access to radio and Chittagong division, while Khulna division has significant but lower access to radio. Muslim has significant higher access to radio but lower access to TV than their non-Muslim counterparts. Respondents living in the urban area have significantly higher access to TV than their rural counterparts, but this is not significant for access to radio. Both respondents and husband's educational level have positive and significant effect on access to TV. Access to TV increases with the increase in education level (Table 3). Dhaka and Rajshahi have significantly higher access of TV but Barisal has significantly lower access to than in Chittagong division. Electricity in the household, work status and ownership of TV has significant and positive effect on access to TV.

CONCLUSIONS

Investigation shows that radio and television are two important mass media to disseminate information among women in Bangladesh. But access to them are still limited, particularly to television. Less than 40% women reported that they listen to the radio weekly and only 18.0% watch television weekly. Slightly more than one-fourth (28.2%) of the respondents reported that their household possess working radio and only 8.6% reported that they have working television. The differential analysis of access to mass media indicate that younger women are somewhat more likely than older women to listen to the radio and women of age 20-29 watch TV more than their younger and older counterparts. Age at marriage and women's education shows the strongest and positive relationship with access to radio and TV. Results of logistic regression analysis also identified place of residence, education of both wife and husband, electricity in the household, husband's occupation, women's work status, religion and ownership of radio and TV as satisfactory significant factor affecting access to mass media.

The principal policy challenge is to design communications strategies that will reach the less privileged, rural and illiterate people who are by far the majority in Bangladesh. Rural women need the special attention of planners and policy makers for several reasons. Their literacy level is very low and television and print are virtually unknown in rural areas. Radio is only mass medium that is accessible to them. Whereas the improvement of the literacy level is a long-term goal, more widespread and effective radio coverage and an improved program contacts by family planning personnel are important short-term objectives. Mass media should continue to be used to promote family planning.

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