

M. Amirul Islam*, M. Kabir and M. A. Salam**

The Influence of Mass Media on Current Use of Contraception in Rural Bangladesh

Introduction

MASS MEDIA family planning programme has played an important role in the promotion and acceptability of contraception in Bangladesh. In a country where more than half of the population are illiterate, the mass media can play significant role in achieving demographic target. Despite success in family planning programme the family size is still high with 3.3 children per woman. One of the important means to motivate rural couples to adopt family planning is the use of mass media in family planning programmes. This implies that mass communication programmes will continue to play a major role in the Bangladesh FP programme. Every year on an average 1.1 million new couples are entering in reproductive life. The main objective of this paper is to understand impact of mass media on family planning programmes among women in rural Bangladesh.

Messages vary greatly depending on the audience. How far the messages and contents are culturally acceptable requires to be evaluated to meet the programme needs and adjustments. Mass media is a powerful medium that reaches the people more quickly than any other medium. It has a wider coverage than any other media does. For example, any message delivered through mass media reaches to all over the country. However, those who have no access or have little access to the modern media such as radio and TV they will receive the messages gradually. Therefore, it needs appropriate planning, designing and time to time evaluation of the effect of a particular family planning message in changing behaviour of the target population. Reproductive health urges

* Department of Agricultural Statistics, Bangladesh Agricultural University, Mymensingh.

** Jahangirnagar University, Savar, Dhaka, Bangladesh.

programmes to use the mass media and other forms of communication to encourage couples to discuss reproductive health issues. Media messages also can address men's specific concerns and give them positive models to follow.

Studies have documented increased contraceptive use and other behavioural changes following use of mass media (Olaleye and Bankole, 1994). There is a need to point out that mass media and interpersonal media are not necessarily in competition with each other. For an effective programme there is a need to judiciously use the two media. Although the impact of mass media on any one individual may be slight, its cumulative effects on an entire population may be great because it reaches to many people (Gilluly *et al.*, 1986; William, 1986). Among the media sources utilized for disseminating family planning messages, radio seems to be quite popular in Bangladesh. A Recent UNFPA study suggests that over 40 percent of the rural population could be reached by radio (UNFPA, 1990a). Radio is considered the most effective medium of mass communication with its wide coverage and deep penetration. The impact of this medium is felt more in rural societies where other means of communications are not available or inadequate to reach the people (GOB, 1993; Ahmed, 1988). The application of mass media 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 matters as their reproductive means and goals (Westoff and Rodriguez, 1995).

Access to radio through ownership and listening at a neighbour's house or a public place was in general higher than access to television (Rahman and Ali, 1991). Television is the second most important mass media in Bangladesh (Rabbani *et al.*, 1989). Access to television increased substantially among urban males and females over time but it is of much less importance in rural areas (Mitra *et al.*, 1996). Access to television through watching at a neighbour's house or a public place was much higher than access through ownership (Rahman and Ali, 1991). They concluded that the primary effect of television viewing was to stimulate interest in learning and acquiring information. Television offers a more dramatic message environment than radio and radio can be more dramatic than print materials (Manoff, 1985). Print materials can communicate through illustration, however, picture booklets that serve as guide to the use of contraceptives or to breastfeeding are now used in some countries, some times in conjunction with radio (Population Reports, 1986). However, in a country where vast majority of the population lives in rural areas and where most of them are illiterate, print materials cannot influence them to change their reproductive goals.

Data Sources

The data for this paper were obtained from Population and Development and Evaluation Unit of Planning Commission, Government of Bangladesh. The data were collected over a nationally representative sample of respondents selected in two stages. Sites containing 150-300 households were sampled from the village specific list of

household counts of the 1991 census and with probability proportional to the estimated size measured in number of households. Finally, 2229 currently married rural women under age 50 were selected for detailed interview.

Socio-Economic Characteristics of the Respondents

Availability of mass media and its access depends on respondent's socio-economic characteristics. Table 1 shows some selected socio-economic and backgrounds characteristics of women obtained from the rural Bangladesh. Age distribution of the respondents suggests that the mean age of respondents was about 28 years. Among currently married rural women about 53 percent were illiterate; about 11 percent and 18 percent had primary and secondary education. A vast majority of the respondents is Muslim. Participation in the labour force is still low with only 6 percent are employed and about 18 percent respondents mentioned that they are members of different rural based women in development organizations.

TABLE 1: PERCENTAGE DISTRIBUTION OF CURRENTLY MARRIED RURAL WOMEN BY SELECTED BACKGROUND CHARACTERISTICS

<i>Background Characteristics</i>	<i>Percentage</i>
Age group (in years)	
<15	1.3
15-19	16.4
20-24	21.2
25-29	21.4
30-34	16.9
35-39	11.9
40-44	7.1
45-49	3.7
Mean age	27.7
Education	
Never attended school	52.8
Less than Primary	19.0
Completed primary	10.7
Secondary and above	17.5
Religion	
Muslim	85.7
Non-Muslims	14.3
Employment	
Employed	5.7
Not employed	94.3
Membership	
Member	17.5
Not member	82.5
Total Respondents (<<)	2229

TABLE 2: EVER USE AND CURRENT USE OF FAMILY PLANNING AMONG CURRENTLY MARRIED RURAL WOMEN

<i>Methods</i>	<i>Ever Use</i>	<i>Current Use</i>
Oral pill	55.5	26.3
Condom	16.3	3.0
Vaginal method	0.9	7.6
Injection	18.6	1.7
IUD	7.6	
Tubectomy	8.1	8.1
Vasectomy	1.4	1.4
Traditional method	32.2	9.2
Safe period	25.6	6.4
Withdrawal	13.2	1.9
Abstinence	3.1	0.3
Others	1.3	0.6
Any method	78.7	57.3
No method	21.3	42.7
Total respondents («)	2229	2229

Acceptability of Family Planning

The use of family planning methods by couples depends on the availability and attitude of the family members towards use of contraception. The information suggests that almost all the currently married rural women (96.8 percent) approve use of family planning methods. Practice of family planning methods was also widely approved by their husbands (87.3 percent) and head of the households (83.4 percent). Approval of using family planning methods by their mother-in-laws was reasonably high. About 70 percent of the currently married rural women reported that their mother-in-laws approve use of family planning methods. This may indicate those traditional norms and values maintained by the aged mother-in-laws have been changing. However, this need to be interpreted with caution because we are dealing with the opinions of the elderly mother-in-laws as reported by the respondents but not their attitudes. Approval of family planning method use by the religion is also positive (Table 3).

Exposures to Mass Media

The use of mass media to influence reproductive behaviour is a natural extension of the basic idea that the media can both inform and motivate couples to change their reproductive norms. The mass media usually employed to disseminate family planning messages are radio, television, cinema, mobile cinema, newspaper/magazines, posters/signboards and the traditional folk events. In this paper all modern exposures such as

TABLE 3: APPROVAL OF USING FAMILY PLANNING METHODS AMONG CURRENTLY MARRIED RURAL WOMEN

<i>Approved by</i>	<i>Percentage</i>
Currently married rural women	
Yes	95.8
No	4.2
Husbands	
Yes	87.3
No	10.8
Not sure	1.9
Head of the households	
Yes	83.4
No	13.5
Not sure	3.1
Mother-in-law	
Yes	69.7
No	21.3
Not sure	9.0
Religion	
Yes	75.4
No	21.0
Not sure	3.6
Total respondents (<i>n</i>)	2229

radio, television and newspapers/magazines are considered. Exposures to mass media were measured in terms of access to radio, television and newspaper/magazines, reaches of radio, television and newspaper/magazines. People listened to radio programmes and watched television and read printed materials published usually in the newspaper/magazines. Among the currently married rural women 29.2 percent had working radio (Table 4). In case of television this percentage was very low (6.5 percent). 48.4 percent of the currently married women reported that they had radio at their neighbour's house or at a public place. The percentage for television was 26.2 percent. 5.2 percent of the respondents said that they read newspaper/magazines.

Reaches of Radio, Television and Newspaper/Magazine

Reaches of radio, television and newspapers/magazines were measured in terms of percentage of respondents listening to radio at least once a week; percentage of respondents watching television at least once a week and the percentage of respondents reading newspapers/magazines at least once a week. The information gathered in this respect indicates that 46.2 percent of the currently married rural women reported that they listen to radio at least once a week (Table 5). Reaches of television and newspapers among currently married rural women were 16.4 percent and 2.2 percent respectively.

TABLE 4: PERCENTAGE DISTRIBUTION OF RESPONDENTS ACCESS TO RADIO, TELEVISION AND NEWSPAPER/MAGAZINES AMONG CURRENTLY MARRIED RURAL WOMEN

<i>Medium</i>	<i>Percentage</i>
Radio	
Working radio in household	29.2
Radio at some other place	48.4
Television	
Working television in household	6.5
Television at some other place	26.2
Newspaper/Magazines	
Read newspaper/magazines	5.2
Total respondents (n)	2229

TABLE 5: REACHES OF RADIO, TELEVISION AND NEWSPAPER/MAGAZINE AMONG CURRENTLY MARRIED RURAL WOMEN

<i>Media</i>	<i>Percentage</i>
Radio (at least once a week)	46.2
Television (at least once a week)	16.4
Newspaper/magazines (at least once a week)	2.2
Total Respondents (n)	2229

Reaches of Mass Media Communications and Attitude of the Respondents towards Family Planning Messages

The reach of mass media communications on family planning was assessed by calculating the percentage of respondents who said that they had heard /seen/read family planning messages through radio, TV and newspaper. The cumulative effect of any media on family planning messages seems to be high since over three fourths of the respondents reported that they are exposed to family planning messages during three months prior to the survey. Only 28.7 percent of the currently married rural women reported that they listened family planning radio programmes during the last three months preceding the survey. The information for television family planning messages was very much low (8.3 percent) and in case of newspaper/magazines it was even lower because only less than a percent of respondents mentioned that they read newspaper/magazines (Table 6). Table 6 also shows that over 81 percent of women are exposed by FP messages through any media.

TABLE 6: REACHES OF RADIO, TELEVISION AND NEWSPAPER/MAGAZINE FAMILY PLANNING MESSAGE IN THE LAST THREE MONTHS PRECEDING THE SURVEY AMONG CURRENTLY MARRIED RURAL WOMEN

<i>Media</i>	<i>Percentage</i>
Heard family planning radio messages	28.7
Heard/seen family planning television messages	83
Read family planning newspaper messages	09
Exposed by FP messages through any media*	81.4
Exposed by FP messages through all the three media	Insignificant**
Total respondents (<<)	2229

* Percentage is higher because they may be exposed through modern media and other (media, such as print media, counselling etc.).

** Number of respondents exposed by all the three media is very negligible.

Mass Media Sources of Family Planning Messages and Recalls of Contents from Mass Media

The present investigation also assessed the reach and effectiveness of messages if the respondents can recall of those messages. Recall of a message depends upon how attractive or innovative is the format and content of message. We want to determine whether respondent's recent exposure to family planning messages in the media, as measured by their recall of FP related messages has any effect on their reproductive behaviour. As Table 7 suggests there is a similarity between radio and TV media in the recall of messages exposed by respondents during the last three months preceding the survey. For example, over 40 percent respondents could recall mass media radio message "to have fewer children". The comparable figures for television and newspaper were 30.8 percent and 18.2 percent respectively. Similarly, the mass media family-planning message exposed by radio "A small family is a happy family" was 36 percent as opposed to over 42 percent and 9 percent respectively by TV and newspaper. Similar variations in the recall of messages by radio and TV are evident in Table 7. Recall rates for mass media Radio were high than that of TV, It is possible that during the last three months radio has broadcast more family planning messages than other media.

Husband and wife communication is important to have significant impact on their fertility preferences. To assess this, respondents were asked whether they discuss the messages with their husbands. It seems that respondents of TV viewers discuss more frequently than radio listeners and newspaper readers. The high percentage of respondents from TV may be that they are more educated than radio listeners. The percentage distribution of the respondents exposed by particular media suggests that TV FP messages are discussed more frequently than other two media (Table 8). This may be

TABLE 7: RECALLS OF MASS MEDIA MESSAGE BY TYPE OF MEDIA
AMONG CURRENTLY MARRIED RURAL WOMEN

<i>Messages</i>	<i>Radio</i>	<i>Television</i>	<i>Newspaper</i>
To have fewer children	403	308	182
A small family is a happy family	358	422	9.1
Sons or daughter, two children are enough	450	314	227
Urging eligible couple to have oral pill	559	405	NA
Urging eligible couple to use condom	27.1	249	NA
Total number of respondents (<i>ri</i>)	642	185	22

Note: *n* is the number of respondents exposed by the particular media during the last three months.

NA = Not available. Generally in the newspaper no specific messages relating to specific method use is published. Thus no information relating to pill and condom are available against newspaper.

TABLE 8: DISCUSSIONS ABOUT FP MESSAGES BY TYPE PERSON
BY CURRENTLY MARRIED RURAL WOMEN

<i>Media</i>	<i>Radio*</i>	<i>Television*</i>	<i>Newspaper*</i>
Discuss with any body	58.4	77.8	86.4
Discuss with husband	40.5	59.5	22.7
Discuss with Relatives	30.9	34.1	50.0
Friends/neighbours	37.5	51.9	45.5
Family Planning Workers	9.8	22.7	18.2
Others	0.4	0.0	-
Total respondents	642	185	22

* Percentage may not add to 100 because of multiple responses

attributed to attractive presentation and style of presentation of FP message in the TV. The presentation of FP related message in TV might be more attractive, which motivate them to discuss it with others.

Multinomial Logistic Regression Analysis

To determine the impact of exposure to mass media family planning messages on reproductive behaviour of respondents both linear and multinomial logistic regression analysis was carried out. The interpretations of multinomial logistic regression are made similar to the linear logistic regression, just as opposed to the common base (reference) category in case of failure. The odd ratios generated from the analysis permit direct observation of the relative importance of each independent variable in predicting the likelihood of contraceptive use, compared with the reference category. Table 9 shows the determinants of exposure to family planning message through different combinations

of the three media (Radio, Television, and Newspaper). The dependent variable was categorized as:

Exposed to family planning messages by only one media (3 months ago) = 1
 Exposed to family planning messages by only two media (3 months ago) = 2
 Exposed to family planning messages by all the three media (3 months ago)= 3
 Not exposed to family planning messages by any media (3 months ago) = 0

Table 9 shows multinomial logistic regression estimates of the effect of demographic and socio-economic variables on exposure to family planning messages with any two media vs. no media. The first panel of the results suggests that among the independent variables two variables namely education and group membership of the respondents have positive effects on family planning messages through any two media. This may be attributed to the fact that educated women may be exposed to more than one media. Only one independent variable has significant effect on exposure to FP messages through all the three media relative to no media (Table 9).

Table 10 presents linear logistic regression estimates of the effect of demographic and socio-economic variables on the exposure to family planning messages. In this model our dependent variable whether women exposed to family planning messages or not. Among the variables considered the variables education, group membership are positively associated with exposure to family planning messages while number of living children has negative influence on the exposure to mass media. The finding demonstrates higher the number of living children lower the likelihood to be exposed to family planning messages. Women with higher number of living children are generally older and their views and attitudes towards family planning messages may be different from others.

The impact of contraceptive use on the type family planning method used is also investigated by using multinomial logistic regression analysis and the results are presented in Table 11. The category of the dependent variable is:

Currently using modern method	= 1
Currently using traditional method	= 2
Not currently using any method	= 0

The regression coefficients suggest that the independent variables age, education, number of living children, group membership, ever heard/seen family planning messages, heard TV FP messages, respondent's approval of family planning, husband's approval of family planning and mother in laws approval of family planning have positive influence on the current use of modern family planning methods relative no method. Similarly, age, total number of living children, education, group membership, respondent's approval of family planning and husband's approval of family planning have significant positive effects on the odds of current use of traditional contraceptive methods relative to non-

TABLE 9: MULTINOMIAL LOGISTIC REGRESSION ESTIMATES OF THE EFFECT OF DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS ON EXPOSURE TO FAMILY PLANNING MESSAGES THROUGH MASS MEDIA

<i>Any two media vs. no media</i>		
Age	-.0193	.9808
Number of living children	-.0513	.9499
Education	.4061**	1.5009
Religion	-.3006	.7403
Group membership	.4187*	1.5199
Constant	-1.4045	
<i>All the three media vs. no media</i>		
Age	.0314	1.0318
Number of living children	-.6350	.5299
Education	.9830**	2.6724
Religion	-.4760	.6212
Group membership	.6566	1.9282
Constant	-5.5773	—

Note: Significance level * $p < .10$, ** $p < .05$, *** $p < .000$
 Model chi-square 30.58, DF = 15, Significance = $p < .001$

TABLE 10: LINEAR LOGISTIC REGRESSIONS ESTIMATES OF THE EFFECT OF DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS ON EXPOSURE TO FAMILY PLANNING MESSAGES THROUGH ANY MEDIA

<i>Independent Variable</i>	<i>Type</i>	<i>Coefficient</i>	<i>Odds Ratio</i>
Age	Continuous	.0198	1.0200
Education	1 = Educated, 2 = Illiterate	1.5917***	4.9122
Religion	1 = Muslim, 0 = Others	.1701	1.1855
Group membership	1 = Yes, 0 = No	1.3161**	3.7288
Owner of Radio	1 = Yes, 0 = No	0.4466	1.5630
Owner of TV	1 = Yes, 0 = No	0.1676	1.1825
Number of living children	Continuous	-.1798**	.8355
Constant		2.9911	—

Note: Significance level: * $p < .10$, ** $p < .05$, *** $p < .01$

use of contraceptive methods. However, in the both the instances religion and religious approval has negative influence on the use. These results imply that higher is the religious affiliation the lower is the likelihood they will be traditional method users relative no method.

Finally in Table 12 we have investigated effect of demographic and socio-economic characteristics on traditional vs. modern method of contraception. Among the independent variables considered the variables group membership, husband approval of FP, religious

The Influence of Mass Media on Current Use of Contraception

TABLE 11: MULTINOMIAL LOGISTIC REGRESSION ESTIMATES OF THE EFFECT OF DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTIC ON CURRENT USE OF CONTRACEPTIVES BY TYPES

<i>Independent variables</i>	<i>Modern Method Vs.</i>	<i>No Method</i>
	<i>Coefficient</i>	<i>Odds Ratio</i>
Age	.0321***	1.0326
Number of living children	.2036***	1.2258
Education	.2971***	1.3459
Religion	-.2712*	.7624
Group membership	.3125**	1.3668
Radio ownership	.0358	1.0364
TV ownership	-.4584	.6322
Ever heard FP messages	1.1768***	3.2439
Heard radio messages (3 months ago)	-.0895	.9143
Heard TV messages (3 months ago)	.3482*	1.4165
Respondents approval of FP	2.5737***	13.1142
Husbands approval of FP	2.1744***	8.7969
Religious approval of FP	.1139	1.1206
Mother-in-laws approval of FP	.4198***	1.5216
Read newspaper messages (3 months ago)	-.2684	.7646
Constant	-.72529	—
<i>Independent Variables</i>	<i>Traditional Vs. No Method</i>	
Age	.0468***	1.0479
Number of living children	.1378***	1.1477
Education	.3126*	1.3669
Religion	-.3628*	.6957
Group membership	.4492*	1.5670
Radio ownership	.1400	1.1502
TV ownership	-1.2827	.2772
Ever heard FP messages	.8594	2.3617
Heard radio messages (3 months ago)	.0805	1.0838
Heard TV messages (3 months ago)	.3469	1.4146
Respondent's approval of FP	1.4197**	4.1333
Husbands approval of FP	.9350***	2.5472
Religious approval of FP	-.3193*	.7266
Mother-in-laws approval of FP	.1277	1.1362
Read newspaper messages (3 months ago)	.7930	2.2100
Constant	-5.8749	—

Note: Significance level: * $p < .10$, ** $p < .05$, *** $p < .01$

Model $\chi^2 = 451.95$

DF = 30

Significance = $p < .0000$

approval of FP and mother in laws approval of FP have significant negative effects on traditional vs. modern method use. The results imply the couples to avoid pregnancy will not approve use of traditional methods relative to modern methods. However, the

variable read newspaper FP messages is positively associated with traditional vs. modern methods implying that those who are regular reader of newspaper has the necessary knowledge and ability to control fertility through use of traditional methods relative to modern methods.

TABLE 12: MULTINOMIAL LOGISTIC REGRESSION ESTIMATES OF THE EFFECTS OF DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS ON CURRENT USE TYPE OF CONTRACEPTIVES

<i>Independent variables</i>	<i>Traditional Vs Modern Method</i>	
	<i>Coefficient</i>	<i>Odds Ratio</i>
Age	.0139	1.0139
Education	.0564	1.0580
Religion	-.1137	.8925
Group membership	-.7514***	.4717
Radio Ownership	.0581	1.0598
TV Ownership	-.8176	.4414
Ever heard FP messages	-.2245	.7989
Heard radio messages (3 months ago)	-.0967	.9078
Heard TV messages (3 months ago)	.0624	1.0643
Read newspaper messages (3 months ago)	.8167**	2.2630
Respondents approval of FP	-1.1230	.3253
Husbands approval of FP	-1.2446***	.2880
Religious approval of FP	-.4127**	.6618
Mother-in-laws approval of FP	-.2891*	.7489
Number of living children	-.0569	.9421
Constant	1.3373	—

Note: Significance level: * $p < .10$, ** $p < .05$, *** $p < .01$

Model $\chi^2 = 468$

DF = 30

Significance = $p < .00$

Discussions and Conclusions

Listening to the radio or watching television is associated with owning radio and television sets. These constraints imply socio-economic connections with exposure to the media messages about family planning. Residence in a city or region where such programmes originate and where such newspaper and magazines are more available is also expected to influence media exposure. Religion and ethnicity may capture cultural dimensions related to media exposure. With the introduction of family planning programmes in rural Bangladesh mass media programmes are being widely used by the government to disseminate family planning messages. Analysis of socio-economic background of the rural women suggests that since the data for this study are from rural area, a majority of the respondents were from low socio-economic status. Less than a half of the

respondents had education. More than half of the sample women was current users. Exposure to mass media may attribute to high acceptability of contraception among the respondents.

Reaches of family planning radio messages were found to be high than family planning messages in television and newspaper. Multinomial logistic regression analysis suggests that education and group membership are positively associated with any two media relative to no media. Linear logistic regression analysis indicates that education and group membership are positively associated with the exposure to family planning messages through any media while number of living children has negative influence on exposure to family planning messages. Multinomial logistic regression estimates of the effect of demographic and socio-economic characteristics on current use of contraception demonstrate that age, number of living children, education, group membership, ever heard FP messages, ever watched TV FP messages, approval of FP messages by husband and mother-in-law are important determinants of modern method use relative no method use. More or less similar variables are affecting the use of traditional methods relative no method. We also investigated effects of traditional vs. modern method by using multinomial logistic regression analysis. The variables that are influencing negatively on the use of traditional methods are group membership, husband approval of FP use, religious approval of FP use and mother in laws approval of FP use. Only one variable read newspaper on FP messages is positively associated with the traditional vs. modern method use. This may be attributed to those who read newspaper regularly are distinct group and they have ability to judge the procedures of using traditional method and they may be fully aware of the risk and failure of traditional method use. The logistic regression analysis demonstrates that continued exposure to FP messages through mass media changes knowledge and attitudes of couples and helps them to create an environment in which family planning may be perceived as a social norm. The results also indicate that multiple media sources help to extend the reach of family planning messages. It is also found that exposure to more media sources had an incremental effect on reproductive behaviour. The more media sources a woman is exposed to, the greater the likelihood that she will use a modern contraceptive method. The programmatic implications of these findings are that mass media should continue to be used to promote family planning and other reproductive health issues in rural Bangladesh.

References

- Ahmed, S., 1988. Evaluation of the Impact of Radio and Television Programs on Contraceptive and Reproductive Behaviors of Listeners and Viewers. Process, PDEU, Planning Commission, Dhaka.
- Gilluly, Richard H. and Moore, Sidney H., 1986. Radio Spreading the World on Family Planning. *Population Reports*, Series J. No. 32
- GOB, 1988, Evaluation of the Impact of Radio and Television Programs on Contraceptive and Reproductive Behavior of Listeners and Viewers. PDEU, Planning Commission, Dhaka.

- Mitra, S. N., Islam, S. and Amanullah, A. S. M., 1996, Exposure to Different Media of IEC Activities on FP-MCH Programs. PDEU, IMED, Ministry of Planning, Government of the People's Republic of Bangladesh.
- Olaleye, Do and Bankole, A., 1994, The Impact of Mass Media Family Planning Promotion on Contraceptive Behavior in Ghana. *Population Research and Policy Review*, 13(2): 161-177.
- William J. McGuire, 1986, The Myth of Massive Media Impact: Savings and Salvagings. In: George Comstock, etc. (eds.), *Public Communication and Behavior*, Academy Press, pp. 173-257.
- UNFPA, 1990a, Bangladesh: Report of Second Mission on Needs Assessment for Population Assistance, Report No. 80, New York.
- Manoff, Richard K., 1985, Social Marketing, New Imperative for Public Health, New York.
- Population Reports, 1986, *Working with the Media*. Baltimore John Hopkins University Population Information Program.
- Rahman, M. G. and Ali, M. M., 1991, *Broadcast Media for Public Service: Access, Exposure and Impact Review of Literature*. UNICEF, Dhaka.
- Rabbani, A. K. M. G., Rahman, S. and Ahmed, S., 1989, *Evaluation of IEM Programs in Bangladesh*. Graphics Information Systems Ltd., Dhaka.
- Westoff, Charles F. and Rodriguez, German, 1995, The Mass Media and Family Planning in Kenya. *International Family Planning Perspective*, 21(1): 26-31.