Trends in mass media exposure upon women: A review of Bangladesh Demographic and Health Survey

Yasmin Jahan *, SM Atiqur Rahman 1, Abu Sayeed Chowdhury 2, Sajeda Chowdhury 3, KATM Ehsanul Huq 1, Md Moshiur Rahman 3

ABSTRACT
Background
With the rapid advancement of technology, mass media acquired widespread exposure upon major portion of the world population. The overall media platform has smooth access into peoples’ everyday lifestyle through routine tele transmission of all the existing media (such as broadcast, print, digital, outdoor media etc.). Mass media platform is one of the few most powerful influential factors causing dynamic behavioral changes.

Objective
To assess mass media exposure and it’s changing trends in Bangladesh using data from the Bangladesh Demographic and Health Survey (BDHS) from 1993-94 to 2014.

Methods
The study used data from the published reports of Bangladesh Demographic and Health Surveys (BDHS 1993-1994 to BDHS 2014).

Results
In the years of 1999-2000, 2004, 2007, 2014 women aged 20-24 years (41%, 54%, 56%, 57% respectively) have passed more time watching television in weekly basis than the other age groups. Higher percentage was observed among the educated women than uneducated from 1999-2000 to 2014 who has made access to all three media (television, radio and newspaper) at least once a week. Proportion of women who had accessed all three media at least once a week was much higher in the highest quintile families than the lowest quintile families and more exposure in urban women than the rural women. The region-wise coverage was higher in 1999-2000 in case of Chittagong (5.2%), Dhaka (4.7%), Khulna (5.1%), Rajshahi (3.1%), and Sylhet (3.9%) division with access to all three media at least once a week except Barisal division.

Conclusion
Findings show higher percentage of television watching tendency among comparatively more educated and economically flourished urban women. Therefore, the major policy challenge addressees the need for designing of communications strategies targeting the less privileged, rural and illiterate people who constitute the majority of population in Bangladesh.

Keywords: Mass Media, Women, Bangladesh, BDHS
INTRODUCTION
Mass media represents the combined media technologies to disseminate various information, notions, and thoughts towards general and definite spectators (whether printed, broadcast, or spoken in nature). This includes radio, television, advertising, movies, the Internet, newspapers, periodicals, and so forth. Acquaintance to mass media is very crucial for evolving public health goals. Nevertheless, mass media is intensively deployed in public health being a multifaceted technical tool for health communication. Journal of Health Communication, (Liana Winett and Lawrence Wallack) inscribed that public health enhancement by mass media can be like navigating a vast network of roads without any street signs that puts on the question of predetermining whether you are moving towards the right path of your destination.

The mass media can facilitate the short-term, intermediate-term, and long-term effects on audiences where the short-term objectives comprise divulging audiences to health perceptions; fashioning cognizance and knowledge; altering obsolete or inappropriate acquaintance; and enhancing audience reminiscence of advertisements, prompt physical activities or public provision proclamations, preferment, or program names. The intermediate objectives of mass media include all the above, as well as changes in acuities of social norms attitudes, and behaviors. Finally, all the aforementioned tasks will incorporate for the long-term objectives to engross restructuring of alleged social norms and to control the directions of behavior modification.

According to the functionalities, mass media accomplishes three crucial purposes: refining, decisive public relations, and advocating for a precise strategy and promoting awareness raising toward the right point of view. Access to media holds greater possibility to be used as educational tools, not only to impart knowledge but also as a part of integrated efforts (e.g., social marketing) to promote actions creating social utility. For achieving credibility and admiration among public health opinion leaders, stakeholders, and other gatekeepers, mass media assist organization as a public relation tool.

The mass media is an imperative font of information about health and medical therapies with widespread interest in the eminence of broadcasting (Moynihan et al 2000). It has been identified in previous studies that media may give inappropriate coverage of published scientific papers, overstatement of adverse effects or risks, and evidence of sensationalism. Moreover, media stories about medications linger to be incomplete in their coverage of benefits, risks, and outlays of drugs, as well as in reporting pecuniary ties between clinical trial investigators and pharmaceutical manufacturers. However, it can also have an optimistic public health role.

The consequences of mass media exposure demonstrate that, possessions are speckled, reciprocal and there can be vast impact on audiences through media by the intensity and frequency of their usage.

The consequences of mass media are accelerating and encouraging the eternal social change, especially in developing countries. It is an indispensable tool for public health to determine health and family planning information and the espousal healthy lifestyles. Researchers have defined the impacts and numerous upbringing factors on revelation to mass media which may affect people’s perception and behavior.

The objectives of this paper are: to evaluate the recent trend of mass media exposure in Bangladesh, to correlate the fluctuating acquaintance status with selected disparities and to identify the areas where mass media exposure needs upgradation. Moreover, we might be able to distinguish the better usages of mass media through its using drifts.

MATERIAL AND METHODS
Bangladesh is situated in the eastern part of South Asia. The country has population of about 166 million, alienated into 7 administrative provinces called divisions. There are 64 districts and 545 sub-districts. Bangladesh lies in the medium human
development category as per recent socioeconomic development standpoint. Nearly 70% of the people live in rural areas and agricultural trading has emerged as the largest sector of the economy.

This study used data from the published reports of Bangladesh Demographic and Health Surveys (BDHS 1993-1994, BDHS 1999-2000, BDHS 2004, BDHS 2007, BDHS 2011, and BDHS 2014). BDHS is the national-level demographic and health survey designed to provide information to address the monitoring and evaluation needs of the Health, Population and Nutrition Sector Development Program (HPNSDP). BDHS also intends to provide data to managers and policy makers involved in this program enabling them to effectively formulate and implement intervention strategies. The survey aims to generate evidences on basic national indicators of social progress including fertility, childhood mortality, maternal and child health, nutritional status of mothers and children, exposure to mass media and awareness and attitude towards HIV/AIDS. In addition to present findings, the report highlights the major changes that have been achieved in Bangladesh according to Bangladesh’s demographic and health situation since 1993-1994. BDHS collected information throughout the country (both urban and rural area) and employed a multi-stage probability sample design. First, primary sampling units were selected with probability proportional to size. After that households in each selected area were mapped and all households were listed. Then a systematic sample of households was selected from these lists with households in the urban and rural clusters (Table 1).

<table>
<thead>
<tr>
<th>Year</th>
<th>Sampling unit</th>
<th>Number of women interviewed</th>
<th>Households interviewed</th>
<th>Eligible women interviewed (%)</th>
<th>Household response rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993-1994</td>
<td>304</td>
<td>9,640</td>
<td>9174</td>
<td>99</td>
<td>97</td>
</tr>
<tr>
<td>1999-2000</td>
<td>341</td>
<td>10,544</td>
<td>9854</td>
<td>99</td>
<td>97</td>
</tr>
<tr>
<td>2004</td>
<td>361</td>
<td>11,440</td>
<td>10500</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>2007</td>
<td>361</td>
<td>10,996</td>
<td>10400</td>
<td>99</td>
<td>98</td>
</tr>
<tr>
<td>2011</td>
<td>600</td>
<td>17,749</td>
<td>17141</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>2014</td>
<td>600</td>
<td>17,863</td>
<td>17300</td>
<td>99</td>
<td>98</td>
</tr>
</tbody>
</table>

BDHS used mainly three types of questionnaires: A Household Questionnaire, a Woman’s Questionnaire, and a Community Questionnaire. The Household Questionnaire was used to list all the usual members and visitors in the selected households. The Woman’s Questionnaire was used to collect information from married women aged 15-49 years and the Community Questionnaire was administered in each selected cluster during the household listing operation and included questions about the existence of development organizations in the community and the availability and accessibility of health services and related facilities. A summary on sample design and field procedures is given below while details can be found in the BDHS reports (Table 2). Field workers were trained to carry out the listing of households, and administered the field-tested questionnaire. In the survey, female respondents were asked whether they usually read a newspaper, listen to the radio, or watch television at least once a week, less than once a week or not at all. It is important to know which types of people are more likely to be reached by the media for purposes of planning programs intended to spread information about health and family planning.

After conducting survey, BDHS questionnaires were returned periodically to Dhaka office for data processing that consisted of office editing, coding of open-ended questions, data entry, and editing of inconsistencies identified by the computer program. Eight data entry operators and two data entry supervisors processed the data. Overall task was carried out using the Census and Survey Processing System (CSPro), a software jointly developed by the U.S. Census Bureau, ICF Macro, and Serpro S.A.
Table 2 Analysis of Survey Procedures in this Review

<table>
<thead>
<tr>
<th>Year</th>
<th>Households selected/occupied*</th>
<th>Number of Field worker participated</th>
<th>Regions of the country (Divisions)</th>
<th>Data collection period</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>10811/10523</td>
<td>120</td>
<td>6</td>
<td>January 2004 - May 2004</td>
</tr>
<tr>
<td>2007</td>
<td>10819/10461</td>
<td>128</td>
<td>6</td>
<td>March 2007 - August 2007</td>
</tr>
<tr>
<td>2011</td>
<td>17964/17511</td>
<td>173</td>
<td>7</td>
<td>July 2011 - December 2011</td>
</tr>
<tr>
<td>2014</td>
<td>17989/17565</td>
<td>164</td>
<td>7</td>
<td>June 2014 - November 2014</td>
</tr>
</tbody>
</table>

* Some household were found vacant at the time of interview

RESULTS

Overall exposure to mass media has decreased from 4.3% to 0.4% in 1999-2000 and in 2014 respectively. The proportion of exposure to mass media from 1999-2000 to 2014 has shown decrease of 3.9 percentage points. There was a continued fall in mass media exposure.

![Trends in Exposure to Mass Media among Women, Bangladesh Demographic and Health Survey, 1993-1994 to 2014](image_url)

An uphill motion is present in the percentage of weekly television watching in 1993-1994 among the age range of 25-29 years of women (21%), which gradually decreased with the age groups. From 1999-2000, 2004, 2007, 2014 women aged 20-24 years (41%, 54%, 56%, 57% respectively to the years) were watching more television weekly than the rest of the age groups. Fifty four percent women aged within 15-19 years had watched television weekly in 2011.

The percentage of watching television weekly was higher in urban area than rural area. But overall survey data showed, gradually the percentage of weekly television watching was higher.

The weekly listening of the radio was higher in 1993 and 2004 (44%, 48%) among less than 15 years age group, which gradually fall in the rest of the age groups. Women aged within 15-19 years had highest percentage (37%, 28%, 7%, 4%) of listening radio weekly in 1999-2000, 2007, 2011 and 2014 respectively.
Fig 2 Trends in Exposure to Television among Women, Bangladesh Demographic and Health Survey, 1993-1994 to 2014

Fig 3 Trends in Exposure to Television in Urban-Rural Differentials among Women, Bangladesh Demographic and Health Survey, 1993-1994 to 2014
Fig 4 Trends in Exposure to Radio among Women, Bangladesh Demographic and Health Survey, 1993-1994 to 2014

Rural percentage of listening radio weekly was higher in 2007 (20%) and 2011 (5%) than urban (15%, 3%). But the percentage was static in the year of 2004 and 2014 (3%).

Fig 5 Trends in Exposure to Radio in Urban-Rural Differentials among Women, Bangladesh Demographic and Health Survey, 1993-1994 to 2014

The total survey data showed a downward motion of exposure in case of listening radio weekly. Percentage of weekly newspaper reading was higher in 1999-2000 and 2004 (10%) and the common age group was 20-24 years aged women. Then, gradually it decreased (8% in 2007, 9% in 2011 and 7% in 2014) and the common age groups were 30-34 and 35-39.
Fig 6 Trends in Exposure to Newspaper Media among Women, Bangladesh Demographic and Health Survey, 1993-1994 to 2014

Percentage of weekly newspaper reading among urban women was 3-4 times higher than rural women. No educational Data has been collected from 1993-1994 BDHS survey. However, from 1999-2000 to 2014 BDHS survey, higher percentage was observed among the educated women than uneducated to access all three media at least once a week. In 2004, there was a higher percentage (17.2%) of secondary level completed women to access on all three media at least once a week but gradually it was decreased with the following BDHS reporting years.

Fig 7 Trends in Exposure to Newspaper in Urban-Rural Differentials among Women, Bangladesh Demographic and Health Survey, 1993-1994 to 2014
Percentage of accessing all three media at least once a week was much higher in the highest quintile families than the lowest. In 2004, the higher percentage (9.5%) of highest quintile families was identified those accessed all three media. The region-wise coverage was higher in 1999-2000 respectively for Chittagong (5.2%), Dhaka (4.7%), Khulna (5.1%), Rajshahi (3.1%), and Sylhet (3.9%) division to access all three media at least once a week except Barisal division, Barisal division had higher percentage (3.3) in 2004.

Fig 8 Trends in Exposure to Mass Media among Women with their Education, Bangladesh Demographic and Health Survey, 1993-1994 to 2014

For wealth quintiles, the highest quintile also had the highest percentage of accessing all three media, with a peak of 9.5% in 2014.

Fig 9 Trends in Wealth Quintiles Differentials in Exposure to Mass Media among Women, Bangladesh Demographic and Health Survey, 1993-1994 to 2014
Fig 10 Trends in Geographic (Region-Wise) Differential in Exposure to Mass Media among Women, Bangladesh Demographic and Health Survey, 1993-1994 to 2014

DISCUSSION
Within the last five decades, both the media and its impact has gone through radical changes with the technological advancement. Information admittance is crucial to surge people's knowledge and awareness regarding informative items that may affect their acuities and behavior. There are three basic functionalities of Mass media such as newscast/information, entertainment and education. These edify people in different ways by giving information over food, health, housing, sanitation, employment, agriculture, industry, environment, science, technology, modernization and so on. People also need to distinguish the information for socialization or to make the verdicts and verbalized views. In the contemporary era of globalization, majority of folks in the society hinge on information and communication to endure allied with the world and to do their quotidian activities like work, entertainment, health care, education, socialization, travelling and anything else that they have to do. Moreover, the media has enormous impact on society in shaping the public opinion. In the surveys, mass media exposure was evaluated by asking respondents how frequently they read a newspaper, watched television, or listened to radio. It is important to know about the subgroups that are more or less likely to be grasped by the media for tenacities that not only can inform but also can persuade. Moreover, this information can also yield positive changes or avert negative vagaries in health-related behaviors across the large populations.

According to BDHS data, women had much exposure to all types of mass media on 1999-2000 than the other BDHS reports and it decreased in lieu of increasing gradually. Most importantly, all types of mass media exposure are positively related to the respondent’s educational level and economic status. Regular exposure to mass media is the highest among women with secondary education and the women with maximum wealth quintile. Women of Chittagong division have greater access to mass media than other divisions and surprisingly it decreased steadily during 1999-2000 and 2004.

If we consider all the three types of media separately, there is a considerable gap in mass media exposure of urban-rural residence. For example, women in rural areas are more disadvantaged in terms of exposure to mass media than urban women especially with reading newspaper. It might be related to the educational level. Young women aged less than 25 years are more likely to watch television or listen to the radio than older women. In case of reading newspaper; however, once a week is higher among the women aged less than 35 years. In comparison to other BDHS reports, among the three media, television exposure of the women aged less than 25
years residing in urban area was more during 2014. Moreover, television is the only media, which had at least once a week exposure regularly among women of all ages. The main reason was that, the television media does not require any special education and it enables listening and watching at a time. Therefore, it is more popular and considering other media.

However, the reviewed articles highlighted that, educated and highest wealth quintiles women residing in urban area had better access to mass media. In general, it can be said that exposure to mass media in urban people was higher because of their economic solvency and amenities to connect with the media. The factors of education, highest wealth quintile and urban area are strongly associated with mass media exposure. Therefore, to build awareness among low–educated rural women from lowest wealth quintile, to provide information about health education, health service delivery systems, to accelerate disease control activities and to introduce new technological innovations through mass media holds significant importance. Only after that, public health sector can be considered as technologically advanced.

STRENGTHS AND LIMITATIONS
The major unique feature of our study is the use of a national level survey data with comprehensive information regarding mass media exposure using demographic variables. However, the main limitation of this study is absence of correlation to the level of education among the divisions and urban-rural areas according to wealth quintile. Therefore, further study is required to investigate the variation in different geographic regions of Bangladesh.

CONCLUSION
Mass media, being the prime mode of information communication technology, is undoubtedly an extremely influential tool to simulate peoples’ way of thinking. This review article shows the contemporary trends of usage and gradual increase in the acceptance of mass media both in rural and urban women folk. Whatever the education level is, interrelation of social status and age in terms of mass media exposure is the main focal point of this discussion. It is well evident that mass media exposure can directly and indirectly produce positive changes or prevent negative changes in the large population groups. It is easier to influence women with the help of mass media and the result is remarkable. Most of the female in the survey reports showed their tendency to believe the information they were delivered by mass media. Therefore, mass media can be termed as one of the most convenient ways to spread necessary information among illiterate women.

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REFERENCES


