INTRODUCTION

Most of the developing countries agreed to achieve the Millennium Development Goals (MDGs) by 2015. Bangladesh is one of them and trying to attain MDGs especially to improve maternal health, women empowerment, reduces child mortality, reduce fertility and hazard of HIV or AIDS diseases. The contraceptive is the importance part to progress the female reproductive health as well as to fertility control to any country [1]. About this necessity Khan and Khan (2010) has mentioned that “Contraceptive choice is central element of quality of care in the provision of family services and an important dimension of women’s reproductive right” [2]. After the Second World War, the explosive population growth had become a vital concern because social, political, cultural and economic situation completely depends on this issue [3]. At this time, family planning program was implemented to decline fertility [4]. After 1980s, this program successfully declines the fertility rate in many developing countries [5]. Among the countries, Bangladesh has set a good example to decline the fertility rate and increase the usage of contraceptive [6].

Bangladesh is the 8th most populous country in the world with a total population of about 160 millions and the fertility rate is 2.2 percent [7]. It is understandable that the continuous population growth constitutes a primary threat to the continued economic growth and development in our country [8].

The government of Bangladesh and some nongovernment organizations have implemented some programs to aware about family planning and distributed contraceptive freely to the stakeholders [9]. After involving this programmed, women gained sufficient knowledge about the benefit of small family size, about the right contraceptive method [10]. As a result, the fertility rate declined further by 10 percent from 2004 to 2007 and almost 15 percent between 2007 and 2011[11].The use of modern contraceptive method also increased by this time.

But there are still many barriers prevals on contraceptive uses, especially for the females; they always face difficulties in this context. Female contraception use decision depends on the husband and wife's mentality, family members, religion, education, financial condition etc. Furthermore, various social-economic and cultural factors are also influence the couple’s contraceptive use. [12]. It is also noted that some demographics factors such as age, son preferences, number of sons and daughter are also important factor to contraceptive use [2].
Among these determinants, education is the most crucial factor. [13]. Furthermore, geographic location is another significant factor which impacts largely on the women to use any types of contraception. For example, contraceptive use rate is lower the in mountainous regions compare to in the lowland regions. Similarly, the use of contraceptive is higher in the urban areas than the rural areas. An illustration can be exposed that fertility rate rapidly declines in the urban area compared to rural area. Mass communication is also encouraged and motivated people to contraceptive use. [14]. 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 [15]. Medical technology also provides new and essential support in reproductive health care facility; thus, reduce child mortality [15].

There are many studies in Bangladesh that focus the determination of the contraceptive use in Bangladesh but they give little attention to effects of women’s knowledge, attitude and family planning approval on contraceptive use. This study aimed to estimate the effects of women knowledge, attitude and approval of family planning on contraceptive use.

OBJECTIVES OF THE STUDY

The general objective of this study was to know about effects of women knowledge, attitude, and approval of family planning on contraceptive use among the married women and to identify the effects of socio-demographics variable on women knowledge, attitude, and approval of family Planning.

REVIEW OF LITERATURE

Islam [16] found in Bangladesh that socio-demographics factors have different effects on contraceptive use according to their age. His study examined that that women occupation and current living children were significantly influenced by younger married women contraceptive use while women education, skilled occupation, husband support on family planning, better knowledge of modern contraception, spousal communication were influence to older married women contraceptive use. So, socio-demographic factors are more important to older married women compared with younger women.

Islam [17] examined the determinants that were influenced to use of contraceptive method in Bangladesh. He found that wife’s education and occupation; living children, male’s higher knowledge and positive thoughts on modern contraceptives, and male’s approval of family planning and exposure to media were influenced by choice modern contraceptive method. He also found that wife’s education, skilled occupation, higher knowledge on contraceptive methods and media exposure were influenced to couple to choice traditional contraceptive method. This study proved that choice of contraceptive types is also influenced by male’s characteristics.

Kamal et al [18] identified the factors that are associated with current contraceptive use among married couples in Bangladesh. They found that the number of current children, want for additional children, education and occupation of wife, education and occupation of husband, husband’s approval of family planning, general health awareness, attitude on contraception, social network, spousal communication and knowledge of contraception were associated with contraceptive use.

Islam et al (2014) showed that couples discussion about family planning issues influenced the couples contraceptive use as well as decision to choose suitable contraceptive method. While husband and wife discuss about family planning regarded issues, they can share their previous experience, side effects and jointly take the decision what kinds of contraceptive they should choice or what types of contraceptive is appropriate for them[19].

Omariba [20] found that women’s higher education increased the modern contraceptive use in Kenya. Thang and Huong [21] showed that modern contraceptive use was rising by over time. They stated that the younger women want to take children rather than contraceptive use. They also added that contraceptive use was low among the illiterate women.

Gordon et al. [22] found that contraceptive use was related to educational level, knowledge of contraception and the accessibility of the health care facility.

Rahman et al [23] identified the social, economic and demographic factors that were related to married women contraception use in Bangladesh. They found that the administrative areas, educational level, visits of health workers, religion, and region, current children, age, and occupation were related to contraceptive use.
Kamal and Hassan (2013) examined the factors that were associated with contraceptive use among tribal women of Bangladesh. Their studies found an interesting result that the contraceptive use rate was higher among the tribal women than the national level[24].

MATERIALS AND METHODS

The research design of this paper is cross-sectional and social survey method was used to conduct this study.

The social survey method was applied to conduct this study. The survey was conducted in January 2014. The primary data was collected through face to face interviews from the representative sample of respondents.

All the married women whose age between 15 years to 49 years were targeted as the population of this study because this is the prior time to child birth.

We purposely selected Narsingdi municipality as the study area for this study. To select the sample size, two-stage cluster sampling technique was used. We consider the Mohallas as a cluster. At first stage, ten Mahallas (cluster) were randomly selected from 33 Mahallas (total cluster). At the second stage 430 married women were selected randomly from the ten Mohallas.

ANALYTICAL TECHNIQUE

The SPSS Amous 17 program was used to analyze the data. We applied here path analysis to determine the significant factor effects on current contraceptive use.

Variable of the path model:
Three types of the variable were used in this path model. Those variables are

1. **Observed, endogenous variables**
   - Knowledge on contraception and STDs diseases.
   - Attitude of contraception
   - Contraceptive use
   - Approval of family planning

2. **Observed, exogenous variables**
   - Current living children
   - Media exposure
   - Women education
   - Age of women

3. **Unobserved, exogenous variables**
   - e1 (Contraceptive use)
   - e2 (Knowledge on contraception and STDs disease)
   - e3 (Approval of family planning)
   - e4 (Attitude of contraception)

![Figure 1. Path analysis](image-url)
RESULTS

Table 1. Path analysis show the regression estimate of the parameters

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge on contraception and STDs diseases</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current living children</td>
<td>-0.032</td>
<td>0.020</td>
<td>-1.574</td>
<td>0.116</td>
</tr>
<tr>
<td>Age of women</td>
<td>0.031</td>
<td>0.028</td>
<td>1.124</td>
<td>0.261</td>
</tr>
<tr>
<td>Media exposure</td>
<td>0.288</td>
<td>0.045</td>
<td>6.419</td>
<td>***</td>
</tr>
<tr>
<td>Women education</td>
<td>0.192</td>
<td>0.019</td>
<td>9.885</td>
<td>***</td>
</tr>
<tr>
<td><strong>Attitude of contraception</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women education</td>
<td>0.229</td>
<td>0.032</td>
<td>7.230</td>
<td>***</td>
</tr>
<tr>
<td>Media exposure</td>
<td>0.302</td>
<td>0.073</td>
<td>4.118</td>
<td>***</td>
</tr>
<tr>
<td>Age of women</td>
<td>0.063</td>
<td>0.046</td>
<td>1.378</td>
<td>0.168</td>
</tr>
<tr>
<td>Current living children</td>
<td>-0.072</td>
<td>0.033</td>
<td>-2.192</td>
<td>0.028</td>
</tr>
<tr>
<td><strong>Approval of family planning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of women</td>
<td>0.048</td>
<td>0.026</td>
<td>1.865</td>
<td>0.062</td>
</tr>
<tr>
<td>Current living children</td>
<td>0.001</td>
<td>0.019</td>
<td>0.28</td>
<td>0.978</td>
</tr>
<tr>
<td>Media exposure</td>
<td>0.226</td>
<td>0.041</td>
<td>5.450</td>
<td>***</td>
</tr>
<tr>
<td>Women education</td>
<td>0.041</td>
<td>0.018</td>
<td>2.270</td>
<td>**</td>
</tr>
<tr>
<td><strong>Contraceptive use</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude of contraception</td>
<td>0.087</td>
<td>0.028</td>
<td>3.073</td>
<td>***</td>
</tr>
<tr>
<td>Knowledge on contraception and STDs diseases</td>
<td>0.309</td>
<td>0.043</td>
<td>7.190</td>
<td>***</td>
</tr>
<tr>
<td>Approval of family planning</td>
<td>0.207</td>
<td>0.052</td>
<td>4.003</td>
<td>***</td>
</tr>
</tbody>
</table>

***p<0.01; **p<0.05; * p<0.10

From the above regression estimate table, it is been clear that all, the attitude of contraception, knowledge on contraception and family planning approval has played an significant effects on the use of contraceptive. It is also been depicted that attitude of contraception is significantly influenced by whether they are receiving message about on contraception from media, women education and current living children. The path coefficient from media exposure to knowledge on contraception and STDs diseases is 0.288. The path coefficient knowledge on contraception and STDs diseases to contraceptive use is 0.309.

The product of path coefficient from media exposure to knowledge on contraception and STDs diseases and the path coefficient from knowledge on contraception and STDs diseases to contraceptive use is 0.089. The coefficient from women education to knowledge on contraception and STDs diseases is 0.192. The coefficient from women education to knowledge on contraception and STDs diseases and the coefficient from knowledge on contraception and STDs diseases to contraceptive use is 0.059. The path coefficient from women education to attitude on modern contraceptives is 0.229.

The path coefficient attitude on modern contraceptive to contraceptive use is 0.087. So, the product of path coefficient from attitude on modern contraception to contraceptive use is 0.02. The path coefficient from women education to Knowledge on contraception and STDs diseases is 0.192. The product of path coefficient from women education to Knowledge on contraception and STDs diseases and the path coefficient from knowledge on contraception and STDs diseases to contraceptive use is 0.059. The path coefficient from media exposure to attitude on modern contraceptives is 0.302; the product of path coefficient from women media exposure to attitude on modern contraceptive and the path coefficient from attitude on modern contraceptive to contraceptive use is 0.026. The path coefficient from age of women to family planning approval is 0.048.

The path coefficient family planning approval to contraceptive use is 0.206. So, the product of path coefficient from age of women to family planning approval and the path coefficient from family planning approval to contraceptive use is 0.009. The path coefficient from media exposure to family planning approval is 0.226.

So, the product of path coefficient from women media exposure to attitude on modern contraceptive use and the path coefficient from attitude on modern contraceptive to contraceptive use is 0.0097. The path coefficient from age of women to approval of family planning is 0.041. So, the product of path coefficient from age of women to family planning approval and the path coefficient from family planning approval to contraceptive use
RESULTS

This study explored the effects of the level of women knowledge and attitude about family planning approval on current contraceptive use. We found that women’s positive attitude of modern contraceptive were highly influenced to use contraceptive.

A study conducted by Kamal et al. [25] showed that positive attitude on modern contraceptives increases the probability of couple’s contraceptive use [18]. It also increase the male involvement in family planning issues.

Our study reveals that higher knowledge on modern contraceptive is significantly affected by contraceptive use of the women. Higher knowledge on contraceptive is driven couple to use appropriate contraceptive. They know the which contraceptive is suitable for them and what kinds of method have the low side effects. It also notes that many women of Bangladesh have the serious misconception about the modern contraceptive use. For this reason, they do not prefer to use modern contraceptive, especially which needs minor surgery.

Women, who have proper knowledge on contraceptive, do not fear about the side effects, prefer to use modern contraceptive even they allow themselves to surgery.

A study conducted by Islam, 2013 showed that men, who had higher knowledge on modern contraceptive, were increased the likelihood of couples to use contraceptive [10]. Our study reveals that approval of family planning has significantly affected contraceptive use. Parven [26] found in Bangladesh that the uses of contraceptive were 7.8 times higher when the husband agreed to family planning. In Bangladesh, husbands’ family planning approval can be considered as a major determinant of particularly wives’ contraceptive use.

Our study also reveals that media exposure significantly increase the positive attitude and contraceptive knowledge. In Bangladesh, mass media is considered an important means for positive change to attitude on modern contraceptive and use of contraceptive. Mass media also play an important role to keep small family size and approval of family planning [15].

Personal attitude and preference are also and important factor to choose the contraceptive method. Most of the couples like the pill, condom and withdrawal compare to tubectomy, vasectomy. Most of the male have the negative attitude about the vasectomy method because they think it may reduce their sexual ability. Some couples also have very positive attitude on withdrawal method because there is no cost in this method.

Our study also reveals that women education significantly effects on women approval of family planning, increase knowledge and positive attitude towards modern contraceptive. Educated women have proper knowledge on modern contraceptive. The relationship between women education and contraceptive use was mediated by approval of family planning and knowledge of contraceptive method [23]. Women education also creates norms to keep small family size. Educated women are more concern about their health and generally visit health care center than who are not educated [27].

Age is also core demographics’ factor that related to contraceptive use. Our study shows that the relationships between women age and contraceptive use are largely mediated by approval of family planning. Older women who have already fulfilled their desired number of children are more likely to use contraceptive.

Our study shows that the relationships between number of living children and contraceptive use are largely mediated by approval of family planning. Current children also influence to couples decision on contraceptive use. Couples, who have no children, have the higher probability of taking the children. But the couples have already considerable living children; they generally approve the family planning decision because they do not desire for new children. They generally accept to use contraceptive.

CONCLUSION

In the mid 1970s, Bangladeshi women had average more than six children. But recently, there is rising awareness to keep small family size. The educated women in rural area prefer to take two or three children. Even in rural area, the tendency of taking more children has been reduced. Bangladesh is the one of the developing country that can successfully inspired its people to keep small family size. Most of this credit goes to Bangladesh government and NGOs initiative, especially effective family planning programmed. It is also positive aspect that all the married women have known about the at least one contraceptive method.

Now contraceptive use rate is 62 percent between age 15 to 49 years old but it was 51.2% among the
teenager aged 15-19 years[28]. Bangladesh government target to population control before 2025. In order to achieve, this targeted level population, and the contraceptive use rate should be increased 68.6% by 2025[29]. The government should give target based family planning approach to increase the knowledge and positive attitude toward contraception, especially the teenage women.

REFERENCES


[29] http://www.popline.org/node/318620

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