Original article

Reproductive health profile of married women: experience from a rural community of Bangladesh

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Abstract

Design: The study was a community based cross sectional study . Objective: The study was conducted to find out the reproductive health profile of rural married women of a selected rural community in Dhamrai Upazila of Dhaka district. **Materials and Methods:** The study was conducted among 204 married women of reproductive age included considering specific selection criteria. Data were collected by face-to-face interview using a semi-structured questionnaire. Maintaining quality control check data were processed and analyzed by using SPSS software. **Results:** The study revealed that majority of the women were either illiterate (34.1%) or had primary education (33.3%) with mean age of 31+8.65 years. Most of them (88.2%) were house wives and major segment (52.9%) had poor monthly family income (Tk.5000-10000). Among all, 63.7% were married within 11-17 years of age and 69.8% gave birth of first child during adolescence (16-18 years). Major part (60.29%) of the women didn't use any contraceptive and only 38.55% utilized ante-natal care. Average number of children was 2.73+1.52 and most of the delivery (81.6%) was conducted at home by untrained birth attendants (57.0%). Adverse pregnancy outcome included abortion, menstruation regulation, still birth, complications to new born and mothers. Reproductive health problems faced by the women included menstrual problem, physical assault, leucorrhea, mental torment, sexual annoyance, puerperal infection, pregnancy related complications, urinary tract infection & pelvic inflammatory disease. Most (81.43%) of the illiterate women didn't utilize ante-natal care while majority (60.0%) having higher secondary school certificate (HSC) had =3 ante-natal visits and this variation was statistically significant [$?2(12)=26.35$, $p<0.05$]. Majority (71.21%) of the illiterate women didn't use any contraceptive method while most of them having HSC used either condom or oral contraceptive and this discrepancy was statistically significant [$?2(12)=27.86$, $p<0.05$]. Majority (67.1%) of the illiterate women were delivered by untrained birth attendants whereas all women having HSC were delivered by doctor (40.0%), nurse (20.0%) and traditional birth attendant (40.0%), this difference was statistically significant [$?2(12)=24.57$, $p<0.05$]. **Conclusion:** Reproductive health profile was worse among the illiterate, less aware and low income rural women. The study recommends formulation and implementation of effective strategies to improve reproductive health status of the rural women.

Key words: Married women, reproductive health, pregnancy profile, rural community.

Introduction

Reproductive health is a state of complete physical, mental and social well being and not merely the absence of disease or infirmity in all matters relating to the reproductive system and its function and processes. Reproductive health, therefore, implies that people are able to have a satisfying and safe reproductive life. Implicit in this is the right of women to be informed of and to have access to comprehensive reproductive health care services that will enable them to go safely through the reproductive cycle including pregnancy and child birth. [1] In developing world, 1/3rd of all healthy adult women are lost due to reproductive health problem.[2] Female population is about 60.26 million in Bangladesh [3] and married women of reproductive age group constitute 51.7% of total female population.[4] More than 500,000 women die every year due to pregnancy related complications in the developing world. [5] In although the average age at first marriage is 18 years for females and 27 years for males, rural females tend to marry even earlier . Approximately 75% of the girls are married before the age of 16, and only 5% are married after 18 years, which is the legal age of marriage for females in Bangladesh. [6] Like early marriage, early pregnancy is common among females in Bangladesh. The adolescent fertility rate in the country is one of the highest in the world with 147 births per 1,000 women aged <20 years. [7]

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Utilization of reproductive healthcare services such as antenatal care (ANC), institutional delivery attended by trained birth attendants are basic needs for pregnant mothers around the globe. In our country, antenatal care coverage (at least one visit) is 48.7%[8] and most of the deliveries (87.4%) takes place at home, only 11.2% deliveries occur in hospitals or clinics.[9] The number of births attended by skilled health personnel is 13%.[10] In Bangladesh different factors in many forms and folds af fect the reproductive health of married women specially in rural communities. This study intended to explore the reproductive health profile and some determinants among the married women in a rural community of Bangladesh. The study findings may contribute to the improvement of reproductive health status of the women.

Materials And Methods

This Cross-sectional study was conducted during the period of January to June 2009 to assess the reproductive health profile of married women of the rural community. The rural women were selected from the rural community 40 Km west to the Dhaka city called "Choybaria" of Dhamrai Upazila under Dhaka district. Married women of reproductive age (15-49 yrs) were included in the study on the basis of selection criteria and by using simple random sampling technique. Considering the GR number , total 204 households were identified randomly followed by one woman was selected randomly from each household and thus total 204 married women of reproductive age were included in the study . Data were collected by face-to-face interview with the help of a semi-structured questionnaire. Socio-demographic data included age, sex, education, occupation, family income, marital status, age at marriage, age at first child birth and number of children. Data regarding pregnancy profile included ANC utilization, number of ante-natal visit, place of delivery, type birth attendant and pregnancy out-

come. Data regarding contraceptive practice and reproductive health problems were also collected. All data were cleaned considering the nature of variables and maintaining quality control check. Data were processed by editing, coding and categorization and preserved by marinating confidentiality.

Statistical Analysis

Data analysis was done by using the SPSS soft-ware (version-18.0) and accordingly descriptive statistics frequency distribution, percentage and mean ± SD was estimated along with statistical association was evaluated among ANC, contraceptive practice, birth attendants, place of delivery and socio-demographic attributes. Inferential statistics included group comparisons by using ?2 test. A 'p' value of <0.05 was considered statistically significant at 95% CI. All 'p' values presented are two tailed.

Ethic

Ethical permission was obtained from the Ethical Committee of NIPSOM. Informed written/verbal consent was taken form the individual participant prior to inclusion in the study . They were also informed about their right to withdraw from the study at any stage or to restrict their data from analysis. Privacy was maintained during data collection and confidentiality of data was maintained strictly.

RESULTS

The study exposed the socio-demographic profile of the rural women and it was found that majority (43.63%) of the women were young adult in the age group 20-30 years and illiterate (34.31%). Most of the women (88.25%) were housewives and had poor economic condition with average monthly income of Tk.6843.14 (+ 2786.77). Most of them (91.80%) were enjoying married life and majority (63.73%) were married at very early age (1 1-17 years). Majority of the women had first child birth as adolescent (16-18 years) and average number of children was 2.73 (+ 1.52) (Table-1).

Attribute	Finding
Age (in years)	15-19: 8.33%, 20-30: 43.63%, 31-40: 28.41%, Mean age (± SD)= 31.00±8.65 years.
Education	Illiterate: 34.31%, Primary: 33.33%, Secondary: 25.00%, SSC: 4.91%, HSC: 2.45%.
Occupation	House wife: 88.25%, Business: 2.40%, Farmer: 4.60%, Student: 4.75%.
Monthly family income (Tk.)	Tk.2000-5000= 35.78%, Tk.5001-10,000= 52.94%, Tk.10,001-20,000= 10.28%, Average (± SD)= Tk. 6843.14 ± 2786.77.
Marital status	Married: 91.80%, Widow: 5.39%, Separated: 2.45%, Divorced: 0.98%.
Age at marriage (in years)	11-17: 63.73%, 18-21: 31.37%, 22-25: 4.90%, Mean age (± SD)= 17± 2.59 years.
Age at first child birth (in years)	16-18: 69.83%, 19-25: 34.64%, 26-30: 1.12%, Mean age (± SD)= 18±2.24 yrs.
Number live children	No child: 12.25%, 1-2: 50.50%, 3-5: 36.27%, 6-8: 0.98%, Mean ± SD= 2.73 ± 1.52.

The study found that 60.29 % women didn't use any contraceptive while 23.04 % used OCP, 8.82 % used injectable, 4.41% used condom, 1.96% used implant and 1.47 % women were done tubectomy (Figure-1).

Figure-1: Distribution of the women by contraceptive use
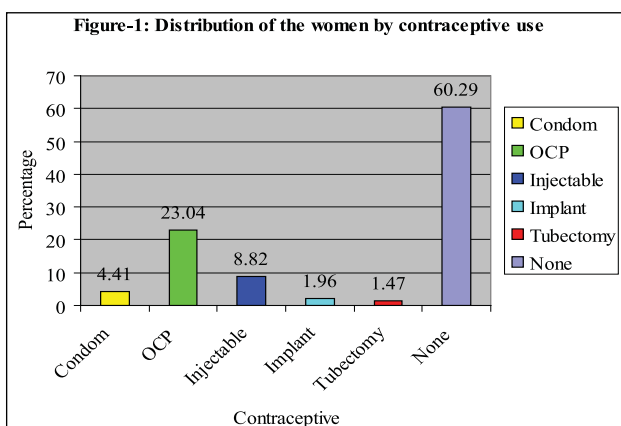
Regarding pregnancy profile, the study revealed that, majority of the women (61.45%) didn't utilize ANC and among users, only 12.29% had 3 ante-natal visits during pregnancy. Most of the deliveries (81.57%) were conducted at home and majority (57.00%) were conducted by untrained birth attendants. Adverse pregnancy outcome included abortion (14.7%), MR (7.8%), still birth (6.7%), complications to new born (18.2%) and mother (19.8%) (Table-2).

peral infection (18.6%), complicated pregnancy (18.1%), perineal tear (17.7%), UTI (12.3%), PID (11.3%), unwanted pregnancy (8.3%), infertility (2.0%) & tumor of uterus (1.5%) (Table-3).

Table-4: Association between Education of the Women and Birth Attendants (n=179)

Reproductive Health Problem	Frequency	Percentage
Menstrual problem	63	30.9
Physical assault	59	28.9
Sexual annoyance	56	27.5
Mental torment	46	22.6
Leucorrhea	45	22.1
Puerperal infection	38	18.6
Complicated pregnancy	37	18.1
Perineal tear	36	17.7
Urinary tract infection (UTI)	25	12.3
Pelvic inflammatory disease (PID)	23	11.3
Unwanted pregnancy	17	8.3
Infertility	04	2.0
Uterine tunour	03	1.5

It was revealed that 67.1% illiterate women and 61.4% women having primary level education were delivered by untrained birth attendants while women having HSC level education were delivered by doc-

Table-2: Distribution of the Women by Pregnancy Profile (n=179)

Attribute	Finding
ANC utilization	Yes: 38.55%, No: 61.45%.
Number of antenatal visits	1-2 visits: 25.14%, 3 visits: 12.29%, 4-8 visits: 1.12%, Average= 1 ± 2.59 visits.
Place of delivery	Home: 81.57%, Hospital: 18.43%.
Birth attendant	Untrained birth attendant: 57.00 %, TBA: 31.80 %, Nurse: 4.5 %, Qualified doctor: 6.7 %.
Pregnancy outcome	Abortion: 14.7%, MR: 7.8%, Still birth: 6.7%, Complications to new born: 18.2%, Complications to mother: 19.8%, Healthy outcome: 51.6%.

Common reproductive health problems suffered by the women included menstrual problem (30.9%), physical assault (28.9%), sexual annoyance (27.5%), mental torment (22.6%), leucorrhea (22.1%), puer-

tor (40%), TBA (40.0%) and nurse (20%). This variation of birth attendants by educational level of the women was statistically significant [$\chi^2(12)=24.57$, $p<0.05$] (Table-4).

Table-3: Distribution of Women by Reproductive Health Problems

Education	Doctor f (%)	Nurse f (%)	TBA f (%)	Untrained BA f (%)	Total f (%)
Primary	02 (3.2)	02 (3.2)	20 (32.2)	38 (61.4)	62 (100.0)
Secondary	07 (20.6)	03 (8.8)	10 (29.4)	14 (41.2)	34 (100.0)
SSC	-	02 (25.0)	3 (37.5)	03 (37.5)	08 (100.0)
HSC	02 (40.0)	01 (20.0)	2 (40.0)	-	05 (100.0)
Illiterate	01 (1.4)	-	22 (31.4)	47 (67.1)	70 (100.0)
Total	12 (6.7)	08 (4.5)	57 (31.8)	102 (57.0)	179 (100.0)
Significance	[$\chi^2_{(12)}$=24.57, p<0.05]				

In respect of ante-natal visits by educational qualification, most (81.43%) of the illiterate women and 55.55% of the women having primary level education had no ante-natal visit. On the contrary, majority (60.00%) of the women having HSC and half (50.00%) of the women having SSC degrees had more than =3 ante-natal visits and this dif ference of ANC utilization by educational qualification was statistically significant [?2(12)=26.35, p<0.05] (Table-5).

Table-5: Ante-natal Visits by Educational Qualification of the Women (n=179)

Education	Number of Antenatal Visit				Total f(%)
	No visit f(%)	1-2 visits f(%)	3 visits f(%)	4-8 visits f(%)	
Primary	35(55.55)	24(38.09)	03(4.76)	-	62 (100.0)
Secondary	15(44.12)	10(29.41)	08(23.53)	01(2.94)	34 (100.0)
SSC	02(25.00)	02(25.00)	04(50.00)	-	08 (100.0)
HSC	01(20.00)	01(20.00)	02(40.00)	01 (20.0)	05 (100.0)
Illiterate	57(81.43)	08(17.14)	05(1.43)	-	70 (100.0)
Total	110 (61.45)	45 (25.14)	22 (12.29)	02 (1.12)	179 (100.0)
Significance	$[\chi^2_{(12)}=26.35, p<0.05]$				

Regarding contraceptive practice by educational level of the women, it was exposed that majority (67.10%) of the illiterate women and 60.30% of the women having primary level education didn't use any contraceptive method. On the other hand, majority (80.00%) of the women having HSC degree used contraceptive like condom (40.00%) and OCP (40.00%) and this variation of contraceptive practice by educational qualification of the women was statistically significant [?2(12)=27.86, p<0.05] (Table-6).

Table-6: Association between Contraceptive Practice and Education of the Women

Education	No use f(%)	Condom f(%)	OCP f(%)	Injectable f(%)	Implant f(%)	Tubectomy f(%)	Total f(%)
Primary	41(60.3)	01(1.5)	13(19.1)	10(14.7)	02 (2.9)	01(1.5)	68(100.0)
Secondary	28(54.9)	02(3.9)	20(39.2)	01(2.0)	-	-	51(100.0)
SSC	06(60.0)	02(20.0)	01(10.0)	01(10.0)	-	-	10(100.0)
HSC	01(20.0)	02(40.0)	02(40.0)	-	-	-	05(100.0)
Illiterate	47(67.1)	02(2.9)	11(15.6)	06(8.6)	02(2.9)	2(2.9)	70(100.0)
Total	123(60.3)	09 (4.4)	47(23.0)	18 (8.8)	04(2.0)	03 (1.5)	204(100.0)
Significance	$[\chi^2_{(12)}=27.86, p<0.05]$						

Discussion

The study estimated the mean ages of women 31+8.65 years and majority (63.73%) were married in early age 11-17 years. Similar finding was depicted through the survey of MOHFW where 75.0% of the girls were found married before the age of 166. Because of early marriage majority (69.8%) of the women had first child birth during adolescence (16-18 years) but the survey of MOHFW found that about 30% of female adolescents of Bangladeshi were already mothers6. Out of all, 34.31% women were illiterate and 33.3% had primary level education but a diverse finding was exposed by the MICS, 2009 of UNICEF[12] where education rate was found around 72.0% among the females 15-24 of years.

This discrepancy can be explained by the facts that the MICS was conducted with a lar ge sample countrywide and the finding was of a specific age group. By occupation, most (88.25%) of them were housewives and majority (52.94%) were from poor monthly income family (Tk.5001-10,000), a comparable finding was revealed by the Centre for Integrated Rural Development of Asia and Pacific where majority of women (82%) in rural areas were found unpaid family workers[12].

The study showed a trivial part (38.55%) of women utilized antenatal care and only 13.41% of them had =3 visits while majority (25.14%) had 1-2 ante-natal visits but the annual report of BDHS showed 48.7%

had at least 1 ante-natal visit[7]. This discrepancy may be explained by the fact that this study was conducted among the married women of reproductive age in a selected rural community while the BDHS survey was conducted countrywide. Among all, 36.3% women had 3-5 children and average number of children was 2.73+1.52, which was almost similar to the TFR (2.79 per women) of Bangladesh as documented by SVRS, BBS[11]. About 60.3 women didn't use any contraceptive method while the Centre for Integrated Rural Development of Asia and Pacific revealed a diverse scenario where 42% married women of reproductive age didn't use any contraceptive[11]. This variation may be due to differences of time and place of studies.

It was seen that most (81.57%) of the women were delivered at home and relevant survey conducted by SVRS, BBS had analogous finding where home delivery was 87.1%10. Most of the deliveries were conducted by untrained birth attended (57.0%) among this study population but this finding varies with the finding of the survey of BDHS, which estimated 64.0% delivery conducted by untrained birth attendants7. This discrepancy may be justified with the logic that this study was carried out with a small sample size in a rural community while BDHS conducted countrywide survey among large group of women. A significant segment of the women were the victims of physical assault (28.9%), sexual annoyance (27.5%), mental torment (22.6%) and unwanted pregnancy (8.3%), all these findings reflected the real scenario of violence against women along with vulnerability and subordinate condition of the rural women.

The study explored that most (81.53%) of the illiterate women of the rural community didn't use ANC while majority (60.0%) of women having HSC level education had =3 ante-natal visits. On the other hand, most of the illiterate women (67.1%) didn't use any contraceptive while most of the women (80.0%) having HSC degree used contraceptive either condom or OCP. These findings imitated poor awareness and economic solvency of the women which predisposed poor accessibility to ANC and poor contraceptive practice among rural women.

The findings in respect of the reproductive health profile revealed by the study recommends wide scale countrywide survey to unveil the real scenario of reproductive health profile specially in rural context. Fundamental change in knowledge, attitude and behavior towards reproductive health should be made through advocacy campaign among the vulnerable rural women. Special measure should be taken by the Government to ensure correct enforcement of legal age of marriage. Current family planning services should be strengthened to ensure access of poor and illiterate rural women. Effective strategies should also be taken to motivate the rural women regarding utilization of reproductive health care.

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