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Reproductive Health: Present Scenario among Bangladeshi Matured Women

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Abstract

We reported the prevalence of adverse reproductive health outcomes and examined its association with certain lifestyle choices and behavior among women of reproductive age in Bangladesh. Data were obtained from a cross-sectional internet-based survey. Multivariate logistic regression analyses were employed: lifestyle choices and adverse reproductive health outcomes were outcome variables while adjusting for socio-demographic and lifestyle characteristics. Among the 1495 participants, 49% suffered from various adverse reproductive health outcomes including menstrual abnormalities (11.7%), Polycystic Ovarian Disease (6.3%), Cervical Cancer (2.9%), Endometriosis (2.7%), Ovarian Cancer (2%), and infertility (3.1%). Even with 49% of the respondents suffering from various reproductive abnormalities, 66.7% of the respondents did not visit the doctors for regular reproductive health checkups. The study found 7% more risk associated with increased drinking of beverages and Polycystic Ovary Syndrome. Respondents in the highest category of using cotton or cloth for longer periods (using cotton, cloth, or sanitary napkins for more than 8 years) had a 12% higher risk of Cervical Cancer than those in the lowest category (using cotton, cloth, or sanitary napkins for less than 2 years). Lack of appropriate knowledge of reproductive health and a conservative mindset is playing a role in the high prevalence of adverse outcomes in women of Bangladesh. To change the current scenario of adverse reproductive health, the general people should be made more aware of the relationship between lifestyle factors and reproductive health outcomes.

Keywords: Reproductive health, lifestyle, reproductive abnormalities, women of reproductive age.

Introduction

Reproductive health (RH) is the state of overall psychological, physical, and social happiness, according to theWorld Health Organization (WHO) definition of health. The 1994 International Conference on Population and Development (ICPD) included reproductive health (RH)in its Programme of Action (www.un.org/en/development/desa/population/events/conference/index.shtml). In the next year's (1995) conference, reproductive health was re-emphasized establishing the Millennium Development Goals (MDGs) targeted 'Achieving Universal Access to Reproductive Health by 2015[1]. RH used to be primarily concerned with population tracking and stabilization through family planning, birth control, a low birth rate, and motherhood protection. The acceptance of the theme of sexual and reproductive health (SRH) in this particular conference paved the way for reproductive health to be recognized as a human right and a right to health, both in general and in detail. Maintaining menstrual hygiene, proper use of contraception, prevention of sexually transmitted diseases (STDs), finding assistance from experts for RH complications, etc. form a substantial portion of SRH[2]. Generally, women's reproductive health, especially in developed countries, is not in very good condition (www.who.int/newsroom/fact-sheets/detail/women-s-

health.). In low- and middle-income countries, SRH is becoming a major health issue. Infertility, pregnancy problems, cervical cancer, urinary tract infections (UTI), sexually transmitted diseases (STDs), and other SRH concerns are more prevalent among women in these countries than women in other industrialized nations. Many females are not aware of different habits in their lifestyle (menstrual hygiene, unhealthy sexual habits, stress, poor diet, etc.) that affect their sexual and reproductive health[3]. According to Aidsinfo, about 38.4 million people were living with AIDS in 2021 with women accounting for more than 60% of the total ((https://aidsinfo.unaids.org/). Nearly all cervical cancer patients are linked to sexually transmitted infections of the human papillomavirus (HPV) which is the second most common form of women's cancer in the world. In poor income nations, more than 90 % of cervical cancer deaths occur among women due to inadequate access to screening and care services (www.who.int/newsroom /fact-sheets/detail/women-s-health).

A recent assessment of Asian sexual and reproductive health research in the United Kingdom emphasized the ethnic group's distinct requirements and discrepancies in contraception use and access to sexual health services[4]. The use of less effective contraceptive methods is more common among Asian women[5]. They are more likely than others to have problems with contraception, as well as infections of the reproductive system and other sexual disorders. According to an Indian study, rural girls with genital infections utilized old cloth again and again throughout their menstruation[6]. Furthermore, women who neglected their monthly hygiene developed vaginitis[7]. Other findings showed little higher risks of reproductive tract infection (RTI) in women using cloth than in those who applied sanitary napkins[7,8]. Food habits, in addition to menstrual hygiene, influence SRH. According to a study, lifestyle variables such as nutrition and psychological stress might have an impact on sexual and reproductive health. It has been proven that eating trans fat instead of monounsaturated fatty acids increases the risk of ovulatory infertility dramatically. Moreover, trans fat instead of monounsaturated fatty acids correlated with a 73% increase in the risk of ovulatory disorders[9]. They also discovered that when stress levels rose, oocyte fertilization reduced due to a negative connection between alpha-amylase and fertility, and the chances of conceiving during the brief period around ovulation decreased[9]. A comparative study on the knowledge of reproductive health in Bangladesh revealed a wide gap between urban and rural communities regarding their RH behaviors[10]. At present what most studies lack is the connection between specific lifestyle factors and reproductive health complications. By focusing more rigorously on evaluated sexual and reproductive health (SRH) approaches for matured women in Bangladesh, the current research aimed to fill gaps in established information. In addition, the survey looked at whether lifestyle variables could be incorporated into SRH interventions. The study presented the present scenario of harmful lifestyle factors with some reproductive health problems.

Method

Data Collection

A well-structured questionnaire with a multiple-choice system was used to conduct the survey. The survey asked about sociodemographics, marriage, sexual behavior, lifestyle, eating habits, and physical state. There were also questions on menstrual product usage, contraception method, STDs, sexual and reproductive health, and psychological difficulties. We first selected some educated female students from different districts of Bangladesh and trained them and they collected data from different districts through questionnaires and sometimes face-to-face interviews especially in the case of non-educated people.

Statistical analysis

We divided our data into two categories for analysis. First, we presented a retrospective examination of the

menstrual products used by Bangladeshi women, contraceptive use, STD prevalence, and reproductive health issues suffered by women.Later, we set up hypotheses to evaluate how early marriage, psychological problems, and other health problems such as diabetes, heart disease affect women's reproductive and sexual health. The connection of psychological disorders (insomnia, anxiety, depression) with SRH difficulties was assessed using chi-square goodness of fit (α=0.05). Another goodness of fit test with a value of $\alpha = 0.05$ was employed to see if diabetes is linked to SRH issues ($p<0.001$)[8,10].

The analysis was done excluding missing values and the sample size is 1495. All analyses were carried out by SPSS.25, R studio & MS Excel.

Results and Discussion

From October 2020 to February 2021, 1495 women between the ages of 18 to 65 in Bangladesh participated in a survey where their reproductive health journey along with certain lifestyle choices was shared.

The mean age of the responding female was 29.38 years (SD = 0.945) and ranged from 19 to 45 years. 39% of the respondents were identified as middle-income families, 42% as lower-middle-income families, 8% as upper-income families, and the rests are lower-income families. 68% of the participating women were married with 51% of them having children.

Among the 1495 participants, 53.77% (n=804) were suffering from various reproductive abnormalities along with reproductive health disorders where urinary tract infection (UTI) takes the lead with 14% (n=214) of participating women being affected. Along with menstrual abnormalities (11.7%), 6.3% of participating women suffer from polycystic ovarian disease, 3.1% suffer from infertility, 2.5% of the participants suffer from cervical cancer, 2.7% suffer from endometriosis with almost 2% of the respondents being diagnosed with ovarian cancer. Whilst vaginal discharge is not a form of reproductive health disorder, 11% of participants still listed this as their top concern.

As menstrual abnormalities were one of the top concerns for the respondents, the study dag deeper into the problems and found out that among the 1495 women, 41.4% suffered from painful menstruation with 13.1% suffering from excessive bleeding periods. In the case of 8.7% of respondents, the menstrual cycle was reduced to less than 21 days but for 21%, the cycle was longer than 35 days with 14% going through an absence of menstruation regularly. Even with the government taking steps and several awareness campaigns organized by various NGOs, 83.92% of the respondents use sanitary napkins (Table-1).

Table 1: Menstrual products used by Bangladeshi women

Menstrual products	Percent	Population number
Sanitary napkin	83.92	1018
Cloth	12.61	153
Cotton	1.81	22
Reusable pad	1.65	20

Note: Percentages do not add to 100% since it was multiple response questions.

An alarming number of females (12.61%) still use cloth for menstruation purposes. What is even more alarming is that 61% of the total study population admits using their sanitary napkins for more than six hours at a time. When asked about the reasons for this, the cited cost (81.9%) as the primary reason for using cotton, cloth and even using them for longer periods. Nevertheless, with 49% of the respondents suffering from various reproductive abnormalities, 66.7% of the respondents do not visit the doctors for regular reproductive health checkups. As Bangladesh is still a developing country, those who skip check-ups, mainly fear the cost of healthcare (45%). But there is also a common misconception among those that are apparently without any abnormalities. Most of the healthy individuals (63%) have a preconceived notion that since they are healthy and without any clear discomfort, they do not need to go for regular health checkups. There are also some respondents (29%) claiming that it is not perceived well by the surrounding society to go to the doctor for reproductive health

discomforts as Bangladesh is in majority, a very conservative country. The poor condition of reproductive health of women in Bangladesh can mainly be attributed to social conservativeness which influences lifestyle factors such as exploring the contents of the respondents' life style like contraception methods, diet, consumption of beverages, weight, etc. Lifestyle factors can not directly cause disease or an abnormality but they can sometimes influence the course of that abnormality about which most of our respondents are unaware. As a result, most of them regularly partake in harmful behaviors.

Table 2: Contraceptive method usage

Contraceptive Method	Number
Skin/Hormonalpatches	25
IUD	15
Condom	193
Emergency pill	77
21 days pill	179

A very little amount of people (or their partners) use condoms (Table-2), various pills, even though 44.5% of the respondents do not want to use contraceptives of any form citing religious values (37%), fear of infertility (23%), family pressure (19%) and wish of bearing many children (21%). When it comes to sexually transmitted diseases, 84% of the participants claim to never have been diagnosed with any type of STDs. But among the rest, 4.8% were diagnosed with genital warts, 3.9% were diagnosed with gonorrhea, 2.9% with trichomoniasis, 2.5% with syphilis and 1.6% were HIV positive (Table-3).

Table 3: Prevalence of Sexually Transmitted Disease (STD)

STDs affected patients	Percent (%)
Genital wart	4.80
Gonorrhea	3.90
Trichomoniasis	2.90
Syphilis	2.50
AIDS	1.60

As Bangladesh is a developing country and there are many living below the poverty line, it should come as no surprise that 41% of the participants have a body mass index (BMI) that is lower than 18 or normal.

There is also an overwhelming number of participants, about 55%, who are currently suffering from iron deficiency anemia which really should come as no surprise as the study also found out that 51% of the whole study population are unable to consume a balanced diet containing fish/meat regularly. There is also an alarming lack of interest in physical exercise among participating women as only 20% of them exercise regularly and 12% express a wish to exercise. An interesting fact about the participating population is that, even though most do not consume a balanced diet regularly, 48.8% of the participating population do consume beverages like tea and coffee once or twice a day. From the study, it is also revealed that anxiety, insomnia, depression have an impact on reproductive health. Sexual health can even be influenced by diabetes. Incognizance, societal taboo, financial aspects may play a significant role in choosing the harmful lifestyle practices by the study population, but this choice can play a very conspicuous role in forming reproductive health disorders. As the study found out, 6.3% cases of PCOS and 3.1% cases of infertility in women whose mean (SD) age was 31 years, the mean consumption of beverages was twice per day. Respondents in the highest category of consumption of coffee and tea (twice per day) had a 6% higher risk of PCOS than women in the lowest category of consumption (once per week). There were also 2.9% of cervical cancer cases in women whose mean (SD) age was 46.3 years. The mean use of cloth or cotton in these participating women was 21.5 years. Respondents in the highest category of using cotton or cloth for longer periods of time (using cotton, cloth, or sanitary napkins for more than 8 years) had a 12% higher risk of cervical cancer than those in the lowest category (using cotton, cloth, or sanitary napkins for less than 2 years). The study did not find any significant association of diet, consumption of beverages, or menstruation with any other reproductive health abnormalities. The current

study aimed to fill gaps in existing knowledge by focusing more on rigorously evaluated sexual and reproductive health (SRH) interventions of matured women. The survey also looked at whether lifestyle factors could be included in SRH interventions.

One of our main concerns of the study was menstrual hygiene. Various micro-level researches on the prevalence of sanitary napkin usage by women found similar findings to the current report. According to our study, a small percentage of Bangladeshi women used hygienic methods to avoid blood staining during menstruation. Many of them were dealing with issues related to their reproductive health. While there are many causes for these diseases' symptoms, including but not limited to unsanitary menstrual activities, this may be one of them. The socioeconomic status of women[11,12] is a significant determinant of using hygienic methods. The use of sanitary methods is influenced by education, economic status, and social status. According to the findings, two-thirds of all respondents came from low- and lower-middle-income households. Nearly half of the participants do not use sanitary napkins, which is also evident. Other factors, however, may influence women's use of sanitary methods. The study's main goal was to figure out the actual number of women suffering from reproductive health-related morbidities. According to our results, half of the women who took part in the study had reproductive health complications. Nevertheless, previous research suggests that successful evidence-based methods to enhance awareness about effective contraception and HIV and other sexually transmitted diseases (STDs) prevention among young women in humanitarian settings are not all inaccessible but must be tailored to the context and realities of humanitarian crises[3]. These matters should be under grave consideration as it is revealed from our study that more than 10% of women respondents have several types of STDs. More research is required to better understand which aspects of traditional psychosocial practices are related to the development of STDs. Although the principal focus of our survey was menstrual hygiene maintenance, the data used in the analysis didn't provide details like how much they washed their genital region during menstruation or how well they washed it. All of these factors may have contributed to a better understanding of the connection between menstrual hygienic practices and symptoms of SRH complications.

Therefore, the association found in the study may not necessarily be without ambiguity. Infections in the genital region, urinary tract infections, and reproductive tract infections may all be caused by unsanitary practices. The large-scale household survey data used in our study allows for a national prevalence estimate, which sheds light on the larger scenario of reproductive health complications in Bangladesh. The results highlight the importance of encouraging women to engage in healthy and sanitary behaviors. The use of hygienic practices must be promoted in the media. Unhygienic activities have a long history and they are not going anywhere anytime soon. Both women and men need to be educated about menstrual hygiene and its association with reproductive health.

Credit authorship contribution statement

Farhana Yasmin: Writing - Original draft, Formal analysis, validation. Fahmida Hoque Rimti: Conceptualization, Writing - Original draft. Mohammad Jomel: Methodology, formal analysis. Mohammad Razuanul Hoque: Writing, editing, review and supervision.

Declaration of Competing Interest

The authors declare no competing interest

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