

FACTORS INFLUENCING FERTILITY INTENTIONS AMONG REPRODUCTIVE AGED WOMEN IN BANGLADESH

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ABSTRACT

INTRODUCTION: Fertility intention, as a crucial factor, affects the demographic composition of nations. Consequently, the factors associated with fertility intentions are essential for the formulation of suitable national policies, strategies, and programs. Our study aimed to examine the desire for having more children and its determinants among reproductive-aged Bangladeshi women.

METHOD: Data analysis was done using secondary data from the Bangladesh Demographic and Health Survey (BDHS) 2017–18, consisting of a total of 16,832 fertile, married, and sexually active women. A binary logistic regression model (LRM) was used to identify the determinants of fertility desire among Bangladeshi women.

RESULTS: Twenty-six percent of reproductive-age women expressed a wish for more children. Higher educated women (AOR: 1.79, 95% CI: 1.36–2.34), working women (AOR: 0.81, 95% CI: 0.73–0.89), rural women (AOR: 1.16, 95% CI: 1.03–1.30), women considering three or more children as the ideal number (AOR: 7.06, 95% CI: 6.11–8.15), women with three or more living children (AOR: 0.05, 95% CI: 0.02–0.09), women having their first cohabitation at age 25 or later (AOR: 1.88, 95% CI: 1.34–2.64), those not using contraceptive methods (AOR: 1.24, 95% CI: 1.12–1.38), and women with non-agricultural husbands (AOR: 1.17, 95% CI: 1.02–1.34) were associated with significantly higher fertility desire.

CONCLUSION: To support the maintenance of an ideal family size and control fertility desire, policymakers should promote gender-responsive family planning education, enhance workplace support for women, establish peer support and counseling services, and address entrenched cultural and social norms that shape reproductive choices.

KEYWORDS: Child; fertility; reproductive-aged women; Bangladesh; contraceptive.

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INTRODUCTION

Fertility is one of the key demographic factors that helps to shape the dimensions and composition of a country's population. The total population size and composition of a country are determined by fertility trends, migration patterns, and mortality rates¹.

Swift expansion resulting from an elevated birth rate and desire for offspring may give rise to conflict, destitution, joblessness, rivalry for limited resources, and so on^{2,3}. The continuous high fertility rate and desire for fertility will have detrimental impacts on the social and healthcare development of developing countries, leading to increased poverty^{4,5}. A high fertility rate leads to a sizable population, which could potentially cause fierce competition for scarce resources that could be used for higher productivity and income development⁶.

On the other hand, many countries of East Asia have reached such low levels of fertility that, if they stay that way for an extended length of time, there will be a significant decrease in population⁷⁻⁹. Furthermore, when these populations' age distributions shift, significant new issues for the design of social and economic well-being will arise. The most well-known issue raised by extremely low fertility is the aging of the population, which presents a whole new set of problems, such as rising old-age dependency ratios, funding old age and health care, continuing family support for the elderly, and elderly political participation¹⁰.

In addition, the attainment of the Sustainable Development Goals (SDGs) bears relevance to the fertility rate. Specifically, the achievement of the first five SDGs—ending all forms of poverty, attaining gender equality and empowering all women and girls, guaranteeing healthy lifestyles and fostering well-being for everyone at all ages, and encouraging possibilities for lifelong learning for everyone through inclusive and equitable high-quality education—is linked to the fertility rate⁶.

In 1990, the fertility rate was 3.2 births per woman worldwide¹¹, and by 2021, that number had declined to 2.31 births per woman¹², and 2.3 births per woman in 2023¹³. Many developing countries

across the globe have experienced a demographic shift in the past decade, evident in the significant decline in fertility and death rates⁶. Similarly, over the last 45 years, Bangladesh has seen a notable decline in fertility, with the number of births per woman falling from 6.3 in 1975 to 1.93 in 2023¹⁴. The fertility rates in Asian countries exhibit significant variation, ranging from below one to over four births per woman^{15,16}.

Identifying the risk factors linked to high fertility as well as low fertility and offering assistance to support those individuals at risk is crucial. In order to devise efficient methods for fertility regulation, it is imperative to comprehend the variables that influence fertility preference. It is postulated that women belonging to vulnerable demographics, such as those who married at a young age, are illiterate, live in rural regions, experience extreme poverty, and possess awareness regarding contraceptives, exhibit elevated levels of fertility preference¹⁶.

Reliable data regarding fertility intentions at different levels in Bangladesh is limited. Very few comprehensive analyses have been conducted to examine the fertility of reproductive Bangladeshi women simultaneously^{17,18}. This study seeks to ascertain the frequency and percentage of some individual socio-demographic and economic characteristics of fertile Bangladeshi women and associated determinants of fertility preference. Besides, this study will provide valuable insights for reproductive health program designers and policymakers, enabling them to comprehend the multitude of factors that impact fertility. Furthermore, our findings will aid in the effective execution of reproductive health programs.

METHODOLOGY

Study design, setting and population

A secondary data analysis of BDHS was performed to capture a snapshot and a rapid assessment of prevalence and associations between fertility and factors that may influence the intention of females to conceive⁸. The data used in this study came from the nationally representative household-based

BDHS, which was carried out in 2017 and 2018 (BDHS, 2017).

Sampling technique

The BDHS in 2017 employed a two-stage sampling design. Initially, a total of 675 primary sampling units (PSUs) were built, with 250 located in metropolitan areas and 425 in rural areas. The PSUs were built based on data obtained from the 2011 Bangladeshi census. For the second step, an average of thirty households were assigned to each PSU using a systematic sampling method.

The initial sample consisted of 20,250 residential households, 6,810 of which were located in urban districts and 13,440 in rural areas. Finally, 20,108 households were included. A total of 20,127 ever-married women between the ages of 15–49 years made up the study's sample. After excluding the missing values and anomalies, 16,832 reproductive-aged women were obtained for this study. Finally, 12,372 women did not prefer any child, whereas 4,460 women had a preference.

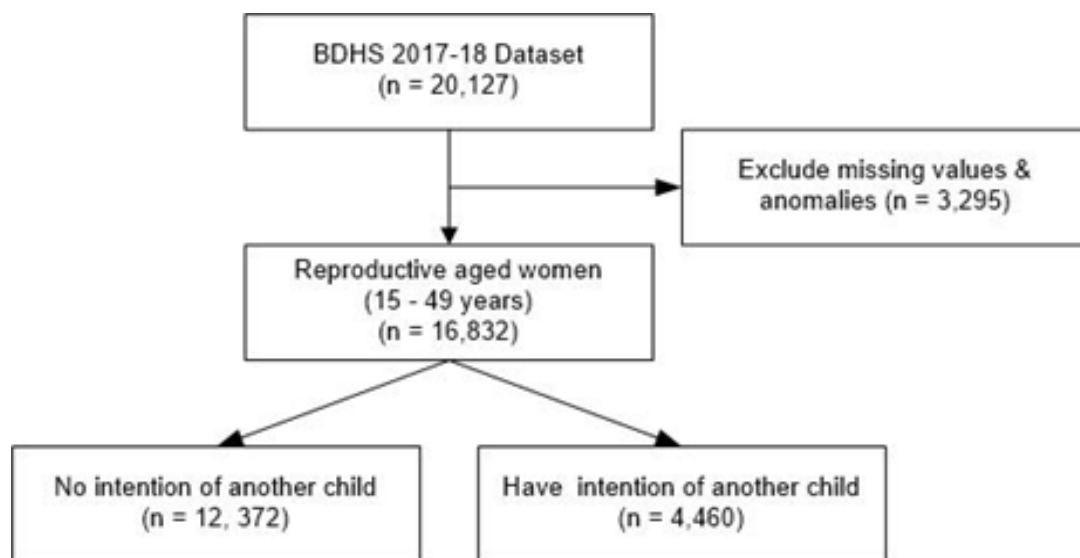


Figure 1: Sample Selection Flowchart: Fertility Intention Among Reproductive-Aged Women (BDHS 2017–18)

Outcome variables

In this study the outcome variable was Fertility intention of reproductive aged women in Bangladesh which is a dummy variable that provides binary outcome. The outcome variable was represented by

$$y_{ij} = \begin{cases} 0, & \text{No intention of another child} \\ 1, & \text{Intention have another child} \end{cases}$$

This came from a question that "Have you any plan to have a (another) child with your husband/partner, or what is your preference about having any more children with him?" [19]. In BDHS data set, Fertility intention was explained as a nominal variable having five options that are having another intention for fertility, undecided,

no more intention, sterilized (respondent or partner) and declared infecund. In this study the women who responded as "undecided", "sterilized (incapable for reproduction through surgical procedures)", "infecund (incapable of producing offspring)", and "no more" were categorized as 'no intention' according to a previous literature¹

Independent variable

There were several independent variables- respondent's current age, respondent educational, respondent education, place of residence, wealth index, age at first cohabitation, contraceptive use and intention, ideal number of children, number of living children, birth order, husband's education,

husband occupation, number of household members.

Statistical analysis

The data analysis process involved two statistical method: bivariate, and multivariate. This was done using the Statistical Package for the Social Sciences (SPSS)software version 26. Bivariate was performed to analyze the association between fertility intention and the predictors using Chi-square test²⁰. Following is the Chi-square formula:

$$\chi^2 = \frac{(O_i - E_i)^2}{E_i} \dots \dots \dots (1)$$

Where refers the observed frequency, and refers the expected frequency. The above statistic is in equation follows the Chi-square distribution with n-1 degrees of freedom.

A binary LRM was performed to examine the association between the independent factors and the initiation towards having additional children²¹. The regression model which was applied in this study as follows:

$$\text{logit}(p) = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_kx_k \dots \dots \dots (2)$$

Where, p is the probability of presence of the characteristic of interest. The logit transformation is defined as the logged odds,

$$\text{Odds} = \frac{p}{1-p} = \frac{\text{Probability of presence of characteristics}}{\text{Probability of absence of characteristics}} \dots \dots \dots (3)$$

$$\text{logit}(p) = \log\left(\frac{p}{1-p}\right) \dots \dots \dots (4)$$

To explore the unadjusted relationships, Crude Odds Ratios (COR) were calculated for each predictor in relation to women's fertility preferences²².

$$\text{logit}(p) = b_0 + b_ix_i \dots \dots \dots (5)$$

The relationship between reproductive aged women desiring another child and various explanatory factors was determined using Adjusted Odds Ratios (AOR) with a 95% confidence level¹.

RESULTS

Fertility Intention

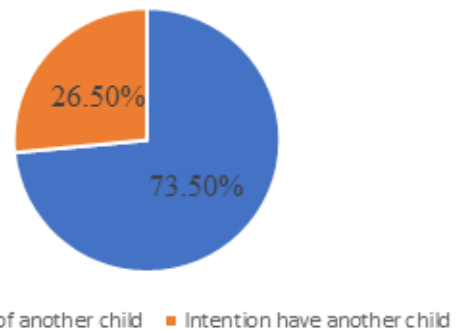


Figure 2: Percentage of the fertility intention

The study's findings regarding the fertility intentions of reproductive women across all explanatory variables are presented in Table-1. The chi-square test showed that age, highest educational level, working status, place of residence, wealth index, age at first cohabitation, contraceptive use and intention, ideal number of children, number of living children, birth order, husband education & occupation, household member had significant associations with the fertility intentions of women.

The pie chart shows that the desire for more children among reproductive women in Bangladesh was 4440 (26.5%, 95% CI: 25.83 - 27.17). We found that the desire for more children was high among women aged 15-24 (66.6%), richest women (29.6%), women with higher level of education (46.6%), urban residents (27.4%), women with first cohabitation aged ≥ 25 (42.8%), those who used Contraceptive (32.8%), women with at most 2 ideal number of child had more intention of fertility (27.1%). Women with No living children exhibited higher intention (80%) compared to those with 1-2 children (41.2%) or 3+ children (24.4%). Similarly, first birth order showed the highest intention (77.1%), decline to just 2.1% for birth order 4+. Women whose husbands had higher education or non-agricultural occupations showed (36.1%) and (29.6%) increased intention compared to less educated and agricultural occupations respectively. Finally, women in large households of more than nine members exhibited higher intention (36.6%) than those in smaller households.

Table 1: Association between selected predictors and fertility intention among Reproductive aged Bangladeshi women

Variables Predictors	Fertility Intention		Chi-square (P-value)
	No (%)	Yes (%)	
Respondent's current age (Years)			
15-24	1258 (33.4%)	2513 (66.6%)	4830.35 (<0.001)
25-34	4738 (73.9%)	1673 (26.1%)	
35-49	6376 (95.9%)	274 (4.1%)	
Respondent education			
No education	2450 (92.3%)	204 (7.7%)	1242.24 (<0.001)
Primary	4471 (80.7%)	1071 (19.3%)	
Secondary	4328 (66.3%)	2204 (33.7%)	
Higher	1123 (53.4%)	981 (46.6%)	
Respondent Occupation			
Not-Working	5788 (71.2%)	2346 (28.8%)	44.43 (<0.001)
Working	6584 (75.7%)	2114 (24.3%)	
Place of residence			
Urban	4424 (72.6%)	1673 (27.4%)	4.36 (0.037)
Rural	7948 (74%)	2787 (26%)	
Wealth index			
Poorest	2473 (76.3%)	769 (23.7%)	46.80 (<0.001)
Poorer	2467 (76%)	781 (24%)	
Middle	2412 (73.7%)	862 (26.3%)	
Richer	2434 (71.7%)	960 (28.3%)	
Richest	2586 (70.4%)	1088 (29.6%)	
Age at first cohabitation (Years)			
≤18	10893(75.3%)	3571 (24.7%)	177.35 (<0.001)
19-24	1312 (63.2%)	764 (36.8%)	
≥25	167 (57.2%)	125 (42.8%)	
Contraceptive use and intention			
Not Using	8640 (76.6%)	2636 (23.4%)	170.75 (<0.001)
Using	3732 (67.2%)	1824 (32.8%)	
Ideal number of children			
At most 2	9427 (72.9%)	3508 (27.1%)	11.14 (0.001)
≥ 3	2945 (75.6%)	952 (24.4%)	
Number of living children			
0 18 (20%)	72 (80%)	3117.61 (<0.001)	
1-2	5957 (58.8%)	4182 (41.2%)	
≥ 3	6397 (96.9%)	206 (3.1%)	
Birth order			
1 st birth	910 (22.9%)	3064 (77.1%)	7239.37 (<0.001)
2 nd births	4363 (80.3%)	1071 (19.7%)	
3 rd births	3398 (93.2%)	246 (6.8%)	
4 th and above	3701 (97.9%)	79 (2.1%)	
Husband education			
No education	3315 (87.7%)	466 (12.3%)	625.15 (<0.001)
Primary	4004 (74.3%)	1386 (25.7%)	
Secondary	3269 (67.1%)	1600 (32.9%)	
Higher	1784 (63.9%)	1008 (36.1%)	
Husband occupation			
Agriculture	3543 (82.7%)	740 (17.3%)	250.72 (<0.001)
Other	8829 (70.4%)	3720 (29.6%)	
Number of household members			
1-4	5205 (71.6%)	2060 (28.4%)	158.51 (<0.001)
5-8	6121 (77.3%)	1796 (22.7%)	
≥91046 (63.4%)	604 (36.6%)		

Factors Associated with fertility intention among Reproductive aged Bangladeshi Women.

In table-2 the second column displays the unadjusted odds ratios or crude odds ratios (COR) for the socio-economic and demographic factors that affects the desire for more children among Bangladeshi women of reproductive age. At the crude level, all the variables showed statistically significant relationships with the desire for more children. The third column in Table-2 displays the outcomes of the logistic regression analysis that examines the socio-economic and demographic factors that influence fertility desires among women in Bangladesh.

In Table-2 compared to women aged 15-24, those aged 25-34 had 47% less odds (AOR: 0.53, 95% CI: 0.47 - 0.59) of intending fertility, while those aged 35-49 had 90% less (AOR: 0.10, 95% CI: 0.08 - 0.12) to intend have another child. Women with primary, secondary, and higher education had 1.37 (AOR: 1.37, 95% CI: 1.11 - 1.70), 1.46 (AOR: 1.46, 95% CI: 1.17 - 1.82), and 1.79 (AOR: 1.79, 95% CI: 1.36 - 2.34) times higher odds of fertility intention respectively compared to those with no education. Women who were employed had approximately 19% (AOR: 0.81, 95% CI: 0.73-0.89) lower odds of fertility intention compared to those who were not working. Rural women had 16% more (AOR: 1.16, 95% CI: 1.03 - 1.30) fertility intention than urban women. Women who began cohabiting at ages 19-24 and 25 or older had 21% (AOR: 1.21, 95% CI: 1.04-1.41) and 88% (AOR: 1.88, 95% CI: 1.337-2.643) higher odds of fertility intention, respectively, compared to those who started cohabiting at age 18 or younger. Non-contraceptive users had 1.24 (AOR: 1.24, 95% CI: 1.12 - 1.38) times higher odds of fertility intention than contraceptive users. Women who considered 3 or more children as ideal number had 7.06 (AOR: 7.06, 95% CI: 6.11 - 8.15) times higher odds of fertility intention than those who considered 2 or fewer as ideal. Having 1-2 and 3+ living children was associated with 77% (AOR: 0.23, 95% CI: 0.12 - 0.45) and 95% (AOR: 0.05, 95% CI: 0.02 - 0.09) lower odds

of fertility intention compared to those having no children. Women with two, three, and four or more births had 91% (AOR: 0.09, 95% CI: 0.08 - 0.10), 93% (AOR: 0.07, 95% CI: 0.06 - 0.10), and 96% (AOR: 0.04, 95% CI: 0.03 - 0.05) lower odds of fertility intention compared to those with one birth. Women whose husbands had primary, secondary or higher education showed 1.31 (AOR: 1.31, 95% CI: 1.11 - 1.54), 1.29 (AOR: 1.29, 95% CI: 1.08 - 1.54), and 1.26 (AOR: 1.26, 95% CI: 1.02 - 1.57) times higher odds of fertility intention compared to those whose husbands had no education. Women whose husbands had occupation other than agriculture had 1.17 (AOR: 1.17, 95% CI: 1.021 - 1.338) times higher odds of fertility intention. Finally, women living in households with 9 or more members had 1.20 (AOR: 1.20, 95% CI: 1.01 - 1.42) times higher odds of fertility intention compared to households with 1-4 member.

Table 2: Binary Logistic Regression Analysis of factors associated with fertility intention among Reproductive aged Women.

Variable	Fertility Intention for Overall Women COR (95% CI)	AOR (95% CI)
Respondent's current age		
15-24 (ref.)	1	1
25-34	0.18*** (0.16 - 0.19)	0.53*** (0.47 - 0.59)
35-49	0.02*** (0.02 - 0.03)	0.10*** (0.08 - 0.12)
Respondent educational		
No education (ref.)	1	1
Primary	2.88*** (2.46 - 3.37)	1.37** (1.11 - 1.70)
Secondary	6.12*** (5.26 - 7.12)	1.46** (1.17 - 1.82)
Higher	10.49*** (8.88 - 12.39)	1.79*** (1.36 - 2.34)
Respondent Occupation		
Not-workin (ref.)	1	1
Working	0.79*** (0.739-0.848)	0.81*** (0.73-0.89)
Place of residence		
Urban (ref.)	1	1
Rural	0.93* (0.86 - 0.99)	1.16* (1.03 - 1.30)
Wealth index		
Poorest (ref.)	1	1
Poorer	1.02 (0.91 - 1.14)	0.85 (0.72 - 1.00)
Middle	1.15* (1.03 - 1.29)	0.88 (0.741 - 1.04)
Richer	1.27*** (1.14 - 1.42)	0.90 (0.752 - 1.07)
Richest	1.35*** (1.22 - 1.51)	0.85 (0.70 - 1.04)
Age at first cohabitation (Years)		
≤18 (ref.)	1	1
19-24	1.78*** (1.61 - 1.96)	1.21* (1.04 - 1.41)
≥25	2.28*** (1.81 - 2.89)	1.88*** (1.34 - 2.64)
Contraceptive use and intention		
Using (ref.)	1	1
Not Using	1.60*** (1.49 - 1.72)	1.24*** (1.12 - 1.38)
Ideal number of children		
At most 2 (ref.)	1	1
≥ 3	0.87** (0.80 - 0.94)	7.06*** (6.11 - 8.15)
Number of living children		
0 (ref.)	1	1
1-2	0.18*** (0.11 - 0.30)	0.23*** (0.12 - 0.45)
≥ 3	0.01*** (0.005 - 0.014)	0.05*** (0.02 - 0.09)
Birth order number		
one birth (ref.)	1	1
two births	0.07*** (0.066 - 0.081)	0.09*** (0.08 - 0.10)
Three births	0.02*** (0.019 - 0.025)	0.07*** (0.06 - 0.10)
Four and above births	0.006*** (0.005 - 0.008)	0.04*** (0.03 - 0.05)
Husband education		
No education (ref.)	1	1
Primary	2.46*** (2.19 - 2.76)	1.31** (1.11 - 1.54)
Secondary	3.84*** (3.11 - 3.90)	1.29** (1.08 - 1.54)
Higher	4.02*** (3.55 - 4.55)	1.26* (1.02 - 1.57)
Husband occupation		
Agriculture (ref.)	1	1
Other	2.02*** (1.85 - 2.20)	1.17* (1.02 - 1.34)
Number of household member		
1-4 (ref.)	1	1
5-8	0.74*** (0.69 - 0.80)	1.02 (0.91 - 1.13)
9 and above	1.46*** (1.30 - 1.63)	1.20* (1.01 - 1.42)

Key note: *** P-value <0.001, ** P-value <0.010, * P-value <0.05, ref Reference, COR Crude Odds Ratio, AOR Adjusted Odds Ratio, CI Confidence Interval.

DISCUSSION

The rapid expansion of the population typically leads to adverse outcomes, including increased unemployment rates, larger family sizes, and heightened chances of maternal and child mortality²³. Nevertheless, the primary cause of rapid population expansion is typically a strong desire for high reproduction rates^{24,25}. Hence, to regulate population increase, it is crucial to concentrate on factors linked to the inclination towards having additional offspring. The current investigation focused on analysing the factors that influence women's inclination towards having more children in Bangladesh.

In this study, increasing women's age was more likely to lead to a desire for additional children. This finding aligns with prior research conducted by scholars^{26,27}. Due to women's increasing age, couples are apprehensive about having children at a later stage in life. Therefore, it is crucial for them to cultivate a childbearing culture at the suitable moment²⁷.

According to the study's findings, working women are less likely than non-working women to want more children. This finding is in line with earlier studies²⁸ that suggested workplace obligations and work-family conflict could limit the desire to have children. Women in professional or administrative professions frequently face increased role incompatibility, which lowers fertility expectations, according to research by Yarger and Brauner-Otto²⁸. According to Atif et al.²⁹, workplace demands and changing gender norms are the reasons why working women in Pakistan had fewer children on average than non-working women.

Rural women exhibited a greater propensity for desiring a larger number of offspring in comparison to their urban counterparts. This finding is consistent with prior research conducted in Rwanda³⁰, Niger³¹, Ghana³², Uganda³³, and Ethiopia³⁴, which demonstrated a relation between urban living and reduced fertility aspirations.

Mahmud et al.³⁵ found that women residing in urban settings exhibit higher levels of empowerment

and reduced fertility desire compared to their counterparts in rural areas. Rural individuals frequently enter into marriage at an earlier age, resulting in a propensity for increased procreation³⁶. Ifelunini et al.³⁷ contend that rural individuals view children as valuable assets and a workforce for their subsistence farming endeavours, leading to an escalation in their aspirations for fertility.

The findings of the study indicate that women belonging to the highest wealth quintile have a decreased inclination towards desiring additional offspring. This finding is consistent with prior research indicating a negative correlation between higher socio-economic status and fertility aspirations. Comparable results have been documented in Nigeria³⁸ and India³⁹. In contrast, individuals in low socioeconomic status desire to have more children, believing that they will provide security in their old age^{40,41}.

This study demonstrated that the age at which women initially cohabitated had an impact on their inclination to have more children. Women aged ≤ 18 years exhibited a lower inclination towards desiring additional children in comparison to women aged ≥ 25 years. The desire for more children increases with the age at which women first cohabit. This conclusion is consistent with prior research indicating that individuals with higher socio-demographic characteristics exhibited a greater inclination towards having more children in Ethiopia²², Rwanda⁴², and Rakai²⁷. Marriage holds great societal importance, particularly in Bangladesh, where it is obligatory for both genders to engage in sexual activity. This event has a huge impact on births, deaths, and the well-being of women and their children, particularly in relation to the age at which they enter into their first marriage¹⁴.

Women who were utilizing a modern method of contraception, whether they were employed or not, had a considerably lower likelihood of wanting to have more children. This conclusion supports previous research indicating that women who utilise contraceptive methods to manage

their fertility are less likely to have a desire to have more children^{27,43-45}. The probable cause for this phenomenon is that women who utilise contraceptives may have a desire to limit their number of children and will employ all means necessary to achieve this goal, including the use of contraceptives^{46,47}.

This study demonstrated that the desire for additional children is impacted by the number of desired children and the occupation of the partner. When the number of ideal children is limited to a maximum of two and the partner is employed in the agricultural sector, a significant correlation is observed between the desire for another child. This finding aligns with prior research conducted in Rwanda³⁰. Livestock is one of the sources of income in developing countries, and having more children increases the perceived benefit of having more cattle caretakers⁴⁸.

The observation that women who had no children or had one or two children exhibited a higher inclination towards desiring children compared to women with more than two children aligns with previous research conducted in various countries^{44,49-53}. This study found that women who did not have any living children had a higher likelihood of desiring to have a child compared to other women. Research indicates that in certain societies, societal expectations greatly impact a woman's inclination to have a child as the sole means of experiencing motherhood or meeting the criteria of being a "woman"^{51,54}. In the specific context of Bangladesh, the presence of a child within a family is regarded as a blessing.

Our findings indicate a positive correlation between the highest educational level of the respondent and their partner and their desire for fertility. This suggests that individuals with greater levels of education tend to have higher levels of fertility desire. The present findings present a contrasting perspective to prior research indicating a negative correlation between greater education and reproductive desire^{39,55}. Additional investigation is necessary to examine the correlation between

educational attainment and fertility aspirations within this particular demographic²⁷.

Additionally, the research demonstrated a negative association between birth order and reproductive aspirations. Specifically, when birth order increases, women are less likely to express a desire for having more children. This finding aligns with prior research conducted in many nations, including China⁵⁶, Sri Lanka⁵⁷, and sub-Saharan Africa⁴⁴. The probable explanation for this outcome is that a subset of these women may have achieved the desired number of offspring⁹. Our findings indicate a positive correlation between the number of household members and reproductive want, suggesting that a higher number of household members is associated with higher levels of fertility desire. The present study's results diverge from prior research indicating a negative correlation between the number of household members and reproductive desire in Rakai,

Uganda²⁷. Due to societal norms or the value placed on having more children for labor or support in old age, larger families are preferred in some cultures⁵⁸.

Strength and Limitation:

The study's findings are broadly applicable due to its large sample size, nationwide scope, and use of a standardized questionnaire. Despite these strengths, our study had several drawbacks. Being a cross-sectional study, it could not definitively establish the temporal relationship between explanatory and outcome variables. Additionally, certain cultural and health institution factors were not examined due to lack of information, unavailability of data, and missing observations. Further higher-level study is recommended to determine the higher-level variation among different factors of fertility intention.

Conclusion

To support the maintenance of an ideal family size and for controlling fertility desire, policymakers should promote gender-responsive family planning education, enhance workplace support for women, establish peer support and counseling services,

and address entrenched cultural and social norms that shape reproductive choices. Further research is recommended to explore the reasons behind the higher fertility intentions among women with higher education and income, and the role of gender norms and cultural values in shaping fertility preferences.

Glossary

BDHS - Bangladesh Demographic and Health Survey

SDGs- Sustainable Development Goals

LRM - Logistic Regression Model

SPSS - Statistical Package for the Social Sciences

AOR - Adjusted Odds Ratio

COR - Crude Odds Ratio

CI- Confidence Interval

PSU - Primary Sampling Units

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