

ORIGINAL ARTICLE

Knowledge and Utilization of Community Clinic Services among the Catchment Area of Nandigram, Bogura, Bangladesh

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ABSTRACT

Introduction: Bangladesh has made significant progress in recent times in many of its social development indicators, particularly in rural health services. Clinic (CC) is also based on principles of Primary Health Care to serve the greatest interest to the largest population. **Methods & Materials:** This Cross-sectional type of descriptive study was conducted at Department of Community Medicine, Rajshahi Medical College Hospital from January 2020 to December 2020. People who were residing in ward no 6, 7, 9, vatra union, Nandigram Upazila, Bogura were the study population. **Results:** Majority of the respondents (94.0%) knew about overall the services given by community clinic. The relationship between age and knowledge about supplied contraceptives for women from community clinic was statistically significant. Relationship between Monthly income and knowledge about contraceptives supplied for women from community clinic was statistically significant. **Conclusion:** In spite of some limitations in the provision of healthcare services, community clinics have emerged as a flagship program of the Government of Bangladesh. By providing adequate and appropriate logistics supports, PHC services can establish from Ccs.

Keywords: Community Clinic, Knowledge, Utilization of services, Primary health care

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INTRODUCTION

Bangladesh government has accomplished the ambitious project of establishing 18,000 Community Health Clinics in sub-districts across the country.^[1] Community Clinics were Clinics (CC) were started in 1996 to expand Primary health care at the doorsteps of people all over the country. Due to the change of government in 2001, community clinics were closed and remained neglected until 2008. However, they were restarted in 2009 through a project called "Revitalization of Community Health Care Initiatives in Bangladesh" (RCHCIB) to enhance the provision of healthcare services at the community level.^[2] Bangladesh has established over 13,000 community clinics (CCs) to provide primary healthcare, with each clinic covering a population of approximately 6,000.^[3] The introduction of CCs in the country has revolutionized healthcare delivery, enabling it to reach people's doorsteps. The provision of healthcare through CCs is truly participatory since the community people donate land for building infrastructure and are also involved in the management process.^[3] Community clinic run by both local government and community. All clinics are built on community land, but the government provides funding to construct the clinic. Medicines and all logistics are supplied by the government.^[4] Community health care providers (CHCP) provide services and distribute medicine for common illnesses.^[5] A committee

of 9 to 13 recognized members, recognized as a community group, comprises community healthcare providers, health assistants/family welfare assistants, landowners, members of the Union Parishad, and renowned persons from the village who oversee the clinic.^[5] The location of a community clinic should be accessible to 80% of the population within a 30-minute walking distance. An ideal clinic should have two rooms with access to safe drinking water lavatory facilities, as well as a covered waiting area.^[4] Community Clinics were designed to bring family planning, preventive health services, and limited curative services closer to the population, aiming to improve the efficiency of service provision by partially replacing outreach services with services provided from a fixed location. The Health Population Nutrition Sector Development Program (HPNSDP) has given considerable emphasis to its development and sustainability.^[6] The services provided by the Community Health Care Providers (CHCP) as the primary providers, along with other providers, include Health Assistants (HAs) and Family Welfare Assistants (FWAs). To supervise and support the CC services, there is a community group (CG) and three community support groups (CSG). The members of the community group are selected mainly from the community to ensure community participation and town the CC. The CC is the best example of a Public-Private Partnership (PPP), as the CCs are constructed

on lands donated by the community. Construction, medicine, and necessary logistics and service providers are from the government, but management is done by the CG and CSG.^[7,8,9] The government of Bangladesh initiated the construction of community clinics to improve the health conditions of people in underdeveloped rural areas. Health is one of the primary indicators of a country's prosperity and development. This study was conducted as a cross-sectional descriptive study with broad objectives. The primary objective of this study was to assess knowledge about community clinic services and evaluate the utilization status of various services among rural dwellers in Nandigram, Bogura, in the current situation.

MATERIALS & METHODS

This Cross-sectional type of descriptive study was conducted at Department of Community Medicine, Rajshahi Medical College Hospital from January 2020 to December 2020. Total 315 patients included in our study. People who were residing in ward no 6, 7, 9, Vatra Union, Nandigram Upazila, Bogura were the study population.

Inclusion criteria:

- Respondents were chosen purposively, and those who were willing to participate gave their verbal consent after hearing the research aim and objectives. Adult household members aged 15 years to 65 years, irrespective of sex, were selected.

Exclusion criteria

- People with the following characteristics were excluded from the study:
- Those who refused to participate in the study.
- Very sick person, both physically and mentally, who was unable to take part.

Sampling technique: A convenient and purposive sampling technique was employed to include the required number of respondents

Data collection instrument: After proper verification, data were coded and entered into the computer by using SPSS. 25.0 versions.

RESULTS

Table I shows that the age of the respondents ranged from a minimum of 15 to a maximum of 65 years, with a mean age of 36.24±14.93 years. The age groups 20-29 years and 30-39 years were the most prevalent (23.5%). Most of the respondents (75.2%) were female, and 24.8% were male. 42.2% of respondents passed the secondary level, whereas 27.3% were illiterate. Among 315 respondents, 44.0% knew

that the working hours of the community clinic were 9 am-3 pm, and 34.0 % knew that the community clinic opened from 10 am-1 pm (Fig. 2). Among the respondents, 75.0% knew that CHCP provided services at community clinic mainly, 18.0 % knew services were given by both CHCP, FWA, HA (Fig-3). The majority of respondents (94.0%) were aware of the services provided by the community, while clinics 6.0% were unaware (Fig. 4). 82.0% of the respondents were aware of the supply of contraceptives by community clinics, while the rest were not (Fig. 5). 32.0% of female respondents received antenatal care from community clinics, 48.0% received a vaccine during their pregnancy period, and 38.0% received family planning services from a community clinic. 75.0 percent of the respondents were satisfied with the overall services of the community clinic (Table II). The majority (56.5%) were in the age group of 31-65yrs. Among them, 80.9% mentioned that OCP was supplied from CC. 57.7% of <30 yrs. also opined that CC supplied OCP for women. The relationship between age and knowledge about supplied contraceptives for women from community clinics was statistically significant ($p < 0.05$) (Table III). 75.6% of male and 75.1% of female respondents mentioned that CHCP was the service provider of the community clinic. The relationship between sex and knowledge about service providers at community clinics was statistically not significant ($p > 0.05$) (Table IV). 83.5% had monthly income <15,000/- and 16.5% had >15,000/-. Of them, 74.1% and 53.8% opined that community clinics supplied OCP for women. The relationship between Monthly income and knowledge about contraceptives supplied to women from community clinics was statistically significant ($p < 0.05$) (Table V). 56.5% were the major proportion of respondents in the age group of 31-65 yrs., and < 30 yrs. were 43.5%. Of them, 37.2% and 30.9% went to the community clinic for the last time due to fever. The relationship between age and the reason for going to CC for the last time was statistically significant ($p < 0.05$) (Table VI). A majority (81.9%) knew that the community clinic provided contraceptives. Of which 46.1% received contraceptives from CC. The relationship between knowledge about supplied contraceptives from CC and received contraceptives by respondents was statistically significant ($p < 0.05$) (Table VII). The majority (74.9%) mentioned that staff was available during office hours at CC, and of them, 91.9% opined that they gave enough time for patients. The relationship between knowledge about the availability of staff at office hours and the time given by staff was statistically significant ($p < 0.05$) (Table VIII).

Table – I: Distribution of the respondents by socio-demographic variable (n=315)

Characteristics	Frequency (f)	Percent (%)
Age		
<20 years	63	20%
20-29 years	74	23.5%
30-39 years	74	23.5%
40-49 years	40	12.7%
50-59 years	45	14.3%
>60 years	19	6%
Mean age in years (±SD): 36.24±14.93		
Sex		
Male	78	24.8%
Female	237	75.2%
Educational status		
Illiterate	86	27.3%
Primary level	75	23.8%
Secondary level	133	42.2%
Graduate	17	5.4%
Master Degree	4	1.3%

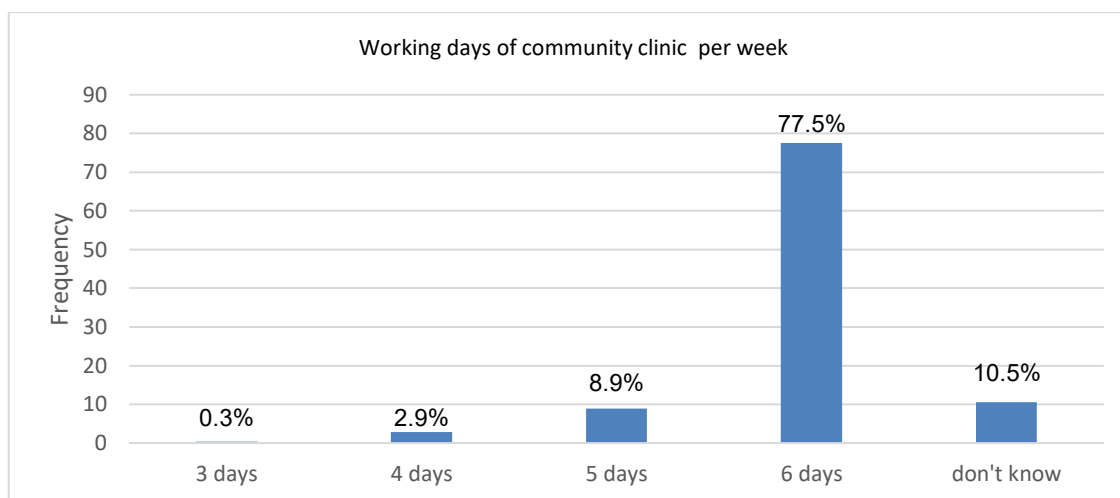


Figure – 1: Distribution of respondents by knowledge regarding working days of community clinic per week

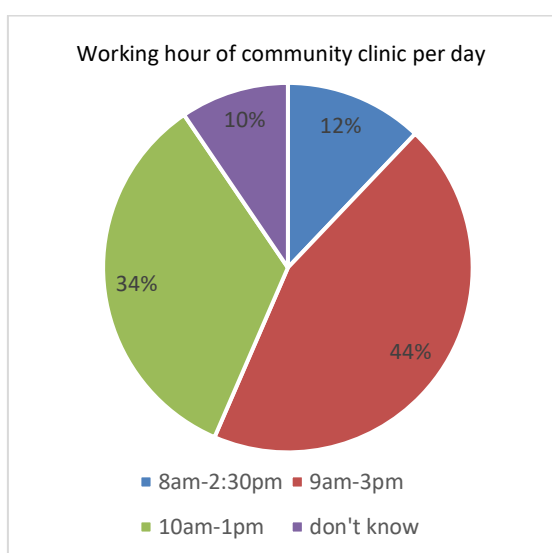


Figure – 2: Distribution of the respondents by knowledge about working hour of community clinic per day

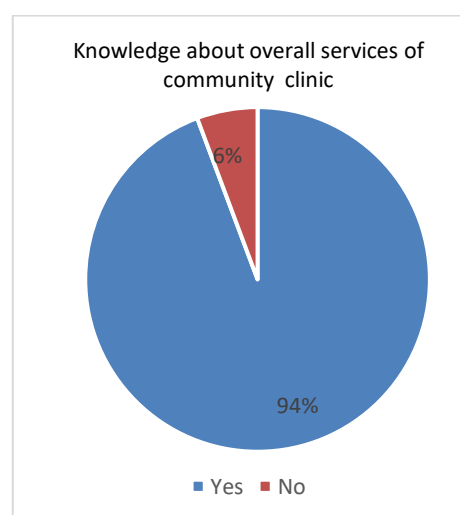


Figure – 4: Distribution of the respondents by knowledge about overall services of community clinic

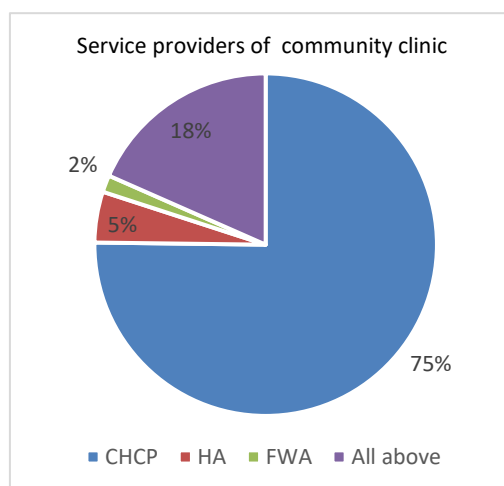


Figure – 3: Distribution of the respondents by knowledge about service providers of community clinic

Community clinic supply contraceptives

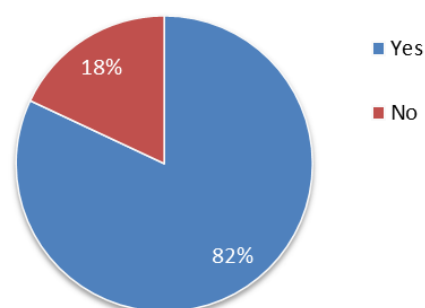


Figure – 5: Distribution of the respondents by knowledge about supply of contraceptives from community clinic

Table – II: Distribution of the respondents by utilization of community clinic services (n = 315)

Characteristics	Frequency (f)	Percent (%)
Received antenatal care from community clinic		
Yes	102	32%
No	78	25%
NA	135	43%
Received vaccine from community clinic during pregnancy period		
Yes	152	48%
No	71	23%
NA	92	29%
Received Family planning services from community clinic		
Yes	120	38%
No	88	28%
NA	107	34%

Table – III: Relationship between age and knowledge about supplied contraceptives for women from community clinic (n=315)

Age (years)	Knowledge about supplied contraceptives for women from community clinic				Total n (%)
	OCP	IUCD	INJECTION	Don't know	
<30	79(57.7%)	2(1.5%)	12(8.8%)	44(32.1%)	137(43.5%)
31-65	144(80.9%)	4(2.2%)	12(6.7%)	18(10.1%)	178(56.5%)
Total	223(70.8%)	6(1.9%)	24(7.6%)	62(19.7%)	315(100.0%)

$\chi^2=25.80$, * $p=.000$, *=significant

Table – IV: Relationship between sex and knowledge about service providers of community clinic

Sex	Knowledge about service providers of community clinic				Total n (%)
	CHCP	HA	FWA	All above	
Male	59(75.6%)	2(2.6%)	2(2.6%)	15(19.2%)	78(24.8%)
Female	178(75.1%)	13(5.5%)	3(1.3%)	43(18.1%)	237(75.2%)
Total	237(75.2%)	15(4.8%)	5(1.6%)	58(18.4%)	315(100.0%)

$\chi^2=1.81$, $p=0.625$ (NS), NS(Not significant)

Table – V: Relationship between Monthly income and knowledge about supplied contraceptives for women from community clinic (n=315)

Monthly income	Knowledge about supplied contraceptives for women from community clinic				Total n (%)
	OCP	IUCD	INJECTION	Don't know	
<15,000/-	195(74.1%)	4(1.5%)	17(6.5%)	47(17.9%)	263(83.5%)
>15,000/-	28(53.8%)	2(3.8%)	7(13.5%)	15(28.8%)	52(16.5%)
Total	223(70.8%)	6(1.9%)	24(7.6%)	62(19.7%)	315(100.0%)

$\chi^2=9.57$, * $p=0.018$, *=Significant

Table – VI: Relationship between age and reason for went to CC for last time (n=315)

Age (years)	Reasons for went to CC for last time						Total n (%)
	Fever	Common cold	Diarrhoea	Joint pain	Abdominal pain	Others	
<30	51(37.2%)	43(31.4%)	12(8.8%)	13(9.5%)	1(0.7%)	17(12.4%)	137(43.5%)
31-65	55(30.9%)	34(19.1%)	15(8.4%)	15(8.4%)	17(9.6%)	42(23.6%)	178(56.5%)
Total	106(33.7%)	77(24.4%)	27(8.6%)	28(8.9%)	18(5.7%)	59(18.7%)	315(100.0%)

$\chi^2=23.02$, * $p=.000$, *=Significant

Table – VII: Relationship between knowledge of supplied contraceptives from community clinic for both sex and received contraceptives by respondents (n=315)

Knowledge about supplied contraceptives from CC	Received contraceptives by respondents			
	Yes	No	NA	Total n (%)
Yes	119(46.1%)	81(31.4%)	58(22.5%)	258(81.9%)
No	1(1.8%)	7(12.3%)	49(86.0%)	57(18.1%)
Total	120(38.1%)	88(27.9%)	107(34.0%)	315(100.0%)

$\chi^2=85.6$, $df=2$, * $p=0.000$, *=Significant

Table – VIII: Relationship between knowledge about availability of staffs in office time and enough time given by service providers for patients (n=315)

Knowledge about availability of staffs in office time	Enough time given by service providers for patients		
	Yes	No	Total n (%)
Yes	217(91.9%)	19(8.1%)	236(74.9%)
No	7(53.8%)	6(46.2%)	13(4.1%)
Don't know	57(86.4%)	9(13.6%)	66(21.0%)
Total	281(89.2%)	34(10.8%)	315(100%)

$\chi^2=13.83$, $*p=0.001$, $*$ =Significant

DISCUSSION

Community clinics (CCs) play a vital role in promoting primary healthcare and achieving universal health coverage (UHC) in Bangladesh, particularly in rural and semi-urban areas. This study, conducted in the Nandigram upazila of Bogura, Bangladesh, provides valuable insights into the community's knowledge and utilization of CC services. The findings indicate moderate to high awareness of CC functions; however, actual utilization patterns vary by demographic and socioeconomic characteristics. The age distribution of respondents, with a mean of 36.24 ± 14.93 years, shows that most users of CC services fall into the productive age group (20–39 years), which aligns with previous findings that health-seeking behavior is more active among adults of reproductive age.^[10] The predominance of females (75.2%) among respondents may be attributed to women's higher use of reproductive, maternal, and child health services, which are frequently accessed at CCs.^[11] Educational attainment was found to influence knowledge and awareness. Around 42.2% of the participants had completed secondary education, and 27.3% were illiterate. This educational disparity directly impacts the interpretation of health information and access to health services, as literacy improves comprehension and utilization of community health services.^[12] Encouragingly, 94.0% of the respondents were aware of the services offered by community clinics. Furthermore, 82.0% were informed about the contraceptive supplies available at CCs. These findings are consistent with prior studies, which highlight the role of awareness in enhancing the use of family planning services in rural Bangladesh.^[13] Notably, 32.0% of women received antenatal care, and 48.0% received vaccines during pregnancy, reflecting that a significant proportion of maternal health services are being accessed via CCs. However, this utilization rate indicates room for improvement compared to the national goal of universal access to maternal health services.^[14] An essential finding is the high satisfaction rate among service users 75.0% were satisfied with the overall services provided by CCs. Satisfaction levels in rural clinics are often influenced by staff behavior, waiting times, and the availability of medicine.^[15] The present study corroborates this, as 91.9% of respondents who found staff available during office hours also reported receiving adequate attention during consultations. The statistically significant association ($p < 0.05$) between knowledge of staff availability and perceived service quality supports the argument that regular presence and interaction with health providers strengthen trust and satisfaction in public health facilities.^[16] Analyzing patterns of contraceptive knowledge and use further revealed crucial insights. While 81.9% knew that CCs provided contraceptives, only 46.1% had received them. This gap between awareness and utilization indicates potential barriers such as supply shortages, social stigma, or lack of follow-up, which were also identified in similar rural settings by Hossain et al. (2021).^[17] The association between knowledge of contraceptive supply

and actual receipt was statistically significant ($p < 0.05$), suggesting the need for intensified community outreach and demand-generation activities to translate knowledge into utilization. Socioeconomic status also influences service knowledge. Among respondents with a monthly income below BDT 15,000, 74.1% were aware of contraceptive supplies, compared to 53.8% of those with higher incomes. This significant association ($p < 0.05$) mirrors the national trend, where lower-income groups rely more heavily on publicly funded services, such as community clinics, as they often lack access to private healthcare.^[18] Age-specific variations in knowledge and utilization were noteworthy. For instance, 80.9% of respondents aged 31–65 years were aware of the oral contraceptive pill (OCP) supplies at CCs compared to 57.7% of those under 30 years. This statistically significant relationship ($p < 0.05$) suggests that older adults may have more extended and consistent engagement with CCs, leading to better knowledge retention over time.^[10] Similarly, the reason for the last clinic visit also varied by age group; older respondents were more likely to visit due to fever, which may reflect the burden of non-communicable diseases and aging-related infections. The designation of the Community Health Care Provider (CHCP) as the leading service provider was known to 75.0% of respondents, with no significant gender-based difference. This suggests a reasonably uniform level of public recognition of CHCPs among both sexes, emphasizing the visibility and integral role of CHCPs in rural primary healthcare delivery.^[19] Despite these positive indicators, the study identifies persistent challenges. A significant knowledge-utilization gap exists, particularly in the domain of contraceptive services. Also, while awareness of clinic hours and staff presence was moderately high (44.0% and 74.9%, respectively), the varied understanding of clinic operational times (with 34.0% mentioning incorrect hours) points to the need for better communication through posters, announcements, or digital means.

CONCLUSION

In conclusion, the findings highlight the significance of community clinics in the rural healthcare landscape of Bangladesh. They also reveal that, while general awareness is high, actual service utilization is influenced by factors such as age, education, income, and perceived quality of service. To strengthen the role of CCs, targeted health education, demand-side financing, and a consistent supply of resources are essential. Moreover, improving service quality and staff responsiveness can enhance satisfaction and increase repeat visits. Policymakers and healthcare managers must leverage these insights to bridge knowledge gaps and ensure equitable access to healthcare in rural communities.

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REFERENCES

1. Yaya, S., Bishwajit, G., Ekholuenetale, M., and Shah, V. Awareness and utilization of community clinic services among women in rural areas in Bangladesh: A cross-sectional study; 2017, 12(10): e0187303.
2. Barman, S., Nayeem, M.A. A field survey on provision of health care service in a community clinic of Bangladesh: a case study of Raicho community clinic. *Int J Community Med Public Health*. 2019, Vol.6: pp. 69-74.
3. Riaz, B.K., Ali, L., Ahmad, S.A., Islam, M.Z., Ahmed, K.R., and Hossain, S. Community clinics in Bangladesh: A unique example of public-private partnership. *Heliyon*. 2020, Vol. 6, 39-43.
4. Normand, C., Iftekar, M., H., and Rahman, S., A. Assessment of the community clinics: effects on service delivery, quality and utilization of services. *Health Systems Development Programme, Bangladesh, 2002*.
5. Directorate General of Health Services (DGHS). *Health Bulletin 2012*. Dhaka, Bangladesh.
6. Aktar S. Health Care Seeking Behavior for Safe Motherhood: Findings from Rural Bangladesh. *Bangladesh e-Journal of sociology*. 2012 Jul 1;9(2).
7. MOHFW. Revitalization of Community Health Care Initiatives in Bangladesh. Ministry of Health and Family Welfare, Government of Bangladesh, Dhaka, March, 2015.
8. Millat M., Jahan M., Hasan M., Alam K., Hossain M & Miah M. Status and prospect of Community Clinic in rural areas of Bangladesh: An overview of health workers. *Bangladesh Medical Research Council Bulletin* 2011;37(2): 76-77.
9. Sultana N and Tania F. Effectiveness of Community Clinic in Urban Area: A Cross-Sectional Study. *Malaysian J Medical Biological Res* 2016;2(1):43-48.
10. Rahman MS, Rahman MM, Gilmour S, Swe KT, Abe SK, Shibuya K. Trends in, and projections of, indicators of universal health coverage in Bangladesh, 1995–2030: a Bayesian analysis of population-based household data. *The Lancet Global Health*. 2018 Jan 1;6(1):e84-94.
11. Ahmed SM, Evans TG, Standing H, Mahmud S. Harnessing pluralism for better health in Bangladesh. *The Lancet*. 2013 Nov 23;382(9906):1746-55.
12. Amin R, Shah NM, Becker S. Socioeconomic factors differentiating maternal and child health-seeking behavior in rural Bangladesh: A cross-sectional analysis. *International journal for equity in health*. 2010, Dec; 9:1-1.
13. Yaya S, Bishwajit G, Ekholuenetale M, Shah V. Awareness and utilization of community clinic services among women in rural areas in Bangladesh: a cross-sectional study. *PloS one*. 2017 Oct 27;12(10):e0187303.
14. DGHS. *Health Bulletin 2023*. Directorate General of Health Services, Ministry of Health and Family Welfare, Bangladesh.
15. Islam A, Biswas T. Health system in Bangladesh: challenges and opportunities. *American Journal of Health Research*. 2014 Nov 14;2(6):366-74.
16. Baten A, Biswas RK, Kendal E, Bhowmik J. Utilization of maternal healthcare services in low-and middle-income countries: a systematic review and meta-analysis. *Systematic Reviews*. 2025 Apr 16;14(1):88.
17. Hossain MB, Khan MH, Ababneh F, Shaw JE. Identifying factors influencing contraceptive use in Bangladesh: evidence from BDHS 2014 data. *BMC public health*. 2018 Dec; 18:1-4.
18. NIPORT, ICF. *Bangladesh Demographic and Health Survey 2022: Key Indicators*. Dhaka, Bangladesh.
19. World Health Organization (WHO). *Primary Health Care on the Road to Universal Health Coverage*. Geneva: WHO; 2019.