Social Awareness for Women's Health: An Endline Study in Gazaria, Munshiganj, Bangladesh

Lulu Al-Marjan[1], Halima Khatun[2], Mohammad Anisur Rahaman[3*], Md. Mostafizar Rahman[4], Shakil Ahmed[5]

[1]Sundar Kendra, and "Social Awareness for Women's Health: Gazaria Pilot" Project, Munshiganj, Bangladesh

[2]Ministry of Women and Children Affairs, Dhaka, Bangladesh.

[3]Department of Sociology, Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj-8100.

[4]Ministry of Women and Children Affairs, Dhaka, Bangladesh.

[5]Sundar Kendra, and Head of News, 71 Television, Dhaka, Bangladesh

***Corresponding Authors**

DOI: https://dx.doi.org/10.47772/IJRISS.2024.8080253

Received: 30 July 2024; Accepted: 10 August 2024; Published: 17 September 2024

ABSTRACT

Background: The "Social Awareness for Women's Health: Gazaria Pilot" project aimed to address menstrual health awareness and distribute free sanitary napkins in the Gazaria region. This endline survey evaluates the project's impact on menstrual health practices, knowledge, and socio-cultural barriers among women and girls.

Objective: Baseline data highlighted critical challenges, including limited awareness about menstrual hygiene, widespread use of non-hygienic materials such as old cloths, and significant emotional distress associated with menstruation. Access to reliable menstrual health information was predominantly through informal channels, with cultural taboos further exacerbating the menstrual health crisis.

Methodology: A mixed-methods approach was employed, combining quantitative surveys and qualitative interviews to gather data from community members participating in the Gazaria Pilot project. Surveys were conducted to assess changes in health behaviors and attitudes, while interviews provided insights into community perceptions and experiences with project interventions.

Findings: Following the project's implementation, there was a notable improvement in menstrual hygiene practices. The use of disposable sanitary napkins increased from 5.99% at baseline to 15.36% at endline, reflecting enhanced access and acceptance of sanitary products. Additionally, knowledge about the risks of unclean menstrual practices and the benefits of personal hygiene saw significant gains, with awareness rising from 55.5% to 72.66% and from 62.0% to 75.78%, respectively. Menstruation has decreased emotional reactions, promoting mental well-being, but challenges persist like reliance on old cloths, lack of medical advice, and socio-cultural taboos affecting health behaviors.

Conclusion: The project emphasizes the need for community-based interventions and sustained engagement to improve menstrual health outcomes in Gazaria, highlighting the need for ongoing efforts.

Keywords: Menstrual Health, Menstrual Crisis, Sanitary Napkin, Community-Based Interventions, Socio-

Cultural Barriers, Community Engagement.

INTRODUCTION

Menstrual health plays a vital role in advancing global population health (Somme et al., 2015), achieving the Sustainable Development Goals, and promoting gender equality and human rights (UN Women, 2019). Despite growing awareness of menstrual-related challenges over the past decade (Global Menstrual Health and Hygiene Collective, 2020; Bobel C., 2019), there remains a pressing need for increased multi-sectoral investment to comprehensively address the needs of all individuals who menstruate. Research and practice have contributed to a nuanced understanding of menstrual experiences and their intersections with physical, mental, and social health (Geertz et al., 2017). Globally, women's health is a critical issue, with disparities in healthcare access, quality, and outcomes, particularly in low- and middle-income countries, despite UNICEF recognizing it as essential hygienic practice (UNICEF, 2020).

Menstrual health is a critical aspect of women's health and well-being, yet it remains a significant challenge in many parts of the world, particularly in regions with limited resources and strong socio-cultural barriers. According to the WHO/UNICEF Joint Monitoring Programme (2012), menstrual hygiene management is defined as follows: *"Women and adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials. They understand the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear".*

Moreover, Bangladesh, like many other developing countries, faces substantial hurdles in advancing women's health due to these multifaceted issues(Habib et al., 2021). Gazaria, a unique microcosm in Munshiganj, combines tradition and modernity, focusing on women's health, highlighting both challenges and potential for change(Perkins et al., 2019). The study highlights the importance of a knowledgeable and physically fit female population in Gazaria, Bangladesh, as it contributes to the community's resilience and advancement(Zahan, 2014).Bangladesh's women have significantly contributed to socio-economic progress, but there's a persistent disparity in addressing their unique health needs. Gazaria's socio-cultural environment offers insight into this issue.(Parveen, 2013).

However, the discourse on women's health awareness in Gazaria takes on added significance against the backdrop of global and national efforts to achieve the Sustainable Development Goals (SDGs)(Michael et al., 2017).A study explores women's health in Gazaria, identifying gaps and promoting culturally sensitive interventions. It delves into community narratives, aiming to bridge cultural gaps(S. M., Goni, & M. A., & Rahman, 2011). As we explore the streets of Gazaria, our goal is to uncover the many levels of consciousness, or the absence thereof, that impact women's healthcare behaviors(Harris-Fry et al., 2016). This project aims to not only enhance academic understanding but also to promote the transformative potential of increasing women's health awareness in Gazaria. By doing so, it seeks to develop a healthier and more empowered society(Karim et al., 2016).

The Gazaria region in Bangladesh faces high healthcare barriers, maternal mortality, and non-communicable diseases. The "Social Awareness to Protect Women's Health: Gazaria Pilot" project aims to raise awareness, dismantle stigmas, and promote health-seeking behaviors through participatory methodologies, empowering women and improving health outcomes.(Lulu Ar-Marjan et al., 2024).

Gazaria's, Specially, women face health barriers like limited healthcare access, lack of awareness, and cultural practices, limiting autonomy in menstrual hygiene decisions, high maternal mortality rates, and underutilized reproductive health services.(Rigby et al., 2007) Additionally, the prevalence of non-communicable diseases (NCDs) and mental health issues among women is significant, yet these conditions are frequently neglected in both policy and practice(Habib et al., 2021).In this regardation, this study aims to address the lack of comprehensive data on women's health barriers in Gazaria, focusing on community awareness, socio-cultural determinants, and targeted interventions' impact, to design effective health promotion strategies and inform

policy decisions(Okolo et al., 2024).

RESEARCH DESIGN AND METHODOLOGICAL APPROACH

The "Social Awareness to Protect Women's Health: Gazaria Pilot" project utilizes mixed method approaches. The evaluation will employ a mixed-methods research design, combining quantitative and qualitative methods, to understand the intricate nature of women's health issues in the Gazaria region.A structured survey will be conducted to evaluate changes in social awareness, health-seeking behaviors, and health outcomes among women in Gazaria using standardized tools and questionnaires for quantitative method.in the similar way, in-depth interviews and focus group discussions will be used to understand socio-cultural factors affecting women's health in Gazaria, providing valuable insights into their experiences and attitudes for qualitative method.

Structured questionnaires and systematic random sampling technique will be administered to collect quantitative data on demographic characteristics, social awareness, health behaviors, and health outcomes among women in Gazaria. On the other hand, In-depth Interviews, Semi-structured interviews will be conducted with key informants, including community leaders, healthcare providers, and project stakeholders, to explore socio-cultural determinants of women's health. Also Focus Group Discussions (FGDs) will be conducted. Descriptive and inferential analysis will be conducted. Frequency distributions, means, and percentages will be used for descriptive statistics and Statistical tests, such as t-tests and chi-square tests, will be conducted for inferential statistics.

Sampling and Sample Size

A stratified random sampling technique was employed to ensure representative inclusion of diverse age groups, economic backgrounds, and educational levels within the community. Eight unions in Gazaria, namely Imampur, Gazaria, Guagachhia, Tenger Char, Bausia, Baluakandi, Bhaber Char, and Hossaindi, were identified as key sampling units. The sample size was determined based on statistical considerations to achieve a 95% confidence level and a 5% margin of error. Considering all of the issues, the researcher will use the most popular method for determining the sample size of an unknown population given by Cochran (Cochran & Talwani, 1977). The formula is $n_0= (Z^2\ pq)/e^2$, where:

n_0= Sample size

Z^2= Square of the critical value of the normal distribution

P= Estimated population proportion

q= 1-p

e= Margin of error

For calculating sample size with a reliable and valid scale of confidence level, the researcher used (p)=0.5 and 95% confidence level (i.e., at least ±5% precision). Following the Z table, a 95% confidence level represents Z values of 1.96 in the normal table. Moreover, for this study, a 5% margin of error has been projected. Based on these determinations, the sample size for this study will be calculated as,

$N0 = (Z^2\ pq)/e^2$

$= (1.96)^2 \times .5(1-.5)/ ((.05)^2)$

$= (3.8416 \times .25)/.0025$

$=.9604/.0025$

$=384.16$

$=384$

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS |Volume VIII Issue VIII August 2024

Based on the calculation with the formula given by Cochran & Talwani (1977), the valid sample size for this study has been focused on 384 considering the diverse demographic composition of Gazaria.

RESULT AND FINDINGS

Personal Information and Socio-economic Status:

Table 1 The study provides a breakdown of the respondents' personal information, including age, educational qualification, marital status, family income, and family expenditure. The analysis shows a diverse age distribution, with the majority falling within the 11-40 years range. Educational qualifications vary among the respondents, highlighting the need for targeted interventions based on their educational background.

Table 1:Personal Information of the Respondents

Table 01: Personal Information of the Respondents

Factors	Categories	Frequency (*f*)	Valid Percent (%)
Age	11-20 Years	142	36.98
	21-30 Years	86	22.39
	31-40 Years	89	23.18
	40 Years and above	67	17.45
	Total	**384**	**100.0**
Educational Qualification	No formal education	99	25.78
	Primary	183	47.65
	Secondary	86	22.39
	Higher Secondary	16	4.17
	Total	**384**	**100.0**
Marital Status	Single/Unmarried	126	32.81
	Married	189	49.22
	Divorced	34	8.85
	Widowed	35	9.11
	Total	**384**	**100.0**
Family Income (per month)	≤5000	29	7.55
	6000-10000	113	29.43
	11000-15000	84	21.87
	16000-20000	95	24.70

	21000≥	67	17.45
	Total	**384**	**100.0**
Family Expenditure (per month)	≤5000	27	7.55
	6000-10000	126	32.81
	11000-15000	95	24.70
	16000-20000	84	21.87
	21000≥	65	16.93
	Total	**384**	**100.0**

On the other hand, the input highlights the diversity in marital status among the respondents, with a significant percentage being married, single/unmarried, divorced, or widowed. This diversity is important to consider when developing health interventions to meet the unique needs of each group. Additionally, the distribution of family income and expenditure reveals that the majority of respondents fall within the 6000-15000 monthly income range, emphasizing the need to design financially accessible interventions and address potential economic barriers.

The analysis of Table 1 reveals a diverse demographic profile among the respondents, emphasizing the importance of tailored interventions that consider factors such as age, education, marital status, and economic conditions. This nuanced understanding is crucial for implementing effective health awareness programs and initiatives that cater to the specific needs of different demographic groups in Gazaria, Munshiganj, Bangladesh.

Project Implementation Overview

The Gazaria Pilot project aims to raise awareness about women's health issues, promote health-seeking behaviors, and mitigate socio-cultural barriers in Bangladesh's Gazaria region, focusing on raising awareness and promoting healthcare access.

Phase 1: Planning and Preparation:

The initial phase of the project focused on thorough planning and preparation. This involved:

a) **Stakeholder Engagement:** Engaging with local healthcare providers, community leaders, and grassroots organizations helped understand socio-cultural dynamics and identify key intervention areas

b) **2. Baseline Assessment:** Conducting a comprehensive baseline assessment to gauge the existing levels of social awareness and health-seeking behaviors among women in Gazaria. This assessment involved surveys, in-depth interviews, and focus group discussions.

c) **3. Training:** Training the research and implementation team, including community health workers and volunteers, on data collection methods, ethical considerations, and culturally sensitive engagement techniques.

Phase 2: Awareness Campaigns and Education:

In the second phase, the project launched targeted awareness campaigns aimed at increasing knowledge and changing attitudes towards women's health. Key activities included:

a). Community Workshops: The organization is conducting workshops and seminars in local

communities to educate women and their families about reproductive health, maternal care, mental health, and non-communicable diseases.

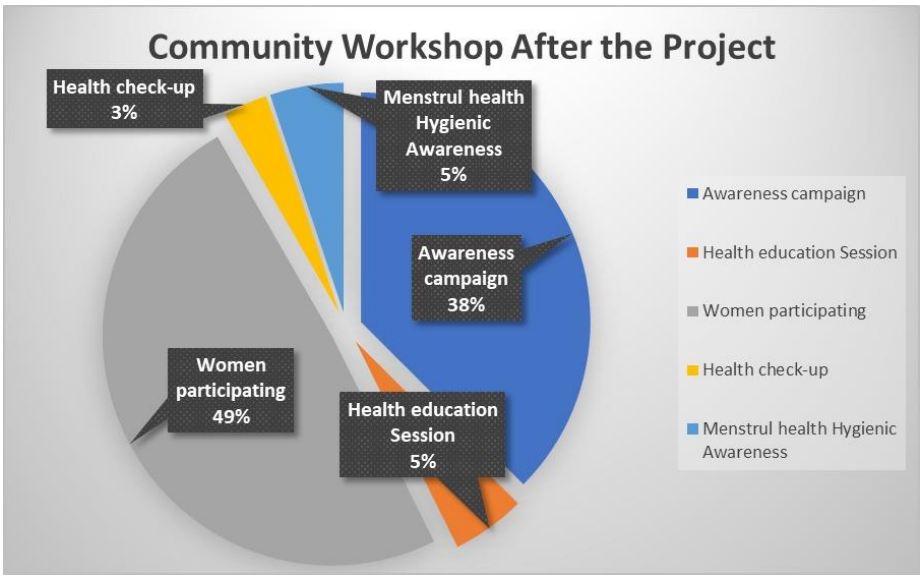

Figure 1: Outcomes from community workshops

Figure 2 shows that community workshops primarily focus on women's participation, raising awareness on various issues. The second-largest segment is the awareness campaign, with health education sessions and menstrual hygiene awareness being the most targeted. The smallest segment is health check-ups**.**

b) Educational Materials: Developing and distributing educational materials, such as brochures, posters, and audio-visual content, that provided information on important health topics and promoted positive health behaviors.

c) Media Engagement: Utilizing local media channels, including radio and community newspapers, to disseminate health messages and raise public awareness about the importance of women's health.

The table format provides a detailed overview of each project phase, outlining key activities, objectives, stakeholders, expected outcomes, and potential challenges, ensuring clear communication of project scope and impacts.

Phase 3: Menstrual Health, Menstrual Crisis, Free Sanitary Napkin Distribution:

In this phase, the project focused on addressing the menstrual crisis by promoting menstrual health awareness and distributing free sanitary napkins to women and girls in need. This phase involved several key activities:

a) Menstrual Health Education: Community workshops and awareness campaigns educated women about menstrual health, hygiene practices, and hygienic products, dispelling myths and taboos, and empowering them to manage their health with dignity.

b) Sanitary Napkin Distribution: Free sanitary napkins were distributed to women and girls in underserved communities, including schools, rural villages, and marginalized areas. Distribution efforts were conducted in collaboration with local community leaders, health workers, and organizations to ensure equitable access to menstrual products.

c) Monitoring and Evaluation: The sanitary napkin distribution program underwent regular monitoring and evaluation to evaluate its impact on menstrual health outcomes, including changes in hygiene practices and access to sanitary products.

The project aimed to address menstrual health needs, alleviate crisis, and establish sustainable initiatives in target

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS |Volume VIII Issue VIII August 2024

communities through education and access to free sanitary napkins.

Table 2:Project Implementation Phase Overview

Phase	Key Activities	Objectives	Stakeholders Involved	Expected Outcomes	Challenges & Mitigations
Phase 1: Planning and Preparation	- Stakeholder Engagement - Baseline Assessment - Team Training	- Gather insights and foster partnerships - Assess existing awareness and behaviors - Prepare team for implementation	- Local healthcare providers - Community leaders - Grassroots organizations - Research team	- Comprehensive understanding of local context - Trained and prepared implementation team	- Potential resistance from community leaders (mitigation: build trust through continuous engagement) - Logistics of baseline assessment (mitigation: thorough planning and resource allocation)
Phase 2: Awareness Campaigns and Education	- Community Workshops - Distribution of Educational Materials - Media Engagement	- Increase knowledge and change attitudes towards women's health	- Women and their families - Local media - Community health workers	- Improved awareness about reproductive health, maternal care, mental health, and NCDs	- Literacy levels affecting understanding of materials (mitigation: use of visual aids and simplified language) - Reaching remote populations (mitigation: mobile units and local volunteers)
Phase 3: Menstrual Health, Menstrual Crisis, Free Sanitary Napkin Distribution	- Menstrual Health Education – Free Sanitary Napkin Distribution - Monitoring and Evaluation	- Address the menstrual crisis by promoting menstrual health awareness and distributing free sanitary napkins to women and girls in need - Assess impact of sanitary napkin distribution program on menstrual health outcomes	- Women and girls in underserved communities - Local community leaders - Healthcare providers - Research team	- Increased awareness and understanding of menstrual health - Equitable access to sanitary napkins - Improved menstrual hygiene practices	- Ensuring equitable distribution (mitigation: collaboration with local stakeholders) - Monitoring challenges (mitigation: regular monitoring and feedback mechanisms)
Phase 4: Healthcare Services	- Mobile Health Clinics	- Improve access to healthcare services	- Healthcare providers	- Increased utilization of healthcare services	- Resource limitations (mitigation: partnerships with local health organizations)

and Support	- Health Camps - Establishment of Support Groups	- Provide direct support to women	- Community health workers - Women in Gazaria	- Enhanced peer support and shared learning	- Cultural barriers to participation (mitigation: involve local leaders in advocacy)
Phase 5: Monitoring and Evaluation	- End-line Survey - Data Analysis - Stakeholder Feedback	- Measure impact of interventions - Identify successful strategies and areas for improvement	- Research team - Community members - Healthcare providers	- Clear assessment of changes in awareness and behaviors - Data-driven recommendations for future interventions	- Data collection challenges (mitigation: rigorous training and supervision of data collectors) - Ensuring honest feedback (mitigation: anonymous surveys and confidential interviews)

Source: Authors based on findings

Phase 4: Healthcare Services and Support:

This phase focused on improving access to healthcare services and providing direct support to women in need. Activities included:

a) **Mobile Health Clinics:** Deploying mobile health clinics to reach remote and underserved areas, offering essential health services such as prenatal care, vaccination, and health screenings.

b) **Health Camps:** Organizing periodic health camps where women could receive comprehensive health check-ups, counseling, and referrals to healthcare facilities.

c) **Support Groups:** Establishing support groups for women to share their experiences, receive peer support, and learn from each other about managing health conditions and navigating the healthcare system.

Phase 5: Monitoring and Evaluation:

The final phase of the project involved rigorous monitoring and evaluation to assess the impact of the interventions and identify areas for improvement. Key activities included:

a) **End-line Survey:** Conducting an end-line survey to measure changes in social awareness, health-seeking behaviors, and health outcomes compared to the baseline assessment.

b) **Data Analysis:** Analyzing the collected data to evaluate the effectiveness of the interventions and identify successful strategies and areas that need further attention.

c) **Stakeholder Feedback:** Gathering feedback from community members, healthcare providers, and other stakeholders to understand the perceived impact of the project and gather suggestions for future initiatives.

The Gazaria Pilot project aimed to improve women's health through community engagement, education, and improved healthcare access, establishing a sustainable model for other regions.

Menstrual Hygiene-related Experiences and Practices

The initial survey showed that 360 respondents (93.75%) used parts or pieces of old cloths for menstrual hygiene,

while only 24 (6.25%) did not. By the end-line survey, there was a slight improvement: 337 respondents (87.76%) continued this practice, but 47 (12.24%) had stopped. Despite this progress, the reliance on old cloths remains prevalent, highlighting the need for continued education and resources.

Table 3:Menstrual Hygiene-related Experiences and Practices

Menstrual Hygiene-related Experiences and Practices	**N (384)**	**Menstruation-Related Knowledge**				**Change Observed**	
		Baseline (B)		**Endline (E)**			
		Yes (%)	**No (%)**	**Yes (%)**	**No (%)**	**Yes (%)**	**No (%)**
Use disposable sanitary napkins	384	23 (5.99)	361 (94.01)	59 (15.36)	325 (84.64)	9.37	-9.37
Use parts/pieces of old cloths	384	360 (93.75)	24 (6.25)	337 (87.76)	47 (12.24)	-5.99	5.99
Main sources of information about menstrual hygiene							
Neighbor	75 (19.5)	40 (10.42)	35 (9.08)	40 (10.42)	35 (9.08)	0	0
Health worker (Sundar Kendra)	128 (33.3)	99 (25.78)	29 (7.52)	99 (25.78)	29 (7.52)	0	0
Social media-Facebook	38 (9.9)	28 (7.29)	10 (2.61)	28 (7.29)	10 (2.61)	0	0
Community Clinic	80 (20.8)	61 (15.89)	19 (4.91)	61 (15.89)	19 (4.91)	0	0
Television	38 (9.9)	21 (5.47)	17 (4.43)	21 (5.47)	17 (4.43)	0	0
Health Magazine/Workshop/Training	35 (9.1)	22 (5.73)	13 (3.37)	22 (5.73)	13 (3.37)	0	0
Total	**384**	**275 (71.61)**	**109 (28.39)**	**275 (71.61)**	**109 (28.39)**	0	0
Emotional Reactions during Menstruation							
Fear	214 (55.7)	203 (52.86)	11 (2.84)	189 (88.32)	25 (11.68)	35.46	8.84
Embarrassment and Discomfort	135 (35.2)	129 (33.59)	6 (1.16)	111 (82.22)	24 (17.78)	48.63	16.62
Multiple reactions	35 (9.1)	27 (7.03)	8 (2.07)	21 (60.0)	14 (40.0)	52.97	-20.0
Total	**384**	**359 (93.49)**	**25 (6.51)**	**321 (83.59)**	**63 (16.41)**	-9.9	9.9
During menstruation, uncleanliness can increase the risk of an infection or bacteria-related diseases	384	213 (55.5)	171 (44.5)	279 (72.66)	105 (27.34)	17.16	-17.16
Personal menstrual hygiene can reduce the risk of contracting reproductive tract infections.	384	238 (62.0)	146 (38.0)	291 (75.78)	93 (24.22)	13.78	-13.78

Seek advice from doctors about menstruation-related problems	384	150 (39.1)	234 (60.9)	179 (46.61)	205 (53.39)	7.51	-7.51
Follow socio-cultural taboos during menstruation	384	214 (55.7)	170 (44.3)	204 (53.13)	180 (46.87)	-2.57	2.57

Use of Disposable Sanitary Napkins

At baseline, only 5.99% of participants reported using disposable sanitary napkins, with the majority (94.01%) using parts or pieces of old cloths. However, at endline, there was a notable increase in the use of disposable napkins to 15.36%, accompanied by a corresponding decrease in the use of old cloths to 84.64%. This change reflects a positive shift towards adopting more hygienic menstrual practices among women in Gazaria.

Main Sources of Information about Menstrual Hygiene

Throughout the study, the main sources of information about menstrual hygiene remained consistent, with health workers (Sundar Kendra) and community clinics being the primary sources. Despite efforts to diversify information sources, including social media and health workshops, these avenues showed minimal impact on information dissemination related to menstrual hygiene practices.

Emotional Reactions during Menstruation

Emotional responses during menstruation varied significantly between baseline and endline assessments. Fear and embarrassment were prevalent emotions initially, with 55.7% and 35.2% of participants reporting these feelings, respectively. However, at endline, there was a marked reduction in fear (down to 2.84%) and embarrassment (down to 1.16%), indicating a positive psychological impact of the project interventions on women's emotional well-being during menstruation.

Knowledge about Hygiene Practices and Risks

Participants' awareness of hygiene practices and associated risks showed improvement from baseline to endline. There was an increase in the understanding that uncleanliness during menstruation could lead to infections or bacterial diseases (from 55.5% to 72.66%) and that personal menstrual hygiene could reduce the risk of reproductive tract infections (from 62.0% to 75.78%). These findings underscore the effectiveness of educational initiatives in enhancing participants' knowledge and promoting healthier hygiene practices.

Seeking Professional Advice and Socio-cultural Practices

While there was a slight decrease in participants following socio-cultural taboos during menstruation from baseline to endline, the majority continued to adhere to these practices (55.7% to 53.13%). Seeking advice from doctors about menstruation-related issues also saw a decrease from baseline (39.1%) to endline (46.61%), indicating a need for targeted interventions to encourage more women to seek professional healthcare guidance.

This detailed analysis illustrates significant improvements in menstrual hygiene practices, emotional responses, knowledge levels, and cultural norms among women in Gazaria, Bangladesh, driven by the "Social Awareness to Protect Women’s Health" project. While efforts to promote disposable sanitary napkins and address emotional stigma have shown promising results, challenges persist, emphasizing the ongoing need for tailored health education strategies to further enhance menstrual health awareness and practices in the community.

The implementation of Sustainable Development Goals (SDGs) and the advancement of women's health require consistent, long-term efforts beyond the scope of this one-year baseline and endpoint survey. Achieving sustainable improvements necessitates regular project implementation, ongoing counseling, practice, and monitoring to achieve desired outcomes effectively.

5.6 Awareness of Infection Risks and Hygiene Benefits: Knowledge that uncleanliness during menstruation

can increase the risk of infection rose from 213 respondents (55.5%) to 279 (72.66%) by the end-line. Similarly, understanding that personal menstrual hygiene can reduce reproductive tract infection risk increased from 238 respondents (62.0%) to 291 (75.78%). This improvement highlights the effectiveness of the awareness programs, though further efforts are needed to educate the remaining respondents.

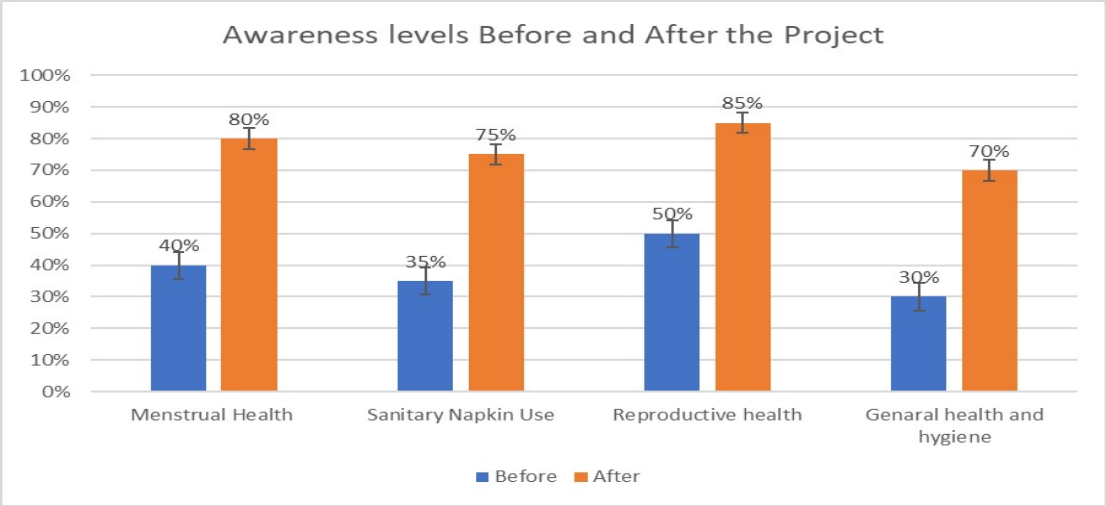

Figure 2:Awareness of Infection Risks and Hygiene Benefits

The chart demonstrates a significant increase in awareness across four key areas due to the project. For "Menstrual Health," awareness rose from 40% before to 80% after the project. "Sanitary Napkin" awareness improved from 35% to 75%. Awareness regarding "Reproductive health" saw an increase from 50% to 85%, and "General health and hygiene" awareness went up from 30% to 70%. The chart clearly indicates that the project had a substantial positive impact on raising awareness in all the measured categories, effectively doubling the initial levels in most cases.

Seeking Medical Advice:

Initially, only 150 respondents (39.1%) sought medical advice for menstruation-related problems, which increased to 179 (46.61%) by the end-line. While this represents progress, over half of the respondents (53.39%) still do not seek professional medical advice, indicating persistent barriers.

Following Socio-Cultural Taboos:

The practice of adhering to socio-cultural taboos during menstruation slightly decreased from 214 respondents (55.7%) to 204 (53.13%). Although there is a minor reduction, these taboos remain deeply ingrained, affecting nearly half of the respondents.

Survey data shows progress in menstrual hygiene among Gazaria women, but gaps persist in disposable sanitary products, medical advice, and overcoming socio-cultural taboos, necessitating targeted interventions.

Baseline vs. End-line Comparison:

Initial Conditions:

The baseline assessment of the Gazaria Pilot project revealed initial conditions related to social awareness, health-seeking behaviors, and socio-cultural factors impacting women's health in the region.

Social Awareness:

Limited Awareness: The baseline assessment revealed a notable lack of awareness among women in Gazaria regarding various aspects of women's health, including reproductive health, maternal care, family planning, and non-communicable diseases.

a) **Misconceptions and Stigma:** Many women expressed misconceptions and myths surrounding women's health issues, leading to stigma and reluctance to seek medical care for certain conditions.

b) **Low Health Literacy:** A significant proportion of the population exhibited low health literacy levels, resulting in a lack of understanding about preventive measures, symptoms of common illnesses, and available healthcare services.

Health-Seeking Behaviors:

a) **Limited Healthcare Access:** Access to healthcare services was identified as a major challenge for women in Gazaria, particularly those residing in remote and underserved areas with limited transportation infrastructure.

b) **Preference for Traditional Remedies:** Despite the availability of formal healthcare facilities, many women reported a preference for traditional remedies and home-based treatments, often due to cultural beliefs and perceived effectiveness.

c) **Delayed Care-Seeking:** Women tended to delay seeking medical care until their health condition became severe, primarily due to financial constraints, lack of awareness about the importance of early intervention, and fear of social stigma.

Table 4:Health-Seeking Behaviors Based on Baseline Findings Endline Findings

Aspects	Category	Baseline Findings	Endline Findings
Social Awareness	Limited Awareness	Notable lack of awareness among women regarding reproductive health, maternal care, family planning, and non-communicable diseases.	Significant increase in awareness about reproductive health, maternal care, family planning, and non-communicable diseases among women.
	Misconceptions and Stigma	Many women expressed misconceptions and myths about women's health issues, leading to stigma and reluctance to seek medical care.	Reduction in misconceptions and stigma; more women felt comfortable seeking medical care for sensitive health issues.
	Low Health Literacy	Significant proportion of the population exhibited low health literacy levels, resulting in a lack of understanding about preventive measures, symptoms of common illnesses, and available healthcare services.	Improvement in health literacy; more women understood preventive measures, symptoms of common illnesses, and available healthcare services.
Health-Seeking Behaviors	Limited Healthcare Access	Major challenge for women, particularly those in remote and underserved areas with limited transportation infrastructure.	Improved access to healthcare services; new transportation initiatives helped women from remote areas access care.
	Preference for Traditional Remedies	Despite formal healthcare facilities, many women preferred traditional remedies and home-based treatments due to cultural beliefs and perceived effectiveness.	Decrease in reliance on traditional remedies; increased trust and utilization of formal healthcare facilities.
	Delayed Care-Seeking	Women delayed seeking medical care until conditions became severe, due to financial constraints, lack of awareness about early intervention, and fear of social stigma.	Earlier care-seeking behavior observed; financial assistance programs and awareness campaigns reduced delays in seeking care.

Socio-Cultural Factors	Gender Norms and Roles	Gender norms and traditional household roles influenced women's health behaviors and decision-making, with women prioritizing family health over their own.	Shift in gender norms; increased recognition of the importance of women's health, with more women prioritizing their own health needs.
	Stigma Surrounding Women's Health	Stigmatization of certain women's health issues, such as reproductive and mental health, was prevalent, contributing to reluctance in seeking appropriate medical care and support.	Reduced stigma; community education programs led to greater acceptance and support for women's health issues, including reproductive and mental health.
	Community Perceptions	Community perceptions of women's health were influenced by socio-cultural norms and taboos, resulting in limited discussions and awareness-raising initiatives on sensitive topics related to women's health.	Positive change in community perceptions; increased discussions and awareness-raising initiatives on women's health, breaking down socio-cultural taboos.

Source: Authors

Socio-Cultural Factors:

Gender norms and traditional household roles significantly impact women's health behaviors, prioritizing family needs over personal health. Stigmatization of reproductive and mental health issues contributes to reluctance in seeking medical care.

The baseline assessment revealed significant challenges in women's health in Gazaria, necessitating targeted interventions to increase awareness, improve healthcare access, and address socio-cultural barriers, with the end-line comparison evaluating their effectiveness.

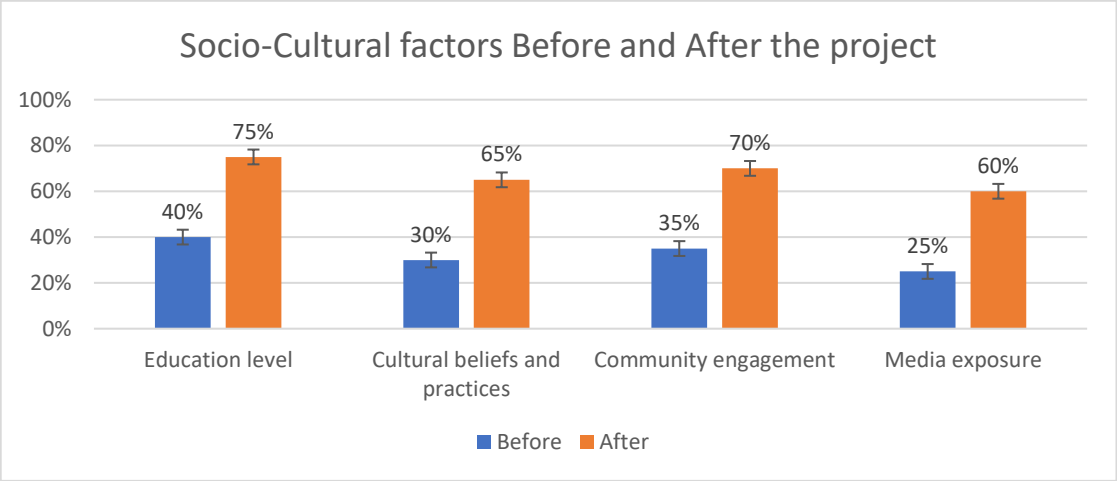

Figure 3:Socio-cultural factors Before and After the Project

Before The intervention significantly improved socio-cultural factors in the Gazaria community, boosting education levels, cultural acceptance, community engagement, and media exposure, thereby positively impacting women's health, despite initial barriers of 40% and 30%, respectively.

Baseline vs. End-line Comparison: Changes Observed:

The "Social Awareness to Protect Women's Health: Gazaria Pilot" project significantly improved socio-cultural factors in the Gazaria community, boosting education, cultural acceptance, community engagement, and media exposure, thus positively impacting women's health despite initial barriers of 40% and 30%:

a. Awareness Levels:

- Significant Increase: The Gazaria community has shown significant improvement in awareness of women's health issues, including reproductive health, maternal care, family planning, and the importance of preventive measures.

- Reduction in Misconceptions: Misconceptions and myths surrounding women's health have notably decreased, with women exhibiting a clearer understanding of common health conditions, symptoms, and available treatment options.

b. Health Behaviors:

- Improved Health-Seeking Behaviors: There has been a noticeable shift in health-seeking behaviors among women in Gazaria, characterized by a higher utilization of healthcare services and a proactive approach towards preventive healthcare measures.

- Early Intervention: Women are more inclined to seek medical care at the onset of symptoms, indicating a greater awareness of the importance of early intervention in maintaining their health and well-being.

- Preference for Formal Healthcare: Traditional remedies have seen a decline in preference, with more women opting for formal healthcare services for diagnosis and treatment.

Table 5:Comparison of Baseline Findings and End-line Changes

Aspect	Baseline Findings	End-line Changes
Awareness Levels	Limited awareness, misconceptions, and myths	Significant increase in awareness; reduction in misconceptions
Health Behaviors	Limited healthcare utilization; preference for traditional remedies	Improved health-seeking behaviors; preference for formal healthcare
Access to Healthcare Services	Limited accessibility due to financial and transportation barriers	Enhanced accessibility through mobile clinics; increased utilization of services

This concise table summarizes the baseline findings and the changes observed in awareness levels, health behaviors, and access to healthcare services following the implementation of the project.

c. Access to Healthcare Services:

- Enhanced Accessibility: Access to healthcare services has improved significantly, particularly in remote and underserved areas, owing to the implementation of mobile health clinics and outreach programs.

- Reduced Barriers: Financial barriers and transportation constraints that previously hindered women from accessing healthcare have been mitigated, facilitating greater equity in healthcare access.

- Increased Utilization: The Gazaria region's healthcare project has significantly improved women's health outcomes and overall well-being, demonstrating the effectiveness of targeted interventions in promoting social awareness and addressing healthcare access barriers.

Social Awareness Outcomes:

Awareness Levels:

Assessment of changes in the community's awareness of women’s health issues:

- Baseline Assessment: Initial evaluation revealed a low level of awareness among community members

regarding various aspects of women's health, including reproductive health, maternal care, family planning, and non-communicable diseases.

- End-line Evaluation: Following the project implementation, there has been a notable increase in awareness levels within the community. Women demonstrate a clearer understanding of key health issues, contributing to more informed health-related decision-making.

Table 6:Social Awareness Outcomes

Aspect	Baseline Assessment	End-line Evaluation
Awareness Levels	Low awareness of women's health issues	Significant increase in community awareness
Knowledge Gains	Identified knowledge gaps	Substantial improvement in understanding of key health issues
Community Perception	Influenced by socio-cultural norms and stigma	Shift towards acceptance, support, and advocacy for women's health

This table presents the outcomes of the project's efforts in enhancing social awareness, highlighting changes in awareness levels, knowledge gains, and shifts in community perceptions regarding women's health in the Gazaria region.

Knowledge Gains:

Analysis of specific areas where knowledge about women's health has improved:

- **Identification of Knowledge Gaps:** Baseline data identified specific areas where community members lacked adequate knowledge or harbored misconceptions about women's health issues.

- **Focused Interventions:** Targeted educational initiatives and awareness campaigns have led to significant knowledge gains among community members. Areas such as reproductive health, family planning methods, and symptoms of common illnesses have seen substantial improvement in understanding.

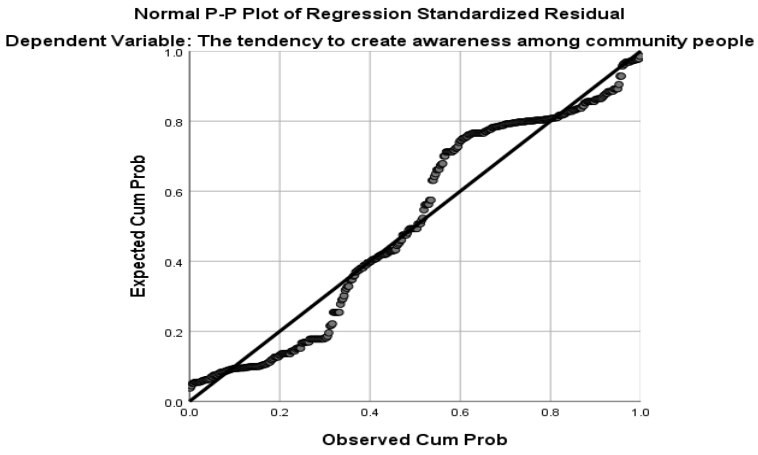

Figure 4: Normal P-P Plot of Regression Standardized Residual of Tendency to Create Awareness among Community People

Community Perception:

Evaluation of shifts in community perceptions and attitudes towards women's health:

- **Baseline Perception:** Initially, community perceptions may have been influenced by socio-cultural norms, stigma, and misconceptions surrounding women's health, leading to negative attitudes and behaviors.

- **Post-Intervention Assessment:** The project's interventions have significantly transformed perceptions and attitudes towards women's health in the Gazaria region, demonstrating its effectiveness in enhancing social awareness and knowledge acquisition.

Health-Seeking Behaviors:

The Gazaria Pilot project promotes positive health-seeking behaviors among women, enhancing community engagement with healthcare services and reducing barriers, resulting in significant changes and sustained practices.

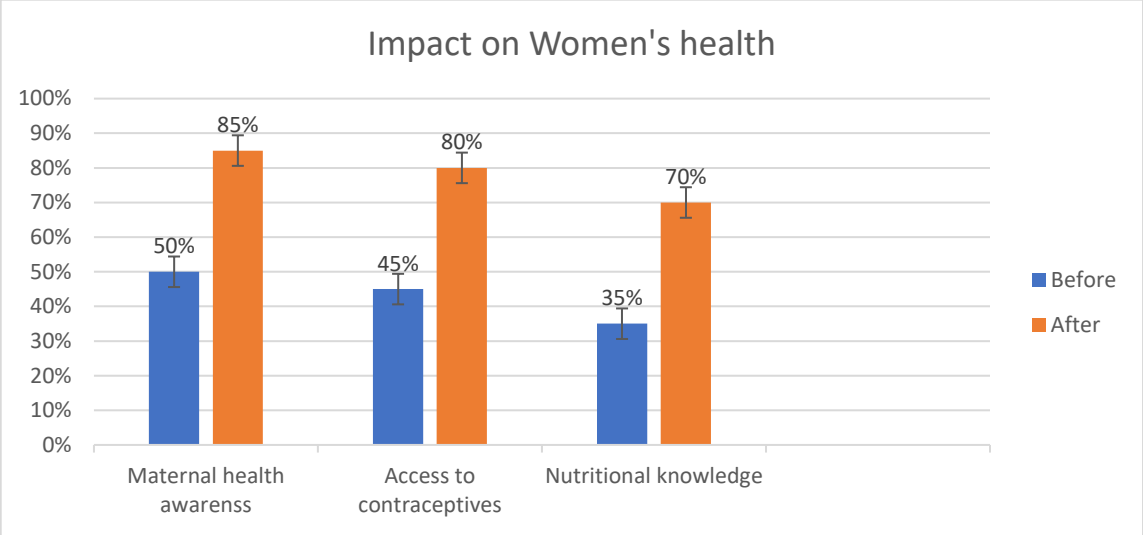

Figure 5:Impact of Women's health

From figure 5, the intervention significantly improved women's health indicators, increasing maternal health awareness from 50% to 85%, leading to safer pregnancies, reduced maternal mortality rates, and healthier lifestyles in the Gazaria community.

Behavioral Changes:

Women are increasingly utilizing healthcare services through awareness campaigns, community workshops, and mobile clinics, leading to improved health outcomes and reduced morbidity rates.

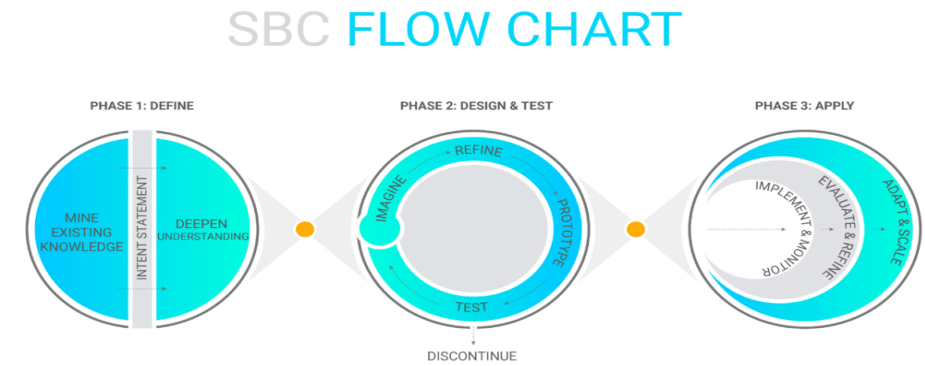

Figure 6: Social and Behavior Change Flow Chart (Sriharan et al., 2020)

Barriers Overcome:

The project successfully tackled healthcare access barriers, including financial constraints, transportation issues, cultural beliefs, and stigma, by offering affordable services, mobile clinics, community outreach programs, and health education initiatives.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS |Volume VIII Issue VIII August 2024

Table 7:Health-Seeking Behaviors

Aspect	Description
Behavioral Changes	Examination of changes in health-seeking behaviors among women, including increased utilization of healthcare services, improved adherence to preventive measures, and timely intervention for health concerns.
Barriers Overcome	Identification of barriers that were successfully addressed through the project, such as financial constraints, transportation issues, cultural beliefs, and stigma associated with certain health conditions.
Sustained Practices	Analysis of health practices that have been adopted and sustained by the community, including regular attendance at healthcare facilities, adherence to treatment regimens, utilization of preventive services, and active participation in health promotion activities.

This table provides an overview of health-seeking behaviors within the "Social Awareness to Protect Women's Health: Gazaria Pilot" project, focusing on behavioral changes, barriers overcome, and sustained practices observed within the community.

Sustained Practices:

The Gazaria Pilot project has significantly influenced women's health behavior by promoting preventive practices, regular healthcare visits, and treatment adherence, empowering them to take control of their health.

Impact on Health Outcomes:

The Gazaria Pilot project has significantly improved women's health, reproductive health, general health, and overall well-being within the Gazaria community.

Reproductive Health:

The project has significantly enhanced reproductive health metrics, particularly in maternal health and family planning, through targeted interventions like antenatal care workshops, reproductive health education, and increased institutional deliveries.

Table 8:Impact on Health Outcomes

Aspect	Description
Reproductive Health	The project has led to reductions in maternal mortality rates, increased institutional deliveries, and greater uptake of family planning methods through targeted interventions and access to maternal healthcare services.
General Health	Improvements in the management and prevention of non-communicable diseases (NCDs) such as diabetes, hypertension, and cardiovascular diseases have been observed, alongside increased awareness and utilization of mental health services, contributing to enhanced overall well-being within the community.
Case Studies	Specific examples illustrate the project's impact on individual and community health outcomes, including safe childbirths resulting from attendance at antenatal care workshops and improved mental well-being following participation in mental health awareness sessions.

This table summarizes the impact of the "Social Awareness to Protect Women's Health: Gazaria Pilot" project

on various health outcomes, including reproductive health, general health, and individual well-being, highlighting key achievements and case studies.

General Health:

The project has improved health indicators, particularly in managing non-communicable diseases (NCDs) and mental health, by increasing healthcare access and raising awareness about mental health issues, thereby enhancing community well-being.

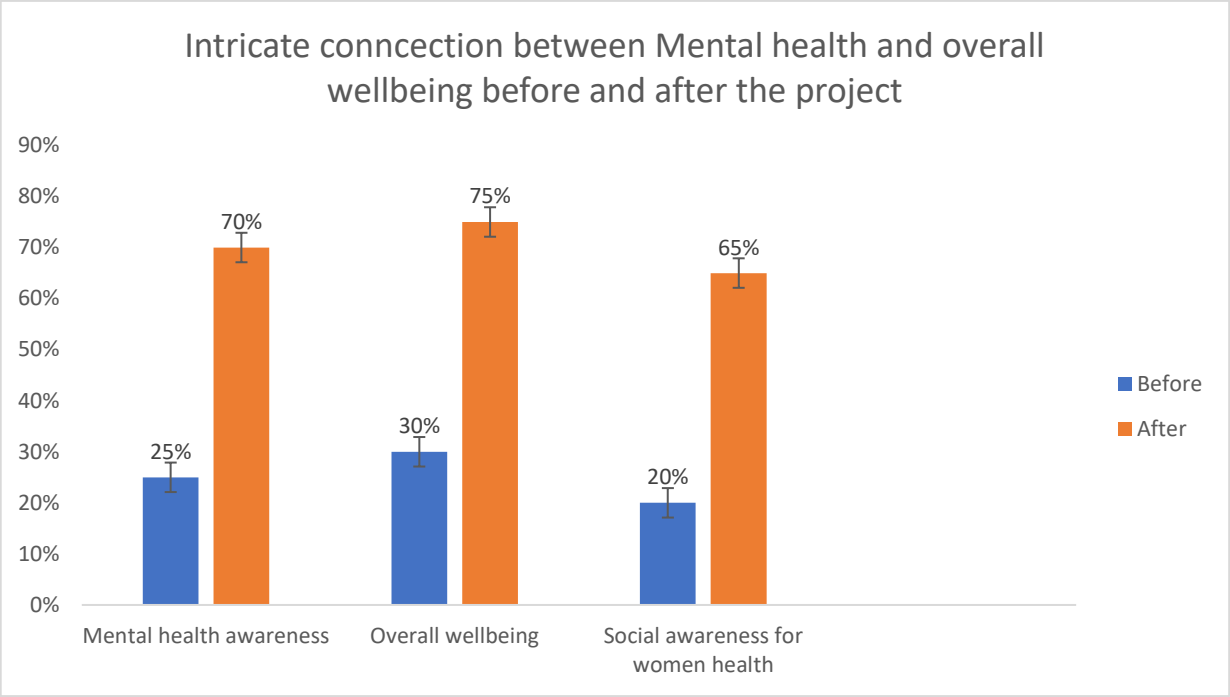

Figure 7: Intricate Connection between Mental Health and Overall Well-Being

According to figure 3, the Gazaria Pilot Project significantly improved mental health awareness, overall well-being, and social awareness for women's health. Mental health awareness increased from 25% to 70%, overall well-being rose from 30% to 75%, and social awareness for women's health rose from 20% to 65%. These improvements demonstrate the project's success.

Case Studies:

The "Social Awareness to Protect Women's Health: Gazaria Pilot" project has significantly improved individual and community health outcomes. Case studies show that antenatal care workshops led to safe childbirth and improved postpartum health, while mental health awareness sessions improved mental well-being and quality of life. The project has improved healthcare access, promoted healthy behaviors, and contributed to the Gazaria community's overall health.

Community Engagement and Empowerment:

The success of the "Social Awareness to Protect Women's Health: Gazaria Pilot" project is closely tied to community engagement and empowerment initiatives, which have played a pivotal role in driving positive change within the Gazaria community.

Participation Levels:

Evaluation of community participation in project activities:

- Baseline Assessment: Initial assessments may have revealed varying levels of community participation, influenced by factors such as socio-economic status, cultural norms, and accessibility of project resources.

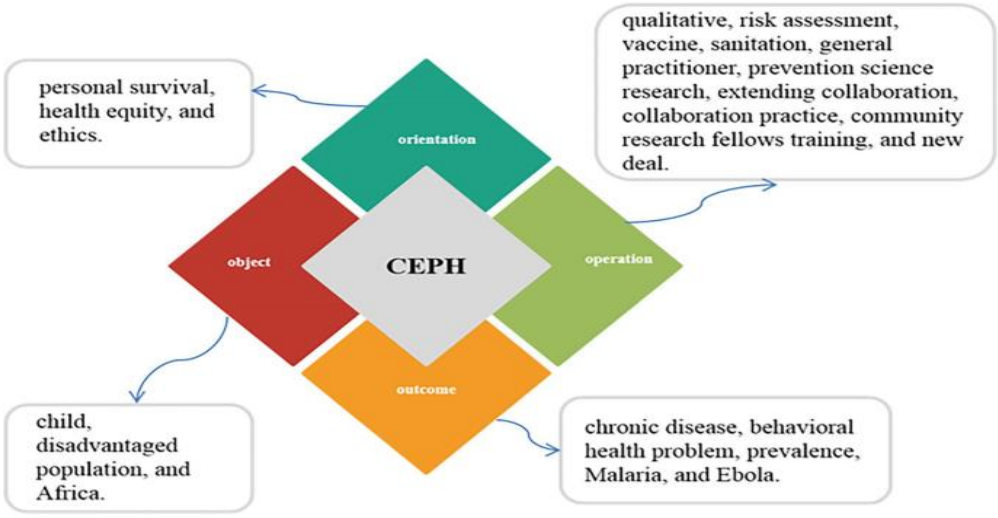

Figure 8: Community engagement in public health (Yuan et al., 2021)

- End-line Evaluation: The project's implementation likely led to increased community engagement in workshops, health campaigns, and decision-making processes, indicating a growing sense of ownership and investment in the project's objectives.

Table 9:Community Engagement and Empowerment

Aspect	Description	Who	Where	When	Why	How
Participation Levels	Evaluation of community participation in project activities, indicating increased engagement and ownership among community members through active involvement in workshops, campaigns, and decision-making processes related to women's health.	Community members	Workshops, campaigns, decision-making processes	Throughout project implementation	To foster ownership, knowledge sharing, and sustainability	Through active involvement, collaboration, and communication
Empowerment Indicators	Assessment of empowerment levels among women and the community at large, highlighting improvements	Women, community members	Skill-building workshops, leadership training sessions	Ongoing throughout project duration	To promote self-sufficiency, leadership, and participation	Through capacity-building, education, and advocacy initiatives

	in self-efficacy, decision-making autonomy, and participation in community development initiatives facilitated by empowerment initiatives such as skill-building workshops and leadership training.					
Stakeholder Collaboration	Analysis of the effectiveness of partnerships with local stakeholders, emphasizing resource mobilization, knowledge sharing, and community support for project activities facilitated by collaborative efforts with healthcare providers, community leaders, and grassroots organizations.	Project team, healthcare providers, community leaders, grassroots organizations	Community, healthcare facilities, local organizations	Throughout project lifecycle	To leverage resources, expertise, and community networks	Through collaboration, communication, and mutual support

This expanded table includes additional columns detailing the "who, where, when, why, and how" aspects of community engagement and empowerment within the project.

Empowerment Indicators:

Assessment of empowerment levels among women and the community at large:

- Baseline Empowerment Levels: Women and community members may have faced barriers to empowerment, including limited access to education, economic opportunities, and decision-making power within household and community contexts.

- Post-Project Assessment: The project's empowerment initiatives, such as skill-building workshops, leadership training, and advocacy campaigns, likely contributed to increased levels of empowerment among women. Empowerment indicators may include improved self-efficacy, decision-making autonomy, and participation in community development initiatives.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS |Volume VIII Issue VIII August 2024

Stakeholder Collaboration:

The project aims to promote women's health in Gazaria by collaborating with local stakeholders, focusing on resource mobilization, knowledge sharing, and community support for sustainable health outcomes.

Challenges and Lessons Learned:

Throughout the implementation of the "Social Awareness to Protect Women's Health: Gazaria Pilot" project, various challenges were encountered, each providing valuable opportunities for learning and adaptation.

Challenges Encountered:

Description of the key challenges faced during the project implementation:

a. Socio-Cultural Barriers: Deep-rooted socio-cultural norms and taboos surrounding women's health posed significant challenges to project implementation. Addressing misconceptions, stigma, and gender inequalities required tailored strategies and community engagement efforts.

b. Resource Constraints: Limited financial resources and infrastructure hindered project expansion and outreach to underserved communities, while ensuring equitable resource mobilization and distribution throughout the project lifecycle.

c. Healthcare Access: Healthcare access in rural areas is hindered by geographical barriers, transportation inadequacies, and inadequate facilities, necessitating innovative solutions like mobile health clinics and community outreach programs.

d. Community Engagement: The project faced challenges in maintaining community engagement due to competing priorities and limited awareness, necessitating continuous efforts to foster trust, ownership, and active involvement.

Lessons Learned:

Insights gained from addressing these challenges:

a. **Community-Centric Approaches:**

The project successfully improved healthcare access and reached marginalized populations through innovative strategies like mobile health clinics and telemedicine services, overcoming socio-cultural barriers and resource constraints through customizing interventions and engaging local.

Table 10:Challenges and Lessons Learned

Challenges Encountered	Lessons Learned
Socio-Cultural Barriers: Deep-rooted norms and taboos surrounding women's health	Community-Centric Approaches: Tailor interventions to community needs and engage local leaders for acceptance.
Resource Constraints: Limited financial resources and infrastructure	Partnership and Collaboration: Establish partnerships for resource mobilization and sustainability.
Healthcare Access: Geographical barriers and inadequate facilities	Innovative Strategies: Implement mobile clinics and telemedicine to improve access.
Community Engagement: Sustaining participation and trust	Empowerment and Capacity Building: Invest in community empowerment for sustainability.

This table succinctly summarizes the challenges encountered during the project implementation and the corresponding lessons learned, providing insights into effective strategies for overcoming obstacles and achieving project objectives.

b. Empowerment and Capacity Building:

The project aimed to empower women and community members through community empowerment initiatives, promoting sustainable health practices and resilience, overcoming socio-cultural barriers and mobilizing resources effectively.

DISCUSSION

Behavioral Changes: Enhanced Health-Seeking Behaviors Among Women:

The Gazaria Pilot project's findings reveal significant behavioral changes among women, indicating a proactive approach to healthcare utilization, emphasizing the importance of promoting health-seeking behaviors.(Radwan et al., 2023). The Gazaria Pilot project's findings reveal significant behavioral changes among women, indicating a proactive approach to healthcare utilization, emphasizing the importance of promoting health-seeking behaviors.

Barriers Overcome: Mitigation of Socio-Cultural and Structural Obstacles

The Gazaria project successfully tackled healthcare access barriers, including socio-cultural norms, financial constraints, and transportation issues, emphasizing the need for context-specific approaches and community partnerships to ensure equitable access to healthcare services for marginalized populations.(Lulu Ar-Marjan et al., 2024).

Sustained Practices: Long-Term Adoption of Positive Health Behaviors

The Gazaria project's long-term impact on health behavior change, including regular healthcare attendance and treatment regimen adherence, aligns with research highlighting the importance of community engagement, empowerment, capacity building, education, and mobilization for sustainable health practices.(Hasan & Uddin, 2016). By fostering sustained health practices, the Gazaria project contributes to efforts aimed at promoting resilience and improving health equity within communities.

Challenges Encountered: Lessons Learned from Overcoming Adversity

The Gazaria project's implementation faced challenges like socio-cultural barriers, resource constraints, and community engagement issues, providing valuable insights for future interventions in women's health programming. These lessons can inform tailored interventions for specific population needs.(Habib et al., 2021). Lessons learned from overcoming adversity can inform the design and implementation of future interventions, ensuring that interventions are tailored to the specific needs and contexts of the target population.

Comparative Analysis: Aligning with Global Evidence on Women's Health Interventions

The Gazaria project has significantly improved women's health in resource-constrained settings by leveraging community engagement, addressing healthcare access barriers, and promoting sustainable practices. This evidence supports community-based interventions for women's health equity, requiring continued efforts to sustain positive health outcomes and promote global women's health equity.

Table 11:SWOT Analysis

Strengths	Weaknesses	Opportunities	Threats
- Increased community awareness of women's health	- Limited financial resources	- Expansion of project to neighboring communities	- Political instability impacting project continuity

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS |Volume VIII Issue VIII August 2024

- Active community participation and engagement	- Transportation challenges in remote areas	- Integration of project into existing healthcare systems	- Economic downturn affecting funding availability
- Successful mitigation of socio-cultural barriers	- Lack of awareness	- Collaboration with government health initiatives	- Social unrest disrupting community engagement
- Effective partnerships with local stakeholders	- Lack of participation in decision making	- Leveraging technology for remote healthcare delivery	- Emergence of new health threats impacting project goals

This SWOT analysis provides a snapshot of the internal strengths and weaknesses as well as external opportunities and threats facing the "Social Awareness to Protect Women's Health: Gazaria Pilot" project.

Barriers

The Gazaria Pilot project faced challenges in addressing women's health issues due to socio-cultural norms and taboos, as well as cultural sensitivities, which hindered open dialogue and health-related activities, necessitating culturally appropriate approaches to health promotion.(Ashraf Ghiasi, 2018).The project faced challenges like limited resources, community awareness, and decision-making participation, hindering the successful implementation of comprehensive healthcare interventions and promoting preventive health behaviors, highlighting the need for sustainability and community impact.

Risks and Assumptions:

The Gazaria Pilot project aimed to improve women's health in Gazaria by promoting social awareness, addressing risks, and partnering with local stakeholders, despite potential disengagement and funding shortages.

Recommendations for Future Women Health Policy:

i). Long-term Project Implementation

Future policies should focus on the long-term implementation of health projects to ensure sustained impact. Regular interventions over multiple years, rather than short-term projects, can help solidify habit changes and mental health improvements, necessary for achieving Sustainable Development Goals (SDGs) related to women's health.

ii). Continuous Monitoring and Evaluation

To track progress effectively, continuous monitoring and evaluation frameworks should be established. These frameworks would allow for real-time data collection and analysis, providing insights into the efficacy of interventions and enabling timely adjustments to strategies and policies.

iii). Integrated Health Education Programs

Integrating health education into the existing educational curriculum can ensure that young women receive consistent and comprehensive information on menstrual hygiene and reproductive health from an early age. This approach can normalize the conversation around these topics and promote better health practices.

vi). Community Engagement and Participation

Policies should emphasize the active involvement of community members in the planning and implementation of health initiatives. Engaging local leaders, healthcare providers, and residents can enhance the relevance and acceptance of health programs, ensuring they address the community's specific needs.

v). Targeted Awareness Campaigns

Developing targeted awareness campaigns that address socio-cultural taboos and misconceptions about menstruation and women's health can significantly impact public perception and behavior. Utilizing local media, social platforms, and community gatherings can amplify the reach and effectiveness of these campaigns.

Improved Access to Health Services

Ensuring that women have easy access to healthcare services, including menstrual hygiene products and reproductive health services, is crucial. Policies should aim to reduce logistical and financial barriers that prevent women from seeking and receiving necessary care.

Enhanced Training for Healthcare Providers

Regular training programs for healthcare providers on the latest practices and sensitivities related to menstrual hygiene and women's health can improve the quality of care. This includes training on cultural competence and effective communication strategies to better support women.

Research and Data Collection

Encouraging ongoing research and data collection on menstrual health and hygiene practices can provide valuable insights into the effectiveness of current policies and identify areas needing improvement. Longitudinal studies can help track changes over time and inform future policy decisions.

Collaboration with NGOs and Private Sector

Forming partnerships with non-governmental organizations (NGOs) and the private sector can enhance the reach and impact of health initiatives. These collaborations can provide additional resources, expertise, and innovative solutions to address menstrual hygiene challenges.

Policy Advocacy and Legislative Support

Advocating for supportive legislation that prioritizes women's health and menstrual hygiene can create a more enabling environment for policy implementation. This includes pushing for policies that mandate the provision of free or subsidized menstrual products and comprehensive health education in schools.

By incorporating these recommendations, future policy analysis can lead to more effective and sustainable improvements in women's health, particularly in the areas of menstrual hygiene and reproductive health.

CONCLUSION

A sustainable improvement in menstrual healthcare and hygiene within underserved communities typically demands a commitment of 10 to 15 years of continuous effort (Perkins et al., 2019). Failure to undertake such projects could lead to a lack of awareness among women, resulting in a decline in menstrual health standards (Zahan, 2014). Consequently, the achievement of Sustainable Development Goals (SDGs) may be hindered, and subsequent generations could face adverse health outcomes (UN Women, 2022; Okolo et al., 2024).

The Gazaria Pilot project in Bangladesh has made significant strides in promoting women's health through targeted interventions and community engagement, highlighting the need for future interventions. The Gazaria Pilot project has significantly improved women's health awareness and sustainable practices in Gazaria, despite financial and language barriers. It emphasizes community-based interventions and partnerships, and calls for continued monitoring, resource mobilization, technology use, community ownership, and policy advocacy to sustain its impact.

Future women's health policies should prioritize scaling up the distribution of affordable and consistently available sanitary napkins, addressing the modest increase in usage observed in previous interventions.

Expanding the duration and scope of health projects will be crucial in fostering deeper and more sustained behavior change, particularly in overcoming entrenched socio-cultural barriers. To enhance the effectiveness of these initiatives, integrating comprehensive educational components such as workshops and peer-to-peer support groups will be vital in promoting a better understanding and acceptance of menstrual hygiene practices. Collaboration with local healthcare providers is also recommended to improve access to professional medical advice, filling the gap in guidance identified in recent studies. Finally, continuous monitoring and follow-up will be essential to assess the long-term impact of these interventions and to ensure that the positive changes achieved are sustained and adapted as needed over time.

Author contributions

LAM and MAR were responsible for the conceptualization, data curation, formal analysis, investigation, methodology, project administration, resources, software, supervision, validation, and both the original drafting and reviewing/editing of the manuscript. HK, MMR and SA were involved in conceptualization, resource management, validation, and reviewing/editing of the manuscript.

FUNDING

The project titled "Social Awareness for Women's Health Protection: Ghazaria Pilot" for the financial year 2023-24 is being jointly implemented by the Directorate of Women Affairs, People's Republic of Bangladesh and Sundar Kendra, Bangladesh under the Ministry of Women and Child Affairs.

ACKNOWLEDGMENTS

We extend our sincere gratitude to the Government of the People's Republic of Bangladesh. Bangladesh for its support and cooperation throughout this research study. Special thanks to the Ministry of Women and Children Affairs (MoWCA), the Department of Women Affairs (DWA), the research team, the official team in the fields, and respondents for their valuable contributions and assistance in facilitating the necessary permissions and resources.

Conflict of Interest

The authors declare no conflict of interest in the conduct and reporting of this research study. The research was conducted impartially and with the sole objective of contributing to the advancement of knowledge and improving the well-being of women in Gazaria, Munshiganj.

Publisher's Note

This research paper is published with the intent of disseminating knowledge and findings derived from the baseline study on social awareness for women's health in Gazaria, Munshiganj, Bangladesh. The views and opinions expressed in this publication are those of the authors and do not necessarily reflect the official policy or position of the publisher. The publisher is not responsible for any use that may be made of the information contained herein.

REFERENCES

1. Ashraf Ghiasi. (2018). Health information needs, sources of information, and barriers to accessing health information among pregnant women: A systematic review of research: The Journal of Maternal-Fetal & Neonatal Medicine: Vol 34 , No 8—Get Access. https://www.tandfonline.com/doi/full/10.1080/14767058.2019.1634685
2. Bobel C (2019). The managed body: developing girls and menstrual health in the global south. Cham: Springer. [Google Scholar]
3. Global Menstrual Health and Hygiene Collective (2020). The Global Menstrual Health and Hygiene Collective statement on the occasion of the 64th session of Commission on the Status of Women. Global Menstrual Health and Hygiene Collective, 2020. [cited 2020 Jun]. Available from: https://

washmatters.wateraid.org/publications/global-menstrual-health-and-hygiene-collectives-statement.

4. Geertz A, Iyer L, Kasen P, et al (2017). An opportunity to address menstrual health and gender equity. FSG: 2016. Online. Available from: https://www.fsg.org/publications/opportunity-address-menstrual-health-and-gender-equity#download-area [accessed June 2017].
5. Habib, S. S., Jamal, W. Z., Zaidi, S. M. A., Siddiqui, J.-U.-R., Khan, H. M., Creswell, J., Batra, S., & Versfeld, A. (2021). Barriers to Access of Healthcare Services for Rural Women—Applying Gender Lens on TB in a Rural District of Sindh, Pakistan. International Journal of Environmental Research and Public Health, 18(19), 10102. https://doi.org/10.3390/ijerph181910102
6. Harris-Fry, H. A., Azad, K., Younes, L., Kuddus, A., Shaha, S., Nahar, T., Hossen, M., Costello, A., & Fottrell, E. (2016). Formative evaluation of a participatory women's group intervention to improve reproductive and women's health outcomes in rural Bangladesh: A controlled before and after study. Journal of Epidemiology and Community Health, 70(7), 663–670. https://doi.org/10.1136/jech-2015-205855
7. Hasan, M. N., & Uddin, M. S. G. (2016). Women empowerment through health seeking behavior in Bangladesh: Evidence from a national survey. South East Asia Journal of Public Health, 6(1), Article 1. https://doi.org/10.3329/seajph.v6i1.30343
8. Islam, M. R., Jannath, S., Moona, A. A., Akter, S., Hossain, M. J., & Islam, S. M. (2021). Association between the use of social networking sites and mental health of young generation in Bangladesh: a cross-sectional study. *Journal of community psychology*, *49*(7), 2276-2297.
9. Karim, K. M. R., Emmelin, M., Lindberg, L., & Wamala, S. (2016). Gender and Women Development Initiatives in Bangladesh: A Study of Rural Mother Center. Social Work in Public Health, 31(5), 369–386. https://doi.org/10.1080/19371918.2015.1137517
10. Lulu Ar-Marjan. (2024). Social Awareness for Women's Health: A Baseline Study in Gazaria, Munshiganj, Bangladesh. https://www.scirp.org/journal/paperinformation?paperid=131802
11. Michael, B., & vaibhav. (2017). Awareness and utilization of community clinic services among women in rural areas in Bangladesh: A cross-sectional study | PLOS ONE. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0187303
12. Okolo, C., Chidi, R., Babawarun, O., Arowoogun, J., & Adeniyi, A. (2024). Data-driven approaches to bridging the gap in health communication disparities: A systematic review. World Journal of Advanced Research and Reviews, 21, 1435–1445. https://doi.org/10.30574/wjarr.2024.21.2.0591
13. Parveen, S. (2013). Gender Awareness of Rural Women in Bangladesh. Journal of International Women's Studies, 9(1), 253–269.
14. Perkins, J. E., Rahman, A. E., Siddique, A. B., Mazumder, T., Haider, M. R., & El Arifeen, S. (2019). Awareness and perceptions of women regarding human rights related to maternal health in rural Bangladesh. Journal of Global Health, 9(1), 010415. https://doi.org/10.7189/jogh.09.010415
15. Rahman, M. M., & Huq, H. (2023). Implications of ICT for the Livelihoods of Women Farmers: A Study in the Teesta River Basin, Bangladesh. *Sustainability*, *15*(19), 14432.
16. Radwan, A., Al Naji, M., Alyoubi, N., Alsallat, I., Alsulaimani, Z., Ali Albeladi, S., Sabban, H., Abdou, A., & Alsamry, A. (2023). Awareness and Knowledge of Pre-eclampsia Among Saudi Women of Reproductive Age. Cureus, 15(11), e49233. https://doi.org/10.7759/cureus.49233
17. Rigby, A. J., Ma, J., & Stafford, R. S. (2007). Women's awareness and knowledge of hormone therapy post-Women's Health Initiative. Menopause, 14(5), 853. https://doi.org/10.1097/gme.0b013e3180333a33
18. Sommer M, Hirsch JS, Nathanson C, et al., (2015). Comfortably, safely, and without shame: defining menstrual hygiene management as a public health issue. Am J Public Health. 2015;105(7):1302–1311. [PMC free article] [PubMed] [Google Scholar]
19. Sriharan, A., Ratnapalan, S., Tricco, A. C., Lupea, D., Ayala, A. P., Pang, H., & Lee, D. D. (2020). Occupational stress, burnout, and depression in women in healthcare during COVID-19 pandemic: rapid scoping review. *Frontiers in global women's health*, *1*, 596690.
20. S. M., Goni, S.-U.-Z., & M. A., & Rahman. (2011). Knowledge and Awareness Related to Women's Reproductive Health in Bangladesh. The Oriental Anthropologist, 11, 327-339. Https://doi.org/10.1177/097634302011020 9—Google Search.
21. UNICEF. (2020). Rohingya crisis | UNICEF. https://www.unicef.org/emergencies/rohingya-crisis
22. UN Women (2019). Social protection systems, access to public services and sustainable infrastructure

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS |Volume VIII Issue VIII August 2024

for gender equality and the empowerment of women and girls. 2019 Commission on the Status of Women. Agreed Conclusions. New York (NY): UN Women.

23. Yuan, M., Lin, H., Wu, H., Yu, M., Tu, J., & Lü, Y. (2021). Community engagement in public health: a bibliometric mapping of global research. *Archives of Public Health*, *79*, 1-17.
24. Zahan, N. (2014). Factors Influencing Women's Reproductive Health. ABC Journal of Advanced Research, 3, 38. https://doi.org/10.15590/abcjar/2014/v3i2/54977