Evaluation of the HERhealth Intervention in Bangladesh: Baseline findings from an implementation research study
Bangladesh is an influential contributor to the garment industry because of its high quality production and low labor costs. In turn, the garment sector plays a central role in Bangladesh’s economy: it is the largest employer of women in Bangladesh and has provided employment opportunities to women in rural areas who previously did not have an opportunity to participate in the formal workforce (Ahmed 2004). Although employment in the garment industry has improved women's financial situation, female factory workers are vulnerable to a myriad of health issues. Insufficient access to water and sanitation, health taboos and prejudices, reproductive tract infections, and inadequate knowledge of reproductive health (RH) issues are common among female workers, and many of them miss work during their menstrual cycle due to pain and embarrassment. Over the last several years, particularly against the background of major occupational safety and health (OSH) disasters in this sector, there have been increasing efforts to address the health, safety and well-being of garment factory workers in Bangladesh. Beyond programs addressing OSH, there are increasing efforts to address other issues of importance to women in this sector, including RH, family planning (FP), sanitation, hygiene and nutrition. One such program is Business for Social Responsibility (BSR)'s HERproject. HERproject is a collaborative initiative that strives to empower low-income women working in global supply chains. Bringing together global brands, their suppliers, and local NGOs, HERproject drives impact for women and business via workplace-based interventions on health, financial inclusion, and gender equality. One of HERproject’s pillars is HERhealth. HERhealth utilizes the HERproject methodology of capacity building and workplace strengthening, and seeks to improve the health-related knowledge and behaviors and access to health services and products of low-income working women. In Bangladesh, this project specifically addresses menstrual hygiene, sexually transmitted infections (STIs) and HIV/AIDS, nutrition, FP, early detection of breast and cervical cancer, and OSH.

To support HERhealth’s strategic vision for scale up in Bangladesh, BSR has collaborated with the Evidence Project/Population Council (the Council) to conduct an implementation science research evaluation study to validate the effectiveness of BSR’s HERhealth model including its peer education methodology, and find ways to optimize program inputs and processes to support the expansion strategy. A comprehensive baseline study was carried out in the intervention area prior to implementation to ensure rigorous measurement and documentation of learning of this innovative program. The study measured socioeconomic and regional differences in existing knowledge and practices related to sexual and reproductive health (SRH) among female garment factory workers at selected factories in the intervention area.
The baseline survey was designed to generate evidence on a range of SRH and FP indicators for women employed in the garment sector, with particular attention to garment workers’ knowledge of, attitudes towards, access to and utilization of modern and long-term contraceptive methods. The survey was also designed to measure their uptake of other SRH services and commodities, including safe motherhood services, STI and HIV services, and menstrual hygiene products. The Evidence Project/Population Council led the study and the overall research, including instrument design, fieldwork training, survey tool refinements, sample design, and data collection and management. Respondents were selected through single stage randomization, and data was collected in two phases, beginning in May 2015 and completed in September 2015. The final sample consisted of 2,165 female workers of reproductive age (18-49 years old) living in the three regions where HERhealth was implemented (Dhaka, Gazipur, and Narayanganj). See Table 1 for the sample distribution.

**TABLE 1**

<table>
<thead>
<tr>
<th>Factory type</th>
<th>Number</th>
<th>Number of completed interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control factories</td>
<td>4</td>
<td>859</td>
</tr>
<tr>
<td>Intervention factories</td>
<td>4</td>
<td>866</td>
</tr>
<tr>
<td>Post-intervention factories</td>
<td>2</td>
<td>440</td>
</tr>
<tr>
<td>All factories</td>
<td>10</td>
<td>2,165</td>
</tr>
</tbody>
</table>
### FINDINGS

**Characteristics of the Sample Population**

#### Demographics

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>18 - 19</th>
<th>20 - 24</th>
<th>25 - 29</th>
<th>30 - 34</th>
<th>35+</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>15%</td>
<td>39%</td>
<td>27%</td>
<td>11%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Across factories, over one-half of workers were from the younger age groups (18-19 and 20-24).

<table>
<thead>
<tr>
<th>RELIGION</th>
<th>98% Muslim</th>
</tr>
</thead>
</table>

#### MARITAL STATUS

<table>
<thead>
<tr>
<th>Currently Married</th>
<th>Never Married</th>
<th>Divorced/ Separated</th>
</tr>
</thead>
<tbody>
<tr>
<td>69%</td>
<td>22%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Across factories, nearly three out of four respondents were currently married (69 percent). More respondents from control factories had never been married (31 percent) than in the intervention and post-intervention factories (16 percent for both) (data not shown).

#### EDUCATION

<table>
<thead>
<tr>
<th>None</th>
<th>Primary Incomplete</th>
<th>Primary Complete</th>
<th>Secondary Incomplete</th>
<th>Secondary Complete or Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>13%</td>
<td>15%</td>
<td>20%</td>
<td>39%</td>
<td>14%</td>
</tr>
</tbody>
</table>

About 14 percent of the workers surveyed had completed secondary or higher education. Less than 30 percent had not completed primary education.

*Unless otherwise noted, results are for respondents at all factories.*
One-half of control factory workers (52 percent) were from the poorest and second poorest wealth quintiles, whereas just 31 percent of respondents at the intervention factories and 39 percent at the post-intervention factories were in these quintiles.

The migrant status of workers varied across factories, with fewer recent migrants employed by intervention factories than by post-intervention factories and control factories.
Charactersitics of the Sample Population

*Work & Employment*

**WORK HISTORY**

Workers from intervention factories reported more experience in the garment industry, on average (5 years), than workers from post-intervention (3 years) and control factories (3 years), differences which were found to be significant.
On an average, female workers in the intervention and control factories earned more than 6,000 BDT per month, with an additional 2,400 BDT if they worked overtime. The survey was unable to collect income information from workers in the post-intervention factories. The survey collected information from workers at all factories about their saving patterns: on average, workers saved more than 2,500 BDT each month.
Characteristics of the Sample Population

Lifestyle

**EXPOSURE TO MASS MEDIA**

At least once a month:

- **Read newspaper**: Post-intervention factories (7%), Intervention factories (3%), Control factories (8%), All factories (13%).
- **Listen to radio**: Post-intervention factories (3%), Intervention factories (7%), Control factories (3%), All factories (14%).
- **Watch TV**: Post-intervention factories (78%), Intervention factories (85%), Control factories (85%), All factories (88%).

Exposure to mass media varied by factory type, with workers from intervention factories reporting more exposure to mass media than workers from other factories. Across all factories, exposure to newspapers and radio was lower than exposure to TV: less than 10 percent of workers at control or post-intervention factories, and only a slightly higher percentage of workers at intervention factories, read the newspaper or listened to the radio at least once a month, while almost 85 percent of all workers watched television at least once a month.

**FOOD INTAKE AND NUTRITION STATUS**

- **Ate three meals every day**: Post-intervention factories (97%), Intervention factories (86%), Control factories (94%), All factories (91%).
- **Never skipped entire meal due to lack of food**: Post-intervention factories (98%), Intervention factories (93%), Control factories (95%), All factories (95%).

Workers were asked “How often did you eat three ‘square meals’ (full stomach meals) a day?” Responses varied by the type of factory: Fewer workers from the intervention factories reported daily intake of three square meals than workers from post-intervention and control factories. On the other hand, approximately 95 percent of the workers from all factories reported that they had never skipped an entire meal due to lack of food. The average Body Mass Index (BMI) score of these female workers is 22.4. Workers from intervention factories had significantly higher BMI scores than workers at the other two types of factories.
Sexual and Reproductive Health Knowledge

Female factory workers at intervention factories (who had not yet been exposed to the HERhealth intervention when the baseline survey was conducted) and control factories generally reported lower levels of SRH-related knowledge than workers at post-intervention factories, including on measures related to menstrual hygiene, the risk period for pregnancy, and SRH service delivery points. Workers from post-intervention factories also reported higher levels of knowledge of STIs and greater awareness of HIV/AIDS and HIV/AIDS prevention measures than both intervention and control factory workers.
Family Planning

Almost all workers, regardless of whether they had been exposed to HERhealth, were aware of at least one method of FP (99 percent) [data not shown]. However, awareness of emergency contraceptive pills (ECP) was very low across factories: among those who had heard of family planning, only 27 percent of workers from the control factories and approximately 40 percent of female workers from post-intervention and intervention factories knew about ECP.

![Chart: Knew about Emergency Contraception](chart1.png)

Pregnancy-related

Female factory workers who had ever been pregnant were asked about their knowledge of selected pregnancy-related topics. Across all types of factories, approximately one-half did not know the recommended number (four) of ANC visits during pregnancy. Workers were also asked to name the five danger signs in pregnancy (convulsion, hemorrhage, headache and blurry vision, fever, and prolonged labor) and the number of signs they could name was recorded. Nearly half of workers across factories didn’t know a single danger sign. Twenty-seven percent of respondents knew at least two danger signs. A negligible proportion of workers could name four signs, but not a single worker could list all five signs of danger during pregnancy.

![Chart: Number of Known Danger Signs in Pregnancy](chart2.png)

![Chart: Knew the Recommended Number of ANC Visits](chart3.png)
Sexual and Reproductive Health-related Practices

*Selected SRH Behavior*

In Bangladesh, women traditionally use cloths during menstruation rather than sanitary pads. Among the garment workers interviewed, a greater proportion used cloths (64 percent) than used sanitary pads (approximately 34 percent). This is concerning, because although these cloths should be dried in the sun to maintain hygiene, social taboos mean that this practice is rarely followed, which can contribute to higher prevalence of reproductive tract infections. Indeed, almost 63 percent of all workers did not know that menstrual cloths need to be dried in the sun (see page 9).

Findings indicate that workers who had been exposed to the HERhealth intervention were more likely to use sanitary pads than workers from other factories. This is likely because those workers had more access to information on menstrual hygiene and to lower-cost sanitary pads, through factory subsidies.

Across all factories, a negligible portion of the garment workers reported that they had been tested for an STI and/or HIV/AIDS. On average, only 7 percent reported that they had experienced an STI in the last 12 months. Among the workers who experienced an STI, 60 percent had sought help.
Use of Family Planning Methods

Among currently married female workers across all factories, 78 percent reported that they used any sort of family planning method and 68 percent reported that they used a modern method (oral pills, injectables, implants, intra-uterine contraceptive device, condoms, or sterilization). Pills were the most popular method (used by 44 percent), followed by injectables (14 percent) and condoms (7 percent) [data not shown]. Though these statistics are quite high compared to the national statistics (62 percent of currently married women use any family planning method and 54 percent use a modern method) (NIPORT et al 2015), they are consistent with rates of family planning use found in a baseline study conducted with a similar population in an urban slum in Dhaka (Rahman et al 2012).

Service seeking during pregnancy

Among garment workers who had ever been pregnant, 64 percent (across all factories) reported that they had received antenatal care (ANC). A smaller percentage had attended four or more ANC visits (37 percent). However, alarmingly, only 16 percent of ever-pregnant garment workers delivered in a hospital or clinic; the proportion was particularly low among workers at control factories, where just 9 percent reported that they had delivered in an institutional setting.
Experience with Other Interventions and Perceptions of On-site Clinic

Involvement in other interventions
The female workers were asked about their involvement in NGO and/or government programs or interventions other than the HERhealth intervention. Among workers in post-intervention factories, 62 percent reported that they had been involved in another program or intervention. One-half of this group described the intervention as health related, with smaller numbers reporting that they had been involved in interventions related to fire safety and security (45 percent) or to occupational safety and health (8 percent). Among workers at intervention and control factories, one out of four reported involvement in another intervention, most often related to fire safety and security.

Awareness of on-site health clinic and services
Almost all workers across factories were familiar with the on-site health facility. They were also able to report many of the services offered in these facilities: almost all mentioned general health services (97 percent), followed by treatment for stomach-related problems (52 percent), other primary health services (45 percent), and antenatal care (19 percent).

Experiences at on-site health clinics
Three out of four workers (74 percent) reported that they had sought services from on-site health facilities at some point in their professional career. Among those who had sought services, they had visited an average of one to two times, and about half (49 percent) had visited the health facility within the three months preceding the survey period. They were also asked their view on the clinic’s working hours: nearly all thought the hours were very convenient (55 percent) or convenient (42 percent). Three out of four (74 percent) said that the quality of the on-site health clinic they had visited was better than outside clinics. Almost all (98 percent) of the workers who sought services at an on-site clinic reported that the service providers had been friendly. However, 79 percent reported that service providers did not listen to their problem, and only 68 percent reported that service providers gave a detailed explanation of their problem.
LIMITATIONS

This study describes the current SRH knowledge, behaviors and practices of a sample of female factory workers living in semi-urban areas of Dhaka. The findings can be generalized to the study population of female garment factory workers, 18-34 years old, since the sample was drawn using single stage randomization from a number of selected factories from three sites in Dhaka. However, findings cannot be generalized for all Bangladeshi garment workers. Additionally, since this study includes only quantitative measures, it cannot provide information on detailed contextual factors and reasons underlying female factory workers’ SRH-related awareness, attitudes and behaviors.
This study offers important insights into the SRH related knowledge, behaviors, and practices of female garment factory workers in one of the world’s fastest growing cities. It is one of the first studies of female garment workers in Dhaka to explore SRH-related outcomes while controlling for respondents’ sociodemographic characteristics, including marital status.

More specifically, this study establishes baseline measures for the BSR/HERhealth evaluation, which aims to improve SRH conditions of female factory workers by gathering evidence to validate the HERhealth model, strengthen the intervention, and enable program inputs for scaling up. Workers at post-intervention factories, who had already been exposed to the HERhealth intervention, were expected to report higher levels of knowledge and positive health behaviors than workers at other factories, and this was indeed the case for many indicators. Workers at post-intervention factories:

- had higher levels of knowledge related to STIs, HIV/AIDS, safe sex, and menstrual hygiene,
- were more likely to have used family planning, and
- were more likely to have attended at least four ANC visits during pregnancy than workers at other factories.

However, this did not hold true across all indicators. For example, workers at post-intervention factories did not report higher levels of knowledge about emergency contraceptive pills or higher levels of institutional delivery.

Data presented in this brief are from a single point in time; interpretation and recommendations will require analysis of the combined baseline and endline surveys (forthcoming). However, these results offer useful insights and an important starting point to validate, refine, and plan for scaling up the HERhealth model and improve SRH conditions for female garment factory workers in Bangladesh.

CONCLUSIONS
REFERENCES


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BSR is a global nonprofit organization that works with its network of more than 250 member companies and other partners to build a just and sustainable world. HERproject is a collaborative initiative of low-income women working in global supply chains. Bringing together global brands, their suppliers, and local NGOs, HERproject drives impact for women and business via workplace-based interventions on health, financial inclusion, and gender equality. Since its inception in 2007, HER project has worked in more than 420 workplaces across 14 countries, and has increased the well-being, confidence, and economic potential of more than 500,000 women.


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