EFFECTS OF A WORKPLACE HEALTH PROGRAM ON ABSENTEEISM, TURNOVER, AND WORKER ATTITUDES IN A BANGLADESH GARMENT FACTORY

April 2007

USAID
FROM THE AMERICAN PEOPLE

esd REACHING FURTHER
extending service delivery

What is ESD?

The Extending Service Delivery (ESD) Project, funded by the United States Agency for International Development (USAID) Bureau for Global Health, is designed to address unmet needs for family planning (FP) and increase the use of reproductive health and family planning (RH/FP) services at the community level, especially among underserved populations, in order to improve health and socioeconomic development. To accomplish its mission, ESD strengthens global learning and application of best practices; increases access to community-level RH/FP services; and improves capacity for supporting and sustaining RH/FP services. ESD works closely with USAID missions to devise tailored strategies that meet the RH/FP service delivery needs of specific countries. A five-year Leader with Associates Cooperative Agreement, ESD is managed by Pathfinder International in partnership with IntraHealth International, Management Sciences for Health, and Meridian Group International, Inc. Additional technical assistance is provided by Adventist Development and Relief Agency International, the Georgetown University Institute for Reproductive Health, and Save the Children.

Contact information:

For further information, please contact:

Extending Service Delivery Project
1201 Connecticut Avenue, NW, Suite 700
Washington, DC 20036
Tel. 202-775-1977
Fax. 202-775-1988
esdmail@esdproj.org

This publication was made possible through support provided by the Office of Population and Reproductive Health, Bureau for Global Health, U.S. Agency for International Development, under the terms of Award No. GPO-A-00-05-00027-00. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the U.S. Agency for International Development.

ACKNOWLEDGEMENTS

This report was prepared for Extending Service Delivery (ESD) by Sorowar Chowdhury (Health Solutions PDA), David Wofford (ESD) and Veronique Dupont (ESD), and reviewed by Shawn MacDonald (ESD) and Carla White (ESD). Joseph Falcone from Health Solutions PDA, and Iftekhar Chowdhury from the University of Chittagong provided additional comments and suggestions to enhance the quality of the report. The report also draws on the research on "ROI" methodologies and an initial study on the Chittagong garment factory by Bettina Brunner (Meridian Group International, Inc.) and HSPDA. ESD would like to thank and acknowledge Shyam Thapa, formerly with ESD and now with Save the Children, for his contribution to the design of the survey and the overall study.

Finally, ESD would also like to thank and acknowledge the Chittagong garment factory workers and factory management who participated in this study. Without their participation, time commitment, and insightful comments, this report would not have been possible.

ACRONYMS AND ABBREVIATIONS

BGMEA	Bangladesh Garment Manufacturers and Exporters Association
BSR	Business for Social Responsibility
CSR	Corporate Social Responsibility
FGD	Focus Group Discussion
FP	Family Planning
HSPDA	Health Solutions Participatory Development Appraisal
NGOs	Non-governmental Oorganizations
RH	Reproductive Health
RMG	Ready-made Garment
ROI	Return on Investment
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

Businesses must be presented with a strong economic rationale—or business case—if they are to be persuaded to invest in workplace health programs. Extending Service Delivery (ESD), a five-year reproductive health and family planning (RH/FP) project funded by the United States Agency for International Development (USAID), found a lack of research into the business case for investment in employee health services by companies in developing countries. Therefore, in 2006, ESD conducted a study to evaluate the return on investment (ROI) of providing health services at a garment factory site in Bangladesh. The study sought to examine the effect of available on-site health services on employee absenteeism and turnover, workers' perceptions of the on-site clinic services, and attitudes toward their employer.

ESD selected the garment industry sector for the ROI study because companies in this sector have low profit margins and, generally, few obligations to workers. In comparison, workers in high-wage sectors can expect or demand benefits and large profit margins provide companies discretionary funds to use for special programs. Furthermore, the Bangladesh garment sector faces similar problems to those faced by the garment sector and other light manufacturing sectors worldwide. These problems include razor-thin profit margins, high staff turnover, high absenteeism, poor working conditions, and a dependence on young female workers. Many of these young women are migrant workers who are often paid below the living wage and have a high unmet need for health services, particularly RH/FP services. This is important because owners in the light manufacturing sector do not consider themselves financially able to provide needed reproductive and general health services to their predominantly female workforce. Therefore, these companies need evidence of the business case for such health investments.

In 2006 ESD partnered with Health Solutions Participatory Development Appraisal (HSPDA) and approached the Chittagong-based garment factory to invite it to participate in a comprehensive study to evaluate the ROI of providing on-site health services. The purpose was to strengthen the evidence base for the relative costs and benefits to businesses of investing in on-site health services.

A cross-sectional survey was conducted at the factory site with a randomized sample of approximately half (203) the factory workers who were on the factory payroll during the survey month. Half of the factory managers (15) were also surveyed. Four focus group discussions with eight female employees each were also conducted. The four groups were organized both by marital status and by whether the employee had used the on-site clinic. In addition, an audit was conducted of factory employee attendance records between January 2004 and June 2006, to measure changes in absenteeism and turnover rates.

The factory audit found:

Absenteeism

- An average of 11 percent fewer days lost to absenteeism (from 867 to 770) in the first year of the program and an 18 percent decline in the first 18 months (from 867 to 712)

Turnover

- A 43 percent decrease in staff turnover (from 40 per month to 23) in the first year of the program and a 46 percent decrease in the first 18 months (from 40 to 21)

The study estimated the monetary value of the savings gained from reduced absenteeism and turnover compared to the start-up and operating expenses for the health program and found roughly a 2.4:1 ROI in the first year of the program. The data indicate a larger return of 3:1 over 18 months of the program. These figures are based on the factory's own estimates on the production costs due to absenteeism and turnover.

The audit data are supported by the quantitative findings of survey and qualitative data of the focus discussion groups. The survey found that factory workers—whether or not they had used the health services—believed that the availability of on-site services made them:

- Less likely to be absent from work
- More likely to stay in their current job
- Have positive attitudes toward factory management

Finally, focus group discussions provided qualitative data confirming that availability of on-site health services was an important factor in women's decision to come to work and to stay employed at the factory.

The three sources of study data (audit, survey, focus groups) indicate that general health services introduced at the workplace with full management support provide both tangible and intangible returns on investment. It should be noted that factory managers also confirmed that the availability of health services made them less likely to be absent or to look for jobs elsewhere. Although the study could not quantify these responses, they suggest additional savings, since replacing managers is more expensive for the factory than replacing line workers.

As a reproductive health and family planning (RH/FP) project, ESD was also interested in learning about worker knowledge of RH/FP services at the factory clinic and the use rates of these services. After 18 months of operation, clinical records show the utilization rate for RH/FP services was 30 percent of all services. The survey found that workers could cite most services available including the following clinical services:

- General health treatments (asthma, diarrhea, etc.) – 93 percent
- Stomach ailment related treatments – 91 percent
- Family planning methods – 90 percent
- Family planning counseling – 81 percent

Clinic records show that workers did receive RH/FP services even though survey respondents reported low use. This likely reflects respondents' hesitancy to report seeking RH/FP services. The actual records suggest that offering these services and designing a program that promotes use within a general package of services increases their utilization.

Several factors contributed to the success of the intervention. First, the factory owner and the line managers supported the new on-site health services from the onset and demonstrated their support by encouraging use and leading by example. Employees reported that both the factory owner and managers encouraged them to seek care at the on-site clinic when they felt sick, and mentioned seeing the owner himself use the clinic services. Second, the health services were designed and implemented in a manner that clearly responded to the needs and interests of employees. Prior to the introduction of on-site health services, HSPDA surveyed a sample of employees and conducted focus group discussions to identify health services that responded to their needs. Thirdly, a group of peer educators was also trained to inform all workers about the availability of health services and provided basic health information and referrals. In June 2006, 98 percent of the factory workers knew about the clinic and could cite the types of services provided at the health clinic. Finally, the survey showed that the service provider at the clinic was responsive to any concerns by factory workers about the provision of health services.

This intervention indicates there are economic, health and welfare benefits of developing workplace health programs. The study findings will add evidence to a broader business case for workplace and company-sponsored health services.

INTRODUCTION

Background on Bangladesh Garment Industry

The major industries in Bangladesh include cotton textiles, jute, garments, tea processing, cement, chemical fertilizer, and sugar. Beginning in the late 1970s, Bangladesh focused on its fledgling garment industry, and it is now the eighth largest garment exporter to the U.S.[1] The ready-made garment (RMG) sector is by far the largest export sector in Bangladesh. The sector contributes an estimated 76 percent of the country's export earnings and provides direct employment to an estimated two million people, the majority of whom are women between the ages of 15 and 30.[2] Factory pay, which is a source of labor unrest in Bangladesh, is very low and often below a living wage.[3]

A major factor affecting the Bangladeshi garment industry has been the dismantling of the global apparel trade quota system that had protected the industry for decades. The old system created national quotas for exporting garments and textiles to rich countries, virtually guaranteeing that all production up to the quota would be sold. Because there were no gains to be realized through increased exports, the system offered factory owners no incentive to improve productivity. With the phase out of the quota system, garment factories in Bangladesh are competing more directly for the first time against countries with higher labor productivity, such as China and Thailand.

Absenteeism and employee turnover are critical issues that significantly affect worker productivity in Bangladesh, where average turnover is 8 percent per month in the garment sector. Negative effects of high absenteeism and turnover include loss of output (both directly and indirectly), cost of employee recruitment and replacement, additional management and staff time needed to cover the work of absent employees, the lower quality of work due to lack of needed skills of absentees, and a loss of competitiveness when companies fail to meet production deadlines due to lack of staff.

In 2002, Business for Social Responsibility (BSR), a prominent organization in corporate social responsibility, published an important work entitled "Women in the Global Supply Chain," which discussed women's health issues at factories in developing countries. The study found that "healthy workers are more productive, produce higher quality products, are absent less, and are more loyal to the factory. These translate into products that have fewer quality defects and are delivered on time, which can ultimately lead to greater customer satisfaction and more sales for the brand."[4] The BSR study indicated that women comprise up to 80 percent of the workforce of light manufacturing industries, and may be at greater risk for poor health than men. These women employees are generally between the ages of 16 and 34 and are consequently in their

---

[1] Fauzia Erfan Ahmed, "The Rise of the Bangladesh Garment Industry: Globalization, Women Workers, and Voice," *NWSA Journal*, June 2004.

[2] Child Labor in Export Industries in Bangladesh, found at http://www.dol.gov/ilab/media/reports/iclp/sweat/bangladesh.htm

[3] At the factory for this study, more than 70 percent received less than $25 a month, not including bonuses.

[4] http://www.bsr.org/CSRResources/HumanRights/WomensHealth_BrandGuide.pdf, p. 4

prime reproductive years. Factory work, including the use of chemicals, has the potential to place additional health risks on women.[5]

Justification for the Study

Businesses in developing countries and elsewhere must be presented with a strong economic rationale or business case if they are to be persuaded to invest in workplace health services. Extending Service Delivery, a USAID-funded project in reproductive health and family planning (RH/FP), develops NGO-corporate partnerships as part of its mission to increase access to RH/FP services by the poor and underserved. In its corporate work, the project had an interest in determining whether there was a business case for workplace health programs. ESD's predecessor project, the CATALYST Consortium (2000-2005), had conducted an extensive literature review of ROI studies, which sought to examine the most efficient and expedient way to measure the ROI of workplace FP/RH programs. The literature review found a lack of statistical evidence on the subject[6], and concluded that a ROI study of a workplace FP/RH program was timely and necessary. [7] It also recommended that the ROI be computed taking into account both direct health care costs and indirect costs, and that company records be reviewed to help track FP-related variables. Finally, the literature review identified key variables to be collected on a yearly basis, which could be used to compute the ROI of a workplace FP/RH program. The aforementioned recommendations helped inform the design of both the CATALYST Consortium and the ESD project ROI studies.

Objective of Study

The study sought to examine the effect of workplace on-site health services on workers' absenteeism and turnover, perceptions of the quality of on-site clinic services, and attitudes toward their employer.

Design and Implementation of On-site Health Services

In late 2004, a project was developed with Health Solutions Participatory Development Appraisal (HSPDA), a local consulting firm specializing in corporate social responsibility (CSR) and health, to introduce and evaluate effects of an on-site workplace health clinic. HSPDA was able to find a factory in the coastal industrial city of Chittagong where the owner and management were interested in participating in a study that would investigate the benefits of providing on-site health services to their workers. The garment factory, which produces jackets, jeans, pants, shorts, and swim wear for the U.S. market under the Union Bay brand, employs

---

[5] http://www.bsr.org/CSRResources/HumanRights/WomensHealth_PracticalGuide.pdf, p. 6

[6] Bettina Bruner, "Measuring the Return on Investment of Worksite Health Interventions: A Literature Review," developed by the CATALYST Consortium, with funding from USAID, Sept. 2004.

[7] Extending Service Delivery (ESD) is the follow-on project to a five year, reproductive health/family planning project called CATALYST Consortium, which launched the initial workplace project in Bangladesh. The key partners involved in each project, Pathfinder International and Meridian Group International, Inc., a leader in CSR and health, remain the same. CATALYST ended in September 2005 and ESD began in October 2005 with a continuity of management and main partners. For the sake of clarity, this report will refer ESD for all activities related to the study, but before October 2005, it should be understood that CATALYST was the project of record.

about 450 employees, 84 percent of whom are women.[8] It is situated in a building that houses two other garment factories, neither of which provide on-site health services. In the vicinity there are 30 garment factories, of which five provide health services.[9]

An agreement was signed with the factory owner regarding the health services and peer education outreach in the factory. The owner agreed to pay for the health services in the factory (about $47 per week covering direct and indirect expenses for medical staff and medicines) for a clinic operating three hours a day, one day a week. The owner also provided a space for the clinic with areas for patient registration, counseling, and examinations, and maintained a first aid kit in the factory itself for minor health needs (band aids, aspirin, etc.). Finally, HSPDA negotiated with factory management to ensure that workers would not lose pay during their factory clinic appointments and peer education sessions, which took place during normal working hours.

To better understand the health needs and attitudes of workers and management, HSPDA conducted a Health Needs Assessment (HNA) in December 2004 as a baseline for the project. In the HNA, 66 percent of workers identified "health facilities at the factory" as a priority, compared to 33 percent who named a subsidized cafeteria, transportation assistance, or new machinery as priorities. Fifty percent of managers also felt health facilities at the factory were needed. The desire for an on-site health clinic ranked first among workers surveyed, followed by the availability of medications and contraceptives at the factory. (See Annex D)

In January 2005, the health services project was launched. During the first six months, a group of 24 peer health educators were trained to inform factory employees about the health services provided at the new factory clinic.[10] For a co-pay of 5 *Bangladesh taka* (or seven cents) per visit—the equivalent of the cost of a cup of tea or two bananas at a local food vendor—factory employees were offered basic health services including RH/FP services and products.

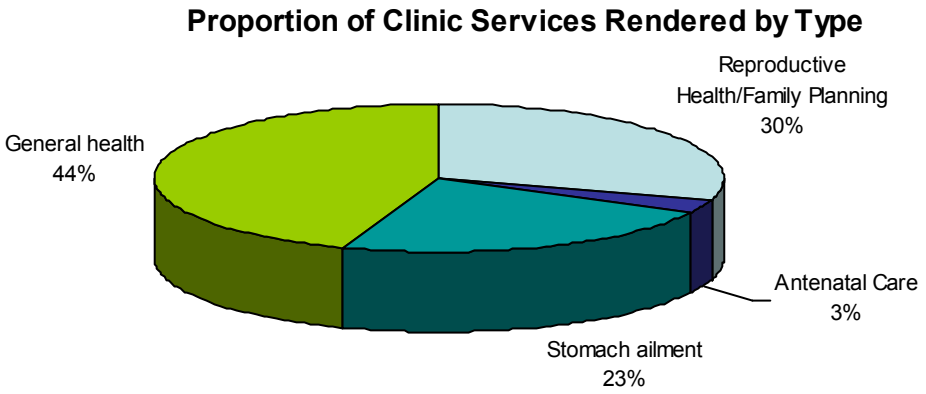
The health team was comprised of a doctor (Ob/Gyn), a nurse-counselor, and an attendant. During consultations, general health issues were highlighted, and then workers were counseled on their RH/FP status and concerns. Both male and female patients were counseled on sexually transmitted infections (STI), including HIV/AIDS. Antenatal care and post-natal care were also available. The on-site health clinic recorded a total of 1,145 consultations during the 18-month study period from January 2005 to June 2006, providing 2,263 treatments or services, 30 percent of which involved RH/FP.

---

[8] In June 2006, there were 436 employees on the payroll at the factory.

[9] In other areas, on-site clinical services are less available. According to research by HSPDA, about eight percent of garment factories in Chittagong have on-site services.

[10] HSPDA held monthly meetings with peer educators, who also organized formal meetings with employees intensively through June 2005. Since then, 15-18 of the peer educators continued to meet more informally with their peers—at lunch and other breaks as well as brief periods during work hours.


Proportion of Clinic Services Rendered by Type
Reproductive Health/Family Planning 30%
General health 44%
Antenatal Care 3%
Stomach ailment 23%

METHODS

Study Design

An initial audit of company records was done in June 2005 to determine whether these services had any short-term effect on absenteeism and turnover. The audit indicated showed an initial positive ROI after six months. In 2006 ESD partnered again with HSPDA to perform a more comprehensive study at the factory to evaluate the ROI for its on-site health services over 18 months.

Three sources of data were produced by the comprehensive study. An audit was conducted of factory employee attendance records between January 2004 (a year prior to the introduction of on-site health services) and June 2006 to measure changes in staff absenteeism and turnover. In addition, a cross-sectional survey was conducted at the factory site with a randomized representative sample of 203 factory workers (186 women; 17 men) who were on the factory payroll in the survey month. Also, 15 of the 33 factory managers answered the survey (11 men, four women). Finally, four focus group discussions with eight employees each were also conducted. The groups were organized by marital status and by whether the employee had used the on-site clinic. Informed consent was obtained from all factory workers that participated in the survey and focus group discussions. ESD and HSPDA collaborated on all aspects of the study design and implementation.

Independent Variables, Materials, Procedures, and Time

The survey was conducted using a 53-item questionnaire comprised of both structured and open-ended questions. The questionnaire included questions about respondents' demographic and socio-economic characteristics, their perceptions of the health services provided at the on-site clinic and its effect on absenteeism and turnover, and their attitudes toward the factory management. An HSPDA staff member and a local consultant appointed by ESD with professional expertise in social science research identified and trained interviewers to administer the questionnaire. The questionnaire was pre-tested and modified accordingly, and a second training was conducted for interviewers using the finalized questionnaire. All materials were translated and back translated. The survey was administered from June 4 to June 11, 2006 at the factory site in a private room, under the technical oversight of the ESD consultant. (See Annex E for survey instrument.)

A focus group discussion (FGD) guide was developed to aid in conducting the FGD sessions. An experienced female FGD facilitator was trained and briefed by the ESD consultant. Four FGDs were conducted in July, 2006. The groups' compositions were: (1) married and had used clinic services; (2) married and had not used clinic services; (3) unmarried and had used clinic services; (4) unmarried and had not used clinic services. The FGD sessions were conducted in a private room on the rooftop of the factory. Two note-takers were hired to record the FGDs. FGDs were also tape-recorded. The ESD consultant was present during the FGDs and provided feedback to the FGD facilitator as needed. (See Annex F for FGD guide.)

Dependent Measures

Employee absenteeism

The total average number of workdays missed per month was computed and defined using the following equation:

$$\frac{\text{Average \# of monthly net work days}}{\text{\# of work days recorded in that month}}$$ [11] x Cumulative # of absent days in that month

The total average number of work days missed per month in 2004 was compared with the average number of days missed in 2005 to determine change in absenteeism over one year. Then the average number of days missed for the period January-June 2006 was compared to the January-June 2004 average to determine the change over 18 months.

Employee turnover

Employee turnover was defined as the total number of new recruits in a given month. Based on discussions with management on turnover and hiring patterns and on the record-keeping process, the assumption was that the number of incoming and outgoing staff would balance out.

The average number of new recruits between January-December 2004 was then compared with the average number of new recruits in following year to determine change in turnover. Then the average number of new recruits for the period January-June 2006 was compared to the average for the comparable period of 2004 to determine the change over 18 months.

Return on investment

Employee absenteeism, employee turnover, activity start-up cost, and clinic operational cost were used to compute the ROI over the 30 months under review. For the purposes of this study, ROI is calculated as:

$$\frac{\text{Total savings (absenteeism, turnover)}}{\text{Total costs (start up and operational costs)}}$$

First, the factory determined the wholesale selling price for one pair of shorts at ≈ 41.67 *taka*[12], *and* ≈ 50 *taka* for a pair of long pants. On average a factory worker produces about 3.36 pairs of shorts or 2.8 pairs of long pants per day. It was thus estimated that a factory worker produces ≈140 *taka* worth of merchandise per day (or 3.36 x 41.67 or 2.8 x 50 = ≈140 *taka or* ≈$2).

Second, the Factory management provided researchers the figure for the turnover cost per employee of 3,333 *taka* so they could convert employee turnover into the cost in *taka* to the employer.

---

[11] The average number of net work days at the factory was computed by subtracting the total number of leave days (holidays; closed days; average paid sick leave including maternity leave) from the total number of days in the calendar: 365 – (18 holidays+42 weekends+10 sick leave days) = 295, thus 295 net work days per calendar year or 24.58 net work days per month.

[12] US$1 = 69 *taka*

Third, the one-year ROI was computed the following way:

1) The factory savings (in dollars) due to reduction in average number of absent days was calculated as follows:

> (Avg. # days absent in 2004 – Avg. # days absent in 2005) x (merchandise produced by a worker per day)

2) Then the factory saving due to reduction in average number of new recruits was calculated:

> (Avg. # of new recruits in 2004 – Avg. # of new recruits in 2005) x (cost of training a new employee)

3) The activity's start-up cost to the factory was calculated, taking into account indirect costs associated with employee and management time.

4) And finally, the clinic operational cost was calculated.

The results obtained through these computations were used to calculate the ROI:

> (Factory savings due to reduction in Avg. # of absent days + Factory saving due to reduction in Avg. # of new recruits) / (Start up cost + Clinic operation cost)

For an 18-month estimate of ROI, these steps were repeated for first six months of 2006 using comparable data from the first six months of the baseline year 2004 and then added to the one-year figures.

Methodological limitations of the audit

The audit portion of the study faced several practical limitations. First, researchers were dependent on the factory owner for his determination of what an absent or departed employee costs his bottom line.

There are more sophisticated methods for determining these costs, but they could not be applied because the data were either not gathered or not available. For instance, data on the total number of workers employed at the factory were inconsistent. The research team had detailed discussions with the factory management on attendance records, which corresponded to the day-to-day reality in the factory. Management said it tried to keep total employment at approximately 450 workers and that production cycles were consistent. During periods of high production the factory tended to ask employees to work overtime rather than hire more employees.

Second, and related to the first point, attendance and employee turnover records were incomplete, in part because many factories in Bangladesh and elsewhere do not completely formalize employment relations and records to avoid certain legal obligations to workers. While the factory was unwilling to provide the researchers access to revenue or payroll figures, the company agreed to allow HSPDA to view employee records to establish a baseline to compare with end of project statistics. At the factory, there is no clear demarcation between holidays and monthly workdays because Fridays can be either, depending on the production cycle. In fact, during peak garment production, some government holidays are ignored and employees are compensated instead. In many cases attendance was not recorded on summary sheets; instead, a staff card system was used whereby attendance was kept by individual employees and later

validated by company management. Researchers made random comparisons of more than 60 percent of the summary sheets and employee attendance cards and found that the attendance records matched about 90 percent of the time.[13] Since it was not possible to view all individual employee cards, HSPDA instead calculated a monthly net average workdays and average size of staff.

Third, in terms of employee turnover, factory records are well-maintained for new hires, but not for resignations or terminations. Often employees quit without giving notice or while on leave. To overcome this challenge, the number of new recruits was defined as the 'staff turnover' with the assumption that the number of incoming and outgoing staff was in balance. There were infrequent spikes in new hires indicating that the number of new recruits is only an approximate reflection of the number of employees that had resigned or been terminated. But these periods were generally balanced out, and factory management supported this approach.

Finally, the researchers faced external challenges to data collection in Bangladesh. There were regular *hartals* (general strikes) that caused employees to miss work. Natural disasters—particularly typhoons—increased absenteeism as did outbreaks of influenza and other diseases. However, researchers were able to adjust for major holidays, by using monthly averages on absenteeism and tracking cyclical changes. (One example is *Eid-ul-fitr* at the end of Ramadan, when employees receive bonuses and return for extended visits to their villages and families; sometimes they do not return.) They were also able to track the number of monthly bonuses awarded to employees for perfect attendance over the study period and found about a five percentage point increase in bonuses compared to the baseline period.

Despite these limitations, it is assumed that the factory management gave researchers as accurate information as it could, provided reasonable estimates of costs, and had no interest in providing false data. Furthermore, the employee surveys and focus group discussions were built into the study to provide additional data about the workers' perception of the effect of the on-site clinic on their work lives.

[13] Deviations tended to be minor. For instance, one day's summary sheet tallied 171 operators, but the individual attendance cards came to 172.

RESULTS

Audit Findings

Effect of available on-site health services on employee absenteeism

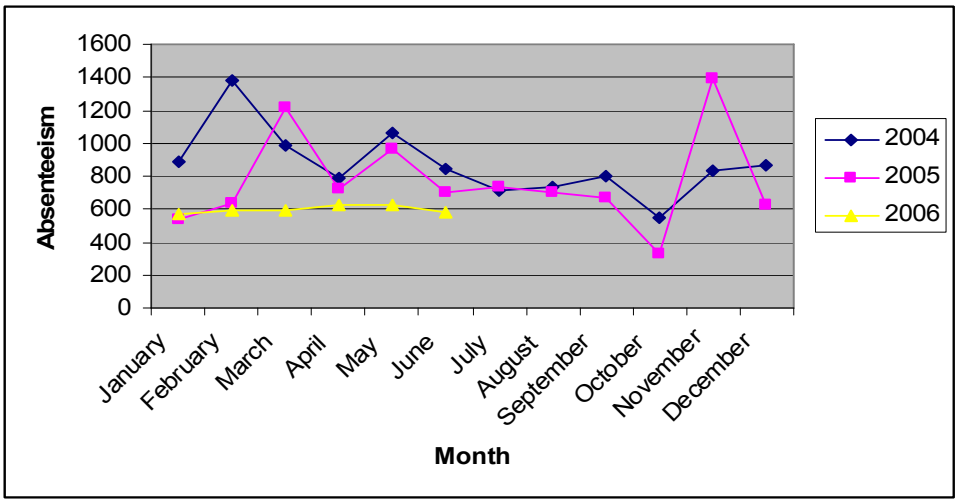
The factory audit found an average of 11 percent fewer days lost to absenteeism (from 867 to 770) comparing 2004 and 2005 (Table 1), and 19 percent fewer days lost to absenteeism (from 986 to 597) comparing the first six months of 2004 and 2006.

Table 1: Total number of days absent from work

	2004	*2005*	*2006*
January	888	532	568
February	1383	640	587
March	985	1218	592
April	787	720	630
May	1058	964	622
June	844	703	585
July	710	738	NA
August	735	704	NA
September	798	665	NA
October	543	333	NA
November	833	1393	NA
December	867	630	NA
Avg. number of days missed	867	770	597

In Chart 1, the comparison of absentee rates over the 30 months from January 2004 to June 2006 suggests some of the seasonal effects on absenteeism. In February 2004 and March 2005 there were seasonal storms that caused flooding in low-lying areas, forcing people to relocate. In May 2004 and 2005, there were outbreaks of influenza. Also in November 2005 and somewhat in 2004, there was a spike during the *Eid-ul-fitr* holiday celebrating the end of the Muslim holy month of Ramadan, when workers returned home.

Chart 1: Absenteeism over 30 months



Effect of available on-site health services on employee turnover

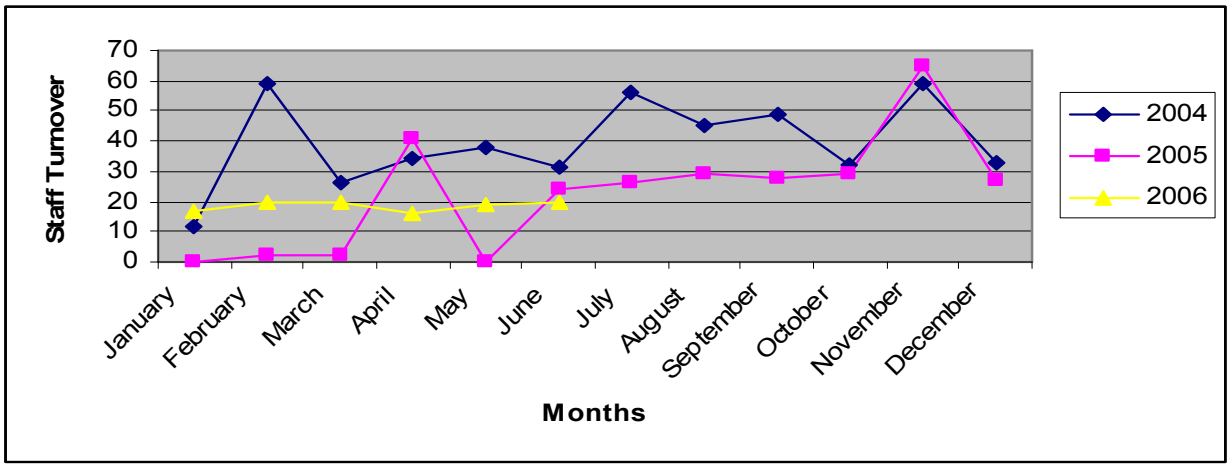
The factory audit found an average of 67 percent decrease in staff turnover (from 40 to 23) between 2004 and 2005 (Table 2) and an average of 43 percent decrease in staff turnover (from 33 to 19) comparing the six month periods (January through June) in 2004 and 2006.

Table 2: Total number of new recruits (turnover)

	2004	*2005*	*2006*
January	12	0	17
February	59	2	20
March	26	0	21
April	34	41	16
May	38	0	19
June	31	24	20
July	56	26	NA
August	45	29	NA
September	49	28	NA
October	32	29	NA
November	59	65	NA
December	33	27	NA
Avg. number of new recruits	40	23	19

Chart 2 indicates some of the seasonal effects on turnover. In February 2004, turnover spiked after the *Eid-ul-adha* festival when people are expected to visit their relations. Some workers this year returned to the city and quit when they were offered higher pay from other factories. In April 2004, and more pronounced in May 2005, there were chicken pox outbreaks. Some workers returned home to recover and did not return to the factory. The *Eid-ul-fitr* holiday also affected turnover in November 2004 and 2005.

Chart 2: Number of new recruits over 30 months



Return on Investment

The ROI was estimated at 2.4:1 in 2005 and 3.1:1 during the 18 months ending in June 2006. As demonstrated in Table 4, in dollar terms the factory had a net savings of an estimated $7,100 in the first year of the program $14,233 over 18 months. (See Annex B and C for calculations.)

Table 3: ROI

	2005	*2006**	*Cumulative*
Savings due to reduction in Avg. # of absent days	$2,362	$4,736	$7,098
Savings due to reduction in Avg. # of new recruits	$9,806	$4,202	$14,008
Total savings	**$12,167**	**$8,938**	**$21,106**
Total start up costs (staff time)	$1,669	NA	$1,669
Clinic operation cost	$3,341	$1,872	$5,213
Total cost	**$5,000**	**$1,872**	**$6,872**
Net savings	**$7,167**	**$7,066**	**$14,233**
ROI	2.4	4.8	3.1

* These figures are for the six-month period, January-June, 2006.

Survey Findings

Socio-economic characteristics of respondents

A total of 203 factory employees participated in the survey of which 92 percent (186) were women and 8 percent (17) men. Sixty-two percent (126) had used the clinic; 35 percent (72) had never used the clinic; and two percent (5) were unaware of its existence.[14] The sociological and demographic characteristics of the survey respondents are described in Table 4.

Table 4: Sample Demographics

Background characteristics - study variables	***(n=203)***
Mean age (years)	22
Marital status (%):	
Married	33
Single	67
Widowed	1
Mean number of surviving children	1.6
% attended school	77
Median number of years completed	5
Mean number of people living in household	4
Mean length of time employed at factory (months)	21
Mode of transportation to factory (%):	
On foot	94
Rickshaw	4
Bus or other	2
Mean travel time to factory (minutes)	13

Health status

The average number of days respondents reported missing due to illness in the last three months prior to the survey was three. More than half of all the surveyed workers (53 percent) said they had been absent from the factory during the previous three months. Of those absent, 66 percent (71 people) were absent due to sickness and most (52 people) were absent between one and four days. Moreover, 61 percent (123 people) said that they came to work sick sometime during their employment.

[14] Four said upon learning of the health clinic that they would use it for health services in the future.

Clinic usage and perceptions of quality

Sixty-two percent (126 people) of all employees surveyed said that they had sought care at the on-site clinic while working at the factory. Of these, 64 percent (81 people) had visited the clinic in the last three months and almost half of the recent users had used the clinic two or more times.

Of the 198 workers that were aware of the existence of the health clinic, workers could identify the following clinical services offered:

Table 5: All Workers Aware of the Existence of the Health Clinic

Do you know what types of services are offered at the factory health clinic?	*(n=198)*
Referral to other health care centers	99%
General health treatments (asthma, diarrhea, etc.)	93%
Stomach ailment related treatments	91%
Family planning methods	90%
Family planning counseling	81%
Pregnancy/antenatal care	71%
HIV/AIDS counseling	66%
Other health treatments related to reproductive health	56%
Sexually transmitted infection treatment and counseling	41%

Workers that had never used the clinic (72 people) said the primary reason for non-use was they had *not gotten sick* followed by *services not being available when needed*. (Table 6)

Table 6: Non Users

What would you say are 1-2 main reasons for not using the services?	*(n=72)*
Did not get sick	69%
Services not available when needed	17%
Sought treatment from another provider	7%
Other (e.g., quality of care and drugs insufficient; newly employed)	7%

The 126 workers (out of 203 surveyed) who had used the clinic during their employment cited these reasons for visits (note: workers could name more than one reason):

Table 7: Clinic Users

The last time you visited the factory health clinic, what was the primary purpose of your visit?	*(n=126)*
For sickness (fever, cough, pain, diarrhea)	60%
Physical weakness	19%
Blurred vision	17%
Ask for suggestions	10%
Itching	8%
Toothache	6%
Reproductive health problems	3%
Asthma	3%
Blood pressure	3%

It is important to note that clinic records show that more than 30 percent of actual clinical services provided were related to reproductive health and family planning. Many young women, particularly unmarried women, are reluctant to mention reproductive health problems, seek care for them, or admit to seeking care for them.

Overall worker perceptions about the quality of the on-site clinic were positive (Tables 8, 9, and 10). All 126 workers surveyed who used the clinic said they would use it again. And 97 percent of the non-users said they expected to seek care from the clinic in the future. Though they have not used the clinic, 89 percent said that they knew someone who had.

Table 8: Clinic Users

How satisfied were you with the services you received?	*(n=126)*
Very	65 %
Somewhat	34 %
Not Satisfied	1 %

Table 9: Clinic Users

To what extent does the clinic fulfill your health care needs?	*(n=126)*
Mostly	78 %
Somewhat	20 %
Not at all	2 %

Table 10: Clinic Users

How does the quality of services at the on-site clinic compare to services at clinics outside the factory?	*(n=126)*
Better	71 %
Same	20 %
Worse	4 %
Unsure	5 %

In general, 77 percent of all 203 respondents preferred being able to get services from an on-site health clinic when they are sick; 16 percent had no preference; and seven percent preferred an off-site clinic. Furthermore, 96 percent said they were willing to pay a fee for health services at the factory premises, versus four percent who were not. In fact, 51 percent were willing to pay double (10 *taka*) the current co-pay or more for the clinic services. This reflects the value that workers said they received from the on-site clinic.

Table 11: Clinic Users

By using the health clinic, did you feel it saved you time or money in any of the following ways:	*(n=126)*
Did not save time	4%
Saved time from going to another clinic	19%
Saved travel time	3%
Saved on cost of medicines	35%
Saved on cost of service	39%

Perceptions about the effect of on-site services on absenteeism

Both users of the health clinic and non-users said that the availability of on-site health services helped them and their coworkers miss less work. Support for this was also suggested by two other reponses: firstly, a majority of the clinic users (69 percent) said that, if they were sick, they would try to wait until the on-site clinic was open (it is open only one day), thus eliminating the need to miss work. In addition, 84 percent of respondents said they would have gone to a clinic elsewhere (thus having to miss work) if the on-site clinic had not been available.

Table 12: Clinic Users

Thinking back, do you think that access to the health services at the factory helped you miss less work?	*(n=126)*
Yes	91%
No	2%
Unsure	7%

Table 13: All Respondents

Do you think that a factory worker misses more work when there is no health clinic at the workplace?	*(n=203)*
Yes	91%
No	2%
Unsure	7%

Perceptions about the effect of on-site services on turnover

They also believed that it made them more likely to stay in their job, and less likely to look for work elsewhere. Given the choice to work at two factories for the same salary, 93 percent of all respondents believed that they were more likely to choose a factory that provides on-site health services rather than one that does not.

Table 14: Clinic Users

Do you think that you are more likely to stay in your job because of availability of on-site health services?	*(n=126)*
Yes	87%
No	4%
Unsure	9%
Do you think that the availability of the on-site clinic makes workers here less likely to look for work elsewhere?	*(n=126)*
Yes	88%
No	4%
Unsure	8%

Table 15: Non-clinic Users

Do you think that the availability of the on-site clinic makes you more likely to stay in your job?	*(n=72)*
Yes	96%
No	0%
Unsure	4%

Perceptions of factory management

In general, the respondents had a positive opinion about the factory management. The majority of respondents believed that the management cares about the health of its employees (Table 18).

Table 16: All Respondents

In your opinion, how much does your factory care about ensuring good health for its factory workers like yourself?	***(n=203)***
To a large extent	73%
To some extent	27%
Not at all	0%

Clinic users and non-users also said that the presence of the clinic contributed to their having a positive attitude toward factory management (Tables 17 and 18).

Table 17: Clinic Users

What is your attitude toward management as they have arranged for on-site health services?	*(n=126)*
Better	86%
No different	14%

Table 18: Non Clinic users

How does the availability of the clinic make you feel about management's concern for workers?	*(n=72)*
Better	96%
No different	4%

Survey results for factory managers

Fifteen factory managers (11 men and four women) were also surveyed. The survey shows that the managers were knowledgeable about the services offered at the clinic, used the services, and were positive about them. Fourteen said that they had sought care at the clinic during the previous 18 months, nine in the previous three months. All said the clinic made a difference not only in worker absenteeism and turnover, but also in their own decisions to come to work and consider other jobs. Key findings are summarized in Table 19.

Table19: Manager Respondents

How satisfied were you with the services you received?	*(n=14)*
Very	79%
Somewhat	21%
To what extent does the clinic fulfill your health care needs?	*(n=14)*
To a large extent	86%
To some extent	14%
Do you think that the availability of the clinic at the factory makes workers less likely to switch to other jobs?	*(n=14)*
Yes	100%
Do you think you are less likely to miss work because of the availability of the on-site health clinic?	*(n=15)*
Yes	100%
How does the quality of services at the on-site clinic compare to services at clinics outside the factory?	*(n=14)*
Better	79%
Same	21%
Do you intend to receive services of the on-site clinic in the future?	*(n=14)*
Yes	100%
Do you think you are more likely to stay in your job because of the availability of on-site health services?	*(n=15)*
Yes	100%

Focus Group Discussions Findings

The focus group discussions addressed the following topic areas: (a) Socio and economic characteristics of women factory workers who had used or not used the on-site services; (b) Motivations and barriers to seeking care at on-site clinic; (c) Effect of on-site services on workers absenteeism, turnover, and productivity; and (d) Availability of on-site services and their value to workers.

Socio-demographic characteristics

The women who participated in the four FGDs all lived in Chittagong where the factory is located, and walked to work in five to 15 minutes. They all had been working at the garment factory for one to five years as machine operators, helpers, or finishing workers. (See Annex A for job listings.) Most women had had some primary level education (i.e., one to five years). Married women reported having one to three living children. Most women were not the sole income earners in their household. Their husbands, fathers and/or brothers also contributed to the household income.

No meaningful differences emerged between the groups of clinic users (married/unmarried) and non-clinic users (married/unmarried).

Motivations/barriers to seeking care at the on-site clinic

Clinic users were pleased with the quality of care they received at the factory clinic. Women commented on short waiting time, affordability and accessibility of services, time allocated to discuss health concerns with provider, friendliness of provider, and cleanliness.

> *"There are female doctors and female counselors in the factory clinic. So we can talk about gynecological problems with them easily, but in the government hospital we are not sure to get this type of situation."* (Married clinic user)

> *"I feel very shy telling my gynecological problems to the outside doctors, but here I feel less shy expressing it, because they are like my family members."* (Unmarried clinic user)

> *"Here, we get services instantly; therefore, there is no need to go on leave."* (Married clinic user)

> *"In the case of the factory clinic, time is not wasted."* (Unmarried clinic user)

> *"In the factory clinic, consultation and medicine cost only five taka, so it is good for a factory worker."* (Unmarried clinic user)

Overall, clinic users seek care at the factory clinic when they are sick because they are concerned about missing work and, consequently, losing pay.

Non-clinic users expressed their dissatisfaction with services received at the government hospital (low-quality) and private clinics in terms of cost (too expensive), accessibility (far from the workplace), interaction with provider (unfriendly), and cleanliness.

> *"The government hospital is always dirty."* (Married non-clinic user)

> *"I went to a private hospital where I had to pay 500 taka but did not get proper treatment. Neither did they behave well with me."* (Unmarried non-clinic user)

Availability of on-site health services and effect on staff absenteeism, turnover, and productivity

Both clinic users and non-users perceived that availability of on-site health services had a positive effect on their work. They felt that, comparatively, they were sick less often that workers at other factory sites where there was no clinic. It is important to note that the employees have regular contact with other factory workers who live in the same neighborhoods and work in the same factory complex or elsewhere.

They also said that the existence of the on-site health services motivated them to work at this particular factory and to come to work regularly. Clinic users also mentioned proximity of factory to home as another important factor in where they chose to work.

Availability of on-site services and their value to workers

The on-site health clinic encouraged positive feelings about the factory management in both clinic users and non-users. They perceived that the management staff treated them cordially, cared about workers' health, and encouraged workers to receive health services from the clinic.

> *"One day, I saw a fellow worker beside me who was not feeling well. The supervisor brought her to the factory manager and provided medicine from the first-aid box and allowed her to rest for an hour."* (Married non-clinic user)

> *"One day I saw the factory owner go to the clinic for treatment. That strongly motivated to go."* (Unmarried clinic user)

> *"Here we have health services within our reach, so we remain healthier."* (Unmarried clinic user)

Clinic users expressed their wish to have a physician at the factory clinic every day of the week. They also wanted factory management to expand the on-site health services to the factory workers' children.

CONCLUSION

Based on the three sources of data, the study found that general health services introduced at the workplace with full management support reduces turnover and absenteeism and yields both tangible and intangible returns on investment.

The factory audit found:

- An average of 11 percent fewer days lost to absenteeism in the first year of the program and an 18 percent decline in the first 18 months
- A 43 percent decrease in staff turnover in the first year of the program and a 46 percent decrease in the first 18 months

The study estimated the monetary value of the savings gained from reduced absenteeism and turnover compared to the start-up and operating expenses for the health program and found roughly a 2.4:1 ROI in the first year of the program. The data indicate a larger return of 3:1 over 18 months of the program. These figures are based on the factory's own estimates of the production costs due to absenteeism and turnover.

Structured interviews found that factory workers had strongly favorable views of the availability of on-site health services and its effects on their work life—regardless of whether or not they had used them. They said that they were less likely to be absent from work, more likely to stay in their current job, and generally had a more positive attitude toward factory management because of the on-site health services.

Finally, the focus group discussions provided qualitative data on the reasons workers valued the on-site clinic and confirmed the other data suggesting that such services reduce employee absenteeism and turnover. The workers reported that the provision of services increased their positive attitude toward management. This was reinforced by the fact that the managers and the owner used the services themselves and encouraged the workers to do the same.

DISCUSSION

This study adds evidence to the business case for company investment in workplace health services for employees. Most research on ROI is focused on large companies, usually multinational corporations, which have resources to experiment with pilot projects, benefit from economies of scale, and use data systems that easily track their investments. Often, the management of smaller local companies will argue they do not have the resources for such employee investments. This study, in contrast, found that a 450-worker factory in Chittagong, Bangladesh gained a financial benefit from providing health services. It was conducted under real world conditions of a local company with less-than-perfect record keeping and limited willingness to disclose sensitive financial information.

The context is no doubt important. The Bangladesh garment industry, once protected, now faces strong competition from China and elsewhere. Profit margins and employee wages are low. In

this specific environment, very few factories offer on-site health care. A clinic that is open only three hours, one day a week is a significant benefit to workers for whom it is difficult to access health care during their long work day and the choice is between a pay check and either a long wait in a government clinic or an expensive visit to a private doctor.

It is important to note that a return of $7,100 a year is not insignificant in an industry where the average worker wage is about $35 a month and senior management are paid about $150 a month, not including bonuses. In such a competitive environment, the owner would have little incentive to spend $3,700[15] a year without recompense. In fact, the owner reported, "The project has achieved very good results in less than two years. The workers have become health-conscious and regular in the factory. Even staff turnover has decreased a considerable extent and remains stable nowadays."

A note on family planning/reproductive health services

This study did not focus specifically on the effects of the clinic on use of reproductive heath/family planning services. However, it is interesting that although only three percent of clinic users reported they sought care relating to RH/FP, more than 30 percent of services given were RH/FP services. This suggests that embedding reproductive health/family planning services into general health services may serve as a way to increase access to RH/FP services by people unwilling to seek them directly. Given workers' low pay, extremely long work hours, and lack of mobility, it is clear that the provision of affordable on-site health services is an effective way of meeting the health needs of this population.

Factors for success

Several factors contributed to the success of the intervention. First, the factory owner and the line managers were very supportive of the new on-site health services from the onset, and demonstrated their support through direct encouragement and by example. Indeed, employees reported that both the factory owner and managers encouraged them to seek care at the on-site clinic when they felt sick, and mentioned seeing the owner himself use the clinic services. It is important to note that the support of management was not just good fortune; it reflected the efforts of HSPDA to meet regularly with management during project start-up and to sustain communication. Secondly, the health services were designed and implemented in a manner that clearly responded to the needs and interests of employees. Prior to the introduction of on-site health services, HSPDA surveyed a small number of employees and conducted focus group discussions to identify the needed health services. A group of peer educators was also trained to inform all workers about the availability of the health services and provide basic health information and referrals. In June 2006, 98 percent of the factory workers knew about the health clinic and the type of services it provided. Third, HSPDA and the garment factory management responded quickly when concerns about the quality of health services arose.

Finally, the findings of the study suggest the value of doing additional research to test the business case for workplace health investments in different contexts. This study might serve as a

[15] The estimated operating costs per year (as of 2006) are $3742. This is based on six-month costs of $1872 (see Table 3).

model for gathering data in difficult environments and for tracking ROI as part of the introduction of new workplace health services.

Annex A: Factory Staffing Pattern

SL.NO	DESIGNATION	STRENGTH
01.	MANAGER Factory Manager & Production Manager	 1 1
02.	ASST. MANAGER	-
03.	MAINTENANCE	2
04.	SUPERVISOR	15-18
05.	IN-CHARGE	3-4
06.	EXECUTIVE	1
07.	SAMPLE-MAKER	1
08.	CUTTING	13-16
09.	LINE QUALITY	14-18
10.	FINISHING	64-72
11.	OPERATOR	170-185
12.	HELPER	120-135
13.	SEW/IRON MAN	1
14.	SECURITY	2-3
15.	CLEANER	4-5
16.	STORE	1
17.	COMMERCIAL	2
18.	ACCOUNTS	1
19.	PERSONNEL	1

Annex B: Start-Up and Operational Costs: Indirect and Direct

Indirect Start-Up Costs—First Six Months

Staff	**Rate in *taka***		**Total time commitment**		**Cost equivalence**	
	Per month	Per hour	Hrs	Month	Taka	USD
Factory Owner		255	32		8,160	127.50
Management	8000		860	4.4	34,967	546.37
Worker	2500		4883	24.8	62,074	969.91
Total				**Six months' cost**	**105,149**	**$1523.90**

Direct Start-up Costs—First Six Months

First Aid Box (One time event)			10,000	144.93
Clinic Services		3000 per mo.	81,000	1,173.91
Clinic Space			20,347	294.88
Total (Indirect and Direct)			**216,496**	**$3,137.62**

Indirect Operating Costs—On Six-Month Basis

Employee/Management time			36,802	536.36

Direct Operating Costs—On Six-Month Basis

Clinic Services		3000 per mo.	72,000	1,043.48
Clinic Space			20,347	294.88
Total (Indirect and Direct)			**129,149**	**$1871.73**

Annex C: Return on Investment Calculations

Estimated production loss due to absenteeism

The factory estimated that the production cost of one day of absenteeism was equivalent to 140 Taka ($2)

Comparing 2004 and 2005:

- 2004 production loss = 867 days/month x 140 Taka lost/day x 12 months = 1,456,560 Taka/ $21,110
- 2005 production loss = 770 days x 140 Taka lost/day x 12 months = 1,293,600 Taka/ $18,748
- Savings in production loss between 2004 and 2005 = 1,456,650 – 1,293,600 = **162,960 Taka/ $2,362**

Comparing first six months of 2004 and 2006

- 2004 production loss: 986 days/month x 140 Taka lost/day x 6 months = 828,240 Taka/ $11,832
- 2006 production loss: 597 days/month x 140 Taka lost/day x 6 months = 501,480 Taka/ $7,176
- Savings in production loss between 2004 and 2006 = 828,240 – 501,480 = **326,760 Taka/$4,736**

Estimated production loss due to turnover

The factory estimated that the production cost of replacing one person was equivalent to 3,333 Taka ($48).

Comparing 2004 and 2005

- 2004 loss due training cost = 474 new recruits x 3,333 Taka/person = 1,579,842 Taka/ $22,896
- 2005 loss due to training cost = 271 new recruits x 3,333 Taka/person = 903,243 Taka/ $13,090
- Saving due to reduction in new recruits = 1,579,842 – 903, 243 = **676,599 Taka/ $9,806**

Comparing first six months of 2004 and 2006

- 2004 loss due training cost = 200 new recruits x 3,333 Taka = 666,600 Taka/ $9,661
- 2006 loss due to training cost = 113 new recruits x 3,333 Taka = 376,629 Taka/ $5,459
- Savings due to reduction in new recruits = 666,600 – 376,629 = **289,971 Taka/$4,202**

Estimated total (gross) savings from absenteeism and turnover reductions

- 2005 Savings = 162,960 Taka + = 676,599 Taka **= 839,559/$12,167**
- 2006 Savings = 326,760 Taka + 289,971 Taka = **616,731/$8,938**
- 18 Month Savings = 839,559 + 616,731 **= 1,456,290/$21,106**

These figures translate into the following net savings:

- 2005 Net Savings = 839,599 (total savings) – 345,645 (total cost) = **493,914 Taka/$7,158**
- 2006 Net Savings = 616,731 (total savings) – 129,149,770 (total cost) = 487,582 Taka/$7,066
- Cumulative Net Savings (18 months) = 493,914 + 487,582 = **1,047,075 Taka/$14,225**

These figures provide an estimate of the factory's return on investment (ROI):

- 2005 ROI = 839,559 Taka (total savings)/345,645 Taka (total costs) = **2.43**
- 18 Month ROI = 1,456,290 Taka/474,794 Taka (cumulative costs) = **3.1**

The estimated ROI was 2.4:1 in 2005. Based on 2005 and 2006 figures, the cumulative ROI for the garment factory since the project was initiated is 3:1.

Annex D: On-site Health Clinic Program

Based in part on the results of the HNA, HSPDA and CATALYST developed a clinical workplace-based services package and peer outreach activities consistent with those conducted in the other factories in Bangladesh by NGOs, including USAID-funded projects within the Pathfinder-led NSDP project. The health services plan included the following elements:

- scheduling of services
- nature of the facilities available for use in the factory
- basic project management elements
- worker outreach efforts via a peer educator system
- delineation of services to be performed by a nurse/counselor and a physician
- outline of reproductive health and family planning services and methods
- list of medicines and contraceptives available during clinic hours
- sample protocols used for treating STIs

The entire health services package was reviewed and approved by CATALYST technical staff for both medical/clinical appropriateness and financial sustainability. Since HSPDA had a proven track record in peer-based outreach interventions, it also designed and implemented the peer education portion of the project, which is discussed in more detail in the following section. Peer outreach activities began in early January 2005, while the integrated health clinic became operational in late January and continued until June 2006.

For the health clinic, HSPDA developed a system of "health cards" and "health record cards" for company employees. While the "health card" functions as an ID card and is shown to the medical team prior to treatment, the "health record card" provides the health and treatment history of an individual employee.

At the on-site clinic, the health service provider team included a doctor (Ob/Gyn), a nurse-counselor and an attendant. The factory provided free clinic space on site with areas for patient registration, counseling, and examinations. During the consultation, general health issues were highlighted, then workers were counseled on their RH/FP status and concerns. Both male and female patients were counseled on sexually transmitted infections (STI), including HIV/AIDS. Antenatal care and post-natal care were also available.

Both the nurse-counselor and physician at the clinic could recommend appropriate RH/FP services and products, such as condoms and injectables and oral contraceptives. Patients were also counseled on other contraceptive methods and options, but were referred to NSDP or other appropriate local clinics for services not available at the HSPDA workplace clinic.

The health clinic was open each week on Sundays, a normal workday, from 10 a.m. to 1 p.m., with the option of rescheduling due to government holiday, production deadlines, or unforeseen causes such as strikes. Approximately 15-20 patients voluntarily sought and received individual consultations per week. HSPDA negotiated with factory management to ensure that workers would not lose pay during their factory clinic appointments and peer education sessions, which

took place during normal working hours. HSPDA was responsible for maintaining all clinic records using record-keeping forms provided by CATALYST/ESD. Client confidentiality was ensured both by the factory and HSPDA.

HSPDA charged the factory 3,000 *taka* (USD $47) per session for the integrated health clinic, which covered HSPDA's direct and indirect expenses for medical staff and medicines. In the on-site clinic, the employee co-pay was 5 *takas* (USD $0.07), which included the consultation as well as provision for typical medicines and contraceptives that were brought to the clinic each week by the attending doctor and nurse. The 5 *taka* was determined to be a meaningful as well as affordable amount, ensuring worker "buy-in" for services. Five *taka* is the cost of two bananas or a cup of tea in a local restaurant.

A total of 1,145 consultations were made for the factory staff during January 2005 to June 2006. The consultations provided 2,263 treatments of which 33 percent involved reproductive health and family planning.

Health Needs Assessment and Attitudes Assessment

To better understand the health needs and attitudes of workers and management at the FACTORY, HSPDA conducted a Health Needs Assessment (HNA) in December 2004 as a baseline for the project and again in June 2005. In the results of the Baseline HNA in December 2004, 66 percent of workers identified "health facilities at the factory" as a necessary benefit, compared to 33 percent for other perceived needs such as a subsidized cafeteria, transportation assistance, or new machinery. Fifty percent of managers also felt health facilities at the factory were needed. The presence of an on-site health clinic ranked first among workers surveyed, followed by the availability of medications and contraceptives at the factory.

The Baseline HNA also found that the cost of transportation to health services was the largest factor keeping employees from receiving health services, followed by the fact that employees were busy during the day at the factory. In contrast, factory management felt that concerns about privacy and not knowing where to obtain health services were the largest factors keeping employees from receiving health services.

Peer Outreach Activities

In addition to the on-site health services provided at the clinic, HSPDA managed a peer outreach program to encourage better health awareness among employees. Twenty-four "peer outreach educators" (7 male and 17 female) were selected from among the factory staff and trained on RH/FP issues. Each peer educator was assigned a group of about 20 employees. The peer outreach educators were responsible for helping to coordinate scheduling and appointments with the HSPDA clinical staff and disseminating project messages and skills. The peer educators were trained in skills and procedures such as basic knowledge and awareness of RH/FP and prevention and care of STIs (including HIV/AIDS). The peer outreach educators were encouraged to increase the use of the on-site services but were not allowed to diagnose or advise peers on health matters.

In terms of management oversight, factory management and HSPDA planned to discuss the project at bi-monthly meetings. Due to production deadlines and other constraints, factory

management opted for short, informal meetings as needed, at which time issues could be resolved and progress discussed. This practice proved satisfactory to both the factory and HSPDA.

Additionally, to bridge the gap between workers and management and to develop better understanding, three worker-management communication workshops were arranged.

Annex E: Survey Instrument

Chittagong Factory Workers Survey 2006

Questionnaire Serial Number

Respondent's Name: □ Male □ Female

Address:

My name is _____ and I am here on behalf of Health Solutions International to conduct an interview with you today. Health Solutions International is an organization dedicated to improving the quality of health services available to factory workers in Bangladesh.
I would like to speak with you today about your awareness and use of the health services available at the Chittagong garment factory. This information could help decide how health services to factory workers could be improved.
The interview should take about 25 minutes. I will be taking some notes and writing down your answers during the session. Your responses will not be shared with anybody, including your supervisor. Your responses may be combined with other responses for a report.
Your participation in this survey is completely voluntary. You have the right not to participate in this survey. Do you agree to participate in this survey? □ Yes □ No

Interviewer Visits			
	1	2	3
Date			
Interviewer's Name			
Result*			
Next Visit: Date Time			

***Results Codes:**
1. Completed at factory
2. Completed at a location outside the factory
3. Respondent could not be located/not available
4. Postponed at respondent's request
5. Refused
6. Other *(Specify)* ……

Survey Supervisor's Name: Date:

1. Just to reconfirm, are you currently an employee of the Chittagong factory?

   ☐ Yes ☐ No → *go to Q3*

2. How long have you been working at the factory?

   ..... *(months)*

3. How do you usually commute from home to work? *(tick mark all that apply)*

   ☐ On foot

   ☐ Bicycle

   ☐ Rickshaw

   ☐ Bus or other public transportation

   ☐ Other (specify) …….

4. If you need to pay for any or all part of your transportation expenses, how many Taka do you usually spend on one-way transportation from home and the factory?

   …….. Taka (*enter 0 for none)*

5. How long does it usually take for you to come from home to the factory?

   ……. Hour …….. Minutes

6. What type of place do you live in?

   ☐ Village ☐ Large town/city

   ☐ Small town ☐ Other (specify) …….

Let me ask a few questions about yourself.

7. How old are you?

   …… *(Completed age)*

8. Have you ever attended a school? If yes, how many years of schooling have you completed?

   …… years of schooling completed *(write 0 for none)*

9. Even though you have not attended school, can read and write?

☐ Yes ☐ No

10. Have you attended any training program or diploma course?

☐ Yes ☐ No

11. Are you unmarried or married?

☐ Unmarried → *go to Q13*

☐ Married

☐ Widowed/Separated/Other

12. Do you have any living children? If so, how many? *(enter 0 for none)*

……

13. How many people live with you at your house?

……

14. Are you the only income earner in your household?

☐ Yes ☐ No

Let me now ask a few questions about your views on health care.

15. In your opinion, how much does your factory care about to ensuring good health for its factory workers like yourself?

☐ To a large extent ☐ To some extent ☐ Not at all

16. Are you aware of any specific things that the factory has undertaken to ensure that its factory workers remain healthy and that their health care needs are met?

☐ Yes ☐ No ☐ Not sure

17. If yes, what things? *(verbatim)*

……

18. Do you think that a factory worker misses more work when there is no health clinic at the workplace?

☐ Yes ☐ No ☐ Not sure

19. When a factory worker is sick, does that worker delay getting health care services if the only clinic available is in town?

☐ Yes, delays ☐ No, gets help right away ☐ Not sure

20. When most factories are paying the same amount to their workers, do you think a factory worker will be more likely to work at a factory that provides an on-site clinic instead of one that does not?

☐ Yes ☐ No ☐ Not sure

21. For yourself, which choice of clinic do you prefer to have available when you need health services?

☐ An on-site clinic ☐ An offsite clinic ☐ Does not matter

22. Which particular day or days do you prefer for health services if an on-site health clinic can be provided any day at the factory,? (tick mark all responses)

☐ Sunday ☐ Monday ☐ Tuesday ☐ Wednesday

☐ Thursday ☐ Friday ☐ Saturday

23. What specific time in a day would be most preferable for you?

☐ In the morning ☐ Mid-day ☐ In the afternoon

☐ No specific preference

24. If not all types of health clinic services could be provided on site, what are 2-3 health services that you think would be critical for your needs? *(verbatim)*

……..

25. Are you willing to pay for health services at the factory premises?

☐ Yes ☐ No ☐ Unsure

26. If yes, how much Taka would you be willing to pay?

…… Taka *(enter 0 for 'none')*

We all miss work sometimes due to several reasons. Some times we become sick, at other times we may miss work because of other reasons. Let me ask you about your experience.

27. In the last three months, have you ever missed work due to *any* reason?

☐ Yes ☐ No → *go to Q29*

28. If yes, about how many days of work did you miss?

……..

29. In the last three months, did you miss work specifically because you were sick?

☐ Yes ☐ No → *go to Q31*

30. If yes, how many days of work did you miss?

……..

31. In the last three months, did you ever come to work when you were not feeling well or were sick?

☐ Yes ☐ No → *go to Q34*

32. When you were sick, did you seek care from any health professional in the last three months when you got sick?

☐ Yes ☐ No → *go to Q34*

33. If yes, where did you go for health care services? *(tick mark all that apply)*

☐ At the factory clinic

☐ Private clinic/doctor outside the factory

☐ Government clinic

☐ Pharmacy

☐ Traditional health care provider

☐ Other (specify) …….

Now, I would like to ask you about the health clinic at the factory.

34. Are you aware that there is an on-site health clinic at the factory?

☐ Yes ☐ No → *go to Q58*

35. How many times a week are the services available?

.....

36. How many hours a day are the services are available?

…….

37. Do you have to pay for services? If so, how much Taka?

…… Taka *(enter 0 for none)*

38. Do you know what types of services are offered at the factory health clinic? *(Specify each and tick mark all that apply)*

a.	Contraceptive methods	☐ Yes ☐ No
b.	Counseling about family planning	☐ Yes ☐ No
c.	STI treatment and counseling	☐ Yes ☐ No
d.	HIV-AIDS counseling	☐ Yes ☐ No
e.	Treatment of reproductive tract infections	☐ Yes ☐ No
f.	Antenatal care	☐ Yes ☐ No
g.	Other reproductive services	☐ Yes ☐ No
h.	Treatment of stomach ailments	☐ Yes ☐ No
i.	Other primary health services (e.g. asthma, diarrhea, rheumatism, anemia, etc)	☐ Yes ☐ No
j.	Referrals for other medical services	☐ Yes ☐ No

Let me now ask you about your use of health services at the factory.

39. Have you *ever* sought care at the factory on-site health clinic?

☐ Yes ☐ No → *go to Q66*

40. In the last three months, did you visit the health clinic at the factory?

☐ Yes ☐ No → *go to Q42*

41. About how many times did you visit the clinic in the last three months?

……

42. The last time you visited the factory health clinic, what was the primary purpose of your visit? *(Verbatim)*

……..

43. To what extent does the clinic fulfill your health care needs?

☐ To a large extent ☐ To some extent ☐ Not at all

44. How convenient are the days when the clinic services are available?

☐ Very convenient ☐ Somewhat convenient ☐ Not at all

45. How convenient are the particular hours of the clinic to meet your needs?

☐ Very convenient ☐ Somewhat convenient ☐ Not at all

46. By being able to get health services at the on-site clinic, do you feel you have saved on any of the following?

☐ save time traveling to and from another clinic

☐ save on transportation costs

☐ save on the cost of drugs

☐ save pay by being able to stay on the job

☐ save on the cost of service

☐ Did not save time or money

47. How does the quality services at the on-site health clinic compare to service at a clinic outside the factory? Do you feel, they are:

☐ Better ☐ About the same ☐ Worse ☐ Unsure

48. How satisfied were you with the services provided at the on-site health clinic?

☐ Very satisfied ☐ Somewhat satisfied ☐ Not at all

49. Do you intend to use the on-site clinic in the future again?

☐ Yes ☐ No ☐ Unsure

50. Thinking back, do you think the access to the health services at the factory helped you miss less work?

☐ Yes ☐ No ☐ Unsure

51. Thinking back, do you think you would have gone to a different clinic if the services were not available at the factory premises?

☐ Yes ☐ No ☐ Not sure

52. If you needed health services, do you think you would wait until the day the factory clinic is available to get help or would you seek care elsewhere right away?

☐ Wait for the clinic ☐ Seek outside care right way ☐ Not sure

53. Do you think that the availability of the clinic at the factory makes workers here less likely to look for work elsewhere?

☐ Yes ☐ No ☐ Unsure

54. Do you think you are more likely to stay in your job because of the availability of on-site health services?

☐ Yes ☐ No ☐ Unsure

55. Do you think you are less likely to miss work because of the on-site health clinic at your factory?

☐ Yes ☐ No ☐ Unsure

56. How does the presence of the clinic make you feel about management's concern for workers?

☐ Better ☐ No different ☐ Worse

57. What recommendations would like to make for making the on-site health services better suited to your needs? *(Verbatim)*

……

Thank the respondent and terminate the interview!

Q58 through Q65 are for only those who are not aware of the on-site health clinic

58. Where do you usually go when you need health care services?

……..

59. Have you sought health services from any place any time in the last three months?

☐ Yes ☐ No ☐ Unsure

60. In the last three months, have you ever come to work when you were not feeling well or were sick?

☐ Yes ☐ No

You might be interested to know that over a year ago the factory management contracted for a health clinic to be available once a week on the factory premises. It charges a small fee. Now that you have this information, we'd like to ask you a few more questions.

61. Now that you know about the clinic, do you think you will use health services available at the factory premises?

☐ Yes ☐ No ☐ Unsure

62. Do you think that the availability of on-site health services makes you more likely to stay in your job?

☐ Yes ☐ No ☐ Unsure

63. Do you think you are less likely to miss work because of the on-site health clinic at your factory

☐ Yes ☐ No ☐ Unsure

64. How does the availability of the clinic make you feel about management's concern for workers?

☐ Better ☐ Worse ☐ No different

65. Do you know of any friends who have used the on-site health services?

☐ Yes ☐ No ☐ Unsure

Thank the respondent and terminate the interview!

Q66 through Q72 for those who are aware of the on-site health clinic but never used it.

66. You said you know about the on-site health clinic but you have not used services in the last three months. What would you say are 1-2 main reasons for not using the services? *(Verbatim)*

……..

67. Do you think you will use the on-site clinic any time in the immediate future?

☐ Yes ☐ No ☐ Unsure

68. Do you know of any friends who have used the on-site health services?

☐ Yes ☐ No ☐ Unsure

69. Do you think that access to the health services at the factory's on-site clinic helps factory workers miss less work also?

☐ Yes ☐ No ☐ Unsure

70. Do you think that the availability of on-site health services makes you more likely to stay in your job?

☐ Yes ☐ No ☐ Unsure

71. How does the presence of the clinic make you feel about management's concern for workers?

☐ Better ☐ No different ☐ Worse

72. What recommendations do you have for making the health services better suited to your needs? *(Verbatim)*

……

Thank the respondent and terminate the interview!

Annex F: Focus Group Discussion Guide

Focus Group Identification Code: **Date:**

Participant number/type: 8/10 female workers that **HAVE NOT USED** the on-site clinic

Moderator: **Note Taker:** **Observer:**

RESEARCH QUESTION	TOPICS	FOCUS GROUP DISCUSSION QUESTIONS
Is availability of on site health services a significant motivating factor for continued employment at the factory?	A. Socio economic characteristics of women that have used the factory clinic	➢ Where do you live? ➢ What is your marital status? ➢ How many children do you have, if any? ➢ How many children would you like to have? ➢ How many years of schooling have you completed? ➢ How long have you been working at the factory? ➢ What is your position at the factory? ➢ How do you get to the factory in the morning? ➢ How long does it usually take you to get to the factory? ➢ Who are the income earner(s) in your household?
	B. Motivations/ barriers to seeking care at on site factory clinic	*We all miss work sometimes for several reasons. Let me ask you about your experience.* ➢ The last time you missed work, what was the primary reasons for your missing work? If health reasons are not mentioned, *probe:* o Have you ever missed worked because you were not feeling well? *Now I understand that you have heard of/know of the existence of the health clinic located at the factory* ➢ Do you know what kind health services are provided at the factory health clinic? *Probe:* Any other services? o Can you name what services it provides for family planning? o Can you name what services it provides for reproductive health? ➢ Does it make a difference to you that the clinic provides reproductive health and family planning services? How so?

		➢ The last time you were not feeling well, where did you go to seek care? *Probe:* Did you go to: o Private provider/clinic? o Government clinic? o Pharmacy? o Stayed home? o Nothing/Go to work? ➢ What was the primary purpose of your visit? ➢ For those of you that sought care from a <u>private provider/clinic</u> or a <u>Government clinic</u>, what was your experience at these facilities? *Probe:* o Were you attended to quickly? o Was the cost for the service appropriate? o Was the location convenient? o Were the service hours convenient? o Was the time spent in consultation sufficient to discuss your needs? o Did you have sufficient privacy during your consultation? o Did the health provider treat you in a friendly and respectful manner? o Did you find the service area to be clean? o Any other? ➢ In general, where would you prefer to go for health care? o Government clinic? Why? o Private provider/ or clinic outside the factory? Why? o Factory clinic? Why? o Any other location? Why? ➢ What are the main reasons why you decided to seek care at the <u>Government Clinic and/or Private Clinic and/or Pharmacy and/or Stay home and/or Go to Work</u> rather than seek care at the <u>factory health facility</u>? *Probe*: o Are there any other reasons?

		➢ In general, what motivates you to seek care when you are not feeling well? *Probe*: o Anything else? ➢ What determines whether you come or not to work when you are not feeling well? *If availability of health services at factory is not mentioned, probe:* o To what extent is the availability of health services at the factory a motivating factor for going to work when you are not feeling well?
	B. On site health services and effect on employee productivity, turnover, and absenteeism	➢ Does having a health clinic available once a week affect the quality of your/other workers' work? How so? *Probe:* o Have you noticed that you/others are you less sick? Are you/others more effective at work? ➢ To what extent does the existence of the factory clinic make any difference in your decision to remain at the factory? How? ➢ How does the existence of the on-site health clinic effect your decision to come to work? *Probe*: o Are you/others more likely to come to work knowing you can get services at the clinic? o Has it impacted the number of days you/others are absent from work?
	C. On site health services and what it means to worker	➢ When you decide to take a job, what makes you more likely to pick one workplace over another? Why? *Probe:* Anything else? ➢ How much do you think the factory cares/is concerned about your health? *Probe*: o Why do you believe this? ➢ When the clinic was opened or when you first heard about it, did it affect how you felt about working at the factory? o Did it make you feel any better about management? or Did it not make any difference? *Probe*: How so? ➢ How supportive is your manager/supervisor of your using the clinic if you need to go there during working hours? *Probe*: o Can you give me some examples?