
**SUPPLY-SIDE EFFECT OF HEALTH CARE FACILITIES ON
PRODUCTIVITY AMONGST THE FEMALE WORKERS IN THE
READYMADE GARMENT SECTOR**

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Abstract

This study was conducted in 4 selected garment factories within Dhaka city. The objectives of this study were to find out health care access (Supply-side effect) in the garments factory for the women workers and their relation to the productivity. A total of 300 women garment workers were included in this study. Most (60.0%) of the respondents were adolescents, unmarried and having only primary level education (5 years of school education). Their average take home monthly salary was 1791.7 taka which was spent mostly on food. They passed a tight work schedule from 6 AM to 11.30 PM without any rest. Hundred percent of female workers had no previous idea about garments nor had any formal training, but they produced on an average 1016 garment pieces a day. They did not get any vaccine, health education or health related knowledge from the garments factory. There was no provision of health care centre or doctor, treatment for fire burn (other than gas), medicine and support in chronic, severe illness for themselves or their family members. More than half (63.0%) of the respondents mentioned about loss of time due to illness. There was a strong correlation ($r=0.858$) between sickness and production loss, between hour loss and production loss ($r=0.9283$), between production loss and percentage loss ($r=0.871$). Though there was loss due to illness, no health access or facility for women workers in the garments factory was available. To overcome the situation and improve the productivity, owners have to provide health access and women workers have to come forward for their rights.

Ibrahim Med. Coll. J. 2008; 2(1): 4-8

Key words: health care, supply-side effect, access, productivity.

Introduction

Bangladesh faces the problem of limited resources and a rapidly growing labor force where the scope of sustained growth in agriculture remains severely constrained due to a variety of socio-economic factors. The need for and the urgency of a structural shift towards industrialization assume profound importance. The imperatives of industrial development have become even stronger in the context of the “export-oriented growth strategy”, which developing countries like Bangladesh have been forced to adopt to circumvent the restrictive size of their domestic markets and to integrate them with the global world economy.

To survive and prosper in the global market, the garment industry must be competitive. Competitiveness largely depends on the productivity of the workers, since the garment manufacturing process in Bangladesh is highly labour intensive. Health and productivity of labourers are highly correlated. The garment workers are basically poor^{1,2}. Safe conditions in the garment industry are very crucial for worker’s health and productivity³.

The growth of export in the Ready Made Garment (RMG) sector from 1993 to 2004 showed that in 1993

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it amounted to 61.4 percent of the country's total export income, and by 2004 it was 78.05 percent. This indicates how rapidly the export of the RMG has grown^{4,5}. In between this period, the level of employment has increased from some 10,000 to approximately 1.5 million today with a simultaneous increase in the manufacturing industry. As such, it was felt relevant to evaluate the overall health conditions of the female garments workers in Bangladesh as well as the health-care access to find out the relationship between the health care facilities of the female workers and its effects on overall productivity.

Materials and Methods

A semi-structured questionnaire was used for collecting information on the garment workers. It consisted of different sections, namely, socio-demographic, economic, health care facilities and access, unit production of garment pieces. Questions with predictable possible answers were pre-coded while some questions were kept open to get in-depth views of the respondents on several issues.

The female workers working in different types of garment factories in Dhaka, Chittagong, Narayanganj and other districts of Bangladesh were selected. The working pattern and environment were similar in the garment factories of all districts. The types of the Garment Factories (GF) were knitting, dyeing, finishing etc. There are 3000 listed (approximate) GF in Dhaka city. The GF were selected randomly. The required numbers of female workers were selected by using the lottery method. A total of 300 female workers were randomly selected, which was taken from 1300 female workers out of four GFs. Data cleaning, validation and analysis were performed using the SPSS software.

Results

In Dhaka, respondents came from all over the country, highest (16.3%) being from Barisal, age ranged from 15 to 19 years (56.0%) and 59.3% were in the unmarried adolescent group, mostly (58.4%) with primary education perhaps as a consequence to the Bangladesh Government's free female education policy.

About half (53.7%) of the respondents had to take care of their parents and brother/sister (49.0%). They also were taking care of the husband, father and mother

Table-1: *Distribution of the respondents by monthly income*

Monthly Income (Taka)	No. of respondents	Percentage
≤ 1000	41	13.7
1001-1500	49	16.3
1501-2000	155	51.7
≥ 2001	55	18.3

in-law, mother, children, husband and father (14.3%). The average income of the respondent was Taka 1791 ranging from Taka 900 to 3800 (Table-1).

Half of the respondents had 1501 to 2000 taka monthly income followed by 1 of 5 with more than Tk 2001. Almost one third respondents' income was within 1001 to 1500 taka or less. The lowest income of the respondent was Tk 900 and the highest income of one respondent was Tk 3800 per month.

Most respondents (62.3%) lived with their relatives and majority of the respondents (76.4%) (> 5 persons in a room) lived in polluted housing conditions, which are harmful for women, particularly those in their adolescence. It was observed that the respondents woke up very early in the morning (5:00 to 6:00 AM) and were busy until 12:00 midnight. It implies that the respondent's life style was always under pressure and strenuous for their health.

A total of three categories of garment jobs were included and among them 64.7% were found in the sewing section which was hard work and prone to sickness. Other sections were the finishing section (21.3%) and working as helpers (14.0%).

Table 2 showed that the average number of products produced per day by the garment respondents were 1016 pieces ranging from 600 to 1600 pieces. Almost two-thirds (63.6%) of the garments worker produced 1000-1200 pieces per day. The average duration of over time work of the garment respondents was 3.83

Table 2: *Distribution of the respondents by per day product*

Pieces manufactured	Frequency	Percent
< 1000	93	31.1
1000 -1200	191	63.6
> 1200	16	5.3
Total	300	100.0

Table-3: Distribution of the respondents by healthcare facilities

Sources	Frequency	Percentage
Pharmacy	131	43.7
Govt. Hospital	93	31.0
Non Govt. Hospital	29	9.7
Kabiraj	28	9.3
Homeopathy	18	6.0
No treatment	1	0.3
Total	300	100

hours with a range from 3 to 5 hours and almost all of them (92.6%) had to do over time work up to 4 hours.

In this study, 1 of 4 (36.7%) respondents were not sick during the past one month whereas almost 1 of 2 (45.3%) were sick at least one time. Most of the women became sick (one time) in a month and suffered from physical weakness (81.0%), followed by vertigo & headache (49.1%), gastric pain (33.0%), pain in body (27.0%), common cough cold (22.3%), back pain (22.0%) and other diseases (such as palpitation, frustration, dysentery, asthma, weight loss, hollitosis, night sweating, painful eyes and itching). Most of the female workers suffered from physical weakness probably due to poor nutrition. It was observed that 64% of the workers faced abrasion, pricking, hand cutting, and fracture while working in the factories.

It is seen in Table 3 that 43.7% respondents receive treatment from pharmacies followed by government hospitals (31.0%), non government hospitals (9.7%), kabiraj (9.3%) and homeopathy (6.0%). Only savlon and paracetamol (98.0%) were supplied from the factory. There was no provision of doctors and also no provision of health care services to meet any emergency. Only three categories of persons were given some health care facilities at the factory- floor in charge (36.0%), store keeper (34.7%) and supervisor (28.7%). In this study it was found that majority of the respondents mentioned (86.7%) that they had provision of leave during family member's sickness. The respondent could avail this leave without pay. They did not get any support or allowance during treatment of complicated diseases and emergency treatment of other family members. The respondents had no health education in the GF, no maternity leave, and no provision for breast feeding was available in the working place.

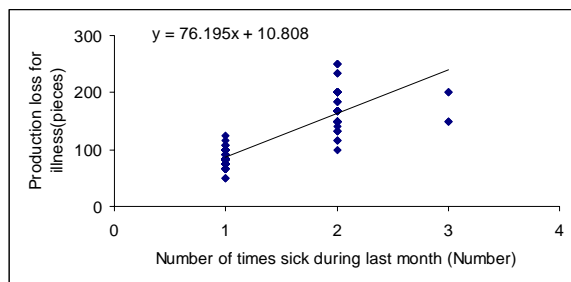
The average working hour was 12.8, ranging from 12 to 14 hours. They got only 4 holidays in a month, thus working 26 days in a month. This study found that they had to work more than the usual, which was exhausting for them and made them prone to sickness.

It was observed that production loss (69.8%) due to illness was up to 100 pieces followed by 101-200 pieces (27.6%) and 201-250 pieces (2.6%). The average loss of production due to illness was 110 ± 44 pieces, ranging between 50 to 250 pieces.

Figure 1 shows that number of sickness in one month mentioned by the 300 respondents expressed in numbers and production loss was expressed in pieces. A significant positive correlation was found between number of sickness in one month and production loss. The value of Pearson's correlation coefficient was 0.858, which was significant ($p < 0.001$). Therefore, there was a positive linear association between the reported number of sickness in one month and the production loss in the factory.

Figure 2 shows per day hour loss mentioned by the 300 respondents expressed in hours and production loss for illness expressed in pieces. A significant positive correlation was found between hour loss and production loss for illness. The value of Pearson's correlation coefficient was 0.9283 and it was significant ($p < 0.001$). Therefore, there was a linear association between hour loss and production loss for illness in the study population.

Figure 3 shows that production loss for illness mentioned by the 300 respondents expressed in pieces and percentage loss expressed in percentage. A significant positive correlation was found between production loss for illness and percentage loss. The value of Pearson's correlation coefficient was 0.871 and it was significant ($p < 0.001$). Therefore, there was

**Fig-1: Correlation between the number of sickness in one month and production loss by the respondents**

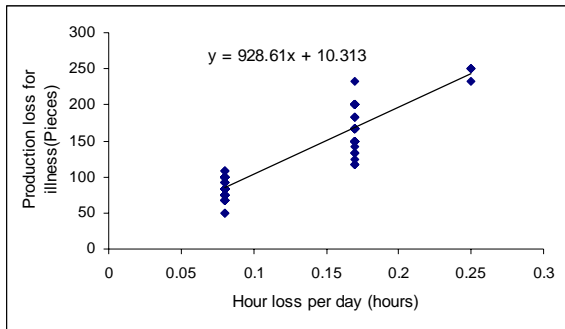


Fig-2: Correlation between hour and production loss for illness by the respondents

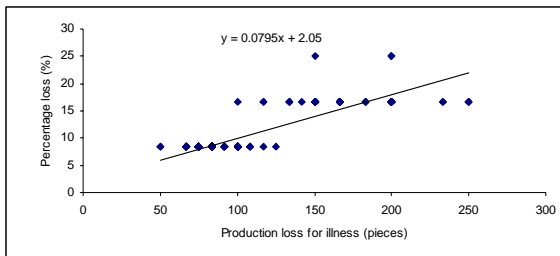


Fig-3: Correlation between production and percentage loss for illness by the respondents

a linear association between production loss for illness and percentage loss in the study population.

Discussion

This observational study was done in a selected area of Bangladesh to ascertain the knowledge about the overall health condition of the female garments workers, ascertain the need of health-care access (supply-side effect of health care) of these female workers, identify the specific area of concern and the possible outcomes of the problem, and finally to find the relationship if any between productivity and these health problems.

In the current study the respondent's place of origin were identified in 42 districts. More than one third of the respondents hailed from the southern districts of Barisal, Bhola and Patuakhali, where river erosion and natural calamity is a part of life. Slightly more than half of the respondents were adolescents. These adolescents, who are the focus group in the garment industries of our country, have no access to any health facility and health education. The mean age of the respondent was 20.4 ± 5.5 years, ranging between 12

to 42 years. Majority of the respondents (59.3%) was unmarried most of whom being in their adolescence. This implies that the most vulnerable group of woman work in the garment sector, who are in dire need of adolescent health education and other health access facilities.

In this study, it was found that most women had primary schooling. This level of education was little; still it could help them to be concerned about health. The average family members in the current study group were 5-6. It is clear that most women workers had a large family which in itself is a burden to them. It was clear that most of them were not the only earning member. Women were sharing a part to maintain their family economics. They look after their parents who need more help. A study found that almost 95 percent of the total workers employed in the country's garment industry are women. The average family size of the women workers was found in the range of 4.1 to 5¹. Another study estimated that around 30 percent of women are the primary earners of their families while the others are secondary earners². From this it is found that a large number of people either exclusively or significantly depend on the female workers of the RMG sector.

The average income of the respondents was only Tk 1791 per month. The salary amount was little; still it was clear that women considered themselves to be self sufficient on their income. The World Bank (1995) report on Labour Market Policies for Higher Employment in Bangladesh has indicated that Bangladesh's unit labour cost in garments is probably lower than in any other South Asian country⁶.

In the current study it was observed that average 5-6 number of members lived in a single room, with a range of 2 to 8 members. It implies that the majority (> 5 persons) of the respondents live in a very poor housing condition, which is harmful for women, especially those in their adolescence. It was also observed that the respondent's life style was always under pressure and harmful for their health. In the present study 100 percent of the respondents had no idea about the garment factory and they did not receive any training to work in a garment factory. They usually worked a minimum of 9 hours per day in the factory. The average number of pieces produced per day by the respondents was 1016. To achieve the target, they had to work overtime. In the current study, the average

duration of over timework was 3.83 hours. But actually a garment worker should do work 8 hours per day like other organization and according to WTO rules.

In the current study hundred percent respondents said that the factory have arrangements for emergency and burn situations, but no respondent could say what type of treatment would be made available during such burn situations.

Conclusion

It is clear from this study that no health access is present in garments for the women workers. Production of the garments is obviously affected. Still owners always try to fulfill their targets by any means, without paying any attention to any services like giving health access to workers, and any health support during illness of the workers. But in the long run both owners and workers are equally affected. Because women workers are the wheel of their machine named garments. Women workers “(wheel)” when sick cannot work and the machine “(garments)” stops. Production levels fall, hampering fulfillment of target in the competitive world market.

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