

HEALTH STATUS AND TREATMENT SEEKING BEHAVIOR AMONG POWER LOOM WORKERS IN AN URBAN SLUM OF MEERUT CITY IN U.P.

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ABSTRACT

Background: Powerloom sector is one of the important but unorganized parts of textile industry of India and mainly run by private establishments. The power loom workers hardly ever benefit from occupational health-and-safety provisions. As a result power loom workers suffer many serious medical illnesses. It is important to note that, it is the only sector of textile industry which is running without much research or innovation. **Objectives:** To study the health status & treatment seeking behavior among power loom workers. **Methodology:** It was a community based cross sectional study conducted by interviewing 150 male power loom workers of small scale industries of urban slum Meerut from January 2011- June 2011. **Results:** Out of total 150 respondents, 92% were Muslims and 8% were Hindus. 78% workers were less than 45 years of age, 86% were married and 72% were illiterate and 82% belonged to lower socioeconomic class. 78% workers gave history of smoking. Among morbidities, majority of workers were suffering from respiratory problems (52%) followed by musculo-skeletal problems (22%), generalized weakness (18%), injuries (14%), mental & GIT disorders (12% each), skin disorders (10%) and noise induced hearing loss (8%). 52% workers preferred allopathic treatment for their illness, though 40% preferred Indigenous system of medicine, out of which 18% preferred Ayurvedic, 14% Homeopathic, 6% Naturopathy and 2% Unani medicine for their illness. 38% of workers had opinion that allopathic medicines are costly and 26% of workers had opinion that allopathic medicine has side effects and 22% of workers had opinion that Indigenous system of medicines are cheap and easily available and 28% of workers had opinion that there is no side effects with the Indigenous system of medicine.

Key Words : Powerloom workers, Health, Treatment, Allopathy, Indigenous

INTRODUCTION

According to the World Health Organization (WHO) report 2002, occupational health risks are one of the leading causes of morbidity and mortality in the world in general and developing countries in particular¹. In India, there is a lack of awareness about occupational safety and environmental hazards that severely affect the vulnerable and marginalized working population. According to WHO, over 1000 million people worldwide are employed in small scale industries². The powerloom industry of India is one such industry.

Power loom sector is one of the important but unorganized part of textile industry of India and mainly run by private establishments. The power loom workers hardly ever benefit

from occupational health-and-safety provisions². As a result power loom workers suffer many serious illnesses such as respiratory problems, musculoskeletal problems, mental disorders, stress, eye diseases, skin problem, gastritis and injuries. The ill health is compounded by various socio-economic factors such as poverty, lack of education, poor diet, addictions, poor working condition, excess working hours etc.^{3,4,5}. The working environment and living conditions of the power loom workers are poor and pathetic and even hazardous to their health. They often do not have proper housing, ventilation, sanitation, water supply, proper electricity, natural and artificial lighting in working environment. There is no compensation for work stoppages by the employers. Many workers are Muslim by religion and weavers by caste. The power loom weaving is a family affairs occupation and it is a based on home industry. Women and children are involved as co-supportive in weaving. It is important to note that, it is the only sector of textile industry which is running without research or innovation of any kind¹². So far, no community based studies have been conducted in Western Uttar Pradesh to find out the health status and treatment seeking behaviour of power loom workers and the present study is an effort in that direction.

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MATERIAL AND METHODS

Approval from Subharti Research ethical committee located in Subharti University, Meerut was first obtained. The present study was a community based, cross-sectional study conducted among the powerloom workers of small scale industry of urban slum, Bunkarnagar, Meerut from 1st January 2011 to 30th June 2011. All the 181 households of Bunkarnagar were included in the study. Sampling unit included one powerloom worker from each household. One powerloom worker was randomly selected from each household. After reviewing various studies done previously in this field, a semi-structured questionnaire was designed keeping in mind the objectives of the study. The powerloom workers were interviewed by using a pre-designed, pre-tested semi-structured interview schedule.

The interviews were conducted during their home visits for all the power-loom workers. Interviews were conducted in hindi/local language.

Written informed consent was first obtained from each participant after explaining clearly the purpose and method of the study. Information sheet regarding the details of the study was also handed over to each participant if the participant or any family member was literate. Workers were contacted and needed information was collected by interviewing them. Information was sought on socio-demographic profile, addictions, health status and about the treatment seeking behavior and the preferred system of medicine during illness. Health status was assessed by asking questions regarding their health problems (in the past one month period) followed by clinical examination by a physician. The interview took approximately 25-30 minutes to complete the schedule.

At least three home visits were undertaken before indicating that a worker was not available. Surrogate interviews (e.g., those that do not include the worker) were not permissible. However, it was useful if others in the household assisted the worker to recall information. Data was compiled and analysed using Microsoft Excel and the results were expressed as proportions.

RESULTS

A total of 181 power-loom workers were selected randomly one from each of the 181 households. Out of them, 31 workers could not be interviewed. Among 31 non-respondents, 23 were not available at home in spite of 3 home visits, 8 workers refused to participate in the study. Non response rate was 17.12%. Data were analyzed for 150 workers.

Socio-demographic characteristics

Of the 150 power-loom workers interviewed, all (100%) were males, 78% were < 45 years, 92% were Muslims, 72% were illiterates, 86% were married, 80% were from upper lower class of Kuppaswami socioeconomic scale, and 78% and 20% reported

history of smoking and alcohol use respectively (Table 1 & 2). The mean age of the patients was 34.3 years and the mean monthly income of the workers was Rs 2512 + 268.78 (SD) (Table 1). The overall prevalence of tobacco use was 80%, while the prevalence of smoking was 78% and tobacco chewing was 20% respectively. Among the reasons for tobacco use, there were many misperceptions; 50% of the workers replied they use tobacco for feeling of pleasure, 35% said it reduces anxiety, depression and tension, 12.5% felt muscular relaxation and 10% replied it suppresses appetite (Table 2).

Health & morbidity status of power-loom workers

Among the health problems, majority of the power-loom workers suffered from respiratory diseases (52%) followed by musculoskeletal problems (22%), generalized weakness (18%), injuries of legs and hands (14%), mental diseases (12%), gastrointestinal diseases (12%), skin diseases (10%) and noise induced hearing loss (8%) respectively (Figure 1).

52% of the power-loom workers preferred allopathic treatment for their illness, though 40% preferred Indigenous system of medicine, out of which 18% preferred Ayurvedic, 14% Homeopathic, 6% naturopathy and 2% Unani medicine for their illness (Figure 2). 38% of workers had opinion that allopathic medicines are costly and 26% of workers had opinion that allopathic medicine has side effects. 22% of workers had opinion that Indigenous system of medicines are cheap and easily available and 28% of workers had opinion that there is no side effects with the Indigenous system of medicine.

DISCUSSION

Hardly any studies were found on reviewing the literature which were conducted to study the health status and treatment seeking behaviour among power loom workers. The objective of the study was to study the health status and treatment seeking behaviour among the power loom workers. 80% of the workers belonged to upper-lower socio-economic status and 72% of the power loom workers were illiterate. A study of smoking prevalence among men in Chennai (India) in 1997 showed that the highest rate is found among the illiterate population (64%)⁶.

The overall prevalence of tobacco use was 80%, while the prevalence of smoking was 78% and tobacco chewing was 20% among the power loom workers. Similar findings were observed in a study conducted by Zaki A et al⁷ who suggested that the overall prevalence of tobacco use was 85.9% and prevalence of smoking was 62.28% among the power loom workers.

According to NFHS III, in India, 55.8% males in the age group of 12-60 years have been found to be consuming tobacco⁸. The other reasons of tobacco consumption may be low educational status, occupation involving hard labour work, doing night shift work and low socio-economic status.

Table-1: Socio-demographic characteristics of power-loom workers.

Characteristics		No. (%)
Age	< 45 years	177 (78%)
	> 45 years	33 (22%)
Gender	Male	150 (100%)
	Female	0
Religion	Hindu	12 (8%)
	Muslim	138 (92%)
Marital Status	Married	129 (86%)
	Unmarried	21 (14%)
Education	Illiterate	108 (72%)
	Literate	42 (28%)
Mean Monthly Income		Rs 2512+268.78 (SD)
Socio-economic status	Lower Middle	30 (20%)
	Upper Lower	120 (80%)

We found in this study that the respiratory problems were 52% among the power loom workers. The other health problems were musculoskeletal problems 22%, generalised weakness 18%, injuries 14%, mental and GIT 12%, skin problems 10% and noise induced hearing loss 8% respectively. In a study by Parimalam P et al⁸, reported high prevalence of breathing difficulty (84%) and showed that 22% of the workers in the cutting section suffered from asthma. In a study by Saha TK et al⁹, musculoskeletal problems (69.64%) were the commonest problem.

The variety of morbidities detected among power loom workers, especially the high prevalence of respiratory problems and musculo-skeletal problems are alarming due to the smoking behaviour and hazards of power loom industry. Respiratory problems were the commonest health problem detected in this study population. This may be explained by the fact that they were working in an ill ventilated, overcrowded and poorly illuminated room. Periods of rest in between their long hours of work and seats with adjustable backrest that provide support for the lumbar region would go a long way to reduce postural strain and low back pain. Mismatch between man and machine is one of the major factors contributing to musculoskeletal problems. This may be mainly due to the attempts made by the workers to fit the man to the job rather than to fit the job to the man.

In this study 50% of power loom workers preferred allopathic medicine although 42 % preferred Indigenous system of medicines, out of them 20% used Ayurvedic medicines, 12%

Table-1: Personal habits of power-loom workers.

	Habits	No. (%)
1	History of Smoking	
	Present	177 (78.0)
	Absent	33 (22.0)
2	Prevalence of Tobacco use	
	Smoking	117 (78.0)
	Tobacco chewing	33 (22.0)
	Both smoking & chewing	21 (14.0)
	None used	30 (20.0)
3	Alcohol use	
	Present	87 (58%)
	Absent	63 (42%)
4	Reasons for use of tobacco	
	Feeling of pleasure	60 (50.0)
	Reduce anxiety, tension & depression	42 (35.0)
	Skeletal muscle relaxation	15 (12.5)
	Suppress Appetite	12 (10.5)
	Others	06 (5.0)

workers were used Homeopathic medicines, 10% used Unani medicines. A study conducted by Lasker AR et al¹⁰ suggested that 34% respondents from urban preferred the private health care facility and 30% of the respondents preferred the quacks. While 55% of the respondents from rural areas consulted the alternative system of medicines for the illness.

Although, there is great advancement of treatment for diseases, every person cannot afford expensive investigations and costly medicine. The indigenous system of medicines have been scientifically approved. The indigenous system of medicines are much alive in India and other countries even today and have become a part of Indian culture and continues to be an important source of medical relief to the public. Despite the ultra modern health facilities, it is high time that all different branches of medicine should be correlated with each other to solve the public health problems.

Lack of general safety measures like absence of first aid kits and lack of safety devices like fire extinguishers, alarms and emergency exits were other serious deficiencies in the workplace. Lack of these safety devices results in the workers getting trapped inside the units under emergency situations.

Every work place should have at least the minimum first aid facilities and access to trained personnel to provide emergency medical care. First aid facilities and trained personnel are important components of health and safety arrangements. Safety measures should be checked periodically for ensuring their utility during emergency situations. Use of personnel protective equipments (PPE) like masks or respirators with mechanical filters or with oxygen or air supply, ear plugs, earmuffs should be made mandatory wherever threat to workers health and safety is anticipated. All workers using PPE should be trained in their use and maintenance. All workers must be given periodic medical examination".

Regular breaks in between work hours and rotation of jobs should be encouraged so that exposed workers are able to reduce the duration and intensity of their exposure. Regular medical check-ups at periodic intervals at the workplace should be held with increased emphasis on preventing health problems rather than curing them.

There is an element of recall bias in our study. One limitation of the study is that the results of this study cannot be generalized to the population in Meerut district.

CONCLUSION & RECOMMENDATIONS

Power loom workers were mainly suffering from respiratory, musculo-skeletal, physical injuries, mental stress, GIT and skin

disorders. Majority workers preferred allopathic treatment for their illness followed by ayurvedic and homeopathy treatment.

Immediate intervention programmes are warranted to reduce the future burden of tobacco use related morbidities among the power loom workers. Exhaust systems should be provided for powerloom workers to ensure proper ventilation and regular supply of fresh air in group work spaces.

In Textile industry, several hazardous conditions exist, which synergistically affects the health and comfort of the workers ultimately decreasing the work efficiency and hence productivity. It is necessary to monitor the occupational environment and health status of the workers periodically. It is also necessary to create awareness regarding the ill effects of industrial hazards. Awareness generation and updated information regarding the traditional medicines should be undertaken for workers.

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Figure-1 : Morbidity profile of power-loom workers (n=150)

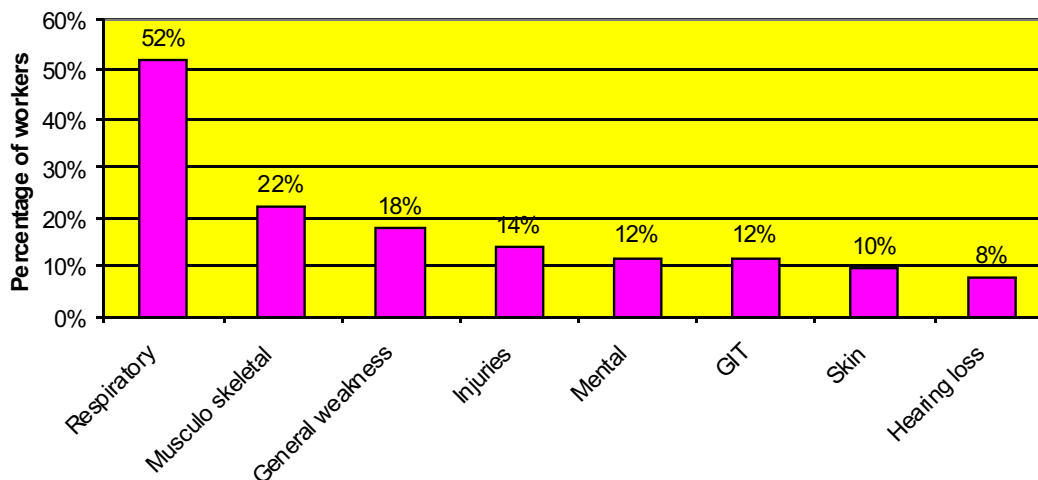
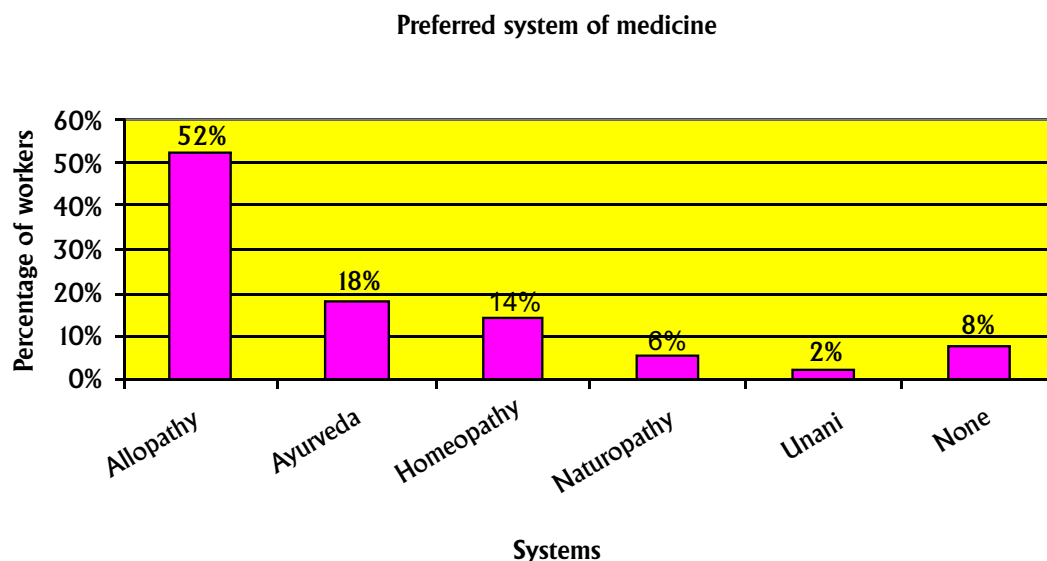


Figure 2 : Preferred system of medicine by power-loom workers (n=150)



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