



Health and Working conditions of Women Carpet Weavers: A Case Study of Bhadohi District of Uttar Pradesh

Ankit Kumar Mishra¹ & Dr. Ravindra Pratap Singh²

¹Research Scholar & ²Assistant Professor Department of Economics, CMP Degree College, University of Allahabad (A Central University), Prayagraj, Uttar Pradesh, India **E-mail:** shashisinghww@gmail.com

Abstract

Carpet industry is the most important and ancient cottage industry in India, with a decentralised set up. The industry is providing livelihood for millions of people in the country. Carpet weaving has been a unique and divergent work for carpet production on small and householdlevels to mass level production in big units. Carpet weaving is one of the most tedious job requiring long hours of static work. In Bhadohi district, there are so many women worked as a carpet weaver. Womenin the carpet industry may face challenges in terms of working condition and healthcare. There has been minimal research done on the women carpet weavers of Bhadohi district of Uttar Pradesh. Therefore, the present study aims to assess the health and working conditions of women carpet weavers in Bhadohi. For the study, primary data has been collected from the women carpet weavers through interview with the help of well-structured schedule. Thus, 100 women carpet weavers randomly selected from the 2 development blocks of Bhadohi district namely Aurai and Bhadohi. The data was analysed with the help of percentage, bar-diagrams, pie-chart and other relevant statistical techniques. The major findings of the study shows that due to the poor working conditions and long hours of static work the majority of the women weavers suffered from the diseases like problem in joints, back pain, eye problem and respiratory problem etc. To further improve the health and working conditions of women carpet weavers the first and foremost step should be to conduct awareness programs for them. The policy makers and other concern bodies should take necessary measures to ensure good health and working conditions of women carpet weavers of Bhadohi district.

Key Words: Carpet Industry, Women Carpet Weavers, Livelihood, Working Conditions, Health Conditions

Introduction

The carpet industry of India is one of the oldest industries and it's roots traced in 16th century during Mughal period. The Indian carpet industry is dominated by informal sector of skilled and semi-skilled workers. According to Carpet Export Promotion Council (CEPC), Indian handmade carpet industry is highly labour intensive and provides employment to over 20 lakhs weavers especially women directly or indirectly in rural and urban areas. Most of the weavers employed are from the weaker section of the society and this industry provides extra and alternate occupation to them including farmer and other at their home or weaving centre's.

The health condition of womenweavers can vary depending on various factors such as nutrition level, working conditions, working hours, nature of work etc. The health condition of women weavers is an integral part of general health and daily life. Needless to say that if weavers will be healthy they will be productive for organisation in which she works. Health becomes a basic requirement for raising income of the household, productivity and development. The working environment engaged in carpet industry is unorganised in nature and all vulnerable in terms of health associated with this occupation.

In order to making a carpet, one is more weavers work on a loom. In fact, the number of weavers required for weaving carpet is depends on the size of carpet. A loom is a frame within which a carpet is made, and also the warp tightened. Looms are the most important part of weaving operation. Looms are divided into two types: vertical and horizontal. Horizontal loom weavers have to sit continuously on a hard floor without any back support and there was not enough space for free leg movement in the pit, which leads to work in static postures for a longer time which causes discomfort and creates stress in lower body parts. During the weaving process, weavers have to use their hands continuously without breaks for throwing shuttles and moving reed frames. This continuous work of the hand increases the musculoskeletal problems like neck pain, chest pain, shoulder pain etc.

Vertical looms are recognised as being safer than horizontal looms but there are some other ergonomic defects in many parts of vertical looms. During the weaving process weavers have to sit on ground or on a piece of lumber. Continuous work engagement for a long duration would increase the intensity of pain and would lead to repetitive stress injury in body parts of the weavers.

Review of Literature

Devi and Lakshmi (2023), in his study, "A Review on Occupational Health Problem in Carpet Weaving". The study stated that carpet weaving is one of the most tedious professions, requiring long hours of static work. The carpet weaving occupation develops various types of health problems like as musculoskeletal disorders, respiratory problems, eye problems etc. The study

suggests these diseases and health problems found in carpet industry can be reduced by proper precautions and care. There must be some provision of protective equipment like as face masks, first aid facility, gloves and uniform for the proper protection of workers.

Jeeva PS (2022), in his study concludes that all type of weavers belong to low socio-economic background due to that they were exposed to different work stressors and hazardous environment. The main health problems faced by handloom weavers are musculoskeletal problem. They face problems like inadequate rest, poor lighting, poor hygienic condition, poor ventilation etc. Many suggestions have been given in the study for the improvement of handloom weaver's health and their working conditions.

P. Kori (2020), in her study, she discussed on the occupational health problems of the handloom weavers. Primary data was collected and total 250 respondents were interviewed. The study reveals that about 80% of the workers are suffering from health problems. Most of the respondents reported suffering from musculoskeletal disorders. The study suggests the ergonomic design into weaver workstation to minimise the adverse effect of their current working postures.

Need of the Study

Despite the fact that carpet industry in India employs a sizeable number of people, the health problem to women employed in the sector have long gone unrecognised. Additionally, all previous studies were restricted to a certain area, there is very few study that accurately depicts the health and workingconditions in the study area. Considering these facts, an attempt has been made in this study to assess health and working condition of women carpet weavers in Bhadohi district of Uttar Pradesh.

Objectives

The objectives of the study are:

- To understand job satisfaction and working conditions of women carpet weavers.
- To explore the health condition of women carpet weavers.

Research Methodology

It tells us that how research is done scientifically or systematically. Descriptive method was used for the study. Two development blocks in Bhadohi district namely Aurai and Bhadohi were selected for this study. The sample respondents are choosen using simple random sampling. As per our convenient only 100 respondents were selected for the study. Primary data regarding health and working conditions of women carpet weavers was collected from direct interaction with women weavers through well - structured schedule and observations during field survey.

Collected data were compiled tabulated and were converted into percentage. Bar-diagrams and pie-chart was also used for graphical representation of data and some other relevant statistical techniques were adopted.

Result and Interpretation

Indicator	Variable	Percentage (%)
Age - group	Up to 30 years	31
	31 to 40 years	37
	41 to 50 years	18
	51 to 60 years	09
	Above 60 years	05
Religion	Hindu	66
	Muslim	34
Social category	General	08
	OBC	69
	SC	22
	ST	01
Educational status	Illiterate	56
	primary	16
	Upper primary	16
	High school	06
	Intermediate	04

Table- 1: General	information	of the S	Sample	Respondents
-------------------	-------------	----------	--------	-------------

	Above intermediate	02
Marital status	Married	77
	Unmarried	13
	Widow	08
	Divorced	02
Type of house	Kachcha	22
	Pakka	25
	Semi kachcha	05
	Semi pakka	48
Family type	Joint	69
	Nuclear	31

Source: Primary Data

It is clear from table 1 that out of 100 sample respondent 37 percent respondents are 31 to 40 years old, 31 percent respondents are up to 30 years old, 18 percent respondents are 41 to 50 years old, 9 percent respondents are 51 to 60 years old and remaining 5 percent respondents are above 60 years. Table shows that, out of 100 respondents 66 percent respondents belong to Hindu community and remaining 34 percent respondents belong to Muslim community. Table also shows that, out of 100 respondents in weaving work 69 percent respondents are OBC category, followed by 22 percent respondents are SC, 8 percent respondents are general and remaining 1 percent respondent are ST. Educational status shows that out of 100 respondents 56 percent of respondents are Illiterate, 16 percent of respondents with primary level education, 16 percent of respondents with upper primary level education, 6 percent of respondents are high school level education, 4 percent of respondents are intermediate level education and remaining 2 percent of respondents are above intermediate level education. Marital status shows that out of 100 respondents 77 percent respondents are married, 13 percent and Unmarried, 8 percent respondents are widow and remaining 2 percent are divorced. In table, out of 100 respondent 48 percent respondents have semi-pakka house, followed by 25 percent respondents have pakka house, 22 percent respondents have kachcha house and remaining 5 have semi - kachcha house.

Table also shows that, out of 100 respondents 69 percent respondents have joint family and remaining 31 percent respondents have nuclear family.

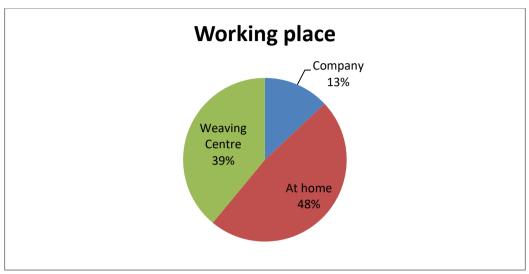


Figure: 1

Source: Primary Data

Figure- 1 show that almost 48 percent respondents do weaving at their home, followed by 39 percent respondents do weaving work at weaving centre and remaining 13 percent respondents do weaving work in carpet company.

 Table- 2: Working Hours

Working Hours	Percentage (%)
Less than 4 hours	10
4 to 6 hours	12
6 to 8 hours	26
8 to 10 hours	38
Above 10 hours	14

Source: Primary Data

Table- 2 shows that out of 100 sample respondents almost 38 percent respondents has to work for long hours like 8 to 10 hours in a day, followed by 26 percent respondents has to work for 6 to 8 hours in a day, 14 percent respondents has to work for above 10 hours in a day, 12 percent respondents has to work for 4 to 6 hours in a day and remaining 10 percent respondents has to work for less than 4 hours on daily basis.

Working Days in a Week	Percentage (%)
1 to 2 days	00
3 to 4 days	07
5 to 6 days	14
7 days	79

Table-3: Working Days

Source: Primary Data

Table- 3 shows that out of 100 sample respondents, almost 79 percent has to work for all 7 days in a week, 14 percent respondents have to work for 5 to 6 days in a week and remaining 7 percent respondents has to work for 3 to 4 days in a week.

Table- 4: Types of Carpet

Types of Carpet	Percentage of respondents (%)
Knotted	48
Tufted	34
Tibbeti	14
Durries	04

Source: Primary Data

Table- 4 shows that out of 100 sample respondents, 48 percent respondents are weaving knotted carpet, 34 percent respondents are weaving tufted carpet, 14 percent respondents are weaving tibbeti carpet and very few 4 percent respondents are weaving durries.

Table- 5: Job Satisfactions

Job Satisfaction	Percentage (%)
Satisfactory	46
Not satisfactory	54

Source: Primary Data

Table- 5 shows that out of 100 sample respondents only 46 percent respondents are feeling satisfied with their job and remaining 54 percent respondents are not satisfied with their job. Almost 50-50 chance of job satisfaction among the respondents in the study area.

Problems faced by respondents at workplace	Percentage of respondents (%)
Yes	70
No	30
Types of problem	Percentage (%)
Inadequate lightning	34
Sanitation and hygiene	33
Fight with other vendors	10
Harassment	01
Other	22

Table- 6: Problems at Workplace

Source: Primary Data

Table no. 6 shows the problem facing by the respondents at their workplace. Out of 100 respondent 70 percent respondents says they are facing various problem at their workplace. It has been found that out of 70 respondents 34 percent respondents are facing problem of inadequate lighting, another problem is of sanitation and hygiene issues that is faced by 33 percent respondents, 10 percent of them are facing the problem of quarrel with other weavers, 1 percent of them are facing the problem of harassment by other employees and remaining 22 percent respondents are facing other problems.

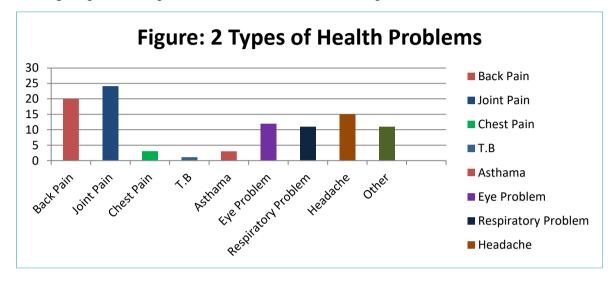
Table- 7: Health Problems

Health Problem	Percentage (%)
Yes	91
No	09
Types of Health Problem	Percentage (%)
Back Pain	20
Joint Pain	24
Chest Pain	03
Asthama	03
Eye Problem	12
Respiratory Problem	11
Headache	15

Source: Primary Data

Table- 7 shows that out of 100 sample respondents, 91 percent respondents had any health

problem. Above tabulation of data also shows that out of 91 respondents, 20, 24, 03 percent respondents suffer from back pain, joint pain and chest pain respectively. Whereas, 3 percent respondents by asthma, 13 percent by eye related problem, 15 percent by headache and remaining 11 percent respondents suffer from other health problems.



Source: Primary Data

Washrooms and Toilet Facility	Percentage (%)
Personal	28
Companies Washroom	37
Open Defecation	35

Source: Primary Data

Table- 8 shows that out of 100 sample respondents, at their workplace, 37 percent respondents are using the company's washroom and toilet, 28 percent respondents are using personal toilet and remaining 35 percent respondents are suffer the problem of open defecation.

Availability of medical facility	Percentage (%)
Yes	91
No	09
Preference of medical facility by respondents	Percentage (%)

Table- 9: Availability of Medical Facility at Work Place

Vol. 2, Issue 1, Jan-June 2024

Public hospital	64
Private hospital	34
Others	02

Source: Primary Data

Table- 9 shows that out of 100 sample respondents, 91 percent respondents answered there is proper medical facility available at their work place and remaining 9 percent respondents says there is no medical facility available at their work place. For medical purpose out of 91 respondent 64 percent respondents prefer public hospital, 34 percent respondents prefer private hospital and remaining 2 percent respondents prefer the other sources.

Table- 10: Addiction among Respondents

Addiction among respondents	Percentage (%)
Yes	10
No	90

Source: Primary Data

Table- 10 shows that out of 100 samples respondent 90 percent respondents are free from any addiction and remaining 10 percent had addiction of chewing pan.

Findings of the Study

- Majority, 37 percent of the respondents are belonging to age group of 31 to 40 years.
- 56 percent respondents are Illiterate and 16 percent have only received primary level education.
- Marital status of respondents revealed that about 77 percent women weavers are married.
- 66 percent respondents are belonging to Hindu community.
- 48 percent respondents do weaving work at their home.
- 38 percent respondents have to work for long hours like 8 to 10 hours.
- Majority, 79 percent of the respondents has to work all the seven days of the week.
- Majority, 34 percent respondents facing the problem of inadequatelighting and also 33 percent respondents are facing the problem of hygiene and sanitation at their workplace.
- 48 percent of the respondents are weaving knotted carpet.
- Only, 46 percent respondents are satisfied with their job.

- Majority, 91 percent of the respondents had any health problem. Almost 50 percent respondents are suffering from back pain, joint pain, chest pain among them.
- 35 percent respondents are suffering the problem of open defecation due to the lack of washroom and toilet facilities at their workplace.
- Majority, 91 percent respondents answered there is proper medical facility available near to their workplace. For medical purpose 64 percent respondents prefer public hospital.
- Majority 90 percent of the respondents are free from any addiction.

Limitations of this Study

The limitations of this study are following:

- The data have been collected from 100 women weavers in two development blocks of Bhadohi district.
- The facts presented are based on the information provided by the respondents.
- The study is focused only on the health and working conditions of women weavers in Bhadohi district.

Suggestions

- Illiteracy is the major problem among the women weavers. The first and foremost step for improving their health condition is the removal of illiteracy among them.
- At the macro level, the government to pass certain legislations with respect to provision of basic safety, hygiene and clean environment at weaving centre.
- Companyowners provide awareness regarding health issues at the workplace, so that weavers are ready to follow be guidelines listed to them.
- Regular medical camps can also be conducted to improve and monitor the health conditions of the weavers.
- The ergonomic shortcomings can be improved by proper workstation design and ergonomically designed hand tools.
- Preventive programs need to be developed for work related health problems.
- Authorities can educate the weavers on benefits they can claim through insurance available.

Conclusion

Women weavers are the most important for the development of carpet industry. The findings of the study revealed that women weavers are illiterate, working for long hours to earn just meagre income in month, faces health and sanitation issues.Weaving work is a high risk occupation as it develops various types of health problems, respiratory disorders and their complications among them. Poor environmental and unhygienic working conditions have to found the major reason behind these health problems. Lacks of awareness among the women weavers deteriorate already existing problems in the carpet industry. It becomes very important for the government and company owners to recognise the problem of women weavers, accordingly take necessary steps to improve their health and working conditions.

References

- Awasthi, S. Singh, P and Awasthi, N. (2018). Risk assessment of Handloom weavers for Musculoskeletal Disorder in durrie unit. The Pharma Innovation Journal. ISSN(P): 2349-8242.
- Boopathiraj, K. Balakrishnan, P. (2022). A Study on Health Status of Women Workers in Textile Industries of Aruppukottai Block. International Journal of Arts, Science and Humanities, Vol. 9. Issue-1.
- Choobineh, A. Shahnavaz, Hand Lahmi, M. (2004). Major Health Risk Factors in Iranian Hand-Woven Carpet Industry. International Journal of Occupational Safety and Ergonomics. Vol.10. No.1.
- Devi, MG and Lakshmi, VV. (2022). A Review on Occupational Health Problems in Carpet Weaving. Agriculture Association of Textile Chemical and Critical Review Journal.
- Jeeva, PS. (2022). A Study on Health Issues of Handloom Weavers in Lakshmiyapuram, Sankarankovil, Tenkasi, Tamilnadu, India. Journal of Xi'an Shiyou University, Natural Science Edition. ISSN: 1673-064X. Vol-18. Issue. 11..
- Joshi, S. K., Sharma, U. Sharma, P. Pathak, S.S. Sitaraman, S. and Verma C. R. (1994). Health Status of Carpet Weaving Children, Indian Pediatrics.
- Koiri, P. (2020). Occupational health problem of the handloom workers: A cross sectional study of Sualkuchi, Assam, North-East India. Clinical Epidemiology and Global Health. ISSN:1264-1271.
- Lakshmi, V. (2022). Occupational Health Hazards among Carpet Industry Workers: A Case Study of Bhadohi District. Research Thesis.
- Nazari, J. (2024). Health status of female carpet weavers in Home–Based Workshops: Mashginshahr villages. Research Square.

- Nazari, J. Mahmoudi, N. Dianat, Iand Gravelling, R. (2012). Working conditions in carpet weaving workshops and Musculoskeletal Complaints among Workers in Tabriz-Iran. Health Promotion Perspectives. Vol.2. No.2.
- Subedi, R.K and Banamala, S. (2015). Occupational Safety and Health among Carpet Factory Workers in a district of Nepal. Open Access Library Journal.
- Wani, KA. Jaiswal, YK. (2012). Risk Factors in Different Seasons of Carpet Industry in Kashmir, India. International Journal of Occupational Safety and Ergonomics. Vol.18.