



“A STUDY ON OCCUPATIONAL HEALTH PROBLEMS OF THE HANDLOOM WEAVERS IN VARANASI DISTRICT”

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ABSTRACT

The handloom sector has a unique place in our economy. It is necessary for all round development of any state to ensure that the economic and social benefits of development should reach all the sections of society. so it is basic need to firstly we know about the socio-economic conditions of handloom weavers .Handloom weavers were facing occupational health problems due to weaving work. The present study has been conducted in Varanasi district of Uttar Pradesh which is one of the major handloom hubs. It is based on primary and secondary data. The present study was conducted in two cluster-Ram agar and Bajardiha .Out of 350 Handloom Co-operative Society 15 Co-operative Society were randomly selected and each societies 10 Handloom weavers were randomly selected.50 Master weavers and 51 weavers working under master weavers, 49 Independent weavers were purposively selected from densely populated area of Varanasi of handloom weavers. Total 370 Handloom weavers were selected. A structured interview schedule was prepared and administered on respondents through personal interview method and observation method of data collection. Secondary data for study collected from the published and unpublished sources, annual reports, research, journals and various related websites. Data were analyzed with the help of appropriate statistical tools like Frequency, Percentage, Mean, Standard Deviation-test and x²test.The computer software SPSS 16 was also used to find results. for finding out the socio –economic background of respondents the B.G.Prasad’s scale of Socio Economic Status 2017 were used and results were drawn from it. The study results revealed that the Handloom weavers suffers lot of health problems like joint pain , abdominal related ,eye problems ,knee pain ,back pain. Handloom weaving is the only sources of their livelihood so we should have made an effort to improve their present working conditions. It is compelling us to revised the policies for their betterment.

KEY WORDS: Handloom, Handloom Weavers, Occupational Health Problem

INTRODUCTION

Mahatma Gandhi said “the spinning wheel is a nation’s second lung”. He considered the spinning wheel, a symbol of revolution.

The Handloom Sector is one of the largest unorganized economic activity after agriculture and constitutes an integral part of the rural and semirural livelihood. The tradition of weaving by hand constitutes one of the richest and most vibrant aspects of the Indian cultural heritage. Handloom weaving is largely decentralized and weavers in the sector are mainly from the vulnerable and weaker sections of the society, who weave for their household needs and also contribute to production in the textile sector. The weavers of this industry are keeping alive the traditional crafts of different States. Indian Textiles Industry has an overwhelming presence in the economic life of the country. Apart from providing one of the basic necessities of life, the textile industry also plays a pivotal role through its contribution to industrial output, employment generation and export earnings of the country. It contributes about 14% to India’s industrial production and 13% to the country’s export earnings. (Annual Report 2014-15).The Handloom sector plays an important role in the economic development of the rural

poor in the state. It contributes significantly by generating more employment opportunities and providing bread to the rural poor. The handloom sector is a major employment generating sector, as is also noted in the Approach Paper for the 12th Plan. As per the latest (3rd) Handloom Census of 2009-10, there are 23.77 lakh handlooms in the country, providing employment to 43.32 lakh handloom weavers and ancillary workers. This includes 38.47 lakh adult handloom weavers and ancillary workers, of which 24.72 lakh are engaged full time and 13.75 lakh on part time basis. The handloom sector has a unique place in our economy. This sector has been sustained by transferring skills from one generation to another.

Significance of the study:

Due to unique design and pattern, Banarasi Saree looks special and comes with some precious value. Despite of having so many heritage and cultural values, Banarasi Handloom industry is not as renovated as it should be. Weavers have to be facing a lot of challenges. Banaras is a hub of handloom Industry and providing direct and indirect employment to handloom weavers but even today, people related to this industry are not able to getting basic facilities which is required. Today Banarasi Brocade and Sarees witnesses growth in demand. Globally people are getting interested in the rich culture and tradition of Indian society and thereby there is increase in demand of Banarasi Brocade and Sarees all over the world. Keeping in view to support the handloom weavers, to make them economically independent and relive the handloom industry the evaluative study was done.

Objectives of the study:

- 1- To find out the personal and socio economic conditions of handloom weavers of Varanasi.
- 2- To find out the occupational health problems of the handloom weavers due to weaving.
- 3- To suggest the remedies to overcome the problems expressed by weavers based on the present study.

REVIEW OF LITERATURE

S. Mahendra Dev and et.al (2008) examined the problems and prospects of the handloom sector in Andhra Pradesh. The major finding of the study is that the monthly income of the household weaver is generally lower when he worked as member of the cooperative society and also as a weaver under the control of master weavers. The health hazards are very high in the weaving industry and as a result, expenditure on healthcare accounts for a considerable proportion of their income.

Singh(2014) stated in his study that the Handloom weavers in Banaras, who have inherited this occupation, are in pitiable condition owing to the poor socio-economic conditions. Majority of them are wage weavers who earn minimum wages in spite of working for more than ten hours a day. Almost fifty per cent of the community belonged to middle income group; who were engaged with Master Weavers or in the Co-operative Societies.

Geeta shree bori(2016) reported in her study that the posture adopted by the respondents while performing different activities in the handloom industry was found to be poor and improper. The respondents had to bend in almost 90° increases stress on low back of the user. Poor postures have found a great impact on health in the musculo-skeletal system. The respondents were found to adopt inadequate postures while performing various activities. These unnatural postures causing joint discomfort and severe musculo-skeletal problems in the long run. Joint discomforts were found maximum in finger, neck, waist, elbow shoulder and knee respectively. On the whole the perceived joint discomfort and musculoskeletal problems were high due to long period of service.

Various pre-loom activities like warping the loom require the worker to work in extremely poor and painful ergonomic conditions for hours. A detailed analysis of the production process for handlooms shows a direct impact on health of the weaver. Body pain, pulmonary problems, chronic bronchitis, decrease in hand-grip strength are observed in weavers. 94% of weavers with 10-30 years of work experience report pain in the knee, back, and neck. Eyesight problem is also a serious problem amongst weavers. This is directly connected to the nature of weaving which involves continuous and repetitive movement. (Report of the Working Group on Handlooms for Twelfth Five Year Plan.)

Tawheed Yousuf et.al(2013) revealed in his study that It was found that Sixty percent of the weavers reported facing health ailments: knee pain, back ache, headache, respiratory ailments and joint pain. Weavers work in an arrangement with contractor through the debt cycle and one of the respondents told of having a debt of Rs Three Lakh. Weavers have ready access to credit but their daily wages are reduced to Rs 180 –190 day. Awareness about reduced wages brings in the feeling of being exploited.

Dikchha Tiwari (2017) found in her study that Weavers and their families suffer from a range of health issues. They suffer from backache and poor eyesight as they work in dark dingy places sitting continuously for eight to nine hours. As most of the looms are situated in a house where there is no adequate light and ventilation, it results in weavers being afflicted by weak eyesight and serious respiratory

ailments, shortness of breath, cough and wheezing due to allergic reaction to dust and fungi in cotton, flax and hemp fibres. Also, the loom is partially embedded into the ground, and one needs to make a pit for weaver to be able to keep his legs. In the pit the temperature is different resulting in numbness of lower portion of the body.

T. Senthil Rajeshwari (2013) revealed in her study that around 69.3 percent of the respondents opined that the work environment caused headache, 62.3 percent of the respondents opined that the work environment caused anxiety disorder, 66 percent of the respondents opined that the work environment caused injuries, 66.7 percent of the respondents opined that the work environment caused skin rashes, 61.7 percent of the respondents opined that the work environment caused ulcers, 70 percent of the respondents opined that the work environment caused dust allergy problems.

RESEARCH METHODOLOGY

The present study has been conducted in Varanasi district of Uttar Pradesh which is one of the major handloom hubs. It is based on primary and secondary data. The present study was conducted in two cluster-Ramnagar and Bajardiha. Out of 350 Handloom Co-operative Society 15 Co-operative Society were randomly selected and each societies 10 Handloom weavers were randomly selected. 50 Master weavers and 51 weavers working under master weavers, 49 Independent weavers were purposively selected from densely populated area of Varanasi of handloom weavers. Total 370 Handloom weavers were selected. A structured interview schedule was prepared and administered on respondents through personal interview method and observation method of data collection. Secondary data for study collected from the published and unpublished sources, annual reports, research, journals and various related websites. Data were analyzed with the help of appropriate statistical tools like Frequency, Percentage, Mean, Standard Deviation-test and χ^2 test. The computer software SPSS 16 was also used to find results for finding out the socio-economic background of respondents the B.G.Prasad's scale of Socio-Economic Status 2017 were used and results were drawn from it.

RESULTS AND DISCUSSION

Results of the study were discussed according to the objectives of the study under the following sub headings.

Table : 1-Demographic Profile of the Respondents

Table No-1	Title	S No.	Categories	Number	%
1.1	Age (In Years)	1	Up-to 35	97	26.2
		2	36-50	183	49.5
		3	>50	90	24.3
			Total	370	100.00%
		Average age \pm sd =43.27 \pm 10.94, Range=(18-27)			
1.2	Sex	1	Male	309	83.5
		2	Female	61	16.5
1.3	Religion	1	Hindu	181	48.9
		2	Muslim	189	51.1
			Total	370	100
1.4	Caste	1	General	45	12.2
		2	OBC	159	43
		3	SC	166	44.8
1.5	Educational status	1	Illiterate	136	36.8
		2	Primary	60	16.2
		3	Middle	28	7.6
		4	High	74	20
		5	Inter	58	15.7

6	UG	9	2.4
7	PG	3	0.8
8	Professional	2	0.5

Table no. 1.1 reveals that majority of respondents (49.5%) belonged to age group of 36 to 50 years followed by 26.2% respondents belonged to the age group of 35 and below 35 years. Only 24.3% respondents belonged to the age group of 50 and above 50 years. Table 1.2 reveals that majority of respondents (83.5%) belonged to the male followed by 16.5% respondents belonged to female. Table 1.3 reveals that the majority of respondents (51.1%) were Muslims while (48.9%) respondents were Hindu. Table 1.4 reveals that majority of respondents (44.8%) belonged to the scheduled cast while (43.0%) respondents belonged other backward cast and only (12.2%) respondents belonged to general caste. Table 1.5 shows that majority of respondents (36.8%) were illiterate and 22.0% respondents had high school education and 16.2% respondents has primary level education. 15.7% respondents had intermediate level education and 7.6% respondents had middle level education and 2.4% respondents had under graduate level education. Very few only 0.8% had post graduate level education and 0.5% respondents had professional level education.

Table no.2

Distribution of Respondents views regarding suffering from ailments due to weaving on basis of their age, religion region and socio-economic status.

Sr. No	Age	Suffering from diseases					
		Yes		No		Total	
		No	%	No	%	No	%
1	up to 35	80	82.5	17	17.5	97	100.0
2	36-50	168	91.8	15	8.2	183	100.0
3	>50	76	84.4	14	15.6	90	100.0
	Total	324	87.6	46	12.4	370	100.0
$\chi^2 6.14, df = 2, P < 0.05$							
Religion							
1	Hindu	160	88.4	21	11.6	181	100.0
2	Muslim	164	86.4	25	13.2	189	100.0
$\chi^2 0.23, df = 1, P > 0.05$							
Region							
1	Urban	235	84.5	43	15.5	278	100.0
2	Rural	89	96.7	3	3.3	92	100.0
$\chi^2 = 9.46, df = 1, P < 0.01$							
socio-economic status.							
1	Lower	165	91.7	15	8.3	180	100.0
2	Middle	140	87.5	20	12.5	160	100.0
3	upper	19	63.3	11	36.7	30	100.0
$\chi^2 = 18.96, df = 2, P < 0.001$							

The table no 2 shows about views regarding suffering from disease due to weaving. The table show that 91.8% of respondents were of age 36 to 50 years were suffering from disease, 84.4% of respondents were age more than 50 years were suffering while 82.5% of respondents were of age up-to 35 years suffering from disease. The statistical test X2 shows that there was significant difference among suffering from disease due to weaving work and age of respondents. The table also show that 88.4% of Hindu respondents were suffering from disease followed by 86.4% of Muslim respondents. The statistical test X2 shows that there was no significant difference among suffering from disease due to weaving work and religion. The table reveals that 96.7% of rural respondents were suffering dieses due to weaving work followed by 84.5% of urban respondents. The statistical test X2 shows that there was significant difference among suffering from disease due to weaving work and region of respondents. The table also reveals that 91.7% of respondents belonged to lower income group were suffering for disease due to weaving works followed by 87.5% of middle income group respondents while 63.3% of respondents belonged to upper income group were suffering from disease. The statistical test X2 shows that there was significant difference among suffering from disease due to weaving work and socio economic status of respondents.

Table no. 3

Distribution of Respondents according to suffer from different ailments due to weaving work.

Sr. No	Ailments	Yes		No		Total	
		No	%	No	%	No	%
1	Eye problem	92	28.4	232	71.6	324	100.0
2	Knee problem	59	18.2	265	81.8	324	100.0
3	Abdominal Related	46	14.2	278	85.38	324	100.0
4	Joint pain	160	49.4	164	50.6	324	100.0
5	Back pain	139	42.9	185	57.1	324	100.0

The table no 3 shows that the majority of respondents 49.2% were suffering from joint pain due to weaving work. 42.9% respondents were suffering from back pain.28.4% respondents were suffering from eye problem. 18.2% respondents were suffering from knee problem. 14.2% respondents were suffering from abdominal problem due to weaving work.

Table no. 4

Age wise distribution of Respondents according to suffer from different ailments due to weaving work.

Sr. No	Ailments	Age (years)									
		Up to 35(80)		36-50 (168)		>50 years (76)		Total (324)		df=2	
		No	%	No	%	No	%	No	%	X ²	P
1	Eye problem	25	31.2	44	26.2	23	30.3	92	28.4	0.85	>0.05
2	Knee problem	17	21.2	34	20.2	8	10.5	59	18.2	3.97	>0.05
3	Abdonimal Related	13	16.2	18	10.7	15	19.7	46	14.2	3.87	>0.05
4	Joint pain	45	56.2	89	53.0	26	34.2	160	49.4	9.38	<0.01
5	Back Pain	32	40.0	71	42.3	36	47.4	139	42.9	0.92	>0.05

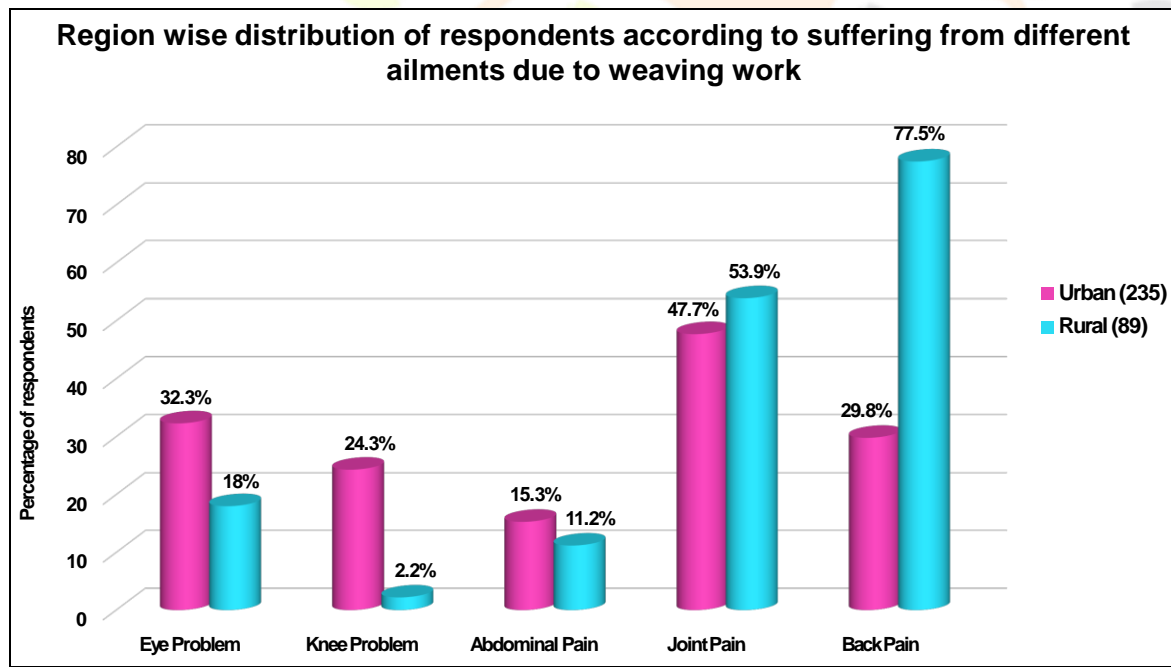
The table no 4 shows that the proportion of respondents age of up to 35 years had more suffering form different ailments due to weaving work than age of between 36 to 50 years except back pain but statistically the difference is significant regarding joint pain and in all other ailments respondents of all age groups had significantly same suffering conditions.

Table no. 5

Region wise distribution of respondents according to suffering from different ailments due to weaving work.

Sr. No	Ailments	Region							
		Urban (235)		Rural (89)		Total (324)		df=1	
		No	%	No	%	No	%	X ²	P
1	Eye Problem	76	32.3	16	18.0	92	28.4	6.55	<0.01
2	Knee Problem	57	24.3	2	2.2	59	18.2	20.99	<0.001
3	Abdominal Pain	36	15.3	10	11.2	46	14.2	0.88	<0.05
4	Joint Pain	112	47.7	48	53.9	160	49.4	1.02	>0.05
5	Back Pain	70	29.8	69	77.5	139	42.9	60.06	<0.001

Table no 5 show that the proportion of urban weavers had more suffering conditions regarding different ailments than rural weavers except joint-pain and back-pain due to weaving work. But statistically the different is significant regarding eye-problem, knee-problem and back-pain. And in all other disease rural and urban weavers had significantly suffering same conditions due to weaving work.



FINDINGS-

- 1-The findings of the present study reveals that majority of respondents (49.5%) belonged to age group of 36 to 50 years.
- 2- Majority of respondents (83.5%) belonged to the male followed by 16.5% respondents belonged to female.
- 3- Majority of respondents (51.1%) were Muslims.
- 4-Majority of respondents (44.8%) belonged to the scheduled cast and only (12.2%) respondents belonged to general caste.
- 5- Majority of respondents (83.0%) were married. majority of respondents (36.8%) were illiterate.

6-Majority of respondents 49.2% were suffering from joint pain due to weaving work. 42.9% respondents were suffering from back pain. 28.4% respondents were suffering from eye problem. 18.2% respondents were suffering from knee problem. 14.2% respondents were suffering from abdominal problem due to weaving work.

7-The proportion of respondents age of up to 35 years had more suffering form different ailments due to weaving work than age of between 36 to 50 years except back pain.

8-The proportion of urban weavers had more suffering conditions regarding different ailments than rural weavers except joint- pain and back-pain due to weaving work.

9-Majority of the respondents(91.7%) belonged to lower income group were suffering for disease due to weaving works.

10-The statistical test X² shows that there was significant difference among suffering from disease due to weaving work and socio economic status of respondents.

Recommendations

In the light of findings of the study , researchers suggests and recommends with her own observation and experience for the future studies to the researchers, policy makers, administrators, government and non-government organizations , economist and social activists.

During research, it was also observed that due to continuous engagement in the weaving activities, weavers have to face a lot of physical and health challenges. Majority of them are suffering from knee joint pain, waist pain, stomach ache, blur vision due to weaken eye sight and T.B. etc. Pit loom weavers have to face the drawback of the design as they have to sit for many hours in a pit by folding both the legs and putting entire body weight on the stomach, resulting knee and stomach problems. Individual handloom weavers are not able to access minimum basic facilities like, house, drinking water, air and food nutrition due to which they have to suffer a lot of health and hygiene issues.

It is highly recommended that, we need to work to develop a technology so that weaver no need to sit in situation so long. During research, it was revealed that weaver's main problem belonged to knee and back pain. So the need of the hour is to develop such technology so that they can use and work for long time without any health concerns. Government need to engage its research and development wings to develop such technology so that up-gradation of industry can be achieved.

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