



Women of urban Punjab in hosiery industry

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ABSTRACT

Women workers in the unorganized sector like hosiery units deserve special emphasis in view of the double burden of work that distinguishes women from men. Hosiery industry is the hub of Ludhiana city, where women work as casual workers to do minor hand operations on manufactured hosiery garments. Present study was conducted to examine the work environment of women workers in hosiery units of Ludhiana city. Results revealed that maximum number (60.83 %) of respondents was in age category of 35-60 years; married (71.83 %); belonged to Hindu religion (57.50 %) and were matriculates (53.33 %). They lived as nuclear family 88.73 per cent. Monthly income earned by most of them (90.00 %) was from Rs. 1000-5000/-. Most of them (63.33 %) lived in rented house, but almost all of them (98.33 %) lived in *Pacca* house only. Most of them (69) were of normal body type. Almost all (116) the respondents were right handers.

INTRODUCTION

India being one of the fastest growing economies, the economic contribution of women in is also growing at a steady pace. Most Indian women by and large undertake "productive work" under the economic compulsion but indirectly start playing important role in development of the country. The working conditions of women in this sector are not good and women's work is rarely recognized.

Ludhiana being the industrial hub of the state, contribution towards growth of the nation and provides employment to disadvantaged population (especially migrants) in terms of low education, poverty, lack of technical expertise and socio-economic insecurities. Women who have natural skill of doing fine works with ease, and require no additional training to do jobs like handling thread and needle; get employment in garment sector very easily. Jobs like spinning, weaving, knitting, stitching, embroideries, crocheting and finishing the garments are mostly done by female workers.

However, employment conditions of these workers are far from being satisfactory. Most of them enter unorganized

work sector as unskilled or semi- skilled wagers, paid at the whims of the employers and do not have any legal protection, securities and training incentives. Plight of such female workers is multifold, being doubly burdened and are also physically weaker and socially backward segment of population. Generally women who have to face financial crises at home are forced to work for meager wages and without social security. So, the present study was conducted to analyse the work scenario and problems of women workers in hosiery units.

MATERIAL AND METHODS

A pre-structured and pretested interview schedule was used to evaluate work environment in hosiery industry. For conducting the field survey, out of industrial hosiery hubs of Ludhiana city, two localities (Sunder Nagar and Shiv Puri) were purposively selected. The selected localities had many hosiery units in close vicinity. Out of each selected locality, six hosiery units were also purposely selected where women workers have strong strength. Out of each unit, 10 female workers were randomly selected. Criteria for selecting these workers were; who were regularly employed by hosiery owners and who have

been working there for 3-5 years. Thus the total constituted sample was 120 respondents. The results were tabulated, analyzed and presented in the form of tables and pie diagrams.

OBSERVATIONS AND ANALYSIS

Demographic profile included age, marital status of respondents, type and size of family, they belonged to and analysis of their educational level. Table 1 showed that maximum number of respondents (60.83 %) belonged to age category of 31-60 years and minimum number of respondents (2.50 %) was above 60 years of age. Mean age of respondents was 35.60 years (± 12.36). Madhok (2005) also indicated in her study on status of women workers in construction industry in her report on National Commission on Women, that none of the women was above 40 years of age, as contractors prefer young women only. She further disclosed that as construction work is extremely taxing, most of the women were young (average age 25). Some of them had joined the workforce even before they reached their teens. Widows constituted 3.33 per cent of sample; only 20.83 per cent respondents were single and 71.83 per cent respondents were married.

Bharara (2012) also has disclosed in her study on female labourers in construction site of Ludhiana city that majority of the respondents were married and were of mean age less than 30 years, Representation of this particular age group was therefore found in both the studies and thus in line with the present study. Table 1 also revealed that majority (57.50 %) of respondents belonged to Hindu religion, followed by 32.50 per cent respondents who were Sikhs and 10.00 per cent Muslims. It was an interesting revelation that in a prominent city of Punjab, female workforce in unorganised sector did not belong to the main religion of the state. However, it is equally interesting to note that otherwise the female work participation rate (21.5 %) is higher among Sikhs than the overall female work participation rate in Punjab (GOI, 2004). But these findings do not match the presented data; which may be due to the fact that women workers in hosiery industry (unorganised sector) may have migrated from other states and thus were non Sikhs.

It was also observed in the table, that 88.33 per cent respondents were living in nuclear families and only 11.66 per cent respondents were living in joint families. Trend of nuclear families is a recent phenomenon which has swept almost all the urban families. Bharara (2012) too presented similar results in her study on construction workers where she disclosed that families migrated as couples and men brought along their wives and children and not their extended families; resulting into maximum nuclear family trend among them. Maximum number of respondents (57.50 %) had family size varying from 3 to 5 members, and 40.83 per cent of respondents had family size above 5 members. Very few respondents (1.66 %) had family size upto 2 members only. Norm of small family did not find favour with this segment of society, who perhaps believed in

'more hands more earnings' philosophy. Gupta (2012) also reported similar findings; while studying women workers in *papad* making industry.

Table 1 also disclosed that majority (53.33 %) of respondents had studied up to matric; 36.66 per cent were illiterate and only 10.00 per cent had completed their graduation. Education level of women in unorganised work sector is mostly low. Major compelling force to enter into unorganised work sector actually is low education of women and this fact was also observed by Gupta (2012) in her study on women in *papad* rolling activity for 'Lijjat Papad Industries'.

Demographic feature	No.	Percentage
Upto 35	44	36.66
36-60	73	60.83
Above 60	3	2.50
Mean (\pm S.D.)		35.60 (± 12.36)
Married	91	71.83
Single	25	20.83
Widow	4	3.33
Sikh	39	32.50
Hindu	69	57.50
Muslim	12	10.00
Joint	14	11.66
Nuclear	106	88.33
Up to 2	2	1.66
3 to 5	69	57.50
Above 5	49	40.83
Mean (\pm S.D.)		5.18 (± 1.68)
Illiterate	44	36.66
Upto Matric	64	53.33
Graduation	12	10.00

Socio- economic characteristics :

Socio - economic characteristics of a population when expressed statistically includes dimensions, such as age, sex, education level, income level, marital status, occupation, religion, birth rate, death rate, growth rate, average size of a family, average age at marriage. For the present study; it covered only personal income of respondents, their total family earnings; the assets family owned including house, conveyance and the liabilities of the families in the form of loans etc.

It is seen in Table 2 that majority of respondents (90.00 %) received Rs. 1000-5000 per month; 5 per cent each of respondents received up to Rs. 1000 and above Rs. 5,000 as their personal income. Majority (55.00 %) of respondents had family income falling in the income category of Rs. 5,000-10,000;

43.33 per cent of respondent had earnings above Rs. 10,000 per month and only 1.66 per cent of respondents earned a meagre amount of Rs. 5,000 per month as their family income. Similar pattern of earnings was seen in the studies conducted by Bharara (2012) who interviewed women working in construction industry; and Nauriyal (2006) who studied women engaged in spinning industry of Ludhiana city.

Table2 : Socio - economic profile of selected women workers in hosiery units (n=120)		
Socio economic profile	No.	Percentage
Monthly personal income (in Rs.)		
Upto 1000	6	5.00
1000-5000	108	90.00
Above 5000	6	5.00
Monthly family income (in Rs.)		
Upto 5000	2	1.66
5000-10000	66	55.00
Above 10000	52	43.33
Family assets		
<i>House (multiple responses)</i>		
Owned	44	36.66
Rented	76	63.33
<i>Kaccha</i>	1	0.83
<i>Pacca</i>	118	98.33
Both (<i>Kaccha and Pacca</i>)	1	0.83
<i>Conveyance</i>		
Only cycle	29	24.16
Only scooter	6	5.00
Cycle and scooter both	2	1.66
Three wheeler	1	0.83
Cycle and three wheeler both	1	0.83
Family liabilities		
Loan to be paid	3	2.50

It is also revealed in Table 2 that maximum (98.33 %) number of respondents lived in *pacca* houses, very few (0.83 % each) of respondents lived in *kaccha* houses and both *pacca* and *kaccha* houses. These results are in line with the results of Gupta (2012); who while studying women workers in *papad* making industry disclosed that hardly any family lived in a *kaccha* house. It was also found that majority (63.33 %) of respondents lived in rented house and 36.66 per cent of respondents were found living in their own houses. It is very clear from these results that most workers, especially those engaged in unorganised sector in the state are either migrants or shifted temporally near to the place of work and therefore they did not own houses and lived on rent. However, they lived in *pacca* houses only. Gupta (2012) too enfolded in her study that 66 per cent of the respondents lived in their own houses whereas rest 34 per cent lived in rented houses.

It was also revealed from Table 2 that as far as their meagre assets are concerned; a house, some furniture, some conveyance or a bit of valuables were the only possessions these families had. Table disclosed that 24.16 per cent of respondents owned just a cycle, 5.00 per cent of respondents owned scooter, and 1.66 per cent of respondents owned a three wheeler as conveyance as well as for earning their living. It was also observed that only 0.83 per cent of respondents used both cycle and three wheeler and 1.66 per cent of respondents owned both cycle and scooter; to be used as conveyance. It is therefore evident that they generally used cycle for transportation purposes.

As regards the liabilities of the respondents and their families, it was overwhelming to note that only negligible population of them were under debt. Only 2.50 per cent of respondents had loans to pay off.

Physical characteristics :

Physical characteristics of a worker are the one dimension to determine and influence the amount and type of drudgery one can feel in a particular type of work. More importantly if the work is done in un-ergonomic workplace; and the scenario of work is in 'unorganized work sector' as in case of present study, their workplace is in hosiery industry. It is important to study all physical aspects of the worker *viz.*, their weight, height, and Body Mass Index particularly; to ascertain her physical health status which plays a major role in handling manual labour; major kind of work performed in any unorganised work sector.

It is revealed in Table 3 that maximum (61.66 %) number of respondents fall into weight category of 51-65 kg.; one fourth (25.00 %) of respondents had to weight less than 50 kg and 13.33 per cent of respondents weighed more than 65 kg. Mean weight of respondents under study was 55.67 kg \pm 8.65. These findings are also supported by the past studies conducted by Bharara (2012); Gupta (2012) and Nauriyal (2006) as their results are in line with the present investigation.

It was also revealed in Table 3 that majority (51.66 %) of respondents belonged to height category of 156-165 cms. It may be noted that 35.83 per cent of respondents were of height not more than 155 cms and 12.50 per cent respondents were having height more than 165 cms. Mean height of the interviewed workers under study was 157.73 cms \pm 6.27. These findings are in line with the results reported by Nauriyal (2006) and Bharara (2012). As regards Body Mass Index (BMI) of the respondents, which was calculated by using values of their height and weight; it was observed that 56.66 per cent of respondents had BMI (Body Mass Index) above 22; 31.66 per cent of respondents had BMI in the range of 18-22 and 11.66 per cent of respondents had BMI less than 18. Mean BMI of the respondents was 22.44 \pm 3.69. Bharara (2012) and Nauriyal (2006) also revealed in their studies that BMI of women workers

Table 3 : Profile of worker, work and work place in hosiery units

Profile	No.	Percentage
Upto 50	30	25.00
51-65	74	61.66
Above 65	16	13.33
Mean (\pm S.D.)	55.67 (\pm 8.65)	
Upto 155	43	35.83
156-165	62	51.66
Above 165	15	12.50
Mean (\pm S.D.)	157.73 (\pm 6.27)	
Upto 18	14	11.66
18-22	38	31.66
Above 22	68	56.66
Mean (\pm S.D.)	22.44 (\pm 3.69)	
Upto 5	13	10.83
5-6	77	64.16
Above 8	30	25
Mean (\pm S.D.)	7.53 (\pm 1.47)	
Upto 23	4	3.33
24-27	58	48.33
Above 27	54	45
Mean (\pm S.D.)	29.10 (\pm 2.38)	
Upto 5	14	11.66
5-8	99	82.50
Above 8	7	5.83
Mean (\pm S.D.)	7.08 (\pm 1.82)	
Upto 35	14	11.66
35-65	102	85.00
Above 65	4	3.33
Mean (\pm S.D.)	47.27 (\pm 14.20)	
Upto 2	85	70.83
2-4	25	20.83
Above 4	10	8.33
Mean (\pm S.D.)	2.10 (\pm 1.67)	
Up to 2.40	61	50.83
240-3.20	35	29.16
Above 3.20	24	20.00
Mean (\pm S.D.)	2.41 (\pm 114.37)	

*BMI was calculated by Quetlet's index = Weight (kg) / Height² (m)

was 18.54 and 18.30, respectively. BMI was seen to be very much within the normal range, as it should be in ideal range between 18.5 and 25. An average BMI of a population should be between 21 or 22 (ICMR, 2010), thus indicating that respondents enjoyed normal health status.

The temporal demands on work are the prime deriving forces which need to be studied objectively. For the scope of present study these included working hours per day, working days per month; average distance travelled to reach workplace and area allotted per worker to perform hosiery related work in hosiery units. Daily and weekly time spent in hosiery related work at home was also covered under this study; as large of number of women carried hosiery related work to their

respective homes.

Data in Table 3 revealed that observed mean working hours/day during the peak season in hosiery units were close to regular work shift of hours with mean of 7.53 hours (\pm 1.47). It clearly indicates that workers were hired for the recommended period only and were not made to over work, as specified in guidelines by International Labour Organisation (1919). This figure is also in close range to what respondents agreed upon when they revealed that they spend on an average 7 hours 8 minutes per day in hosiery work. Average working days in a month were calculated to be approximately 27 days with a mean of 29.10 days (\pm 2.38). This indicates that generally these workers were getting Sundays off; unless some of them were compelled to work for over time or they themselves opted to work for overtime. There were no other holidays observed by hosiery unit owners except for main festivals like *Holi*, *Diwali* and *Vishkarma* day.

Average distance travelled by the respondents was 2 kms and 10 meters (\pm 2.38) on each work day; and as disclosed earlier, respondents covered this distance on foot. It indicates that generally women had to travel longer distances to work place. Hosiery units in Ludhiana are generally located in the outer ring of the city; that may be the reason these workers have to travel more to reach there. Average area allotted per worker was 2.41 square meters (\pm 1.14) and this space is enough to sit and work comfortably.

Average time devoted to hosiery work daily was observed to be 7 hours 08 minutes (\pm 1.82) and; this figure is also close to what respondents had disclosed themselves. Average weekly time devoted to hosiery work in hours was worked out to be 47 hours and 27 minutes (\pm 14.20).

It can thus be concluded that the assessed parameters of work and workplace were not in violation of Labour Laws; however, no women – oriented special incentives were provided by the hosiery unit owners. However in developed world the welfare of female workers in properly taken care off by providing them with facilities such as separate toilet, rest and changing facilities for women (McLean, 2003).

Body type :

According to the Indian Council of Medical Research (ICMR) report 2010; most Indian women from lower strata are of lean body type. This may be due to poor nutrition, gross neglect of health issues and low socio-economic position of these women in society.

However, women worker in garment or hosiery industry, do not portray such gloomy picture and generally fall in normal body type as also seen in Nauriyal's (2006) study on women workers in spinning industry. In the present study also, Fig.1 revealed that maximum number of (57.50 %) of respondents had normal body type followed by 26.66 per cent respondents who had lean bodies and very few *i.e.* 15.83 per cent were

found to be obese. As discussed earlier undernourishment and hard labour in unorganised work sector may have been the cause of lean body of such unskilled or semi skilled workers. However, those who are engaged in hard manual labour were found to be leaner as reported by Bharara (2012). These results are also supported by findings of Gupta (2012).

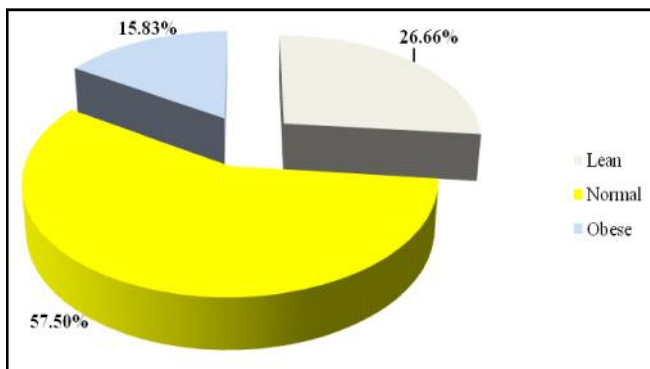


Fig. 1 : Distribution of selected women worker in hosiery units according to body type

Hand use :

Globally, one segment of people is left hand users and few are also capable of working with both hands. It was therefore important to know about the hand use preference of interviewed hosiery workers. It can be seen from Fig. 2 that almost all the respondents (96.66 %) used right hand while working, whereas only 3.33 per cent of respondents used left hand for doing work. None of the respondent was found using both hands. Although the hand use does not put any significant limitations on workers, but in India, generally tools are not specifically designed for left hand users and the most common to pinpoint is scissors.

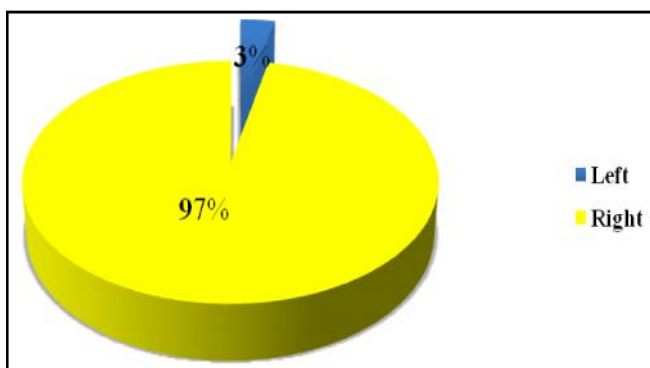


Fig. 2 : Distribution of selected women worker in hosiery units according to hand use (n=120)

In present study, use of scissors was very frequent by workers; and the use was uncomfortable and stressful for left

hand users. It was a relief to note that hardly any worker faced this difficulty as majority were right hand users. Although Flimel (2012) had analysed the selected ergonomic problems of left handed workers in production activity and found life little tough for them.

Conclusion :

The results of present study revealed that maximum number (60.83%) of respondents were in age category of 35-60 years; married (71.83%); belonged to Hindu religion (57.50%) and were matriculates (53.33%). They lived as nuclear family (88.73%); and size of the family was 3-5 as reported by 57.50 per cent of them. Monthly income earned by most of them (90.00%) was from Rs. 1000-5000/- ; but their families income was Rs. 5000-10,000/- (as reported by 55.00 % of respondents) and had hardly any loan to re-pay. Most of them (63.33 %) lived in rented house, but almost all of them (98.33 %) lived in *Pacca* house only. Ownership of conveyance was less as only 24.16 per cent respondents owned a cycle. Mean weight of respondents was 55.67 kg (± 8.65); their mean height was 157.73 cms ± 6.27 and most of them (56.66 %) had BMI above 21. However most of them (69) were of normal body type. Almost all (116) the respondents were right handers.

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