A STUDY ON WORK AND HEALTH RELATED DISCOMFORTS COMPARISON BETWEEN BOUTIQUE AND HOME BASED TAILORS IN TIRUPATI, ANDHRA PRADESH

V. Jhansirani, Sri Padmavati Mahila Visvavidyalayam

ABSTRACT

Now a days tailoring is chosen like employment from young to adult women, especially low family income women to support their families financially. Due to this Women sewing machine operators are need to manage well both the family and work, because of this women tailors are facing lot of work and health related discomforts like stress, fatigue, head ache, eye problems, neck and shoulder pain, back ache, leg cramps, leg pains and swelling, knee pains, gastric problems, over heat, urinary track infections etc. are mainly in this sector for reaching their targets. The present study is an attempt to analyze work area, compare discomforts between boutique and home based tailors and to suggest some solutions to resolve this work and health related discomforts in both boutique and at home. A sample of 120 women tailors were selected from boutique and self-employed (home based tailors) in Tirupati. Interview scheduled was prepared with multiple questions to collect the information from women tailors who are willing to participate in this. The results shows that maximum percentage of the boutique based women tailors faced neck and shoulder pain, back ache, right leg pain at hip joint area compare with home based tailors. Major percent of boutique tailors were over stressed. And both women tailors were expressed their work area does not have enough space and good lighting.

Key words: Tailor, Health problems, Boutique, Entrepreneur, Stress.

INTRODUCTION

Tailoring one of the ways to earn money for low and middle income group women especially who are unemployed, widows, unmarried girls and who want to support their families financially. Before choosing tailoring women are undergoing training programs for three to six months. This sector is very challenging and need more concentration to fulfill the customer needs. Now a days tailoring is chosen like employment from young to adult women, especially low family income women to support their families financially. Due to this Women sewing machine operators are need to manage well both the family and work, because of this women tailors are facing lot of work and health related discomforts like stress, fatigue, head ache, eye problems, neck and shoulder pain, back ache, leg cramps, leg pains and swelling, knee pains, gastric problems, over heat, urinary track infections etc. are mainly in this sector for reaching their targets. In present days almost all the tailor are using motorized machines to complete work fast to reach the dead line to get customer satisfaction and appreciations for more orders (Anne Mary Joseph (2021). Tailors are getting health problems due to long hours of working on motorized machines. The body feels so numb due to the vibrations coming from the machine. In our survey they said that even after stopping the machine, the feeling of vibration does not go away for some time. Bhavini B. Patil et al., (2020) revealed that tailoring sector is one of the regular minor scale sectors where the women, come from below income groups are working in huge numbers. Based on the Tailoring Workers Forum, the members include those who are employed as sewing machine operators, Surface ornamentation technicians and owed business tailors (Akanbi, O, G; Ikemefuna, A N (2010).

Figure 1
COMMON HEALTH PROBLEMS OF WOMEN TAILORS

Objectives of the study

a. To find out common work and health issues faced by women tailor in Tirupati
b. To compare work and health related discomforts between boutique and home based tailors mainly menstrual problems.
c. To give some suggestions to resolve the health problems

METHODOLOGY

The current study is an attempt to know and compare the various works and health related problems of boutique and home based women tailors especially menstrual problems (Anand, E. (2018). A sample of 120 women tailors were selected from boutique and self- employed (home based tailors) in Tirupati, Andhra Pradesh. Interview scheduled was prepared with multiple questions to collect the information from women tailors who are willing to participate in this research (Ararso Tafese, Anisha Nega, M. (2014) The results were discussed and tabulated below following the heading;

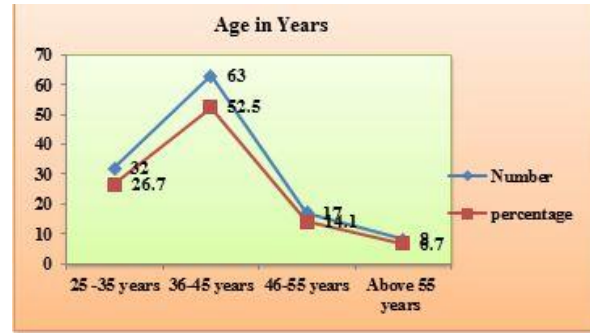| S. No	Variable	Classification	Number	Percentage
Table 1 DISTRIBUTION OF WOMEN ACCORDING TO THEIR AGE				
1	Age in years	25 -35 years	32	26.7
		36-45 years	63	52.5
		46-55 years	17	14.1
		Above 55 years	8	6.7
		Total	**120**	**100**

Figure 2
DISTRIBUTION OF WOMEN TAILORS ACCORDING TO THEIR AGE

The table 1 and Figure 2 indicates that the 26.7 percent of the women tailors were aged between 25-35 years, 52.5 percent of the women tailors were 36-45 years, 14.1 percent of the women were 46-55 years and very less percent that is 6.7 percent of the women aged above 55 years (Choobineh Alireza, Tabatabaei Sayed Hamidreza (2015). The results revealed that the maximum percent of the women tailors in Tirupati aged between 36-45 years.

Table 2 DISTRIBUTION OF WOMEN ACCORDING TO THEIR CATEGORY			
S. No	**Category**	**Number**	**Percentage**
1	Unmarried women	19	15.8
2	Unemployed women	72	60
3	Widows	18	15
4	House wife	11	9.2
	Total	**120**	**100**

The Table 2 shows that the major percent (60%) of the women want to support their families financially. Which means that most of the women were chosen tailoring to share their husband's burdens for the well-being of their families (Delleman N J, and Dul J. (2002).

Table 3 ASSESSMENT OF ORGANIZATION OF WORK						
S.No	**Particulars**		**Boutique based tailors**		**Home based tailors**	
			Number	**Percentage**	**Number**	**Percentage**
1	Experience	<5	7	11.7	11	18.3
	(years)	05-Oct	12	20	9	15
		Oct-20	37	61.7	33	55
		Above 20	4	6.7	7	11.7
2	Duration of work (hours)	<8	-	-	37	61.7
		08-Dec	60	100	23	38.3
3	Break during work	Yes	-		60	100
		No	60	100	-	-
4	Break of fixed timings	Yes	-		60	100
		No	60	100		

5	Working pattern	Single			60	100
		With others	60	100	-	-

The Table 3 revealed that 61.7 percent of the boutique based tailors and 55 percent of the home based tailors have 10-20 years of experience in tailoring field (Genebra CV, Maciel NM, Bento TP (2017). All the boutique based tailors and 38.3 percent of the home based tailors duration of work was above 8 hours and majority (61.7%) of the home based tailors were worked below 8 hours. Continuous and working more than 8 hours without break is the main reason for their health problems (Kalınkara V et al (2011). Sabreen Asadullah Jamro, Muhammad Asif Sheikh, Hira Islam Rajput, Muhammad Jawwad Baig Chughtai, Amanullah, Asia Ayaz Jamroo (2018) Elevated prevalence of musculoskeletal pain was associated with age less than 35, daily working hours more than eight hours, both gender, year of experiences more than ten, weekly working hours more than eighteen hours, working posture and nature of job were also effective in prevalence of musculoskeletal disorders.

Table 4
ASSESSMENT OF WORK PLACE

S.No	Statements	Answer	Boutique based tailors		Home based tailors	
			Number	Percentage	Number	Percentage
1	Having sufficient space to work comfortably	Yes	-	-	-	-
		No	60	100	60	100
2	Working on power operatd sewing machines	Yes	60	100	22	36.7
		No	-	-	38	63.3
3	Sitting in constant posture for long time	Yes	43	71.7	-	-
		No	17	28.3	60	100
4	Use Soft paded seat	Yes	-	-	-	-
		No	60	100	60	100
5	Seat height adjustable	Yes	--	-	-	-
		No	60	100	60	100
6	Seat with back support to rest	Yes	-	-	-	-
		No	60	100	60	100
7	Having enough light at work place	Yes	47	78.3	33	55
		No	13	21.7	27	45
8	Use foot and arm rest while working on machine	Yes	-	-	-	-
		No	60	100	60	100
9	A place to relax for a while in between work	Yes	-	-	60	100
		No	60	100	-	-

(Anne Mary Joseph (2021) the fundamental element of work areas are the work surface, storage, and main machine or Instrument. For doing several works all these three elements are important to fulfil the necessities of the task and employee. The organization and planning of work centres are wanted for reducing distresses were certain for position analysis (Mir Masih Moslemi Aghili, Hasan Asilian, Parinaz Poursafa (2012).

The Table 4 indicates that all the boutique based and home based tailors werent have sufficient space to

work comfortably. All the boutique based and home based tailors were worked on power operated machines and only 36.7 percent of the home based tailors were used normal machines for their work (Nag, A., Desai, H., & Nag, P. K (1992).

Majority (71.1) of the botique based tailors were sat constantly in one position for long time and continuing their work due to hectic work schedule. All the home based tailors were taken break in between the work. Both the BBT and HBT were not used any soft padded seat (Zhang FR, He LH, Wu SS, Li JY (2011), foot and arm rest while working on sewing machine, they were used seat without back support and that seats weren't have height adjustment. Major percent (78.3 & 55) of BBT and HBT was not having proper lighting facilities at their work place.

All the BBTs were not having any specific place to take rest between the works. Working without rest in constant position, was not using adjustable seat height chairs and seat without back support were also the main reasons for their health problems.

S.No	Health problems	BBT (N=60)	HBT (N=60)
1	Head ache	3 (5)	9 (15)
2	Neck, shoulder and Back pain	26 (43.3)	22 (36.7)
3	Leg cramps, leg pains and swelling	14 (23.3)	19 (31.7)
4	Eye problems	7 (11.7)	5 (8.3)
5	Gastric problems	1 (1.7)	3 (5)
6	Blood pressure due to Stress	9 (15)	2 (3.3)

Table 5
COMMON HEALTH PROBLEMS FACED BY BOUTIQUE AND HOME BASED TAILORS

T.Muthulakshmi and R.Immanuel (2012) revealed that women tailors have been suffered by backbone pain, skin infections, problematic eye, urinary infections and breathing problems (Balogun, M.O (2015). Protective measures are followed to rise in productivity (Bhavini B (2020). This can contribute to productivity, protection from work-related health difficulties, physical and emotional well-being (Nag, A., Desai, H., & Nag, P. K (2011).

The table 5 shows that the majority percent (43.3 & 36.7) of BBTs and HBTs were suffered with neck, shoulder and back pain (Rempel, D. M., Wang, P. C (2007). Compare with BBTs 31.7 percent of HBTs were suffered with leg cramps, leg pains and swelling due to using of foot operated sewing machines. They need to use more pressure to run the sewing machine. 15 percent of the BBTs were also taking stress because of heavy work pressure, continuous work and more working hours with out break (Roy SH, De Luca CJ, Casavant D A. (1989) (Sabreen Asadullah Jamro, Muhammad Asif Sheikh (2018) (Wang PC, Harrison RJ, Yu F, Rempel DM, Ritz BR (2010).

Table 6
COMPARISON OF MENSTRUAL PROBLEMS BETWEEN BOTIQUE AND HOME BASED TAILORS

S. No	Menstrual problems	BBT	HBT	P value
		Frequency	**Frequency**	
1	Over bleeding	2(1.666667%)	4(3.333333%)	0.00(Significant)
		1(0.833333%)	26(21.66667%)	

		1(0.833333%)	9(7.5%)	
		22(18.33333%)	14(11.66667%)	
		34(28.33333%)	7(5.833333%)	
2	Abdominal, back and leg pains	0(0%)	6(5%)	0.00(Significant)
		2(1.666667%)	14(11.66667%)	
		2(1.666667%)	6(5%)	
		20(16.66667%)	19(15.83333%)	
		36(30%)	15(12.5%)	
3	Irritation	0(0%)	4(3.333333%)	0.00(Significant)
		2(1.666667%)	20(16.66667%)	
		4(3.333333%)	13(10.83333%)	
		19(15.83333%)	10(8.333333%)	
		35(29.16667%)	13(10.83333%)	
4	Anxiety	2(1.666667%)	4(3.333333%)	0.00(Significant)
		4(3.333333%)	23(19.16667%)	
		4(3.333333%)	14(11.66667%)	
		21(17.5%)	11(9.166667%	
		29(24.16667%)	8(6.666667%)	
5	Lack of concentration	0(0%)	2(1.666667%)	0.00(Significant)
		5(4.166667%)	12(10%)	
		4(3.333333%)	21(17.5%)	
		17(14.16667%)	14(11.66667%)	
		34(28.33333%)	11(9.166667%)	
6	Irregular periods	2(1.666667%)	4(3.333333%)	0.00(Significant)
		5(4.166667%)	21(17.5%)	
		3(2.5%)	10(8.333333%)	
		21(17.5%)	14(11.66667%)	
		29(24.16667%)	11(9.166667%)	
7	Fatigue	0(0%)	4(3.333333%)	0.00(Significant)
		0(0%)	14(11.66667%)	
		2(1.666667%)	8(6.666667%)	
		21(17.5%)	20(16.66667%)	
		37(30.83333%)	14(11.66667%)	
8	Itching and rashes due to over heat	0(0%)	5(4.166667%)	0.00(Significant)
		4(3.333333%)	17(14.16667%)	
		0(0%)	8(6.666667%)	
		21(17.5%)	18(15%)	
		35(29.16667%)	12(10%)	

9	Reduction of period days	1(0.833333%)	4(3.333333%)	0.00(Significant)
		1(0.833333%)	19(15.83333%)	
		2(1.666667%)	12(10%)	
		27(22.5%)	12(10%)	
		29(24.16667%)	13(10.83333%)	
10	Late periods	2(1.666667%)	2(1.666667%)	0.00(Significant)
		3(2.5%)	15(12.5%)	
		1(0.833333%)	14(11.66667%)	
		19(15.83333%)	16(13.33333%)	
		35(29.16667%)	13(10.83333%)	

The Table 6 indicates the comparison of menstrual health problems between boutique and home based tailors which reveals that there was significant difference found in the BBT and HBT (0.000) at 0.01 level (Schibye B, Skov T, Ekner D, Christiansen JU, Sjøgaard G (1995). The results allows to conclude BBTs need more rest during working in menstrual time not only in menstrual time in their daily work also they need to take rest in between to avoid their health problems. HBTs are taking proper rest between works that is why they have less health issues compare with BBTS. Because of work pressure they were taking more stress due to this changes happened in BBTs menstrual cycle and they felt irritation, anxiety etc (T.Muthulakshmi and Dr.R.Immanuel (2022).

CONCLUSION

Continuous and working more than 8 hours without break is the main reason for their health problems. Working without rest in constant position, was not using adjustable seat height chairs and seat without back support were also the main reasons for their health problems. Hectic work schedule also one of the reason for their stress. Because of work pressure they were taking more stress due to this changes happened in BBTs menstrual cycle and they felt irritation, anxiety etc. HBTs were taking proper rest so they have less complication compare with BBTS.

SUGGESTIONS TO OVERCOME HEALTH PROBLEMS

- The Present research paper suggests that women tailors should use various safety percussions and good position without negotiating their work.
- If they use seat with back support can reduce the lower back pain. They should keep shoulders in rest position and straight neck while doing work on sewing machine.
- Using arm and foot rest can decrease the pains, cramps and swelling in legs.
- Boutique owners also need to give break between work and they should arrange specific space to take rest in menstrual and other time.
- Proper planning and adjusting timings can overcome the stress related problems.
- If they walk for a few minutes every half an hour or one hour, the blood circulation will be better and avoid sitting in constant position also.
- Doing of eye exercises can avoid eye related problems. Working in proper ventilation and lighting also reduce the breathing and eye problems.
- Taking nutritious food and eating in time also reduce the health issues. Drinking more water without neglect between the works also important.

REFERENCES

Akanbi, O, G; Ikemefuna, A N, Tailor's chair and musculoskeletal disorders in Nigeria, Ergonomics SA: Journal of the Ergonomics Society of South Africa, 2010, 22(2), 14-32 17.

Anand, E., (2018). A Case Study on Status of Tailoring Trained Women in Sherkhan Garden Slum at Kodambakkam, International Journal of Current Advanced Research, Vol.7, No.8 (H), pp.15157 – 15160.

Anne Mary Joseph (2021), Work, Workspace Organisation and Body Discomforts of Women Working in Tailoring Units, Volume 65, Issue 4, Journal of Scientific Research, Pp.120-125.

Ararso Tafese, Anisha Nega, Manay Kifle, Wakjira Kebede, Predictors of occupational exposure to the neck and shoulder musculoskeletal disorders among sewing machine operators of garment industries in Ethiopia, Journal of environmental and public health, 2014, 2 (6): 577-583.

Balogun, M.O., Fagbola, M.A., Oladoyin, V.O., Sigbeku, O.A., Ogbuagwu, C.G., Leigh, G.M., and Omokhodion, F.O., (2015). Workplace Hazards and Health Problems of Tailors in Ibadan, Nigeria. Occupational and Environmental Health Journal, Vol. 4, No 2, December, pp.69- 76.

Bhavini B. Patil and Suma M. Hasalkar., (2020). Ergonomic Assessment of Women Tailors in Dharwad City. Ind. J. Pure App. Biosci. Vol.8, No.3, pp.372-377.

Choobineh Alireza , Tabatabaei Sayed Hamidreza, Tozihian Marzieh, Ghadami Fatemeh, Musculoskeletal problems among workers of an Iranian communication company, Indian journal of occupational and environmental medicine, Indian journal of occupational and environmental medicine, 2015, 11(1), 32.

Delleman N J, and Dul J. (2002). Sewing maxchine operation: Workstation adjustment, working posture, and workers' perceptions. International Journal of Industrial Ergonomics, 30: 341-353.

Genebra CV, Maciel NM, Bento TP, Simeão SF, De Vitta A. Prevalence and factors associated with neck pain: a population-based study. Brazilian journal of physical therapy. 2017 Jul1; 21(4):274-80.

Kalınkara V et al (2011). Anthropometric measurements related to the workplace design for female workers employed in the textiles sector in Denizli, Turkey Eurasian J. Anthropology. 2(2):102−111.

Mir Masih Moslemi Aghili, Hasan Asilian, Parinaz Poursafa, Evaluation of Musculoskeletal Disorders in Sewing Machine Operators of a Shoe Manufacturing Factory, Ergonomics Journal, 2012, 36 (7), 793-800.

Nag, A., Desai, H., & Nag, P. K, Work stress of women in sewing machine operation. Journal of human ergology, 1992, 21(1), 47-55.

O.J.Sealetsa and A. Thatcher, Ergonomics issues among sewing machine operators in the textile manufacturing industry in Botswana, 2011, Work: A Journal of Prevention, Assessment and Rehabilitation, 2011, 38 (3), 279-289.

Rempel, D. M., Wang, P. C., Janowitz, I., Harrison, R. J., Yu, F., & Ritz, B. R, A randomized controlled trial evaluating the effects of new task chairs on shoulder and neck pain among sewing machine operators: the Los Angeles garment study. Spine journal,2007 32(9), 931-938.

Roy SH, De Luca CJ, Casavant D A. (1989). Lumbar muscle fatigue and chronic lower back pain. Spine (Phila Pa 1976). Sep;14(9):992-1001..

Sabreen Asadullah Jamro, Muhammad Asif Sheikh, Hira Islam Rajput, Muhammad Jawwad Baig Chughtai, Amanullah, Asia Ayaz Jamroo (2018), work-related musculoskeletal disorders among tailors, International Journal of Pharmaceutical Science and Health Issue 8, Vol.2 (March-April 2018) ISSN 2249 – 5738, pp. 18-25

Schibye B, Skov T, Ekner D, Christiansen JU, Sjøgaard G, Musculoskeletal symptoms among sewing machine operators, Scandinavian journal of work, environment & health,1995, 427-43.

T.Muthulakshmi and Dr.R.Immanuel (2022), Occupational Health Hazards of Women Tailors in Valliyur Block, Tirunelveli District, e-ISSN 2320 –7876, Vol.11, Iss.8, pp. 2242-2248.

Wang PC, Harrison RJ, Yu F, Rempel DM, Ritz BR, Follow-up of neck and shoulder pain among sewing machine operators: The Los Angeles garment study, American journal of industrial medicine, 2010, 53 (4), 352-36

Zhang FR, He LH, Wu SS, Li JY, Ye KP, Wang S, Quantify work load and muscle functional activation patterns in neck-shoulder muscles of female sewing machine operators using surface electromyogram, Chinese medical journal, 2011,124(22), 3731-3737