

## Mental Health Status of Female Workers in Private Apparel Manufacturing Industry in Bangalore City, Karnataka, India

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### Abstract

**Introduction:** Work plays a vital role in the lives of most people. It is not only the means of earning a living and of maintaining self esteem but also a source of constant strain and stress. It is essential to recognize how factors affect women's mental health in the garment industry since there has been no study done so far regarding the mental health status or any other associated factors, in this sector.

**Objective:** The objective of this study was to assess the mental health status of the female garment workers and the associated factors.

**Methodology:** It was a descriptive study conducted in three units of a private garment factory with a sample size of 350 who were randomly selected. General Health Questionnaire-28 and the Subjective Well-Being Questionnaire was used to assess the mental health.

**Results:** The study showed that 45.1% of the study population had General Health Questionnaire (GHQ) Likert scoring  $\geq 5$ , which is considered significant. General health questionnaire revealed that the prevalence of somatic illness is 11%, persons with symptoms of anxiety are 7.6%, social dysfunction is 7.1% and symptoms of depression are 6.8%. Trend analysis showed that there is no significant association between age, education, marital status, years of experience and number of hours of overtime.

**Conclusions:** The overall GHQ positive (probable cases) workers were found to be as high as 39%. GHQ was not associated significantly with demographic factors like age,

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education, marital status, and occupational factors like years of experience, overtime done.

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**Key words:** Mental Health, Female garment workers, General health questionnaire

## **Introduction**

A sound mind in a sound body has been recognized a social ideal for many centuries. Mental health is not exclusively a matter of relation between persons; it is also a matter of relation of the individual towards the community, the society, the social institutions which for a large part guides his/her life, and which determines his/her way of living, working, leisure.<sup>1</sup> Work plays a vital role in the lives of most of the people. It is not only the means of earning a living and of maintaining self esteem but also a source of constant strain and stress. For that reason the world of work is important in terms of mental health and emotional disturbances. Working women have multiple roles to play as a wife, a mother, a housewife and an employee. Being subject to dual demands of home and work place they are liable to face a crisis of adjustments which may cause strains and stresses.<sup>2</sup> How women cope with these myriad pressures and tensions, and what toll it takes in terms of their mental and physical health, needs to be determined.<sup>3</sup> It is essential to recognize how the socio-cultural, economic, legal, infrastructural and environmental factors that affect women's mental health are configured in each country or community setting.

The garment industry, which has been traditionally a low profile sector, has shown a tremendous growth over the last two decades. In Bangalore the workforce is made up largely of women workers. There has been no study done so far regarding the mental health status or any other associated factors, in this sector.

The objective of this study was to assess the mental health status of the female garment workers and the associated factors.

## **Methodology**

This is a descriptive study conducted in three units of a private garment factory in India. A list of female garment workers in each of these factories who have completed at least one year of working in the factory was done with the active co-operation from the HRD of these factories.

Using the number of workers as the basis the sample size was found to be 350. The workers were selected using the simple random number table. Each of these workers was interviewed using a pre-tested schedule. Self administered questionnaires were also given

consisting of the General Health Questionnaire-28<sup>4</sup> and the Subjective Well-Being Questionnaire.<sup>5</sup> The General Health Questionnaire (GHQ) is a self-report psychiatric screening instrument with a variety of forms range from 12 to 60. The GHQ is developed from a pool of 140 items that are believed to cover all aspects of adjustments and “felt distress”. These concepts include: depression and unhappiness, anxiety and felt psychological disturbance, social impairment, and hypochondriasis. The GHQ-28 is a scaled version using Likert scoring methods. A cut off of 5 was used to measure abnormal GHQ scoring. The data was analyzed using standard statistical software packages.

## **Results**

The mean age of the female workers was found to be 26.5yrs (SD  $\pm$  6.42) with a range between 18 to 55 years. A majority of the females (60%) had studied at least up to high school. 56% of the workers are married and hence had the dual responsibility of managing the house and the work. The estranged women and widows were also found in small numbers (6%) who had joined the work for maintaining the house since many of them were single parents. The selected workers had an average of 5.9 years of experience and ranging between 1 to 22 years

General health questionnaire revealed that the prevalence of and symptoms of depression was present in 6.8% of the women interviewed and anxiety was present in 7.6%(Table 1), It was also observed that somatic symptoms was positive in 11%, social dysfunction in 7.1%(Table 2) The study showed in the study population the GHQ Likert scoring  $\geq 5$  which is considered as the cutoff for probable mental illness <sup>[4]</sup> was present in 45.1% (Table 3). These results reveal hypochondriasis, symptoms of anxiousness, social impairment and feeling of dejection, unhappiness, felt psychological disturbance respectively. It was also observed that Chi square for linear trend applied for age (Table 4) showed that the women in 20-24 year and  $\geq 45$  age groups showed 2 and 6 times at risk of becoming mentally ill respectively than the other age groups though this was not significant. Trend analysis for education showed that the risk decreases with education (Table 4) though again there was no significance. Linear trend for marital status years of experience, number of hours overtime done did not show any significance. The assessment of subjective well-being showed that 65% of the women had positive well-being and 35% had negative well-being.

## **Discussion**

Physical and mental health is not important for a worker only in his or her personal life, a worker's health is also very important for the productivity of an industry. Since Labour standard is linked with international trade these days, more attention should be paid

towards better physical and mental health of the workers for the benefit of not only the workers, but also the garment factory owners.<sup>6</sup> There is growing body of evidence though rare in Indian context to substantiate that occupational stress is causal factor in mental health of the employees.<sup>7</sup> In this study we found that with the screening tool of GHQ-28, 39% had some kind of mental illness. A number of workers have been reported in recent years regarding the relationship between different background variables and mental health of industrial workers. The findings have been different for many of these researchers.<sup>8</sup> In one of the earliest studies, Fraser in 1947 found that 10 percent of the British industrial population suffers from disabling neurotic illness and 1/5<sup>th</sup> of the workers from minor nervous disorders.<sup>9</sup> Ganguli's pioneering study on Indian industrial workers shows the extent of neurosis as 12 percent.<sup>10</sup> Since GHQ is only a screening tool this study was not able to detect neurotic or psychotic disorders. A further investigation has to be planned out in this aspect.

A study done to investigate the relationship and predictive efficiency of age and educational qualification of the industrial worker with their level of mental health indicated that the level of mental health of the industrial workers is significantly and negatively related to age but the level of education is significantly and positively related.<sup>8</sup> Kornhauser found that young industrial workers have higher mental health than the middle aged at upper skill levels; that they are equal in mental health at the ordinary semi-skilled level; and that they have lower mental health in low-level routine jobs.<sup>11</sup>

But the outcome of our study showed that there was no significant relationship between mental health and age or education. Byrant and Veroff found measures of subjective mental health (unhappiness strain) positively and significantly related to age. They also found negatively related factors (lack of gratification, feelings of vulnerability and uncertainty) with age. They also found that the measures of subjective mental health (lack of self confidence, strain as negatively and uncertainty as positively) related to one's educational qualification.<sup>12</sup> Studies have also shown that the overall rates of mental illness were seen to be high among the married women.<sup>13</sup> It was observed that in this study there was no significant association between marital status and mental illness. In a study done by the ICMR and Department of Science and Technology in 1987 in a multicentric study shows that the prevalence of severe mental morbidity in Bangalore among the females is 9.3 per 1000 population.<sup>14</sup> This shows a wide difference between the general population and the garment workers. The occupation of these workers may be a stressor to explain this gap. Accidents, absenteeism, turn over and losses of productivity are the problems associated with mental health of the employees. There are studies done which suggests that personal factors are responsible for 80-90% of the industrial accidents. There is very meager statistical data available Indian industries let alone garment workers.

It is seen that women attend doctors more often than do men as demonstrated in many studies. Studies using standard questionnaires show that the point prevalence of depressive symptoms varies from 13% to 20%. Paykel in 1991 has offered explanation based on the social effects of life stress, of social vulnerability factors and absence of

support, and of women's role in society.<sup>15</sup> In another major study the prevalence of depression was found to be 9.1%.<sup>16</sup>

## **Conclusions**

The garment industry is mostly export oriented. The workers in these factories are mostly women especially from the low socio-economic status. Most of the selected workers have an experience of at least 1 to 9 years with the mean experience of 4 years. Majority of the workers were satisfied with the work environment and enjoyed a good relationship with their colleagues and supervisors. The workers agreed that their life had changed after joining the job with respect to better quality of life, economic independence, confidence, and increased self esteem. The overall GHQ positive (probable cases) workers were found to be as high as 45%. 65% of the workers were found to have a positive well-being, while 35% of the workers were found to have negative well-being. GHQ was not associated significantly with demographic factors like age, education, marital status, and occupational factors like years of experience, overtime done.

## **Recommendations**

There are very few studies in India which shows the prevalence of mental disorders among garment workers. This study shows a substantial proportion of the workers have some form of mental illness. This prevalence of minor psychiatric morbidity among the workers raises the issue that the occupational health services which already exists should also concentrate on detection, treatment and prevention of mental disorders. The level of organizational input to corporate mental health can vary from non-existent to comprehensive, with the provision of full leisure, sports and recreation facilities, complete medical cover to include mental illness, employee assistance programmes (EAPs) which identify and assist troubled employees (often with the provision of counseling services).

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**Table 1:** GHQ Subscales- Anxiety/Insomnia and Severe Depression

Scores	Anxiety		Severe Depression	
	Frequency	Percent	Frequency	Percent
0	163	46.6	196	56.0
1	64	18.3	58	16.6
2	45	12.9	33	9.4
3	37	10.6	30	8.6
4	14	4.0	9	2.6
<b>&gt;=5</b>	<b>27</b>	<b>7.6</b>	<b>24</b>	<b>6.8</b>
Mean score(SD) Range	1.36 ( $\pm$ 1.69) (0-7)		1.09 ( $\pm$ 1.63) (0-7)	

**Table 2:** GHQ Subscales - Somatic symptoms and Social dysfunction

Scores	Somatic Symptoms		Social Dysfunction	
	Frequency	Percent	Frequency	Percent
0	143	40.9	179	51.1
1	69	19.7	67	19.1
2	35	10.0	42	12.0
3	33	9.4	18	5.1
4	30	8.6	19	5.4
<b>&gt;=5</b>	<b>40</b>	<b>11.4</b>	<b>25</b>	<b>7.1</b>
Mean score(SD) Range	1.65 ( $\pm$ 1.89) (0-7)		1.25 ( $\pm$ 1.75) (0-7)	

**Table 3:** Overall GHQ Score

Scores	Frequency	Percent
0	77	22.0
1	38	10.9
2	19	5.4
3	30	8.6
4	28	8.0
<b>&gt;=5</b>	<b>158</b>	<b>45.1</b>
Mean Scores (SD) Range	5.34( $\pm$ 5.42) (0-24)	

**Table 4:** Screened positives for Mental illness and Associated factors

Variable	Category	Total (N=350)	Screened negative (n=213)	Screened positive (n=137)	Odds Ratio	Remarks
<b>Age</b> Mean =26.5 SD= ± 6.4 Range = 18-55	15-19	55 (15.8%)	39 (70.9%)	16 (29.1%)	1	$\chi^2 = 0.248$ p=0.6187 Not Significant
	20-24	106(30.3%)	58(54.8%)	48(45.2%)	2.02	
	25-29	98 (28%)	62 (63.2%)	36 (36.8%)	1.42	
	30-34	53(15.1%)	31(58.4%)	22(41.6%)	1.73	
	35-39	20(5.7%)	14(70%)	6(30%)	1.04	
	40-44	10(2.8%)	7 (70%)	3(30%)	1.04	
	<b>&gt;=45</b>	<b>8(2.3%)</b>	<b>2 (75%)</b>	<b>6 (25%)</b>	<b>6.09</b>	
<b>Education</b>	Illiterate	29 (8.2%)	13 (44.8%)	16(55.2%)	1	$\chi^2 = 1.87$ p=0.171 Not Significant
	Primary	32(9.2%)	18(56.3%)	14 (43.7%)	0.63	
	Middle	77(22%)	50(65%)	27 (35%)	0.44	
	High School	182(52%)	114(62.6%)	68(37.3%)	0.48	
	PUC	25(7.2%)	15(60%)	10(40%)	0.54	
	Degree	5(1.4%)	3 (60%)	2(40%)	0.54	
<b>Marital Status</b>	Married	196 (56%)	118 (60.2%)	78 (39.8%)	1	$\chi^2 = 0.061$ p=0.804 Not Significant
	Unmarried	126 (36%)	78 (61.9%)	48 (38.1%)	1.07	
	Widowed/ Separated	28(8%)	17(60.7%)	11 (39.3%)	1.05	
<b>Years of experience</b> Mean = 5.9 SD= ± 3.9 Range = 1-22	1-4	158 (45.1%)	97 (61.3%)	61 (38.7%)	1	Chisquare = 0.132 p=0.716 Not Significant
	5-9	137 (39.2%)	78 (57%)	59 (43%)	1.2	
	10-14	39(11.1%)	28 (71.8%)	11(28.2%)	0.6	
	15-19	11(3.2%)	8 (72.7%)	3(27.3%)	0.62	
	<b>20-25</b>	<b>5 (1.4%)</b>	<b>2(40%)</b>	<b>3 (60%)</b>	<b>2.39</b>	
<b>Hours of overtime</b> Mean = 7.0 SD= ± 8.9 Range = 0-40	0-10	271(77.4%)	170 (62.7%)	101(37.3%)	1.00	Chi square For trend = 2.986 p=0.083 Not Significant
	11-20	46 (13.1%)	28 (60.8%)	18(39.2%)	1.08	
	21-30	28(8%)	13(46.4%)	15 (53.6%)	1.94	
	<b>31-40</b>	<b>5(1.5%)</b>	<b>2(40%)</b>	<b>3 (60%)</b>	<b>2.52</b>	