

# Health Status of Spinning Women Workers

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**Abstract:** *The economic status of women is now accepted as an indicator of a society's stage of development. Textile industry is one of the sectors which furnish semiskilled jobs to women population in our country. Women workers unlike the majority in the informal sector have been exposed to rigorous work, discipline, fixed working hours, specific production norms etc. In spite of the improvement in textile technology the work environment has not changed much. Research reports highlighted that women working in textile industry suffer from musculoskeletal aches, respiratory problems and anaemia etc., considering this, an attempt has been made to assess the health status of textile women workers. The investigation was carried out in the urban areas of Tirupur and Erode Districts of Tamilnadu. Totally 150 adult women performing varied textile tasks and aged between 20 to 60 years were identified randomly from spinning (n=150)(carding, blowing and spinners sections) industries. . About 18 per cent of spinners respectively showed symptoms for protein calorie malnutrition and 68 per cent of workers from spinning industries respectively suffer from anaemia. Respiratory symptoms classified under mild and moderate degree were prevalent among less than 50 per cent of textile women workers. Similarly, 20-40 per cent of them had symptoms for musculoskeletal aches many of them suffered from backache, joint pains, headache and general tiredness.*

**Keywords:** backache, joint pains, headache and general tiredness, musculoskeletal aches

## 1. Introduction

Cotton and synthetic textile industry in India is the largest industry in the country accounting for 14percent of industrial output and providing employment to around 35 million workers. Industrialization is necessary for prosperity and at times for the survival of nation. The production is the real wealth of a nation. Only initialization is not enough, real benefit is brought by continuous top performance of the workers which is only possible by their good health. The ill health is compounded by various socioeconomic factors such as poverty, lack of education, poor working conditions, excess working hours, and poor diet<sup>1-3</sup>. Due to exposure to the cotton dust in the worksites the workers are at risk of suffering from various chronic respiratory illnesses like byssinosis, chronic bronchitis. The workers are under pressure to keep up with the production demands, working long shifts, at night and overtime<sup>4</sup>. To achieve production targets, the workers usually operate machinery continuously at one specified place in the production line due to the physical demands and the repetitive nature of their work; factory workers are especially susceptible to musculoskeletal disorders<sup>5</sup>. Pain in the back and large joints such as the knee and shoulder joints are among the most common health complaints in industrialized societies among females. The women do not give much importance to their health. They try to work even when they are sick and weak, just to supplement the family income. The health hazards of the women working in the textile industry are much higher compared to their counter parts in other sectors. Against this background we conducted the study among spinning women employed in textile industry; we had the following objectives:

1. To find out the morbidity profile and musculoskeletal disorders. of the spinning women workers
2. To assess the respiratory symptoms among spinning women workers

## 2. Material Methods

Today is an era of women who have diverse role to play in society. To elicit the information on health status of textile workers totally 150 non pregnant and non lactating women working in different sections of of spinning factory (carding, blowing and spindle) aged between 20-60years were identified randomly from spinning industries located at Tirupur and Erode. Interview schedule was used to collect information on a predesigned proforma regarding demographic data work pattern, nutritional profile and occupational health hazards. Occupational health problem are important component of the total mobility disability and mortality among workers. Considering this, the morbidity pattern, Respiratory problem related to pulmonary disease were assessed using medical research council respiratory questionnaire<sup>6</sup> and musculoskeletal symptom prevalent among these workers were examined.

## 3. Results and Discussion

Textile workers are susceptible to various morbid conditions by virtue of workplace and working conditions. These conditions may range from chronic respiratory disease due to cotton dust inhalation to anaemia because of nutritional deficiency and varicose vein to low back pain due to working postures. Considering this, in the present study general morbid conditions and with special reference to respiratory diseases, musculo skeletal problem and morbid conditions examined among spinners Presented in table 1.

**Table 1:** Morbid conditions among spinning women workers

N=150

Morbid Conditions	Blowing		Carding		Spindle		Total 150	%
	n	%	n	%	n	%		
General Weakness	20	75	18	30	43	48	81	54
Gastric Problem	15	56	7	21	21	23	43	29
Dental stains	14	52	15	45	3	3	32	21
Dental caries	7	4	3	9	6	7	16	11
Sinus	-	-	1	3	3	3	4	3
Hypertension	6	22	4	12	5	6	15	10
Respiratory problem	2	7	1	3	5	6	8	5
Fever	9	33	19	58	28	31	56	37
Anaemia	20	74	24	73	58	64	102	68
Tonsillitis	-	-	6	-	9	10	15	10
Tuberculosis	-	-	2	6	1	1	3	2
Eye	5	19	3	9	19	21	27	18
Ear	2	7	1	3	53	59	56	37

From the above table-1 that 74, 30 and 48 per cent of women working in blowing, carding and spindle sections respectively showed symptoms for general weakness. Gastric problems were prevalent among 56, 21 and 33 per cent women in blowing, carding and spindle sections of spinning units respectively. Dental problem such as dental stains and dental carries were observed among 16 per cent of spinners. Sinus symptoms related to asthma was seen among 3 per cent in carding and spindle section of women. Similarly 10 per cent and 2 per cent of spinners were suffering from tonsillitis and tuberculosis. Prevalence of anaemia among spinning workers was about 60 per cent. It was found that 18 and 37 per cent of women had eye and ear problems respectively due to working condition.

**Respiratory symptoms among spinning women workers**

Table 2 shows that the workers in spinning industry are exposed to high level of cotton dust. The most frequent common respiratory health problems were burning of eyes (36 per cent), headache (51 per cent) cough (20 per cent) and nasal irritation (33 per cent). Similarly 22,27 and 37 per cent of spinners suffering from sneeze, sputum and fever respectively. Similarly 18,19 and 12 per cent of women showed symptoms such as sleeplessness, nausea and vomiting respectively related to problem which is attributed to long working hours (16 hrs/day). Further 27 per cent had cough with sputum. Symptoms related to

prevalence of asthma, chronic bronchitis and tuberculosis were identified among 3,2 and 3 per cent respectively. Various workers have reported that dusty sections like carding, ring frame, drawing, spinning etc were found to be associated with higher prevalence of bronchitis compared to the non-dusty sections. Conditions related to musculoskeletal problems were assessed among spinning women workers.

**Table 2:** Respiratory symptoms among spinning women workers

N=150

Respiratory symptoms	Gin houses		Gutter		Sorting		Total	%
	n	%	n	%	n	%		
Mild Burning of eyes	12	44	11	33	31	34	54	36
Headache	7	26	13	39	57	63	77	51
Fever	9	33	19	58	28	31	56	37
Sneezing	8	30	15	45	10	11	33	22
Sputum	6	22	12	36	22	24	40	27
Cough	4	15	7	21	19	21	30	20
Nasal irritation	9	33	6	18	34	38	49	33
Numbness on hand	6	22	3	9	14	16	23	15
Moderate Rhinitis	5	19	9	27	1	1	15	10
Allergy	2	7	1	3	-	-	3	2
Sleeplessness	3	11	4	12	20	22	27	18
Nausea	3	11	5	15	21	23	29	19
Vomiting	2	7	7	21	9	10	18	12
Sore throat	4	15	6	18	29	32	39	26
Cough with sputum	3	11	8	24	29	32	40	27
Severe Asthma	1	4	-	-	4	4	5	3
Influenza	-	-	-	-	2	2	2	1
Pneumonia	-	-	-	-	1	1	1	7
Tuberculosis	1	4	2	6	1	1	4	3

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**Musculoskeletal Problem**

Prevalence of pain in arms (22 per cent) hands (33 per cent) and legs (37 per cent) were observed. Similarly 37, 3 and 31 per cent of women working in blowing, cardings and spindle respectively reported that they have low back pain. Likewise, about 21 per cent working in different

sections of spinning units expressed that they have difficulty and pain in knees while bending and this could be attributed to wrong posture during working. Other condition such as pain in joints and neck were noticed in 34 and 40 per cent of workers respectively shown in

Table-3 The occupational health include musculoskeletal disorders, speciously pain, sprain defragment of the lower back, wrist joint of fingers and feet affected 32 per cent of textile workers

**Table 3:** Musculoskeletal symptoms among spinning women works

N=150

Musculo Skeletal symptoms	Blowing		Carding		Spinners		Total	%
	n	%	n	%	n	%		
Weakness / Plain								
a) Arms	2	7	9	27	32	36	33	22
b) Hand	4	15	4	12	41	46	49	33
c) Leg	3	11	5	16	47	52	55	37
Back pain	10	37	1	3	28	31	39	26
Difficulty Bending at your knees	4	15	9	27	19	21	32	21
Pain in Joints	8	30	6	18	37	41	51	34
Pain in Neck	1	4	-	-	59	66	60	40

#### 4. Conclusion

The higher prevalence of morbidity, musculoskeletal problem and mild to moderate degree of respiratory problems is alarming. Different sorts of morbidities with special reference to musculoskeletal problems among industry workers are giving a warning signal. Therefore it is the actual need of the hour for right action for solving their job related disputes so that they can have a better living.. To make conscious about work-related musculoskeletal problems audiovisual training program suitably designed by experts for different sectors of industry can be implemented to get best results. Periods of rest in between long hours of work, provision of seats with adjustable back rest for support to lumber region may be helpful to reduce low back pain. Proper counselling and health education through campaign can work as magic to improve their health condition.

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