

# Occupational Health Hazards Among Ginning Women Workers

**KEYWORDS** 

Respiratory problem, morbidity, musculoskeletal problem, ginning women workers

Head and Associate professor Department of Nutrition and Dietetics, Dr. NGP Arts and Science College, Coimbatore

Associate professor, Department of Nutrition and Dietetics, PSG Arts and Science College, Coimbatore

The present cross sectional study was carried out in the urban areas of Tirupur and Erode districts of Tamilnadu .Totally 150 nonpregnant, nonlactating adult women performing varied textile tasks and aged between 20 to 60 years were identified randomly from ginning (n=150) industry. About 43 per cent and 85 per cent of ginners respectively showed symptoms for protein calorie malnutrition and 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.

### INTRODUCTION

Women throughout the world play critical role in economic growth and development and their contribution have an impact on households, communities and national economies. Women contribute to the family economy, by participating in the labour force, thereby earning an income and contributing to the family and also by undertaking the primary responsibility for household maintenance, childcare and there by sustain the family<sup>1</sup>. The economic status of women is now accepted as an indicator of a society"s stage of development. Participation of women in the work force has also been found to be an important element in the adoption of the small family norm, essential for the achievement of the twin goals of economic development and population planning. It is of utmost importance therefore that the country makes full and effective use of its human resources by providing economic empowerment to women who constitute 50 per cent of it. The women are ready to work for very low wages and for longer hours under exceedingly inhospitable conditions of work. Textile industry is the only industry to have employed women workers since long time. Occupational health is branch of community medicine which deals with the effects of occupation (or) work place on human health .Every occupation is associated with one or other ill effects one such occupational group is cotton textile worker. Ginning is one of the un organized occupation of textile industries ,which employs more number of women. Ginning textile women workers are susceptible to various health hazards by the more inhalation of cotton dust 2. Hence this study was under taken to assess the health status of the selected working women in ginning mills.

## **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 performing varied textile tasks and aged between 20-60years were identified randomly from ginning industries located at Tirupur and Erode. Of the total, 150 women working in different sections of ginning factory (gin house, gutter and sorting) were included for the study. Interview technique was used to collect information on a predesigned prohoma 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>3</sup> and musculoskeletal symptoms prevalent among these workers were examined.

## RESULTS AND DISCUSSION

Textile workers are susceptible to various morbid conditions by virtue of workplace and working conditions. These conditions may ranged 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 observed among ginners Presented in Table 1.

Table - 1
Morbid conditions among ginning women workers
N=150

| Morbid Conditions     | Gin houses<br>(80) |    | Gutter<br>(45) |    | Sorting<br>(25) |    | total | to-<br>tal |
|-----------------------|--------------------|----|----------------|----|-----------------|----|-------|------------|
|                       | n                  | %  | n              | %  | n               | %  | ber   | %          |
| General Weak-<br>ness | 53                 | 66 | 30             | 67 | 10              | 40 | 93    | 62         |
| Gastric Prob-<br>lem  | 32                 | 40 | 35             | 78 | 15              | 60 | 82    | 55         |
| Dental stains         | 58                 | 73 | 27             | 60 | 6               | 24 | 91    | 61         |
| Dental caries         | 27                 | 34 | 13             | 52 | -               | -  | 40    | 27         |
| Sinus                 | 6                  | 8  | 7              | 16 | 4               | 16 | 17    | 11         |
| Hypertension          | 40                 | 50 | 9              | 16 | 4               | 16 | 53    | 35         |
| Respiratory problem   | 9                  | 11 | 4              | 9  | 2               | 8  | 15    | 10         |
| Fever                 | 32                 | 40 | 20             | 44 | 8               | 32 | 60    | 40         |
| Anaemia               | 69                 | 86 | 38             | 84 | 20              | 18 | 127   | 85         |
| Tonsilitis            | 2                  | 3  | 1              | 2  | 3               | 12 | 6     | 4          |
| Tuberculosis          | 3                  | 4  | 2              | 4  | 2               | 8  | 7     | 5          |
| Eye                   | 10                 | 13 | 2              | 4  | -               | -  | 12    | 8          |
| Ear                   | 17                 | 21 | 15             | 33 | -               | -  | 32    | 21         |

It is clear from the table that 66,67 and 40 per cent of women working in gin house, gutter and sorting sections

respectively showed symptoms for general weakness. Gastric problems were prevalent among 40,77 and 76 per cent women working in gin house, gutter and sorting of women in different section of ginning units respectively. Dental problems such as dental stains and dental carries were observed among 59.6 per cent of ginners. Sinus symptoms related to asthma was seen among 7, 15 and 16 per cent of ginning women respectively.

Minimum of 11,9 and 8 per cent of women working in gin house, gutter and sorting sections respectively had respiratory problems. As Fox<sup>4</sup> pointed outworkers use tobacco and betal leaves during working hours which may lead to reduce the ventilator capacity and cause respiratory problems. Further 50, 20 and 16 per cent of women working in gin house, gutter and sorting sections respectively showed symptoms for mild hypertension. Likewise less than 5 percent showed symptoms for tonsillitis and tuberculosis. Prevalence of anemia, rather symptoms related to anemia condition was common among 86, 82 and 64 per cent of women working gin house, gutter and sorting units respectively. It was found that 8 and 21 per cent of women had eye and ear problems due to working condition .World Health Organization  $_{\scriptscriptstyle{5}}$  stated that most common morbid conditions like amoebiasis (4.1 per cent), byssinosis (2.3 per cent) bronchitis(4.5 per ent), dental stains (5.6 per cent) hypertension (1.9 per cent) and iron deficiency anemia (52.7 per cent) among textile workers.

Table - 2
Respiratory symptoms among ginning women workers
N=150

| Respiratory symptoms    | Gin<br>houses<br>( 80) |    | Gutter<br>( 45) |     | Sorting<br>(25) |    | total | total<br>% |
|-------------------------|------------------------|----|-----------------|-----|-----------------|----|-------|------------|
|                         | n                      | %  | n               | %   | n               | %  | ber   |            |
| Mild                    |                        |    |                 |     |                 |    |       |            |
| Burning of eyes         | 47                     | 59 | 21              | 47  | 6               | 24 | 24    | 49         |
| Headache                | 39                     | 49 | 22              | 49  | 3               | 12 | 64    | 43         |
| Fever                   | 32                     | 40 | 20              | 44  | 8               | 32 | 60    | 40         |
| Sneezing                | 43                     | 54 | 28              | 62  | 12              | 48 | 83    | 55         |
| Sputum                  | 19                     | 24 | 12              | 27  | 3               | 12 | 34    | 23         |
| Cough                   | 37                     | 46 | 16              | 36  | 7               | 28 | 60    | 40         |
| Nasal irritation        | 37                     | 25 | 18              | 40  | 8               | 32 | 63    | 42         |
| Numbness on hand        | 7                      | 5  | 5               | 11  | 7               | 28 | 60    | 40         |
| Moderate                |                        |    |                 |     |                 |    |       |            |
| Rhinitis                | 13                     | 16 | 4               | 9   | 9               | 36 | 26    | 17         |
| Allergy                 | 6                      | 8  | 3               | 7   | 4               | 16 | 13    | 9          |
| Sleeplessness           | 25                     | 31 | 16              | 36  | 3               | 12 | 44    | 29         |
| Nausea                  | 16                     | 20 | 8               | 18  | 7               | 28 | 31    | 21         |
| Vomiting                | 12                     | 8  | 5               | 11  | 2               | 8  | 19    | 13         |
| Sore throat             | 13                     | 9  | 4               | 9   | 1               | 4  | 18    | 12         |
| Cough with sputum       | 19                     | 13 | 11              | 24  | 6               | 24 | 36    | 24         |
| Severe                  |                        |    |                 |     |                 |    |       |            |
| Asthma                  | 5                      | 6  | 2               | 4   | -               | -  | 7     | -          |
| Chronic bron-<br>chitis | 8                      | 10 | 7               | 16  | -               | -  | 15    | 10         |
| Influenza               | 2                      | 1  | 1               | 22  | -               | -  | 3     | 2          |
| Pneumonia               | 1                      | 1  | -               | -   | 1               | 4  | 2     | 1          |
| Tuberculosis            | 2                      |    | 2               | 4.4 | 2               | 8  | 7     | 5          |

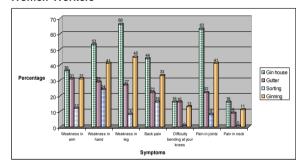
It is clear from the table that the highest per cent of moderate degree of respiratory symptoms such as sleeplessness, nausea ,cough with sputum were seen in 29, 20 and 24 per cent of workers in ginning units respectively .Symptoms classified under sever category asthma and tubercu-

losis were observed at the time of survey was less (2-5 per cent) among the ginning women workers. Cotton textile workers suffer from a variety of respiratory diseases because of exposure to cotton dust. It has been clearly mentioned by Kamat <sup>6</sup> that in Indian cotton textile workers byssionsis is quite distinct from chronic bronchitis

# Musculoskeletal problem

Prevalence of pain in arms (31 per cent) hands (41 per cent) and legs (45per cent) were observed. Similarly, 44, 22 and 16 per cent of women working in gin house, gutter and sorting segments respectively reported that they have low back pain. Likewise, about 13 per cent working in different sections of ginning units expressed that they have difficulty and pain in knees while bending and this could be attributed to wrong posture during working. Other conditions such as pain in joints and neck were noticed in 41 and 11 per cent of workers respectively is shown in figure-1. About 63, 51 and 20 per cent of women worked in gin house, gutter and sorting sections respectively had low back pain.

Figure – 1 Musculoskeletal Symptoms among Ginning Women Workers



### CONCLUSION

It is conclude that higher percentage of textile women working in ginning units was with musculoskeletal and mild to moderate degree of respiratory problems there exists wealth of evidence to show that women contribute towards economic and social development. To continue to do this they should have sound health ,it is an astonishing fact that most of the women working in various fields do not enjoy good health .The health hazards of the women working in the textile industry is much higher compared to their counter parts in other sectors. It is therefore an urgent need on the part of the policy makers to take effective steps to better the condition of women in textile industry not only to improve their condition but also to make effective contribution to the society. There should be programme to reduce disease, morbidity and mortality among workers in high risk sectors. A system should be developed to do surveillance for major occupational diseases and health hazards. Efforts should be taken to collect, analyze and disseminate information on the distribution occupational illness and health hazards to target and evaluate intervention and prevention efforts.

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