Economic Influence of Occupational Health Concerns on Informal Sector Laborers in Chennai with Special Reference to Female Laborers

Sivasubaramanian K

Assistant Professor, Department of Economics

Kristu Jayanti College Autonomous Bengaluru

sivasubramanian@kristujavanti.com

Abstract

The current study meant to transport out the work-related health problems confronted by the female workers in the informal sector and similarly the influence of health issues on their economic conditions, namely, the earnings potential. Women are engaging in physical work both at the workplace and at home for their domestic work like cooking, washing clothes, cleaning vessels, sweeping home, and the list is endless. So, ultimately, it worsens their health condition and economic stability. The occupational health concerns are started from day one of the work and extend till a very long period together. The women are still working along with several occupational health issues plow the condition worsens because of their poor economic situation. It is found from the data that women informal sector workers are severely affected by many occupational injuries like fire accidents, unforeseen machine accidents, chemical reactions, gas effects, unforeseen slips during construction works, and so on. It is revealed from the data that the workers lost an average of 25 to 30 percent of working days due to injuries. Among the respondents, 37.03 percent are affected by extreme varicose veins due to long hours of standing jobs in the shops and stores. Instead of chemicals, cement, and weight-lifting work, the construction and domestic workers are affected by eye, skin, and muscle-related diseases. To conclude, occupational health injuries and health issues have badly affected women's economic conditions.

Keywords: Occupation, Health, Economics, Social, Workers

Introduction

Health issues are always a concern for every woman, especially women in the informal sector. Because the women play a dual role in common life and practice a challenging living for their family's economic needs. Women are engaging in physical work both at the workplace and at home for their domestic work like cooking, washing clothes, cleaning vessels, sweeping home, and the list is endless. Numerous health problems are happening in due course of the work is carried out by the women informal sector workers such as skin diseases, burn, eye problems, breathing issues, varicose veins, etc. However, there are no appropriate social security and occupational health safety measures to reach this vulnerable workforce in India. It leads to effects and deactivates the good health of the women and badly influences their family's economic conditions. The reported health complaints such as Injury during their work life, respiratory symptoms-breathing problems, coughing, tuberculosis, chest pain and asthmatic, eye problemsburning, redness, watering, low vision, itching, hearing problems, headache, giddiness, nausea, vomiting, impaired postural balance, Varicose vein, Toxic chemicals and carcinogens, Respiratory problems, Skin allergies and diseases, Muscular-skeletal disorders, Gynecological problems, Exhaustion and stress, Occupational risks in the home, and control and abdominal pain were noted. The ILO estimates that hundreds of millions of workers worldwide suffer from work-related diseases and accidents, the poorest and the least protected being the worst sufferers. Bringing occupational safety and health to those working and living in the informal economy represents a particular challenge, as this report from the slums of Pune in India shows.

The present study aimed to bring out the occupational health problems faced by the women workers in the informal sector and the impact of health issues on their economic conditions, namely, the earnings potential.

Statement of the Problem

Good health is a prime factor for determining women's good life and living condition. Health is always a strength for women in general Hence; it affects the course of informal work. The occupational health concerns are started from day one of the work and extend till a very long period together. The women are still working along with several occupational health issues plow the condition worsens because of their poor economic situation. However, there are no proper

social security and safety measures provided by the government. Ultimately, it becomes a massive obstacle for the social development of women.

The objectives of the Research Study

- 1. To find out the various occupational health problems faced by the women informal sector workers in the study area
- 2. To evolve the economic impact of occupational health problems of informal sector women workers in Chennai city

Hypothesis framed for the Research Study

Ho: There is no association between economic conditions of women informal workers and occupational health problems

Research Methodology

The present study emphasizes the occupational health issues of women in urban informal sector workers in Chennai city. The research methodology consists of the need for the present study, selection of the study area, a database for the present study, and the sampling method adopted. Studying women's occupational health issues becomes essential because of their contribution to gross domestic product and the employment generation by the sector. Chennai is playing a major role in providing employment opportunities to the uneducated, educated, unemployed, and poor migrant workers in informal works, especially women workers. The present study is based on primary data. The Chennai district has been selected for the present study purpose. A household survey was conceded in the major slum-based locality in the study area, namely, Thiruvanmiyur, Mylapore, Adyar, Velachery, Nungambakkam, Saidapet, and Old Washermenpet during January 2016 to December 2016. A semi-formulated questionnaire was prepared, and the researcher conducted a direct field survey. The questionnaire contains peculiar open-ended questions related to the sample respondents' social, economic, and health aspects. The primary data was collected from 108 sample respondents who have been engaged in construction works, domestic works, home-based works, street vending, and other informal works.

Review of Literature

The report published in 1988 by the National Commission on Self-Employed Women constituted by the Ministry of Human Resource Development has addressed the problems of 'home-based workers" in a detailed manner devoting a whole Chapter. Since then, several new types of homework may have been added. Manufacture of leather products like handbags, jackets, belts, stuffed toys, sports goods, footwear in and around Agra for big exports/companies; are examples of new types of homework. Further, consequent to the strict enforcement of some labor laws such as the Child Labour Act, even activities like drying and labeling fireworks have also been outsourced as homework, as revealed by reports of accidents in newspapers. There is no legislation providing OSH coverage for homework. However, ILO convention 177 defines 'employer' for homework. The employer has a crucial role, and he can be made accountable for creating awareness for the home workers employed by him. Suitable legislative measures may have to be formulated in line with ILO guidelines. As the formulation of legislative measures may take considerable time, employer support could be enlisted voluntarily as an immediate measure

Except for a few pilot surveys in some of the segments of the unorganized sector, no authentic statistics at the national level are available on accidents and occupational diseases. The sample surveys in the agriculture sector provide information about the nature of hazards and types of accidents. These are due to agriculture hand tools and implements, farm machinery, chemical agents, climatic agents, animal/snake bites, etc. The workers are also exposed to many types of hazardous substances, which can cause serious occupational diseases such as asbestosis, silicosis, lead poisoning, etc. Gangopadhyay and Nag have reported that the Indian unorganized sector is characterized by congested workplaces, restricted work areas, poor illumination, high noise levels (80-90 dB), and extreme environmental conditions of high temperatures and humidity. These conditions in informal workgroups expose the varied nature of health-related hazards implicated in their impaired health and poor well-being. Demographic factors such as age, gender, smoking habits, working hours, and job tenure were associated with injuries in construction workers and Indian laborers. Unsafe work practices were associated with injuries in workers at fish processing, gem polishing construction work, and coal mining. Further, psychosocial aspects such as job control, poor management, emotional instability, and psychometric disorders were associated with the injuries in construction workers, Indian coal miners, Indian farm laborers, and artisans.

Exposures to food irritants and repeated hand washing at food manufacturing in UK-based workers, fish juice in African fish processing workers, oil grease and petrol in Tanzanians garage workers, and cement and related allergens in Netherlands brick processing workers were reported to cause skin related diseases. Food irritants in food manufacturing, smoking and higher job involvement in Indian agricultural workers and textile workers, organic dust in sewing industry workers, tobacco dust in Croatian and Indian tobacco processing workers, chemical exposures in Tanzanian garage workers, organic dust in Indian flour mill workers and construction dust, asphalts and gases and vapors in Iranian construction workers were associated with respiratory symptoms. The above literature builds a premise that workers employed in different occupations are exposed to varied risks. These risks lead to varied health hazards. As women move beyond their traditional occupations, they meet new health hazards that may replace or add to their existing occupational exposure. Women's labor force participation rates have increased steadily, and not only in the industrialized countries. The dramatic economic successes of the newly industrialized states of Asia, for example, are substantially a reflection of the increasing Feminization of labor in this region. In these economies, female workforce participation rates increased far more rapidly than males from the 1960s, although their jobs were largely less-skilled and poorly paid. Women workers formed the largest pool of workers in export-oriented light industries, such as electronics and textiles, which underpinned economic expansion (Lin Lean Lim 1993). Although occupational health measures along these lines have been enacted throughout most of the world, implementing them has become a greater problem. Thus, in 1988 the government of Vietnam drew up a list of heavy labor or harmful jobs expressly forbidden to women, but many women continue to work in such occupations from necessity. Even within state enterprises, the introduction of competitive market economy practices has reduced or eliminated many of the protective health provisions (Morrow, 1995). In the Newly Independent States of the former USSR, it is estimated that 400,000 women are undertaking heavier than legally sanctioned manual labor and that between 20 and 50 percent of female workplaces do not meet safety requirements (WHO, 1994).

The WHO report on women's health in Eastern and Central Europe identifies exposure to pesticides in agricultural work as perhaps the greatest occupational health risk to women because of their preponderance in labor-intensive manual work in the fields and hence exposure to heavy doses of pesticides in the soil and surface water as well as the products they handle. Direct and

concentrated exposure to dangerous chemicals while picking and processing crops poses serious women threats. Women's contribution to the household economy is greatest among female heads of household, and their proportion has been increasing since the 1970s. Female household heads in 1990 made up between 20 percent and 46 percent of all households in 174 countries studied (UNDP, 1991). Female-headed households in every country are swelling the ranks of the poor. Estimates indicate women as the sole breadwinners in one-fourth to one-third of the world's households.

What is more, at least one-fourth of other households rely on female earnings for more than 50 percent of total income (Agarwal et al., 1990)? Nutritional discrimination is just one aspect of wider discrimination against girls and women. This is visible in 'missing' girl babies and female mortality rates at their most extreme. In India's Punjab State, girls aged two to four die at nearly twice the rate of boys. The pressure to bear sons is so great in India, China, and Korea that women have begun using amniocentesis and ultrasound as sex-selection devices to abort female fetuses selectively. In a large Bombay hospital, it was found that 95.5 percent of fetuses identified as female were aborted (Ramanamma, 1990). It is important to recognize the psychological effects of these practices. Women and girls get messages about their value from how others treat them. Consistent experiences in discrimination are likely to lead to diminished self-worth and a "culture of female sacrifice" that continuously reproduces preferential treatment for males. Thus girls may be viewed as a drain on household income and receive less health care and less education: their ability to undertake domestic and other work may be compromised, and their choice of occupation is limited by gender bias in their upbringing.

Occupational hazards of household work

Domestic accidents are relatively common, especially among older women. In developing countries, data on domestic accidents are extremely sparse, but it is clear from the nature of the work that they are a major risk here too. Damp and dilapidated houses require extra labor to keep them clean, and dampness appears to be linked to increased asthma and other respiratory diseases. Female agricultural workers are subject to hazards that affect men, such as poisoning from pesticides chemical fertilizers. They are at high risk for backache, postural defects, and infectious and parasitic diseases (Chatterjee, 1991).

Data Analysis and Discussion

The following table reveals that a majority of 51 percent of sample respondents are 25 to 45, i.e., 55 respondents. Among the total sample respondents, 23 (21.29%) are aged 15 to 25. It is observed from the field data that the young workforce is mainly engaged in informal works. The data also exposes that 28 percent of the respondents are 45 to 65 years old.

Table.1. Age-wise Distribution of Sample Respondents

| S.No | Age | Frequency |
|------|-------|------------|
| 1 | 15-25 | 23 (21.29) |
| 2 | 25-35 | 33 (30.55) |
| 3 | 35-45 | 22 (20.37) |
| 4 | 45-55 | 12 (11.11) |
| 5 | 55-65 | 18 (16.66) |
| | Total | 108 (100) |

Source: Field data

It is found from the data that women informal sector workers are severely affected by many occupational injuries like fire accidents, unforeseen machine accidents, chemical reactions, gas effects, unforeseen slips during construction works, and so on. It is also coming to know from the respondents that they did not receive even the first-aid medical kit during the injury time

Table.2. Occupational Injury Happened During the Work

| S.No | Occupation | Occupational Injury during work | Frequency |
|------|--------------------|--|------------|
| 1 | Construction Works | Unforeseen Accidents | 50 (46.29) |
| 2 | Domestic Works | Fire burns, Washing Chemical effect | 30 (27.77) |
| 3 | Home-based Works | Fire burns, Back Pain | 8 (7.41) |
| 4 | Street Vendors | Vehicle Smoke effect, Pollution Effect | 20 (18.52) |
| | Total | | 108 (100) |

Source: Same as the previous table

The following table.3, analyses the number of working days before and after the women workers is affected by occupational Injury during the work is carried out.

Table.3. Number of Days work in a month before and after the Occupational Injury

| S.No | Occupation | Frequency | Days of Work (Before Injury) | Days of Work (After Injury) |
|------|--------------------|------------|---------------------------------------|--------------------------------------|
| 1 | Construction Works | 20 (18.51) | 20 | 15 |
| 2 | Domestic Works | 20 (18.51) | 30 | 25 |
| 3 | Home-based Works | 18 (16.66) | 25 | 25 |
| 4 | Street Vendors | 10 (9.25) | 25 | 15 |
| 5 | Other Works | 40 (37.03) | 20 | 15 |
| | Total | 108 (100) | Average 21 days | Average 14 days |

Source: Same as the previous table

It was shocking that all the women in the informal sector are affected by some occupational health injury. So, it decreases their workforce regarding the number of days worked during a particular month. It is well-known that the workers are paid according to the number of days work is carried out, because they do not have any paid holidays or leaves as formal sector workers get. It is revealed from the data that the workers lost an average of 25 to 30 percent of working days due to injuries. (Table-3)

Table.4. Frequency Distribution based on Occupation and Earnings

| S.No | Occupation | Frequency | Earnings (Before Disease) in Rs | Earnings (After Disease) in Rs |
|------|--------------------|------------|--|---|
| 1 | Construction Works | 20 (18.51) | 600 | 300 |
| 2 | Domestic Works | 20 (18.51) | 125 | 75 |
| 3 | Home-based Works | 18 (16.66) | 150 | 100 |
| 4 | Street Vendors | 10 (9.25) | 400 | 200 |
| 5 | Other Works | 40 (37.03) | 300 | 200 |
| | Total | 108 (100) | Average 315 | Average 175 |

Source: Same as the previous table

Moreover, the loss in days of work leads to decreased earnings. The field data on earnings reported an average of 45 percent of income loss due to health injuries in connection with working days. Apart from the occupational Injury, the workers face the problems of certain long-term health issues as listed in the following table. Among the respondents, 37.03 percent are affected by extreme varicose veins due to long hours of standing jobs in the shops and stores. Instead of chemicals, cement, and weight-lifting work, the construction and domestic workers are affected by eye, skin, and muscle-related diseases.

Table.5. Occupational Health Problems of Sample Respondents

| S. No | Occupation | Health Problem | Frequency |
|-------|--------------------|-----------------------|------------|
| 1 | Construction Works | Skin Disease | 20 (18.51) |
| 2 | Domestic Works | Skin & Muscle Pain | 20 (18.51) |
| 3 | Home-based Works | Eye Problems | 18 (16.66) |
| 4 | Street Vendors | Breathing Problem | 10 (9.25) |
| 5 | Other Shop Works | Varicose Vein | 40 (37.03) |
| | Total | | 108 (100) |

Source: Same as the previous table

Table.6.Test Statistics

| | Chi- | df | Asymp. |
|-----------------|--------|----|--------|
| | Square | | Sig. |
| Earnings After | 0.600 | 3 | .896 |
| Health Issues | | | |
| Earnings Before | 0.010 | 4 | 1.000 |
| Health Issues | | | |
| Working days | 0.400 | 2 | .819 |
| Before Injury | | | |
| Work days After | 0.200 | 1 | .655 |
| Injury | | | |

Source: Authors Computation from Field survey

The above table exhibits the results from the field data computed with an appropriate statistical tool called the chi-square test.

Ho: **Ho:** There is no association between the economic conditions of women informal workers and occupational health problems.

It was found from the chi-square analysis that the earnings of the women in the informal sector have declined due to their occupational health issues and injuries. Hence, there is a strong association between the economic conditions of women workers and occupational health problems.

Conclusion

It is found from the data that women informal sector workers are severely affected by many occupational injuries like fire accidents, unforeseen machine accidents, chemical reactions, gas effects, unforeseen slips during construction works, and so on. It is revealed from the data that the workers lost an average of 25 to 30 percent of working days due to injuries. Among the respondents, 37.03 percent are affected by extreme varicose veins due to long hours of standing jobs in the shops and stores. Instead of chemicals, cement, and weight-lifting work, the construction and domestic workers are affected by eye, skin, and muscle-related diseases. To conclude, the occupational health injuries and health issues have badly affected the economic conditions of the women

References

Agarwal, B. et al. (1990). Engendering adjustment for the 1990s: report of a commonwealth expert group on women and structural adjustment, *Commonwealth Secretariat*. London

- Banerjee, P., and Gangopadhyay, S (2003). A study on the prevalence of upper extremity repetitive strain injuries among the handloom weavers of west bengal. *Journal of Human Ergology*, 32,17–22
- Gangopadhyay, S., Ray, A., Das, A., Das, T., Ghoshal, G., Banerjee, P., and Bagchi, S. (2003). A study on upper extremity cumulative trauma disorder in different unorganized sectors of West Bengal. *India. Journal of Occupational Health*, 45, 351–357.
- Goldenhar, L. M., Williams, L. J., Swanson, N.G. (2003). Modeling relationships between job stressors and injury and near-miss outcomes for construction labourers. *Work Stress*,17, 218–40.
- Kumar, Adarsh., Varghese, Mathew., and Mohan, Dinesh (2010). Equipment–related injuries in agriculture: an international perspective. *Injury Control and Safety Promotion*, 7(3), 175-186
- Lin, L. L (1993). The feminization of labor in the asian-pacific rim countries: from contributing to economic dynamism to bearing the brunt of structural adjustments' in human resources in development along the Asian-Pacific Rim, (eds) Ogawa, N., Jones, G & Williamson, G. J. Oxford University Press, Singapore. 176-209
- Nag, A., Vyas, H., and Nag, P. K. (2010). Gender differences, work stressors and musculoskeletal disorders in weaving industries. *Industrial Health*, 48, 339–348.
- Saha A, Nag, A, Nag, P. K. (2006) Occupational injury proneness in indian women: a survey in fish processing industries. *Journal of Occupational Medicine and Toxicology*.1(23).
- Tiwari, R.R., Saha, A., Parikh, J.R., Saiyed, H.N. (2004) Injuries, and Injury Care among Child laborers in Gem Polishing Industries in Jaipur. India. -. 46(3). https://pubmed.ncbi.nlm.nih.gov/15215664/
- Tiwari, R. R., Pathak, M. C., Zodpey, S.P (2003). Low Back Pain among Textile Workers. *Indian Journal of Occupational Environmental Medicine*.7(9) 221-289