

OCCUPATIONAL HEALTH STATUS OF SMALL SCALE INDUSTRY WORKERS IN ALIGARH CITY (U.P.)

Nida Fatima

Research Scholar, Department of Geography,
Aligarh Muslim University, Aligarh, India
Email: nida.fatima2012@gmail.com

Abstract: *One cannot imagine development without the development of enterprises and productivity of industries is directly depend upon the workers' health, it means health and productivity are expected to highly correlated. The workers of the unorganized sector are mostly uneducated and have nothing to sell in the labour market except their services as a labour. Therefore a good health condition is important for them, as they having the long hours of working in the hazardous condition without any security. The small scale industry having small space poor ventilation and ill management leads several health problems. The labour intensive small scale industry absorbs the bulk of labour and makes them skilful. Small scale industry although play key role in economic development of India and provide ample opportunity to earn livelihood of lakh of artisans. The aim of present study is to identify the major health problems in different type of small scale industry and the factors which contribute to these problems. The study is mainly based on primary sources of data collected from the workers employed in various small scale industries. The various industrial processes and workplace environment create conditions that led to small scale varying health problems in different industries as reflected in the physical and mental disorders afflicting this population.*

Key words: Small Scale Industry, Health Problem, Workers, Work Environment

Introduction

In countries like India, great efforts are directed towards the development of small scale industries as the engine for their economic growth. The small scale industry of India is one such industry which has provided ample opportunity of employment for the people especially for low socio economic class (Roy, 2008). Health and productivity of workers are expected to be highly correlated. The better the health condition of a worker, it is likely that the higher his/her productivity and vice versa. The workers of the unorganized sector are mostly uneducated and have nothing to sell in the labour market except their services as a labour. The impact of industrial growth and human health has been a matter of concern the world over. Industrial growth is generally considered as an indicator of development. Development implies improvement in quality of life. Therefore, the emphasis must be as much on social wellbeing as on economic progress. The need for good health thus becomes one of the primary objectives of development especially in the developing countries (Izhar, 2004). Small scale industry workers constitute a significant proportion of the total population of any industrial area. The health of this population is reflected in the health of the society in the given area. Thus an understanding of health situation of workers employed in industry can be of considerable significance in explaining the spatial differentiation in health and disease pattern. Some studies pertaining to problems in specific industries carried out by researchers

in various disciplines. There is no doubt that like other manufacturing industries has brought various health problems. However these health problems associated with different industries depend on prevailing industrial structure, duration of working hour, work place environment, year of exposure and prevailing socio economic condition .Therefore a good health condition is important for them , as they having the long hours of working in the hazardous condition without any security because the lock industry in Aligarh city are un organized and does not follow any rules and norms which had government form for the security of labour and due to poverty and illiteracy the workers are unfair about that . It is well said, health is wealth. It is health which enables the worker to go through his work & complete it in time cheerfully. If workers health is good, they can work with full capacity and efficiency. It helps to increase the production and profit of the organization. Then the organization can provide better wages & other welfare facilities to the workers. Thus employees' welfare, health and safety measures are related with each other. Hence, every organization should take care of employees' health by providing proper safety measures.

An industrial accident may affect the working capacity of the worker. Some workers may become permanently handicapped. Accidents affect the industrial productivity which in turn affects the economy. A company, in which accidents are frequently occurring, create poor image in the public eye. An employer has to pay large amount as compensation. It increases costs of industry resulting from the separation of the disabled worker. If the worker disabled is highly skilled and experienced one, this loss is greater. Injured worker can't work with full capacity. It also affects his family. The factories Act, 1948 lays down certain provisions of safety and health of the workers to be adopted by the factories. Whenever an accident occurs it gives rise to pain for the victim and his family and retards industrial productivity which in turn affects the economy of the country. It results in the financial loss for the employees and the employer and large payments by the later in the shape of compensation.

Objectives

The objectives of the present study are:

- To identify the major health problems in different type of small scale industry.
- To find out the factors which contribute to health problems of workers.
- To suggest some measures that needs to be addressed urgently in order to tackle these problems.

Database and Methodology

The study is mainly based on primary sources of data collected from the workers employed in various small scale industries. A total of 149 workers engaged in 38 small scale industries were interviewed for this study. For the present study researcher had used purposive sampling technique. The questionnaire which had been used for interviewed having the question about the health condition. Question regarding their working hours, working place condition, problem due to long working hours and also the availability of health facility taken considered. For the presentation of the data simple percentage method had been used .The health problems have been divided in to three section viz., ergonomic problems, systematic problems and psychological problems.

Study Area

Aligarh city is situated in the east from Delhi at the distance of 135 Km. in the North from Agra at the distance 85 Km. and towards West from Kanpur at 288 Km. It is on main track of train as well as of Roadways. Therefore, there is no problem of transportation, which is frequently available. Aligarh is well known for manufacturing the different type of locks used in Building doors, Automobiles, V.I.P Suitcases, Wooden & Steel Furniture etc. due to which Aligarh possess an important position in the industrial map of India. The climate up to 48°C and cold dry in winter with a minimum temperature down to 2° C and intervening rainy season up to 60 – 100 cm. Aligarh is an important city of Uttar Pradesh. The total area of Aligarh city is 33.98 sq. km and its total population is 909, 559. Out of which 482, 828 are males (Census, 2011). The literacy rate of the city is 70.54 percent. (Fatima, 2016). Although the urban growth rate is fluctuating in Aligarh city but the city population is gradually increasing. The population of Aligarh City is 872,575 which makes it 7th largest populated city in Uttar Pradesh (Census, 2011). Of the total population, it has 25.36 per cent are reported to be main workers (61% tertiary sector, 36.5% secondary sector and 2.5% primary sector). The Aligarh city has the status of class-1 city with 23 % of the district population lives in Aligarh city. Studies suggest that rapid urbanization of Aligarh city has led to large scale land transformations and expansion of urban area .The population is increasing by natural growth and migration in Aligarh city resulting in expansion of the city encroaching upon the lands from surrounding villages to accommodate these people. The village economy is tied up with the growing city. Aligarh is a quite famous city for manufacturing of Locks and Building Hardware. Aligarh is known as “Tala Nagri”. Locks and Hardware industries are the main industries of Aligarh. At present this city is leading in the manufacture of simple locks used in doors, cycle locks, suitcase locks and locks used in scooters, motorcycles cars and trucks. Some 2, 00,000 people are directly or indirectly associated with at least 5,000 lock manufacturing units of Aligarh. In Aligarh there are 7 – 10 large lock manufacturers; 30-35 medium sized & 1500+ small manufacturers. Total of 1683 lock industrial units are functioning in Aligarh city (Fatima, 2015). In Aligarh city the main lock manufacturing is located in main industrial area, while the small scale manufacturing industries are located randomly but cluster of industries are located all along the railway tract and centre of the city.

Discussion

Occupational Health

Occupational health is essentially preventive medicine. Both have the same aim of prevention of disease and maintenance of the highest degree of physical, mental and social well-being of workers in all occupation. Occupational health therefore is the application of preventive medicine in all places of employment (Nalini, 2009). Ergonomics is the physiological link between the worker and his environment. This would have an effect on the worker's body and the relative increase of discomfort in various parts of the body. It indicates the effects of varied working condition which led to the occurrence of health related problems. The various systematic problems that are investigated are respiratory systems, cardiovascular system and skin. The psychological problems are examined in terms of stress and sleep.

Health problems in small scale industries

Health problems in cottage industries differ from one industry to another; it depends upon the nature of the industry. The health problems of some industries are very prominent. In the

on-going paragraph discuss the environmental condition and process which responsible in creating various health problems in different industries.

Lock industry

Lock industry is the industry wherein the iron is transformed into a form of lock which is used for human consumption. This is the industry where human population are engaged in different types of work like polishing, cutting, hammering etc. Dust can be responsible for serious respiratory disorder include asthma (www.waset.org/journals/waste/v80/v80.50.pdf)

Flour grinding and Spice Grinding

Flour grinding also produces a large amount of dust. On an average, flour grinding workers are exposed to the workplace environment for eight to ten hours a day. Poor ventilation is the basic problem in flour grinding throughout the country. Flour dust accumulate in the work place environment because of poor ventilation, hence workers get exposed to excessive amount of flour dust which lead to pulmonary and respiratory diseases due to a long time continuous exposure (Nilish, 2006). Spices are vegetable products used specially in powder form for giving a taste to foods. Spice grinding is associated with dust and noise problems. During the process of grinding large amount of dust produces and inhale by the workers which lead to respiratory problems (Chan, 1990).

Brass and hardware industry

Brass and hardware industry in Aligarh city is the important, ancient traditional industry, which plays an important role in improving economic condition of rural people by providing employment to a large number of people in study area. The process of hardware parts involves exposure to brass and steel dust which causes irritation in the nose, eyes and respiratory system (Izhar, 2004)

Furniture industry

Furniture industry is the manufacturing industry where peoples are involved in building the wooden furniture. In Aligarh city large peoples are involved in the furniture industry. In this industry due to long working hours people having the back problems. Table.1 shows the health profile of sampled small scale industry workers in the study area. About 80 percent respondents reported that they have various kinds of health problems in different industries. The association between different categories of industries and the various health problems show that problem of respiratory and muscular are frequently reported in lock industry and flour grinding. With reference to the workers the skin disease are reported more. It is because of use of polishing in the lock materials. The respondents get itching. To avoid the effect of polish, they use cloths to cover their hand. (Table.1) The fact that the problems of stress and sleep almost pervade in all cottage industry, the consequence of industrial environment are brought into sharp focus. Psychological stress caused by time and work pressure, have been associated with sleep disturbances. Majority of the workers in the industry are daily wagers and living in poor socio economic condition so they are compelled to work for more than 12 hours, this lead to adverse psychological effects (Table.1)

Table 01: Nature of Health Problem according to Industry Type (In percentage)

Nature of Health Problem	Lock Industry	Flour and Spice grinding	Furniture industry	Brass Industry	Total
Skin	2.01	2.02	4.68	2.17	10.88
Respiratory	7.97	11.59	2.17	4.35	26.08
Muscular	29.71	17.39	3.62	1.45	52.17
Stress and sleep	4.35	2.90	0.72	2.90	10.87
Total	44.04	33.90	11.19	10.87	100.00

Source: Based on field survey, 2015

Respiratory problems are very common among all small scale workers (Table.2). In case of lock industry, flour grinding and spice grinding workers, as they are receiving a heavy dose of dust particle which leads to respiratory diseases due to excessive exposure to fine organic dust prevalent in the workplace environment. The weavers frequently report the breathing problems because the minute thread dust and the iron dust surround the room's atmosphere while they operate the looms. They get respiratory problems because they inhale the dust. Bronchitis and T.B is found to be a threat from small scale workers although.

Table 02: Respiratory Problem according to Industry Type (In percentage)

Kind of problem	Lock Industry	Flour and Spice grinding	Furniture Industry	Brass industry
Breathing	72.73	50.00	66.67	66.76
Asthma	18.18	43.75	-	16.67
Bronchitis	9.09	-	33.37	-
T.B.	-	6.25	-	16.67
Total	100.00	100.00	100.00	100.00

Source: Based on field survey, 2015

Figure .1

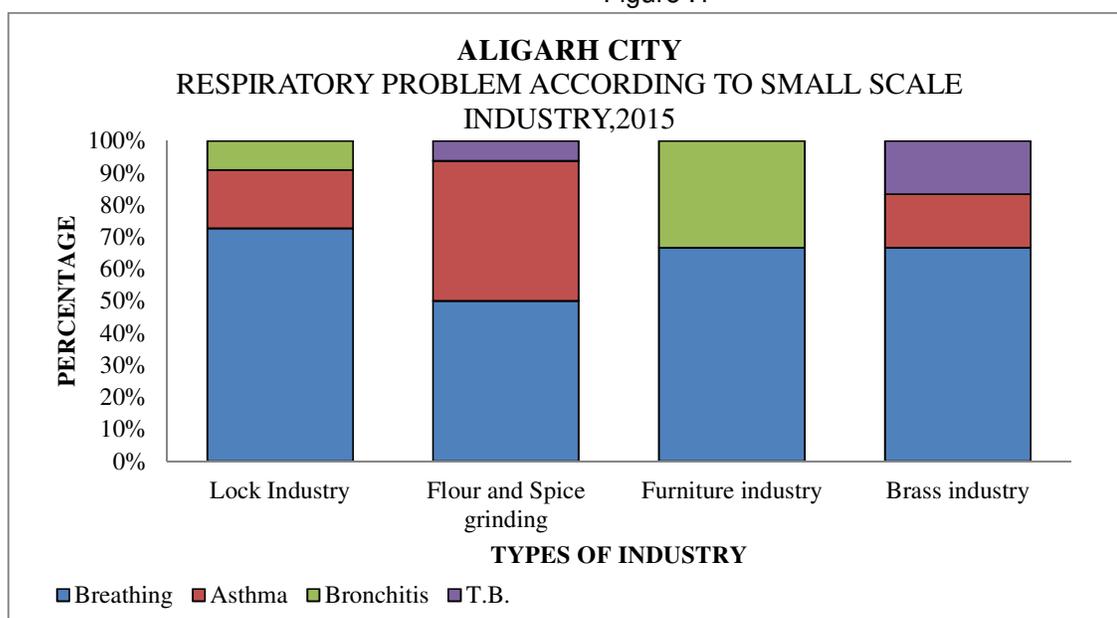


Fig .1 shows a very small percentage of T.B and bronchitis complaints as compare to breathing and asthma.

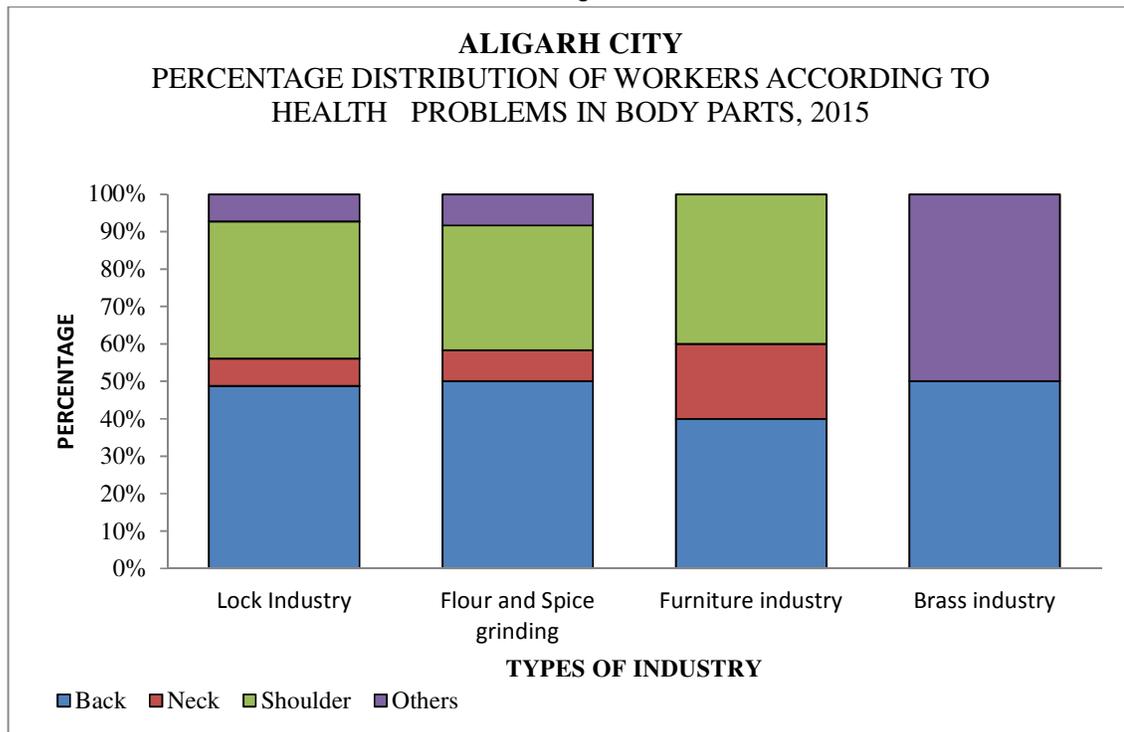
Table 03: Discomforts in Body Parts

Parts of Body	Lock Industry	Flour and Spice grinding	Furniture Industry	Brass industry
Back	48.78	50.00	40.00	50.00
Neck	7.32	8.33	20.00	-
Shoulder	36.59	33.33	40.00	-
Others	7.32	8.33	-	50.00
Total	100.00	100.00	100.00	100.00

Source: Based on field survey, 2015

The data in Table.3 show that back pain and shoulder pain are major physical problems found in practically all the categories of industries. The problem may have arisen due to posture, since most industries required constant standing posture and long working hours.

Figure .2



The Fig. 2 shows that 49% of the people are facing backache, 35% are suffering from shoulder pain 16% are suffering from neck pain and other problems.

Conclusion

The industrial environment, prevailing today is far from conducive to generate a sense of happiness among the people who work within this environment. The various industrial processes and workplace environment create conditions that led to varying health problems in different industries as reflected in the physical and mental disorders afflicting this population. Although the exact occupational diseases could not be identified during this study, the ailments described by the respondents give sufficient indication of the nature of

health problems that are being encountered. To sustain human progress and well-being, there is an urgent need of full effort to tackle these problems. The following are some of the issues that need to be addressed urgently:

- Industry workers should be made aware of work related health problems through media or door to- door campaigns by non-governmental agencies.
- The workers must enforce the use of safety devices against pollution and other chemicals especially weavers should use cloths to cover their hand to avoid effect of dye.
- The poor facilities and bad environmental conditions will affect the worker's health and consequently production repeatedly. There should be proper ventilation in the workplace.
- Stress management should be introduced in the organization and interaction could help in better occupational adjustment.

References

1. Roy, Sima, A Study on Health Status of Women Engaged in Home-based Papad making Industry in a Slum Area of Kolkata,
2. *Indian Journal of Occupational and Environmental Medicine*, 12(1),2008, 33-36
3. Izhar, N., Geography and Health: A Study in Medical Geography (A.P.H. Publishing Corporation, 2004).
4. Nalini, B., Work condition and Health Status in Unorganised Sector: A Gender –based Study (Serials Publications, New Delhi, 2009).
5. www.waset.org/journals/waset/v80/v80.50.pdf
6. Nilish, D., The Influence of Workplace Environment on Lung Function of Flour mill Workers in Jalgaon Urban Centre, *Journal of Occupational Health*,.48, 2006,396-401
7. Chan, O.Y. ,Health Problems among Spice grinders, *The Journal of the Society of Occupational Medicine*, 40(3),1990, 111-115.
8. Izhar, N., Geography and Health: A Study in Medical Geography (A.P.H. Publishing Corporation, 2004).
9. Fatima, N. & Bano, R., Health Problem of Lock Industry Workers: A Case study of Aligarh City in Uttar Pradesh, Life and Living Newer *Spectral Geography*, Mohit Publication, New Delhi, 2015. pp-254-268
10. Fatima, N., Industrial Development and its Problem and Prospects: A Case Study of Aligarh City, *Journal of Global Resources*, Vol.3, July, 2016.