

# Health-related Problems among Female Workers in Aligarh Lock Industries: A Case Study

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## Abstract

This paper makes an analysis to understand the health-related problems of female workers in the Aligarh lock industries. The methodology used here is the inductive logic of inquiry; it starts with the collection of data and then proceeds to derive generalisations. The data was collected from the female workers who work in the lock factories. According to the 2011 Census, the Aligarh Lock Industry constitutes about 14.33% of women workers in the unorganised sector engaged in various processes of lock making. In this industry, they have a tragic situation due to unskilfulness and illiteracy. This paper discusses the female workers health conditions, family backgrounds, socioeconomic and educational status in the Aligarh lock industries.

**Keywords:** Women workers, Health, Socio-economic conditions

## Introduction

It would not be wrong if we called females the second "creators" of the world after God. Females are valuable human assets in every nation and can be groomed to become good and productive citizens. This aim can be achieved by providing them with food, shelter, clothing, education, and training. Failure to provide these essentials leads to deprivation. Thus, in order to fulfil their needs, women are compelled to work. In such a situation, females become sources of income, and their family member's value as an economic asset increase. They are considered a kind of insurance for their parents, old age or sickness. Hence, females are not only deprived of their basic needs but also lose social contact. Since the dawn of the industrial revolution, the ratio of female workers in an industrial setup has been minimally low, depriving them of their economic rights and financial stability. Industrial hazards and their aftermath affect both men and women alike. But in the case of a female falling ill, it has a cascading effect on their family because they are the breadwinners of their family as well as homemakers.

The dignity of women in society provides an exact measure of the development of society. Historically, the position of women was extremely oppressive. Women were deprived of their individual decisions and choices. They were brought under the full control of men. They were not supposed to seek any gainful employment outside the family. This hindered their economic development and reduced their social position. The most important and far-reaching efforts to emancipate women were made during the period of the freedom movement in our Country. It was during that movement that women made their presence felt, and by participating in the movement, they positively demonstrated that they were in no way unequal to men. After the industrial revolution, the social situation changed throughout the world,

and so did it in India. A family no longer remained a centre of production. Because of industrialization and urbanisation, new paradigms and values emerged. Job opportunities, economic hardship, and favourable social and cultural situations encouraged women to seek employment outside the home.

Following the country's independence, an increasing number of women left their homes in search of work. The women started migrating to the cities to take up employment in industry. According to the 2011 Census of India, women workers constitute 28.68 % of the total workforce in the Country. There are three sectors: The Primary sector, the secondary sector, and the tertiary sector. The primary sector is the dominant sector so far as the employment of women in rural areas is concerned; it accounts for nearly 85% of women's activity. The primary sector consists of agriculture, mining, and quarrying; the secondary sector consists of manufacturing, electricity, water, and construction; and the tertiary sector includes wholesale and retail trade, restaurants, and hotels; transport, storage, and communication services; financial intermediation; insurance; real estate and business services; public administration; education; healthcare services; and community services.

In rural areas, women are mostly engaged in the primary sector, while in urban areas, women are mostly engaged in the tertiary sector. Although the entry of women into the labour force raised their economic and social status, it also gave rise to many problems and difficulties for them. They have to face problems at home as well as at work. They have to perform dual responsibilities termed "reproductive" and "productive". The problems and difficulties multiplied due to their peculiar social, biological, and psychological conditions and due to their illiteracy and ignorance. They may have to accept jobs that they do not like; they may have to work under unpleasant conditions; and they may have to accept wages that are not enough for their average way of living. They were taken on labour jobs carrying lesser wages, and there was no avenue of promotion for them, nor protection or security of employment. The wages of women are usually fixed at rates lower than those for men in the same or similar occupations. They are not able to take advantage of social security programmes. The working conditions of women workers in the organised sector are also not good. Women workers in the public and private sectors are all deprived of most of the benefits.

Sexual harassment of women at the workplace is a very complex problem, whether in government or private organisations. It can happen to top executives, supervisors, clients, factory workers, and domestic servants. Due to the fear of losing confirmation of service, promotion, and jobs, many women have silently endured sexual harassment at the workplace, considering it a normal occupational hazard. In totality, the conditions of women workers are very pathetic and disgusting. To undo the aforesaid discrimination and exploitation, there was a need to provide them with some security and protection through the law. The Constitution of India makes several provisions for the protection and security of women workers. These provisions, besides the preamble, are contained in Articles 14, 15, 16, 23, 39, 43, and 46 of the Constitution. The provisions of the Constitution, which are called policy principles for providing protection and security to women workers, are implemented through different protective legislations. Protective measures are not only provided through legislation but also through different plans, programmes, policies, and schemes of the government.

### **History of Lock Industry in Aligarh and Work Process**

There are different interpretations regarding the origin of the lock industry in Aligarh. Jain provided one interpretation regarding its origin, whereas Nevill provided a different interpretation as follows: The History of lock manufacturing in Aligarh is interesting. Almost 125 years ago, in 1870, a gentleman

from England established the firm Johnson and Company to import locks from England for sale in Aligarh. In 1890, Johnson and Company started the normal production of locks on a small scale by cutting the sheets and manufacturing them through the process of moulding. Besides England, the locks made of sheet metal began to be imported from Germany for sale in Aligarh. In 1930, Johnson and Company and some small-scale units started manufacturing locks from sheet metal by duplicating German locks. These locks, which were manufactured in Aligarh, are known as Aligarh locks. In 1950, Surendra Kumar, an advocate by profession and the son of a barrister, started manufacturing locks in a very systematic way by importing machines, techniques, and even foreign engineers. However, this globally famous lock manufacturing unit has closed down due to a family dispute. In 1975, when the company collapsed, the engineers, contractors, mechanics, and labourers employed in this large concern set up their own small-scale lock units. And now Aligarh is the biggest lock-manufacturing hub in India. It is true that from 1950 to 1975, many Muslims made significant contributions to the manufacturing of locks from shared metals with the help of machines. Prominent among these were the Jemco and Rose Lock brands, which became very popular in those days. Around 1970, Aligarh manufacturers stepped into the field of manufacturing locks for scooters and motors (Jain, 2003). Work in metal is of considerable importance. The Aligarh Postal Workshops, since their establishment in 1842 or thereabouts, have served as a training ground for a large number of mechanics and have given them a sound knowledge of modern tools and appliances. With the adoption of wheeled carriages, mail carts, and bullock waggons in place of runners on the main postal lines, Dr. Paton, then postmaster general, started the Aligarh shops, and the experiment proved more successful, with almost every part of India being supplied with vehicles as well as other requirements in the shape of bags, stamps, and printed forms. The workshops employed as many as 2,000 men after the Mutiny, and organised labour enabled Postal communication to be restored with great rapidity at that critical period. The operations of the workshops were largely curtailed after the opening of the railways, and the number of hands was reduced to 800 or 400, mainly carpenters, ironworkers, die-sinkers, and leather workers. At the present time, the institution comprises a large printing establishment with a daily average of 325 hands, as well as the workshops proper.

The latter employed some 370 persons, and the articles produced include scales, locks, letter boxes, furniture, badges and scales, knives, lamps, lanterns, metal notice and sign boards, mail and handcars, bags, wallets, and tarpaulins. To these workshops may be traced the origin of the metal Industry of Aligarh, which is especially dedicated to the production of locks in brass and iron. There are numerous locks manufacturing industries in the city, as many as 27 being in existence in 1907, and others are to be founded at Iglas, Hathras, and elsewhere in the district. Two firms in Aligarh employ over two hundred people, and one is a joint stock company. Known as the Pioneer Lock Works and General Metal Foundry, started several years ago by Messers Johnson and Company, while the other is known as the Sparking Lock Works. The locks are of high quality and are imported in very large numbers to all parts of India. Other well-known firms are those of Nabi Bakhsh and Karam Ilahi and of Hafiz Inayatullah and Abdullah. The output at Aligarh is estimated at about 500,000 locks per year, valued at Rs. 2,76,000. Iglas Works produced locks to the value of Rs. 30,000 (Nevill 1926, Pp, 61-62). However, a real impetus for the development of the lock industry in Aligarh came in 1926, when the Government of the country established a metal workshop to train artisans in lock making. Soon, many artisans began manufacturing locks and their components at home with the help of their family members, including children. Many families living in the adjoining villages of Aligarh city also took up this work out of their economic

compulsions due to insufficient income from agriculture. With this, the lock industry spread to surrounding villages too. A majority of lock makers at that time were Muslims. With the partition of the country in 1947, most Muslim master craftsmen and artisans migrated to Pakistan, leaving a void and creating a slump in the lock industry. However, this situation did not continue for long.

The Punjabi Hindus who migrated from Pakistan to Aligarh soon realised the potential of this industry and started producing locks with the help of locally available skilled labour. The social composition of lock makers changed, but production of locks on a mass scale was resumed. The Government also helped the industry by offering various incentives. The industry emerged as the most important industry in the town, offering employment to a large number of people and producing locks worth crores of rupees. Today, locks of different types are made in Aligarh, sent to different areas of the country, and exported to many countries around the world. The lock industry in Aligarh city mainly falls under the small-scale and cottage sectors. A large part of it comprises household units and workshops. They are largely unorganised and unregistered. There are some relatively big and semi-unorganised units too, but their number is very small. The location pattern of this industry is such that while the big units are located in the industrial Estate and on the outskirts of the city, the smaller units are scattered all over the city. There is a large concentration of smaller units in selected mohallas. In these units, the various processes of lock making are carried out mostly by hand. They also employ the bulk of the child labour force.

Locks are made in Aligarh both by traditional and modern methods. The traditional method is mostly used for making heavy locks of brass and iron. Under this method, the lockmaker designs a lock and obtains an order from the trader. The trader, while placing the order, also advances some amount or a loan to the lock maker to buy essential raw materials and components. The lock maker then gives the raw material to the moulder along with a model. The moulder casts all the pieces as per specification and returns them to the lock maker, who then files them. The lock maker then assembles locks with the help of other essential components like the U-shaped bar, springs, keys, etc. bought from the market and delivers them to the trade. The traders get the locks polished and engraved with his brand name before marketing them. The smaller locks are made in factories with modern methods of production. Power presses are used for cutting, bending, making grooves, smoothing, and piercing holes in locks and keys. The rusted components of locks are polished on buffing machines or given dhol or drum polishing. Generally, the parts of locks that are visible and require electroplating are first polished on a buffing machine, and the parts that are not visible are given dholor drum polishing. In cases where visible parts are not electroplated, they are spray painted. The different processes of lock-making are carried out in different units. Generally, cutting, bending, and groove-making work is done in relatively large units with the help of power presses, and processes like buffing, electroplating, spray painting, assembling, etc. are carried out in small workshops and household units. Different units specialise in different types of work. Factories often get the parts manufactured outside on a contract basis. The contractors get the work done with the help of subcontractors (Wahab 2001, Pp.31-33).

### **Review of Literature**

There have been numerous attempts from diverse corners to look into the child labour legislation. In the beginning, any act that was introduced by the British Government to restrict the employment of children in Indian factories was criticised by the Indian Press, even by the leading nationalist and social reform newspapers (Indu Prakash, March 22, 1880, March 21, 1881, and August 4, 1884) and the Gujarati

(March 28, 1880, and March 27, 1881). The Indian spectator (20 March 1881), the Native Opinion (27 March and 19 June 1881), and Prakash (30 June 1881) protest against the legal measures affecting the industrial employment of children in India. This criticism was based on the belief that the effective implementation of the Factory Act would retard the growth of the cotton and textile industries (Chandra, 1969). The impact of various acts to bring down the employment of children has been observed by various commissions. The Royal Commission on Labour in India in 1930 observed that the effect of the 1922 Act had brought down the employment of children in the cotton spinning and weaving industries. The Labour Investigation Committee in 1946 reported that several concerns, including the legal provisions prohibiting employment of children in the 1938 Employment of Children Act, sections in the Factories Act, and the Indian Mines Act, appear to be infringed openly and with impunity. Commenting on the laws dealing with children The Harbans Committee on Child Labour (1977) reports that the existing legal framework for the employment of children in India is rather dispersed and patchy and recommends single-model legislation. The Report of the Committee on Child Labour (M. S. Gurupada Swamy, 1979) observed that no "general" law regulating child labour is to be found on the Indian Statute Book, and this is because historically, legislation was passed not with a focus on the employment of children but with reference to the need to regulate employment in a particular industry as and when such a need arose. The report on child labour in Indian Industries (1981) emphasises the need for change in the social attitude towards child labour, besides tightening the laws. The report blames loopholes in the law for the prevalence of child labour and contends that these loopholes further perpetuate child labour in the unorganised sector. During the eighties, the manifest failure of child labour legislation to achieve its objectives was widely criticised. The Child Labour Act was an attempt, as the Government put it, to use law as the main instrument for culminating child labour, as mentioned in the National Child Labour Policy of 1987. But this attempt was acknowledged as a failure by Burra (1989). Even in attempting to ban or prohibit child labour in certain areas and processes, the act included a provision that negated all that was said in the section.

By keeping out of purview any occupation, work, or process that is carried on by a family, the Government has offered protection to the match industries of Sivakasi in Tamil Nadu; the Carpet Industry of Mirzapur; the glass units of Ferozabad in Uttar Pradesh; the beedi industry in various parts of the country; and all the rest to continue their exploitation of children under the umbrella of the family. Thus, the 1986 Act turned out to be legislation to legitimise child labour in the name of pragmatism. "A diction in the constitution has been contradicted" (V.R. Krishna Iyer 1987). Ever since the new legislation passed, no employer in the hazardous industry has been found guilty or inflicted punishment. Thus, the law is only a showpiece of the government, and the people at large are just spectators. The acceptance of child labour of any tender age is indicated by regulating child labour without mentioning the minimum age limit for the employment of the child (Uma Joshi, 1988; Usha S. Nayyar, 1989). Their discussion has mainly veered about the areas in the existing legislation that need to be enlarged to achieve the ultimate goals in the sphere of child labour and the need to probe and plug the loopholes in the act concerning child labour in the unorganised sector.

### **Previous Studies on Lock Industry**

Though there have been several studies conducted by various social scientists, academicians, and NGOs on female workers and child labour in Aligarh, particularly in the lock industries, building construction, and hardware manufacturing industries, there has been a dearth of studies focusing on the fallout of

legislation on female workers in Aligarh, particularly in the lock industry. Some of the previous studies conducted on female workers focused on various aspects of the issue. They looked into the magnitude of female labour, the socio-economic conditions of female worker families, the quality of the artisans, problems of capital intensity in the lock industry, the income structure of families and hired workers, and the nature of work and hazards faced by female workers in the lock industry.

Iffat Faridi's study on the lock manufacturing industry in Aligarh was one of the earliest studies, focusing on numerous lock manufacturing processes and the types of labourers employed in the manufacturing units. The study observes that the factory owners do not face a shortage of labour as it is available in abundance, especially with the availability of women and children in the lock units. The study also highlights the exploitation of women and children in lock manufacturing. According to him, women and children form 43% of the total work force. The author blames the prevalence of primitive technology for the existence of child labour. Burra (1989), in her report, found that there are a number of hazards in the process in industries such as polishing, electroplating, and spray painting and stressed the need for shifting the home-based units carrying out the hazardous jobs to an area like an industrial estate where the working conditions can be supervised and laws can be implemented. The vulnerability of small entrepreneurs and their need to deploy cheap labour in order to survive the study forcefully point out that implementation of the law without ensuring adequate income for the parents and proper health care for the workers would result in the plight of the workers working conditions and reduced wages for the female workers.

### **Meaning and Types of Lock**

A lock is a mechanical fastening device that may be used on a door, vehicle, or container, restricting access to the area or property enclosed. Commonly, it can be released by using a key or combination. Locks may be entirely mechanical or electromechanical. They may be operated by turning some form of removable key, by keying or dialling in a combination that directly or via electromechanical means operates the lock, with some form of magnetic or other *card* reader, or by moving a part on a safety lock intended to prevent accidental operation rather than unauthorised access (Nasir, 2011, Pp. 30).

### **Lock Making Process**

Lock making passes through various processes Some important processes are:

**Power Press:** The lock case or plate, lid, flat keys, and other parts are cut from MSA sheets on a power press.

**Hand Press:** In the hand press, the components are smothered, and holes are punched on keys and lock cases.

**Polishing:** The components of the locks, which are bound to get rusted, are polished through processes called Drum polishing or polishing in buffing machines. Drum polishing is done on parts that are not visible from outside, such as the handle cover or keys, and parts are polished on buffing machines.

**Electroplating:** In this process, the polished metal pieces are tied on copper wires, which are then strung on rods and submerged in acid and alkaline baths.

**Spray Painting:** The components of locks are arranged in a tray and carried to the painting table. With the help of a spray gun, the spray painting is made over the components of the locks. Paint and paint thinner are used in this process.

**Assembling:** Components of the locks are assembled together to make the complete locks. A complete lock requires the assembly of different pieces. Under this process, each worker does a particular job and passes it on to the next.

**Packing:** Packing is the last step in the process of making locks. A number of locks are packed in a carton for marketing.

**Processes in the Lock Industry Indicating the Segmentation of Labours**

<b>Processes</b>	<b>Labour</b>
Hand press machine	Female and female children
Power press machine	Female and female children
Liver Chirai	Female and female children
Making springs	Female and female children
Electroplating	Adult men and children
Buff- polishing	Adult men and children
Dhol – polishing	Adult male
Drum- polishing	Adult male
Filing component	Male and female
Assembling	Male and female
Packing	Female
Marketing	Male and female

**Study Area**

Located at a distance of about 126 km from Delhi, Aligarh is one of the important districts of Uttar Pradesh. It lies in the fertile area between the rivers Ganges and Yamuna, known as the Doali. Aligarh is located in the western part of Uttar Pradesh (U.P.), one of the most populous states in northern India. The district comprises the northernmost part of Agra division. Aligarh district has its boundaries with Bulandshahar district in the north, Mathura district in the south, Etah district in the southeast, and the extreme northwestern boundary, formed by the river Yamuna, that separates Aligarh from Gurgaon district of Haryana State. Aligarh town is the largest urban centre and administrative headquarters of

Aligarh district (Zilah). The district is further divided into six sub-districts (tehsils), each with its own divisional headquarters. Minor officials administer five tehsils, while government administrators in Aligarh town regulate any policies or activities affecting the Zilah as a whole. The city covers an area of 34.98 square kilometres. The total population of Aligarh City is 874,408 (Census of India, 2011). According to the 2011 census, the literacy rate of Aligarh city is 67.52%, of which the male literacy rate is 77.97%, the female literacy rate is 55.68%, and the sex ratio is 882 females per 1000 males in Aligarh city, Uttar Pradesh. The residential structure of Aligarh city is rather typical and varies in nature. Aligarh city has two distinct nature-wise divisions, i.e., old/walled city and Civil Lines.

In Old City, the houses are very congested and of an old type. Due to the non-availability of open spaces, the housing is rather unplanned in nature. They lack proper ventilation, sewage, etc. The housing pattern of Civil Lines is well planned and different from that of the old walled city. The major factor that influences the inequalities in different parts of the city has been the occupational status of the people. The manufacturing units of the lock industry are scattered all over Aligarh. Though the households engaged in various processes of lock-making or assembly are found all over the city, they are concentrated in 48 mohallas located in 28 different wards. For the purpose of this study, 18 mohallas, which are child labour concentration pockets, were selected. They are: Jeevan Garh, Bhojpura, Shahjamal, Rasalganj, Sarai Rehman, UsmanPara, Hathi Pul, Tantanpara, Chowk Bundu Khan, Sheikh Khan, Atish Bazan, Delhi Gate, 14 Kailash Galli, Shastri Nagar, Parao Dube, Jaiganj, and Sarai Lavaria. These Mohallas are located in 11 different wards of the city.

### **Causes of Female Workers**

In a country like India, where well over 30% of the population lives in conditions of extreme poverty, women work out of necessity, and without their earnings (however meagre they may be), the standard of living of their families would decline further. Since it is not easy to eliminate female labour all of a sudden due to the existing socio-economic situation, legislative measures have been taken to prohibit female employment in certain occupations and processes that are considered hazardous for women and to regulate their employment in other occupations, providing for improvements in working conditions, reducing working hours, ensuring minimum wages, and providing facilities for health and education. The unfortunate part is that women are unprotected and are exploited to a great extent in the unorganised sectors. Here, women are employed in occupations like domestic servants, cooking, homemaking, and various processes of manufacturing goods that are subcontracted by industrial concerns and are home-based. One of the steps to curbing such exploitation is intervening through legislative action.

### **Work Processes and Women**

Today, locks of different types are made in Aligarh, sent to different areas of the country, and exported to many countries around the world. The lock industry in Aligarh city mainly falls under the small-scale and cottage sectors. They are largely unorganised and unregistered. They consist of many household units and workshops. Locks are made by the traditional method and the modern method in Aligarh lock factories. The traditional method is used in making heavy locks of brass and iron, and the smaller locks are made in factories with modern methods of production. There are various types of work processes in lock making. Generally, they are cutting, bending, making grooves, buffing, electroplating, spray painting, assembling, smoothing, piercing holes in locks and keys, etc. But the majority of the women are engaged in the process of making liver chirai, hodka, packing, dholki, etc. (Nasir, 2011, Pp. 46).



### **Health Facilities**

Health facilities may be provided to working women and their children. The majority of working women's households are unable to afford the cost of treatment. As we know, the households and working females who work in Lock Industries are affected by Asthma, T.B., Heart problems, Skin diseases, etc. The treatment of these diseases is so costly that a poor man cannot afford it. At least one dispensary can be opened in each female labour-prone Mohall equipped with sufficient medicine and adequate staff. These dispensaries may make regular checks on the workers. Medicine and other facilities may be provided free of charge. For this purpose, assistance from entrepreneurs, District hospitals, local-level practitioners, and NGOs may be sought. The Government should allocate sufficient funds for these dispensaries (Sekar & Mohammad, 2001, Pp. 14).

### **Objective of The Study**

- To find out about health problems among female workers in lock industries
- To access the socio-economic and educational conditions of female workers in Lock Industries

### **Problems of Female Workers in the Aligarh Lock Industry: A Case Study**

The information used in this part of the paper has been gathered through the interview schedule for the female workers in the Aligarh lock industry. This paper is divided into two parts. In the first part, ten case studies collecting the general background of female workers have been written. In the second part of the paper, the focus is on the general characteristics of the female workers under study. It also examines the socio-economic profile of female workers in terms of age, religion, educational status, nature of work, etc. The analysis of the data is based on a sample of 50 female workers in the age group 13–65 years.

### **Case Studies**

#### **Case Study-1**

Zainab Khanam, in her 30s, works in the Aligarh lock industry. She lives ten minutes walking distance from the factory in the Sarai Rahman locality. She was married at an early age, at the age of 17, and as a result, she had three children by the age of 23, two daughters and one son. Her life was going a bit normal for a couple of years after her marriage, but unfortunately, she developed tuberculosis at the age of 25. Her husband was financially weak, which led to the skirmishes (ranjis) between them. He was a drunk man as well, and he used to beat her very much. Often, these all led to their divorce. Naturally, the children were to be with their mother after their suppression, so she moved to her mother's home in Sarai Rahman locality with her children. As she had lost her father at a very young age, now the only breadwinner of that family was the Zainab, so to take care of her family, she joined the lock factory as a lever chirai worker. She faces a lot of problems at the workplace because she is an illiterate, unskilled worker, and she is getting a weekly wage of only Rs 600 (six hundred). So, with this meagre wage, she found it very difficult to sustain her family. But she sent one child out of three to the school, but as we all know, in Indian society, a son is given preference over a daughter. She has another problem in the family due to the severe illnesses of her mother and her younger daughter. She spent a considerable amount of her salary on medication for both her mother and daughter. She had to miss work a couple of times since she had to take care of her mother and children. The owner of the factory used to scramble for her because of her absenteeism at work. She also used to get sick very often, which made her health

fragile. She always complained about the government's negligence towards her condition because she thought that the government should help people in need. She also developed some diseases due to her work in the factory as a lever-chirai worker, like skin diseases and wounds on her fingers. She feels very frustrated about her condition and her family's problems. But what can she do except hope for better futures?

### Case Study-2

Naseema Parveen, '14, working in the Aligarh lock industry She lives in the Tasveer Mahal slum area. She works in the lock factory as a daily wage worker. She is the elder daughter of her parents, and she also had five younger brothers and sisters. Her father is a rickshaw puller, and her mother is a housemaker. The health condition of her father is very bad because he suffers from a number of diseases, like asthma and a wound in his left leg. He always got sick. According to Naseema, her father worked on electroplating and polishing in the lock industry several years ago. But now he is not well, which is why he used to drive an e-rickshaw if he felt well; otherwise, he used to take rest at home. Basically, Naseema and her family belong to Purnia district of Bihar; her father came to Aligarh in 1985 in search of a job with his uncle, and he joined the lock industries for different jobs; some time he used to do work on buff machines, some time he worked on lever chedai, by power press machine and hand press machine, for a very long time. Because of this work, he got back pain, and in one of the major accidents with the power press machine, he lost his fingers. Now he has totally left the job of a factory and works as an e-rickshaw puller in the local area, from the railway station to Jamalpur or some other place, but the work is not profitable because there are many rickshaws running, the availability of passengers is very low, and the charge of the rickshaw owner is also high. So, if her father pays the rickshaw charges to the rickshaw owner, the amount left with him is very low, and that amount is not sufficient to sustain my family. So, she has to go to work and earn 100 or 150 rupees daily from the lock industry by working on hand presses, and her mother also used to do some work in flats and houses that were very near her house, so she also earned some money, which was helpful for her family. One of the biggest problems is that, at the time of her father's accident, she took some money on loan from a local businessman. So, he often visits the home to collect the loan amount, which is divided into instalments of 350 rupees per week. So that amount puts a lot of pressure on her family. She says that if the instalment is not paid at the time, the person who comes abuses her parents, and she feels very bad for this. She used to go to work every day and earn some money to fulfil the loan amount as soon as possible. At last, she said her wish was to study, but due to family problems and the health condition of her father, she left the school and started working in a factory.

### Case Study-3

Nazo is in her 50s and works in the Aligarh lock industry. She lives in Shahjamal locality and works in the Aqdas lock industry as a permanent worker on a hand press machine and some time on lever chirai work on a monthly salary of about 6,000 to 8,000 depending on the performance of the factory and the production of goods. She was married at the very young age of 16 years, but she had only one child, her son, whose name was Rahman. She told me that her son, 15," was shot dead by the police at the time of communal violence between Hindus and Muslims in the upper court area. She started crying when she talked about her son, Rahman. Her misery continues, or her husband also left her alone one year ago, on

October 25, 2022. Her husband died due to kidney failure. He also worked in a lock factory for almost 35 to 40 years. And the disease he was suffering was also due to working in a lock factory.

According to Nazo, in Aligarh, most of the factories are unorganised, the condition of work is very bad, and there is no skilled labour, safety, or precaution taken by workers at the time of work. Work like polishing by buff machines and the dust particles that come out of the machine are very dangerous for health if the worker inhales the dust particles with air. It starts affecting their lungs and creating diseases like asthma and breathing problems. Slowly and gradually, it led to the death of the worker. She also told me that it is our compulsion to work in lock factories because we have no other work opportunities. Now that she lives with her brother's family, her brother also works in the same factory as an accountant. She also had a problem with blood pressure, and for that, she used to take Unani medicine from Tibia College and the hospital in Amu. She also suffers from back pain due to long hours working on a hand press machine. She always feels very frustrated about her condition and her family's loss. She started her morning with crying and ended her night with crying.

#### **Case Study-4**

Muneera Khatoon, 65," works in the Aligarh lock industry. She lives in Jeevangarh and works as a binding and packaging worker. She had a proper family, like a son and daughter-in-law. They live together, and she also has her own house. She has two sons and the whole family of her son, but she used to work in a lock factory to support herself economically. Because her two sons do not earn as much as the whole family needs, she used to work in a lock factory 40 years ago, in different places and different factories. But now she works near her house in a factory. Which is run by Salim Miya of Amroha district. She works on binding and packaging locks because she is a very old lady and not well; her husband died in an accident on Kawarsi bypass at the age of 35. After that, she was the only breadwinner in her family, which is why she works in a lock factory. She knew well the adverse conditions of the lock factories, which is why she did not allow her son or any member of her family to work in the lock industries because she had long experience. After all, she is a mother, and a mother never wants to push her son into dangerous work that directly affects his health. At last, she said that her experience of life is very bad because she lost her husband at a very young age. And the whole responsibility falls on her soldiers.

#### **Case Study-5**

Sadiya Parveen, 23," working in the Aligarh lock industry, lives in Sharia Rahman locality and works in the Fuzee lock factory in her locality, just a walking distance away. She is unmarried and working on a hand press machine because she is young and powerful, and the hand press machine needs more power and stamina to work on it. She lost her father at a very young age and had no elder brother. She had four brothers and sisters, and her mother also got ill very often because of disease, and she is very anaemic due to a lack of nutritional food because of poverty. According to Sadiya, she works on a power press machine in the lock factory on a monthly basis for some 7,000 per month. But the amount of 7,000 is not sufficient for her family. Her younger brother, Ashraf, goes to work in a service centre for motorcycles. He also supports his family economically. But now he does not go to the service centre for work. Because he is suffering from jaundice and fever. According to Sadiya, these days it is very difficult to survive and run her family, so she does, over time, work in a factory. She is also not feeling well these days; she always suffers from back pain and pain in her hands due to overwork. She is very tensed and

frustrated with their work and wanted to do some other work where she expected to get at least 10 to 12 thousand per month. Finally, she wishes her the best for the future.

### **Case Study-6**

Reshma is 13 years old and works in the Aligarh lock industry. She lives in the upper court area and works in the Jogee lock industry as a daily wage worker on liver chirai and some time on hand press machines, on a monthly salary of about 5000 rupees according to her work and production. She is the elder daughter of her mother, and her father left her mother finally because he was a drunk man as well as because he used to beat her mother very often. These all led to her mother's divorce. Naturally, Reshma and her two younger brothers were with their mother after her mother's suppuration. As Reshma is an elder sister and no one in her family can support her economically except her mother, that's why she used to work in a lock factory, and her mother used to work in some houses as a maid and earn 2000 rupees per month. But the health condition of her mother is not well, and she suffers from breathing problems as well as high blood pressure. So, her mother was unable to work hard and continuously. Her mother used to take medicine from one of the homoeopathic doctors in her locality, and Reshma always felt pressure from her family about her mother and two brothers. She never went to school because of her family's condition and poverty, but she told me that she wanted to send her brother to school. According to Reshma's age, she is a child labourer working in a lock factory due to poverty, and the condition of her family is good because there is no male member who works as the breadwinner of her family. So that she is the only breadwinner of her family, and for that, she used to work hard and spend extra time at work without bothering about her health condition or nutritional diet. She also feels some type of pain in her backbone, a fever, or a headache.

### **Case Study-7**

Shabana is in her 30s and works in the Aligarh lock industry. Basically, she belongs to the Rohtas district of Bihar. But now she lives in Rasalganj locality and works in the Hi-Fi lock industry, just a short walk from her house. She works on a power press machine as a daily wage worker on the basis of her work or the pieces she produces over a day. She is illiterate but well known for her works; her father was the barer in M.M. Hall at Aligarh Muslim University, and her mother left her at a very early age. When she was only 6 years old, she had one sister and one brother; her brother also worked in the dining hall of M.M. Hall as a non-permanent worker. And her sister got married by her cousin brother. But according to Shabana, she was married at the very young age of 16 years, and as a result of that, she had five children by the age of 24. With three sons and two daughters, her life was going a bit normal for a couple of years after her marriage, but unfortunately, she developed tuberculosis at the age of 26. Her husband was a rickshaw puller, and he was financially weak. So, to sustain her family, she also used to work in the lock industry. But after the disease, she was not able to go to work, and the financial condition of her family was not able to sustain her family and the food. That led to the skirmishes between them. Her husband was a drunk man, and he used to beat her and her children very often, which led to their divorce. Naturally, the children were to be with their mother after their suppression. She lives in a slum area of Rasalganj with her children. According to Shabana, one of her sons, Salim, works in an Aligarh slaughterhouse and earns 4000 rupees per month. And she also sent two of her daughters and one son to the government primary school for study, and Shabana used to work in factories to support or sustain her family. She also had a very good vision for her children and her family. She feels well now

and takes regular medicine. At last, she told about her disease that she worked in a lock factory for almost 5 to 7 years before, near the works like electroplating and buff-polishing, and that was the only reason for her illness or suffering from a disease like tuberculosis. Because we all know that women's immune systems are weaker or lower than men's, women are more susceptible to disease than men.

### **Case Study-8**

Rekha Kumari is in her 20s and works in the Aligarh lock industry. She lives in the Delhi Gate area and works in the OM lock industry as a daily wage worker on lever chirai work and some time on a power press machine. On a daily wage of about 400–600 rupees according to her work and production of items, she was married at the very young age of 17 years, and she had two children: her son's name is Sunil, 3 years old, and her daughter's name is Puja, 1 year old. According to Rekha, her husband is a very nice person; he is working as a salesman at A-One Cycle Shop in Railway Road, Aligarh, and earns a monthly salary of 5000 rupees. But that money was sufficient for her family, which is why she used to work in a lock factory. She had no house; she lives on a rent of 1200 rupees monthly, and she told me that she wanted her son and daughter to be literate and gave them the best education. Her daughter is very sharp-minded, and her son is too. She also studied at the middle school level. And her husband is also a high school graduate. Because of her two small kids, she has a lot of problems managing her job in the lock factory. She used to take her daughter with herself to work because her daughter is only one year old, and her baby boy to her mother's house because her mother's house is near her house. Her mother also worked in the same factory, but now and then she was not well, and she was a very old lady. And Rekha's father was no more; he died of the very dangerous disease tuberculosis. He also worked in a lock factory on electroplating machines for at least 25–30 years. Doctors told him about his diseases and that the cause of his illness was only his work. That's why Rekha doesn't like her husband to work in a lock factory. At last, she told herself that she was also suffering from a wound in her fingers and always felt tired because of work. But she is happy and has confidence that one day everything will be fine when her kids grow up, and what she did was only for her children.

### **Case Study-9**

Aafreen 12," working in the Aligarh lock industry She lives in the Jivangarh area, near the Khan brothers lock factory. As she is a very small child, only 12 years old, she used to work only on the packing and binding of the metallic parts of the lock, which are ready for electroplating. She is the elder child of her parents, and she also has three younger brothers and sisters. Her father is a carpenter, and her mother works as a cook in some houses near her locality. Her father's health condition is not good because he is suffering from mouth cancer. Her father used to chew guthkha (supari) and Tam Baku every day. That's why he is not able to do his carpentry work and why his treatment is going on at J N M C H of Aligarh Muslim University. According to Aafreen, the economic condition of her family is very weak. So that she preferred to work in a lock factory to support her family economically. Basically, she belongs to Bihar, but now and then, Aafreen and her family live in the slum area of Jivangarh. After several years, her father, Wakif, came to Aligarh with his uncle for a job at the university, but he was unable to join the university and started working as a carpenter in Jivangarh. Now she is always concerned about her father's disease and prays to Almighty Allah that Allah cure her father. At last, she used to go to work daily and earn some money to fulfil the needs of her family. She feels very frustrated about her family's condition and the problems with her father.

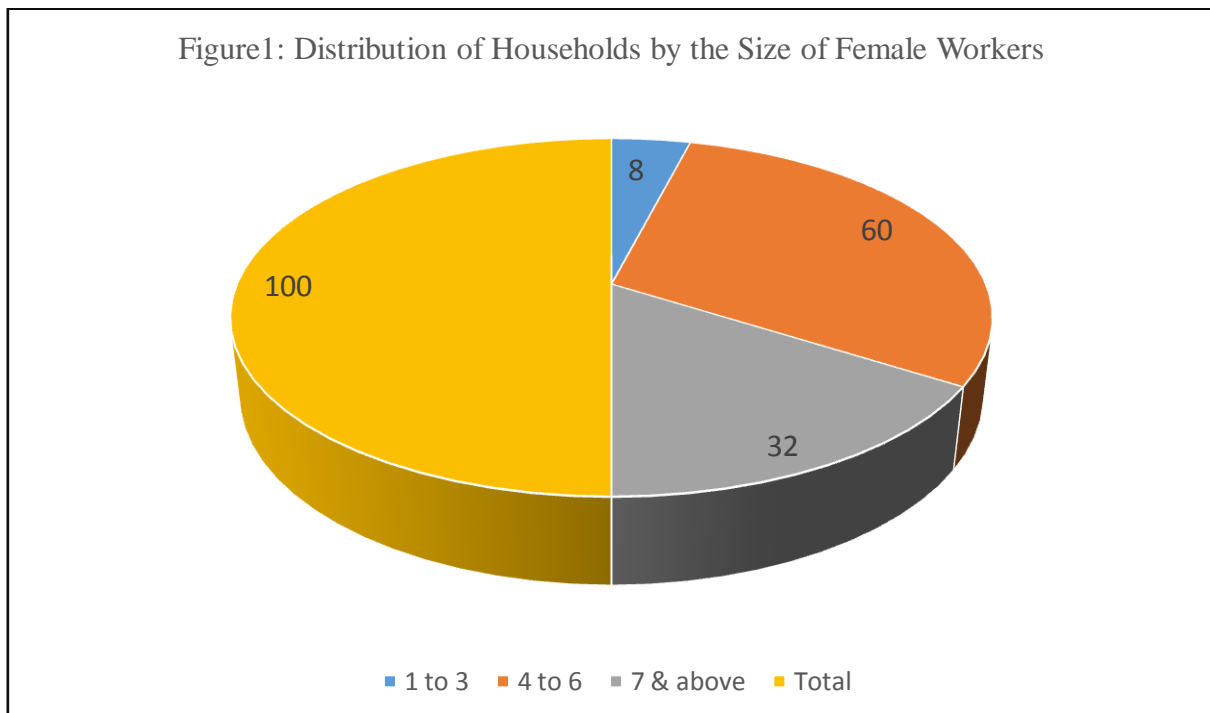
**Case Study-10**

Salma Ansari is in her 50s and works in the Aligarh lock industry. She lives in the upper court area and works in the Aqdas lock industry, which is run by my dear friend, Saboor Khan. She said that she is a permanent worker on a power press machine on a monthly salary of about 6,000 rupees. She was married at the very young age of 20 years, but she had no children because of some deficiency in her body. Her husband is a very nice person, and he loves her too much. Instead of having no children, he used to live together, and he always loved and cared for his wife. But they adopt one of her children, named Rashid, from one of her brothers who lives in Bihar. And as Salma Ansari said, her husband is a rickshaw puller. But he is very weak, and the condition of his health is not good. So, he is not able to pull rickshaws regularly. At that time, the family suffered from economic crises. That’s why Salma used to work in a lock factory and gave some of her money to her husband for his treatment. She wanted to educate her adopted child and fulfil all his needs related to his best life. Now her son is a 7<sup>th</sup> grade student at a private school named Aligarh Modern School. At last, she is very happy with her family and works hard to protect them in every respect, like socio-economic and health conditions. Her wish is to own a house, and she also dreams of making her son an engineer.

**Socio-Economic Status of Female Workers**

**Table 1: Distribution of Households by Size of Family**

S.No.	Size	Frequency	Percentage
1.	1-3	4	8
2.	4-6	30	60
3.	7 & above	16	32
	<b>Total</b>	<b>50</b>	<b>100.00</b>



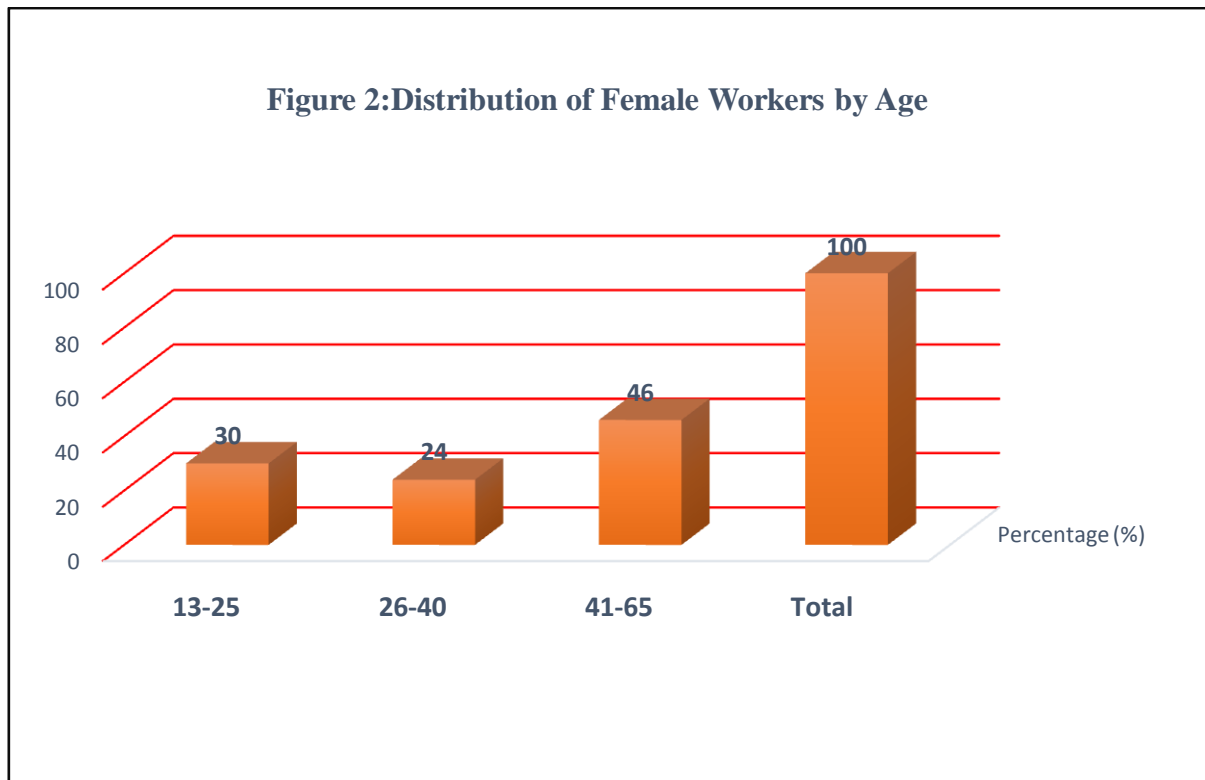
It is evident from Figure-1 that the majority of heads of households (60 percent) had 4-6 people in their families. Families with seven or more children made up 32% of the total. The families that had 1-3 people represent 8 percent. This shows that most of the female workers belonged to families with 4–6 people. The average family size of the households was 5.12 people.

### Age Distribution

Age plays an important role in shaping personality values such as responsibility for work and participation in different walks of life. The information on the age of the female workers was collected from this background. The table presents the distribution of female workers by age.

**Table 2-Distribution of Female Workers by Age**

S. No	Age Group (in years)	Frequency	Percentage (%)
1.	13-25	15	30
2.	26-40	12	24
3.	41-65	33	46
	<b>Total</b>	<b>50</b>	<b>100.00</b>



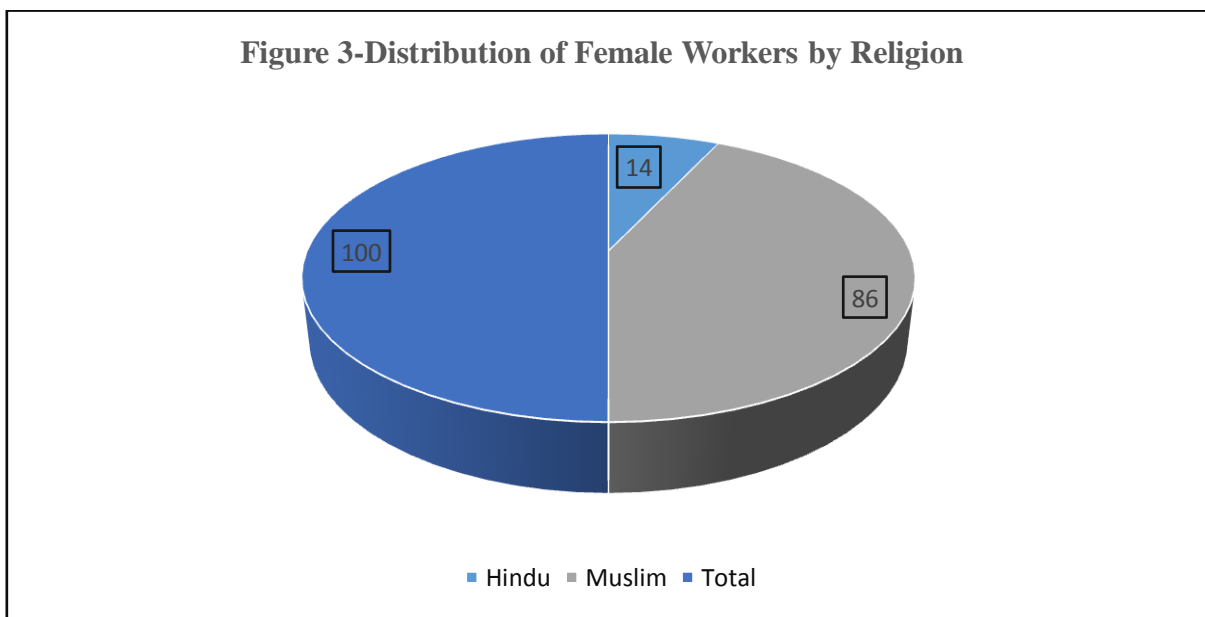
**Figure 2** indicates the majority (46 percent) of the female workers were in the age group of 41–65 years and 30 percent in the age group of 13–25 years. The percentage of female workers in the age group of 26–40 years was 24 percent. The data reveals that the female workers in the age group of 41–65 years were working in greater numbers than the female workers in the age groups of 13–25 and 26–40 years separately in the home-based lock manufacturing units.

**Religion**

**Table 3- Depicts the Distribution of Female Workers by Religion**

S. NO	Religion	Frequency	Percentage (%)
1.	Hindu	7	14
2.	Muslim	43	86
	<b>Total</b>	<b>50</b>	<b>100.00</b>

**Figure 3-Distribution of Female Workers by Religion**



**Figure -3:** indicates that 86 percent of the female workers were Muslims, and the remaining 14 percent were Hindus. This shows that Muslim female workers had a higher percentage than Hindus. It is noteworthy that Muslims concentrated localities in the survey area abroad to home-based Aligarh lock industries.

**Educational Status**

The distribution of female workers by education status is presented in the below table

**Table4-Distribution of Female Workers by Educational Status**

S.NO.	Educational Status	Frequency	Percentage (%)
1.	Illiterate	41	82
2.	Up to Primary Level	9	18
3.	Middle Level	0	0
	<b>Total</b>	<b>50</b>	<b>100.00</b>



**Figure 4- Distribution of Female Workers by Educational Status**

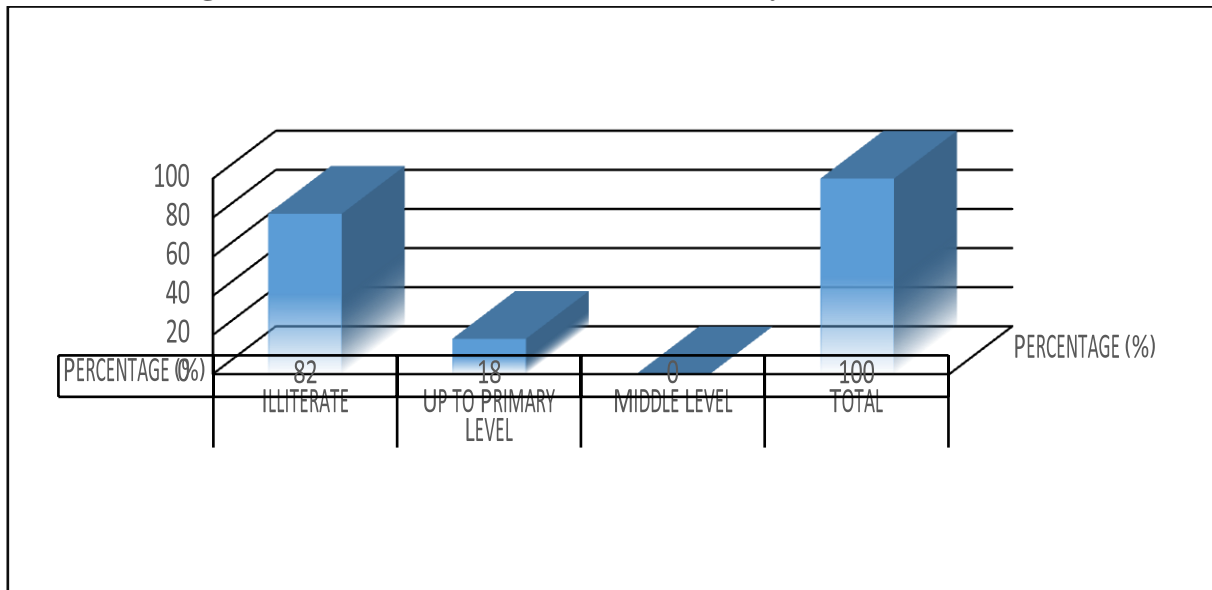


Figure- 4: Data related to the educational status of female workers reveal that 82 percent of the female workers were illiterate, and the remaining 18 percent had some education. This indicates that the educational status of female workers was abysmally low due to the poor socio-economic condition of their parents.

### Nature of Work

Lock manufacturing involves various processes. Female workers were found to be involved in several processes in lock manufacturing. Some of which are hazardous for their health.

**Table-5: Presents the Distribution of Female Workers by Nature of Work**

S. No	Nature of Work	Frequency	Percentage (%)
1.	Lever Chirai	27	54
2.	Hand Press	8	16
3.	Power Press	7	14
4.	Key Hole	5	10
5.	Packing	3	6
	<b>Total</b>	<b>50</b>	<b>100.00</b>

**Figure 5: Distribution of Female workers by Nature of Work**

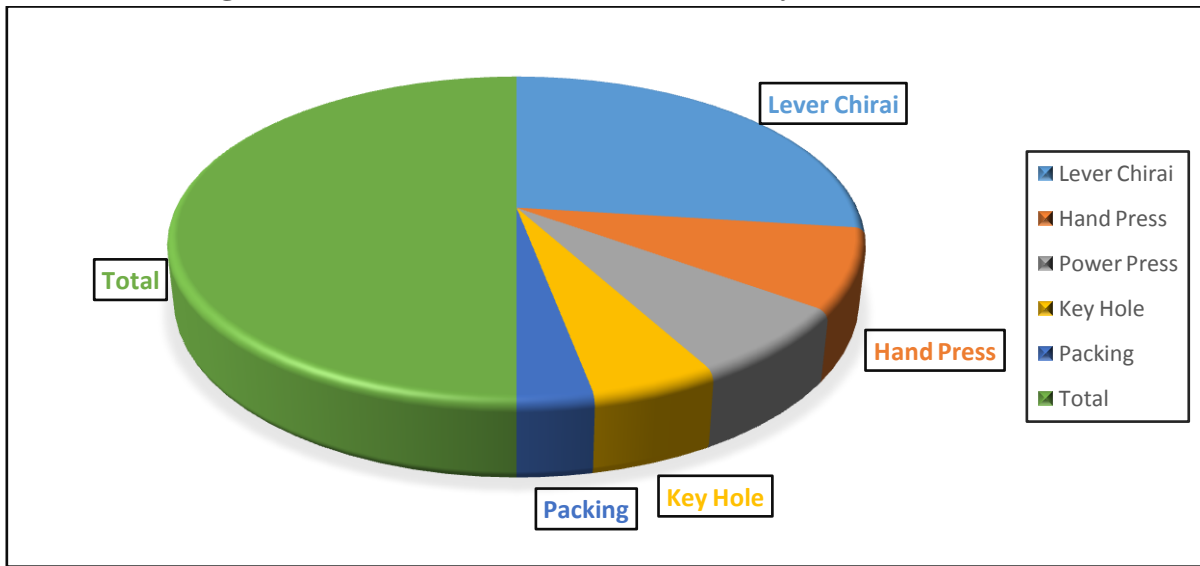


Figure-5: Indicates that 52 percent of the female workers were involved in lever Chirai, 16 percent in hand press, 14 percent in power press, 10 percent in key hole, and 6 percent in packing locks. This highlights that more than 50 percent of female workers are involved in Hazardous work processes such as lever Chirai, key hole drilling, etc.

**Illness**

Lock manufacturing involves various processes, some of which are highly sophisticated and others hazardous to health. Due to the hazardous nature of their work, female workers are exposed to various diseases such as skin diseases, respiratory disorders, Tuberculosis, back pain, hand pain, etc. The nature of illness caused to female workers is presented in the table

**Table 6: Distribution of Female Workers by Nature of Illness**

S. NO	Nature of Illness	Frequency	Percentage (%)
1.	Tuberculosis	7	14
2.	Back Pain	12	24
3.	Hand Pain	15	30
4.	Skin Disease	5	10
5.	Breathing Problem	3	6
6.	Fingers cut	8	16
	<b>Total</b>	<b>50</b>	<b>100.00</b>

**Figure 6: Distribution of Female Workers by Nature of Illness**

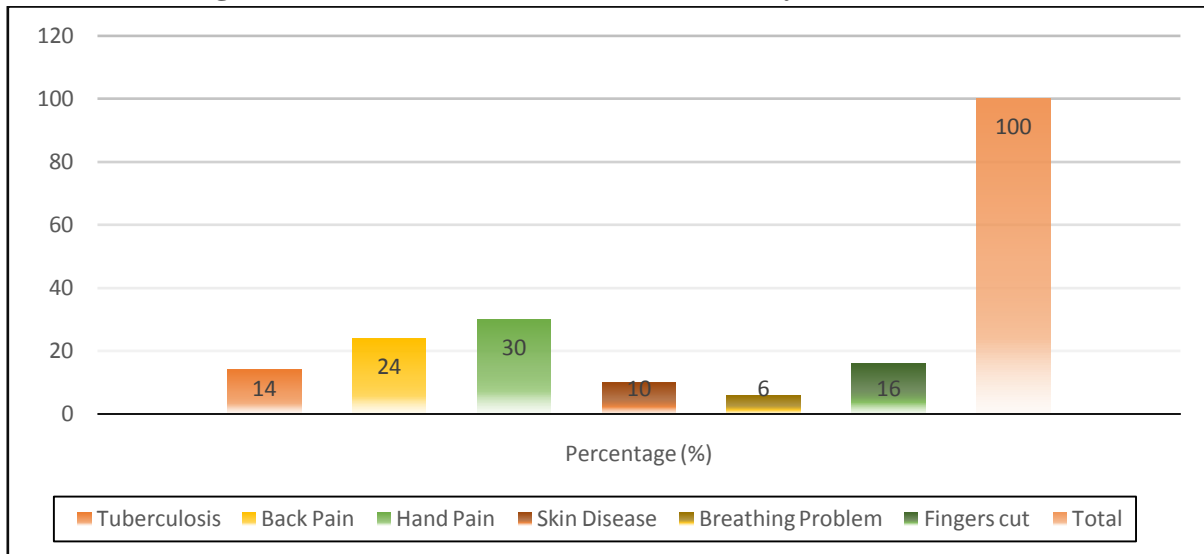


Figure-6: reveals that of all the female workers of Aligarh Lock Industries reporting illness, 14 percent were suffering from tuberculosis, 24 percent were suffering from back pain, 30 percent were suffering from hand pain, 10 percent were suffering from skin disease, 6 percent were suffering from breathing problems, and 16 percent had their fingers cut. Hence, the findings suggest that the female workers of Aligarh Lock Industries are suffering from many hazardous diseases.

### Research Design

The present study on health-related problems among female workers in the Aligarh lock industry uses the inductive logic of inquiry, which starts with the collection of data and then proceeds to derive generalisations. The data was collected from the female workers who work in the lock factories. The respondents related to this project work were identified and interviewed on the basis of the objective of the study and tried to use the case study and interview schedule as an approach for data collection, more than that, attempting to collect the data from the discussions with other people who were a bit aware of the lock manufacturing industry because most of their family members are working in the lock industry of Aligarh. Ten case studies were collected by trying to capture the areas where female workers are involved in lock factories, but it was difficult to collect the data from the lock factory workers directly; actually, the female workers from the lock factory were not ready to give their information.

Despite that, the present study wants to know about the female workers health conditions, family backgrounds, and socioeconomic and educational conditions in the Aligarh lock industries. The study further claims that many of the female workers were working in unorganised factories. But after a period of time, they left the factories because of chronic diseases like back pain and a wound in her fingers from working on lever chirai, hand presses, and power presses. And they started to work in the hardware line and as shopkeepers, etc., so an interview schedule is used for collecting the data.

### Conclusion

It can be said that women working in the lock industry are exposed to a variety of hazards and dangers. Health problems set in at an early stage and persist throughout their lives. Even women who work in non-hazardous processes suffer from health issues because of the work environment. The health problems are compounded by a lack of access to education and meaningful social relationships (with

family and peers) among women in the labour market. According to the case studies, most of the female workers are working in lock factories only because of poverty; they never wanted to do such a type of work because the condition of the work place is very pathetic, all the factories come under unorganised or semi-organised sectors, and the owner of the factory doesn't provide any type of safety to the workers at the work place, or there is no accidental insurance given by the factory owner. The present study is able to know the actual condition of the female workers in the lock industries. Most of the female workers work on lever chirai, hand press machines, and power press machines and earn some amount to maintain and sustain their families. As for as the workplace is concerned, female workers were also the victims of humiliation, torture, and exploitation by the factory owners and male workers. About 85 percent of the female workers were frustrated by the work and the poor condition of their work place, but there is no other option for them to work in Aligarh, that is why they are compelled to work in the lock industries.

The female workers have to face problems at home as well as at work. They have to perform dual responsibilities termed "reproductive" and "productive". The problems and difficulties multiplied due to their peculiar social, biological, and psychological conditions and due to their illiteracy and ignorance. They may have to accept jobs that they do not like; they may have to work under unpleasant conditions; and they may have to accept wages that are not enough for their average way of living. They were taken on labour jobs carrying lesser wages, and there was no avenue of promotion for them, nor protection or security of employment. The wages of women are usually fixed at rates lower than those for men in the same or similar occupations. They are not able to take advantage of social security programmes. The working conditions of women workers in the organised sector are also not hygienic. Women workers in the public and private sectors are all deprived of most of the benefits.

Besides a lack of organisation in terms of forming trade unions among female workers, the adverse impact of technological growth on women's labour, the absence of purposeful human resource development policies on improving women's employability through training, inadequate legislation, and ineffective enforcement of safeguards to protect female workers, particularly in terms of their working conditions, etc. are some of the major causes leading to the pitiable condition of women workers. Under these existing conditions, it would not be out of context to say that the government should make efforts to improve their working conditions in terms of occupational safety, working hours, and the payment of adequate wages to them so that the women workers engaged in the unorganised sector of employment may have mandatory decent and dignified work.

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