EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE AND ATTITUDE REGARDING THE PREVENTION OF SELECTED OCCUPATIONAL HEALTH HAZARDS AMONG COTTON INDUSTRY WORKERS AT SELECTED COTTON INDUSTRY IN DINDIGUL.

A DISSERTATION SUBMITTED TOTHE TAMILNADU DR.M.G.R. MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN NURSING.

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CERTIFICATE

This is a bonafide work of **A.CHINTHAMANIM.Sc (N)** from SakthiCollege of Nursing, Dindigul, Tamilnadu, India,submitted in partial fulfillment for the Degree of Master of Science in Nursing under the Tamil NaduDr.M.G.R Medical University, Chennai.

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College Seal

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“Life isn’t about finding yourself. Life is about creating yourself.”

— George Bernard Shaw

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ABSTRACT

The present study entitled “To evaluate the effectiveness of Video assisted teachingprogramme regarding knowledge and attitude on selected occupational health hazards among cotton industry workers in selected cotton industry at Dindigul District was done by Mrs.A.Chinthamani as a partial fulfillment of the requirement for the degree of Master of Science in Nursing to the TamilnaduDr.M.G.R. Medical University, Chennai during the year 2012-2014.

Objectives: Assess the knowledge and attitude regarding prevention of selected Occupational health hazards, Determine the effectiveness of video assisted teaching programme ,Correlate the knowledge and attitude of cotton industry workers and Associate the selected demographic variables with Knowledge and attitude of cotton industry workers .**Research design**: Quasi experimental, in this one group pre test, manipulation and post test design was adopted. **Research Approach:** Evaluative approach**Setting:** Sola cotton industry at Vedasandur in Dindigul. **Sampling Technique :** Simple Random Sampling. **Sample:** 60 cotton industry workers. **Questionnaires:** Structured Interview Questionnaire’s for to assess the Knowledge and Likert type Attitude scale to assess the attitude level. **Intervention:** Video assisted teachingprogramme was developed regarding the prevention of selected occupational health hazards. **Result:** There was a significant improvement in the Knowledge and Attitude of cotton industry workers after the video assisted teachingprogramme. There was a positive moderate correlation between the Knowledge and Attitude of cotton industry workers. **Conclusion:** The result supported thatthe video assisted teaching program was very to improve the Knowledge and Attitude regarding prevention of selected occupational health hazards.

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"Do good to yourself
By doing good to others"-Frathula

INTRODUCTION

''Health is a state of complete physical, mental and social well being and not merely an absence of disease or infirmity'' -WHO (1948)

God said to Adam, "you will have to work hard all your life to produce enough food for you". So even now, human being is struggling to earn for their lively hood. These earning sources vary from one individual to another.

But often people take health for granted and do not fully appreciates until it lost the meaning of health is misunderstood and misinterpreted by many people. This is because of lack of complete scientific information and poor instructions. It is subjective and abstract.

Health promotion and maintenance enables individual's families and communities to develop their full health potential.

India is now a major power source and is turning into a developed country from a developing country. It is been estimated by the government of India that small-scale industries contribute 40% of the gross industrial value in Indian economy. The small sector has grown rapidly over the years that, growth rates during the various plan periods have been very impressive. The number of small-scale units

has increased from an estimated 0.87 million units in the year 1980-81 to over 3 million in the year 2000 This would lead to roping in of 4.2 million people to the spinning industry. This is in addition to nearly 6.5 million people that are already involved in the sector, which is the second largest employer after agriculture.

Apparel **Export Promotion Council** data shows that there are 1,761 cotton-spinning mills in India, total of 460 mills in the State of Tamilnadu, including 160 mills in the dindigul district out of which maximum units are concentrated in Tamil Nadu, Andhra Pradesh, Gujarat and Maharashtra.

The health of the industrial workers, in a large measures, will also be influenced by conditions prevailing in their working place one of the declared aims of occupational health is to provide a safe 'Occupational environment", in order to safeguard the health of workers.

According to **WHO,** healthy workers are productive and raise healthy families and healthy workers are a key strategy for overcoming poverty. Occupation health is related to human work, human place and work environment. Occupation health is entirely preventive medicine. The main objective of occupational health is the safety of workers in all occupations from injuries and disease and to improve their health status.

Depending upon the nature of the occupation environment the workers are exposed to physical, chemical, biological, mechanical and psychological hazards.Occupational hazards are related to excessive heat, radiation, cold, vibration, pressure, noise, abnormal position; body alignment etc. **(Suryakantha)**

"**Working safety is like breathing – if you don't, you die" -Deepak Chopra.**

According to **ILO** estimation, out of 2.34 million occupational related deaths occur every year.

According to **NCOH** Respiratory problem is one of the major health threats to cotton industry Workers. It leads to some systemic symptoms in exposed Workers, along with a number of other physical problem like, hearing loss or noise problem, low back pain, Respiratory symptoms occur. Byssinosis is a respiratory diseases of workers of cotton, flax, soft hemp and is classically characterized as shortness of breath; cough and tightness of chest occur on the first day itself. Then it will develop bronchial asthma.

It is noted that the maximum permissible noise level in work place for 8 hours shift is 90 dB, as recommended by the Government of India, Ministry of Labour, Model Rules under Factories Act, 1948 (corrected up to 31-03-1987), **Occupational Safety and Health Administration (OSHA)** and **International Organization of Standardization (ISO).**

The cotton spinning mill workers were exposed to continuous noise levels between 89 and 106 dBA. It results in mild, moderate, moderately severe degree of hearing impairment. Every year approximately more than 30 million people across the world are occupationally exposure to hazardous noise and most of the people undergone for accident. Occupational accidents result from the joint action of both environmental and human factors, and are therefore dealt with separately

Kurdish saying "Safety is a state of mind - Accidents are an absence of mind".

The interaction between man and his working environment may lead to betterment of health, when work is fully adapted to human needs and factors, or to ill health, if work stresses are beyond human tolerance. Occupational diseases and injuries result from specific exposures at work. In addition, work exposures may aggravate certain illnesses or be a factor of varying importance in causing diseases of multiple etiologies.

According to WHO The main aims of occupational health services are.

- The Promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations.
- The prevention among workers of departures from health caused by their working conditions.
- The protection of workers in their employment.

Industrialization is necessary for prosperity and at times for the survival of a nation. The production is the real wealth of a Nation. Only industrialization is not enough, real benefit is brought by continuous top performance of the worker which is only possible by their good health. Industrial workers constitute only a segment of general population and the factors that influence the health of the population also apply equally to industrial workers. Occupational health is undoubtedly an issue that calls for more research by experts and activists.

Significantly reducing the incidence of occupational disease is not simple, it may not be easy and it will not happen overnight, but progress is certainly feasible. so let us, in our respective areas of responsibility, set clear goals, establish a road map and most critically, act and persevere so that, together, we succeed in turning the tide

on the epidemic and make good progress on this dimension of decent work," **–Ryder (2013)**

SIGNIFICANCE OF THE STUDY

According to **International Labour Organization (2013),** 2.34 million people suffered due to occupational hazards. In this 2.02 million people die each year from work-related diseases ,321,000 people die each year from occupational accidents,160 million non-fatal work-related diseases per year,317 million non –fatal occupational accidents per year. These report reveals that Every 15 seconds, a worker dies from a work-related accident or disease. Every 15 seconds, 151 workers have a work-related accident.

Health and safety executive (2010) estimate the health and safety statistics 148 workers killed at work ,78,000 other injuries to employees were reported ,1,75,000 over 7 day absence injuries occurred 1.1 million people suffered from work related illness ,27 million working days were lost due to work related illness and workplace injury.

Sharan Burrow (2013), General Secretary of the International Trade Union Confederation (ITUC), said: "Our societies must not accept that workers can lose their health to make a living. And we must not forget that occupational diseases put a huge burden on families and the public purse – a burden that is preventable. Harnessing the knowledge of workers is crucial for preventing death and illness".

Employee State Insurance Act (2010) gave information that it has the reports of 1576 cases of occupational diseases, 15 which occurred between 1997 and 2009.

Diseases Include Silicosis, Asbestosis (Total 47, Maharashtra-36, W.Bengal-10), Byssinosis, other lung Diseases (70), Noise-induced hearing loss (total 471, Gujarat 39, Maharashtra 432) and few Cases of mercury, lead and chromium poisoning (97 altogether), Dermatitis (7), COPD (6).

WHO (2007), work on occupational health is governed by the Global Plan of Action on Workers' Health 2008-2017, endorsed by the World Health Assembly in 2007. Encouraging industrialization in the developing countries has occurred rapidly without adequate provision for the production of the workers. Every year work related injuries and disease kill an approximately 1.1 million people worldwide, which is equal to global annual deaths from malaria.

Cotton industry workers are exposed to various hazards in the different departments of textile factories **(Hafez et al., 1998).** Especially in the spinning and weaving sections which play a role in the high incidence of industrial health hazards **(Allan, 1981).** The major health problems associated with cotton dust are respiratory problems, which include (byssinosis, bronchitis and bronchial asthma). The problems are highly prevalent in mills of developing countries **(Fantahum and Abebe, 1999).**

The main goal of occupational safety and health promote the health and safety of people at work through prevention and early intervention (**Occupational Safety and Health 2000**). Occupational health and safety affect not only the worker but also on his family and significant others` and his community **(Salazar, 1997).**

WHO (2012), India has had legislation on occupational safety and health for 50 years. But regulatory authorities are limited to 1,400 safety officers, 1,154 factory inspectors, and 27 medical inspectors. These numbers are grossly inadequate even for the inspection of formal units that only employ about 10% of India's total workforce (around 26 million), let alone the millions who work in the informal sector with absolutely no safeguards.

According to International Labour Organization (2013) estimation occupational accidents and diseases result in an annual 4 percent loss in global gross domestic product (GDP) in direct and indirect cost of injuries and diseases.

Raj Narayan (2010) that revealed that among 462 cotton industry workers (25.3%) workers had chronic respiratory morbidities. The morbidities included Byssinosis (11.7 %), chronic bronchitis (5.8%), Bronchial asthma (4.5%), Tuberculosis (1.5%), other obstructive pulmonary diseases (1.7 %).. The present study showed that 151 (32.7%) had cotton dust exposure for more than 20 years. Only masks were provided as protective devices and 191 (41.3%) of the workers were using it. Total 160 (34.7 %) workers were smokers. The result reveals that Among cotton textile workers more common morbid conditions include amoebiasis (4.1%), byssinosis (2.3%),chronic bronchitis (4.5%), dental stain(5.6%),iron deficiency anemia(54%)and URI(7.2%) .

WHO (2001) estimated that out of work related mortality, 21% of deaths occur due to respiratory disorders. Silicosis attributed death occur in about 300 cases in united states every year. All occupational hazards in industry are manmade and it

is one of the leading causes of death. Health education to the cotton industry workers is minimal and the result is great and it is in the hands of community health nurse.

The work environment is a very conductive environment to provide health education either on a one to one basis or through a group process. The health education on preventive aspects will help the workers to have awareness about the risks on their work, safe practice and ways of preventing the hazards.

Most of the occupational hazards at work are preventable and the primary prevention approach is the most effective strategy for eliminating and control of these hazards. The primary prevention strategy greatly relied on health education and creating awareness on safe practices available. Prevention would play an important role in dealing with this problem since these diseases are mainly the result of inhalation of hazardous substances with most often workers are unaware off. Often occupational health is not given priority because very little research has been undertaken to study exposure to such hazards and its impact on health.

A comparative study was conducted on **2008 by Mohammad ifran, Buskara khan, Mohammed Raheel** in Karachi among 83 cotton spinning mill worker with the objectives of to identify the probable association of respiratory problem (bysinnosis) with factors such as different work area, safety gadget usage and over time and to ascertain proportions of byssinosis to accidental injuries. The overall proportion of byssinotics in the mill was 19.28% and that of accidental injuries was 22.9%.Result shows association of byssinosis was also high in workers who did not use safety gadgets (eg.dust mask) and in people who worked in overtime.

A quasi-experimental experimental study conducted in **2007 by Jessica S.Kale** in Belgaum, Karnataka, with an objective to assess the knowledge and practice of preventing occupational health hazards among textile weavers with a sample size of 55 through implementing planned teaching program. Result showed that 11% (6) had good knowledge during pre test, has improved to 100% (55) during post test. The researcher further recommended that same study can be conducted in other setting.

The investigator felt that in and around the Dindigul district many of the adolescent boys and girls working in cotton industry. Following years of investigator experience with the family and neibourhood cotton industry workers founded that most of them suffered from occupational health hazards such as respiratory problem; noise induced hearing loss and accidents. Based on their own life experience, the investigator light of this aspect of study topic for their research work.

The communication of awareness among the people regarding the various occupational health hazards is necessary. To achieve this, using the effective teaching methods are mandatory.

STATEMENT OF THE PROBLM

A study to evaluate the effectiveness of video assisted teaching programme on knowledge and attitude regarding the prevention of selected occupational health hazards among cotton industry workers at selected cotton Industry in Dindigul**.**

OBJECTIVES

1. To assess the knowledge and attitude regarding prevention of selected Occupational health Hazards among cotton industry workers.

2. To determine the effectiveness of video assisted teaching programme on knowledge and attitude regarding prevention of selected occupational health hazards among cotton industry workers.

3. To correlate between the knowledge and attitude regarding prevention of selected Occupational health Hazards among cotton industry workers.

4. To associate the knowledge and attitude of prevention of selected Occupational health Hazards among cotton industry workers with selected demographic variables.

HYPOTHESIS

H1- There will be a significant difference in the pre test and post test knowledge regarding prevention of selected occupational health hazards among cotton industry workers.

H2 - There will be a significant difference in the pre test and post test attitude regarding prevention of selected occupational health hazards among cotton industry workers.

H3- There will be a significant correlation between the post test knowledge and attitude regarding prevention of selected occupational health hazards among the cotton industry workers.

H4- There will be a significant association of post test knowledge and attitude regarding prevention of selected occupational health hazards with the selected demographic variables.

OPERATIONAL DEFINITIONS

1. Knowledge:

It refers to the understanding and awareness of cotton industry workers regarding health hazards due to their occupation and its prevention.

2. Attitude:

It refers to the way of thinking and beliefs opinion or feelings of cotton industry workers regarding prevention of Occupational health hazards.

3. Effectiveness:

In this study it refers to the outcome of the teaching Programme measured in the terms of knowledge and attitude scores gained. The effectiveness will be determined by using statistical analysis of pre and post test scores.

4. Cotton industry Workers:

A person who is working in selected cotton industry.

5. Occupational health hazards:

Occupational diseases and injuries result from exposure to pollution, noise and vibrations in the working environment at work. In addition, work exposures may aggravate certain illnesses or be a factor of varying importance in causing diseases of multiple etiologies.

6. Video assisted teaching programme

It is an audio visual teaching device, which exhibits the image recorded on video tape regarding prevention of occupational health hazards among cotton industry workers.

7. Prevention

It refers to the measures taken at primary level through video assisted teaching programme to avert the occurrence of occupational health hazards.

ASSUMPTIONS

I. Cotton industry workers will have some basic knowledge on occupational health hazards.
II. The knowledge and attitude of the cotton industry workers will influence the prevention of Occupational health hazards.
III. Health education at regular intervals will improve knowledge and promote the positive attitude among cotton industry workers regarding prevention of Occupational health hazards.
IV. Demographic variables may or may not influence the prevention of Occupational health hazards.

DELIMITATIONS

1. The data will entirely be dependent on the verbalized response of the respondent
2. This study includes the industry workers those who know to converse Tamil
3. This study is confined to selected industry at Dindigul

PROJECTED OUTCOMES

1. The finding of the study would help to identify the cotton industry workers level of knowledge and attitude regarding occupational health hazards and to plan video assisted teaching programme for them.

2. The development of the video assisted teaching programme would be helpful to improve knowledge and attitude among the cotton industry workers thus it helps to improve their practice in prevention of selected occupational health hazards
3. The use of an audio visual aid will enable the learners to grasp the information more easily and it remains in their mind for longer.

CONCEPTUAL FRAME WORK

Conceptual framework is theoretical approaches to study the problems that are scientifically based on emphasize the selection, arrangement and classification of its concepts. The conceptual framework formalizes the thinking process, so that others may read or know the frame of references basic to research problem. It provides frame work of references for clinical practice, research and education.

King viewed Nursing as "Interpersonal process of action, reaction, interaction, and transaction, whereby Nurse and client share information about their perceptions in nursing situation" and as a process of human interaction, between

nurse and client whereby each perceives the other and the situation, and through communication, they set goals explore means and agree on means to achieve goals.

At The basic assumption of the theory of goal attainment that nurses and clients communicate information, set multigoals, and then act to attain those goals is also the basic assumption of this study. Individuals have rights to participate to decision that influence their life, and the community health professionals have a responsibility to share information that help individuals make informed decisions about their health care.

The present study aims at evaluating the efficacy of health promotion interventions on prevention of selected occupational health hazards among cotton industry workers. The conceptual framework was based on Imogene King's goal attainment model (1981).

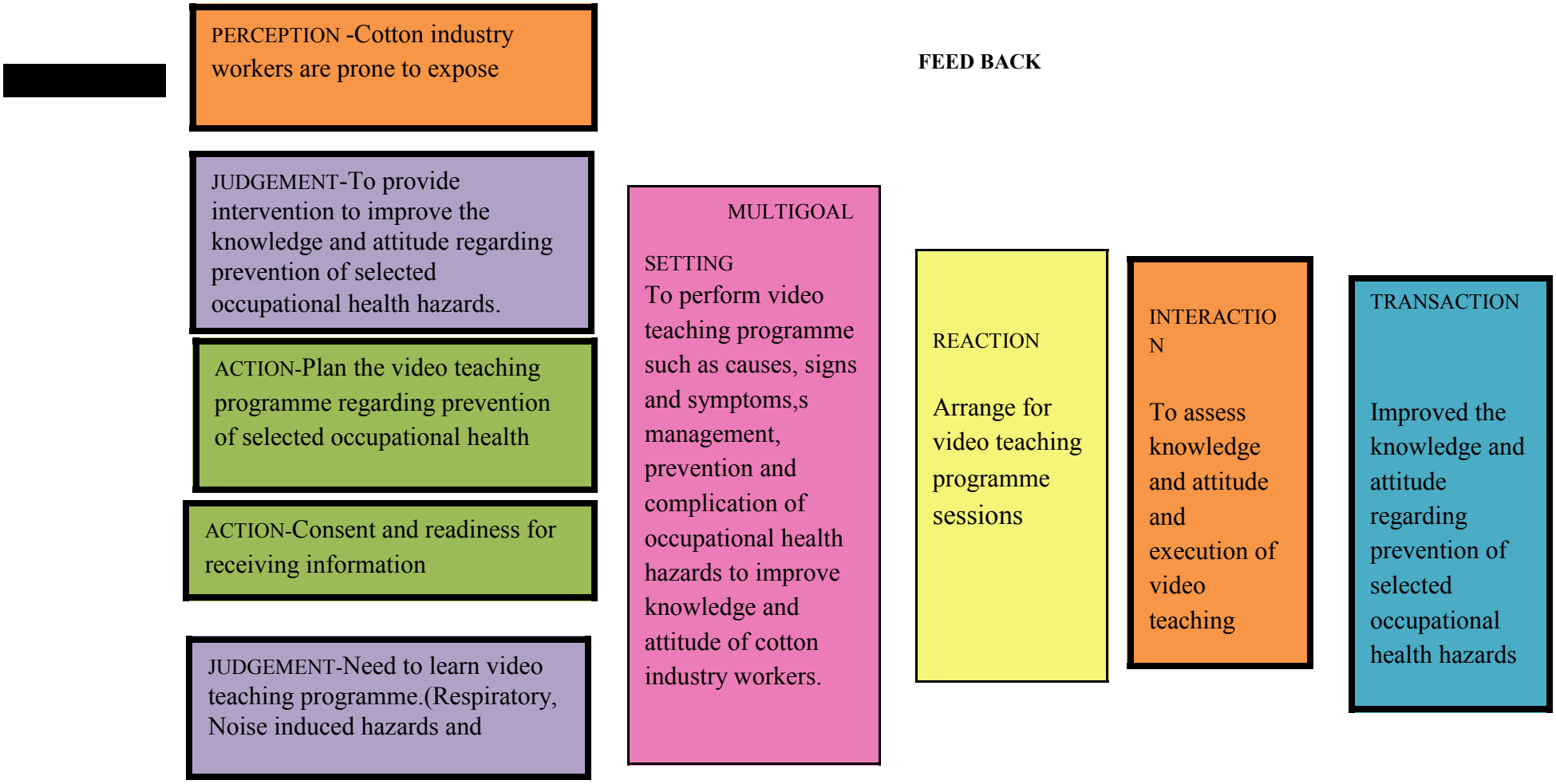
In this study the King's models has been modified and it involves perception, judgments, and action on both the part of the nurses and the client. Multigoal setting is to develop knowledge and to improve the attitude of cotton industry workers regarding occupational health hazards. This leads to interaction and transaction to determine the effectiveness of video assisted teaching programme.

The investigator believes that there is interpersonal relationship between nurse educator and the cotton industry workers. The nurse educator perceives the knowledge and attitude of cotton industry workers regarding prevention of selected occupational health hazards through a structured questionnaire. Investigator judge that the cotton industry worker are having poor knowledge and attitude regarding the

occupational health hazards through a structured questionnaire. Investigator judge that the cotton industry worker are having poor knowledge and attitude regarding the occupational health hazards and then takes action (i.e.) Investigator plans for video assisted teaching programme.

The cotton industry workers perceive that they are just aware about the health hazards but not having a clear idea about the preventive aspects of it. The cotton industry workers judge that learning regarding prevention of occupational health hazards minimizes occupational health problems and the action taken by the cotton industry workers is to be ready for getting information and acquiring knowledge. Both the action (i.e.) by the nurse and cotton industry workers leads to reaction.

In this phase, Nurse Educator and cotton industry workers develop mutual goals for obtaining adequate knowledge on prevention of occupational health hazards .this leads to interaction (i.e.) Nurse Educator conducts video assisted teaching programme through lecture cum discussion and video show. This leads to transaction .in the transaction phase, the knowledge and attitude of cotton industry workers is improved regarding the prevention of occupational health hazards


PERCEPTION -Cotton industry workers are prone to expose
JUDGEMENT-To provide intervention to improve the knowledge and attitude regarding prevention of selected occupational health hazards.
ACTION-Plan the video teaching programme regarding prevention of selected occupational health
ACTION-Consent and readiness for receiving information
JUDGEMENT-Need to learn video teaching programme.(Respiratory, Noise induced hazards and
MULTIGOAL
SETTING
To perform video teaching programme such as causes, signs and symptoms,s management, prevention and complication of occupational health hazards to improve knowledge and attitude of cotton industry workers.
REACTION
Arrange for video teaching programme sessions
INTERACTIO N
To assess knowledge and attitude and execution of video teaching
TRANSACTION
Improved the knowledge and attitude regarding prevention of selected occupational health hazards
FEED BACK

C

cotton industry workers

PERCEPTION-Need for health education on prevention of occupational health hazards of

FEEDBA

CK

Figure 1: Conceptual Frame Work Based On King's Goal attainment theory (1981)

CHAPTER II

"Take care of your body. It's the only place you have to live." – Jim Rohn

REVIEW OF LITERATURE

The review of literature is a broad, comprehensive, in depth, systematic & critical review of scholarly publication, unpublished materials, AV materials & personal communications. Literature review can serve a number of important functions in the research process. It helps to lay the foundation for a study & can also inspire new research ideas. It helps to assess what is already known, what is still unknown & untested, justify the need for its replication& throw some light on the feasibility of the study problems that may be encountered.

It also helps to uncover a promising methodology of data collection of obtaining useful information on how to increase the effectiveness of data analysis. "Review of literature is a critical summary of research on topic of interest, often prepared to put a research problem in contact as the basis for an implementation project".

According to **polit and hungler(1999)** a review of related literature is an essential aspect of scientific research. It broadens the understanding of the researcher and helps to gain an insight necessary for the development of a broad conceptual context into which the problem fits.

According to **Abdellah and Levine(1979)** a review of literature provides a basis for future investigations. it justifies the need for replication of the study. And it also

helps to establish a comprehensive body of scientific knowledge in a professional discipline

Morgan PG (1981) conducted a study to first report of byssinosis in Hong Kong .There has been no report of byssinosis in Hong Kong although the textile industry has been one of the leading industries for many years. There workers with a long history of exposure to cotton dust had chronic obstructive airways disease precipitated by their work environment. One had irreversible airways obstruction but none had chronic bronchitis, emphysema, or Asthma. Only one gave a history of "Monday morning tightness", and this was attributed to the fact that most of the textile workers in Hong Kong work seven days a week. It was suggested that a survey be carried out to ascertain the importance of byssinosis in the textile workers of Hong Kong and tha byssinosis should there be added to the list of notifiable occupational diseases.

STUDIES RELATED TO RESPIRATORY PROBLEM

Ling cui (2011) conducted a cohort study related to unexpected excessive obstructive pulmonary disease mortality among female silk textile workers in shanghai, china a total of 267,400 chinese female textile employees were monitored for COPD mortality cotton and silk workers were, respectively , 1.02 (95% CL : 0.81 to 1.28) and 2.03 (95% CL: 1.13 to 3.34).Compared with all other textile sectors in the cohort. There was greater COPD mortality among cotton workers (HR=1.40, 95% CL : 1.03 to 1.89) and silk workers (HR=2.25, 95% CL: 1.47 to 4.39) elevated COPD mortality among

cotton workers is consistent with previous reports of adverse respiratory effects of cotton dust. The higher rate of COPD deaths among silk workers was unexpected

Saoji Ajeet (2008-2009) did a cross sectional study was conducted among 462 cotton textile workers in babashaheb kedar sut girni ppt ltd of central india present study revealed that among 462 workers (25.3%) workers had chronic respiratory morbidities .The morbidities include byssinosis(11.7%).chronic bronchitis(5.8%).Bronchial asthma(4.5%),Tuberculosis(1.5%) other obstructive pulmonary diseases(1.7%).The present study showed that 151(32.7%) had cotton dust exposure for more than 20 years. Only mask were provide as productive devices and 191(41.3%) of the workers were using it .Total 160(34.7%) workers were smokers.

Saleema et al (2007) conducted a study in a textile mill in Gujarat among 6500 workers with standard interview questionnaire. It reveals that 14.42 %(29) workers had started showing the symptoms of Byssinosis.

Gavirel selvendey(2006) Prevalence of respiratory symptoms significantly increased in some departments as blending & picking, spinning & carding and combing & twisting as these departments had high dust concentration than other departments. These agree with many studies conducted in Assiut by El-Shinawi et al., (1994), who reported that respiratory symptoms increase in preparatory and spinning departments (cough 26.1%, 24.7% respectively, dyspnea 12.3%, 11.1% respectively and chest tight 6.9%, 6.5% respectively), in Alexandria by Ahmad (1988) who reported that 67.7% and 58.8% of workers who working in Bale opening and spinning departments respectively

suffer from chest symptoms and also in Ethiopia by Fantahum and Abebe (1999) who reported that respiratory symptoms increase in spinning department (59.7%).

Osibogun A (2005) conducted a study to prevalence of byssinosis and other respiratory problems among textile mill workers in Asada, Nigeria A total of 735 workers were interviewed and 437 workers had respiratory examinations carried out on them. Byssinisis was diagnosed in 8 out of 405 workers (prevalence of 6.36%) who were directly exposed to cotton dust. The difference was found to be statistically significant (chi2 =9.25 ; df=1; 0.01 <p<0.001). The spinning department had the highest prevalence of 11.5%. The prevalence of respiratory abnormalities which did not necessarily meet the criteria for a diagnosis of byssinosis was 4.9% for persistent cough and persistent phlegm; 8.0% for dyspnoea grade 2+; 3.3% for dyspnoea grade 4 and 2.59% for dyspnoea grade 5. Smoking was not found to be associated with the disease as none of the byssinosis were current smokers .byssinosis and other respiratory problems were found to be more prevalent in sections of the textile mill industry that were directly exposed to cotton dust.

Mishra AK,Sahai during (2003) conducted a case controlled study to identify the prevalence of Byssinosis among 761 male textile workers in pondicherry showed that the prevalence of byssinosis was more among the workers working in dusty work sites ,spinning area and the year of experience was increased.. The study concluded that by reducing the dust level in worksite and by reducing smoking, the risk of developing Byssinosis could be minimized.

The study was conducted on health appraisal of garment workers and suggested that among 3858 workers were examined, 571 (14.8%) were males and the remaining 3287 (84.2%) were females in that 79 cases (96.8%) being musculoskeletal problems, (19.3%) were Gastrointestinal tract disorder (10.9%) gynaecological disorder, respiratory disorder asthma, Bronchitis (81%) allergies urticara (21%).Among 1440 workers from the data elucidated total articles chosen in the acute exposure verses other categories was 42.9% (chronic exposure) 15.3% (acute toxicity) & 31.6% (Chronic toxicity) comparison with the other categories giving differences of 22.2% (acute exposure), 50% (Chronic exposure) & 44.4% acute toxicity.

R Altin (2002) conducted a prevalence of byssinosis and a respiratory symptom among cotton mill workers a questionnaire was used to inquire about respiratory symptoms was chest tightness (20.3%). The prevalence of byssinosis was 14.25% in cotton- processing workers. Among these cases, 28.6% had symptoms on the 1st day of the week, and 71.4% had symptoms on all days of the week. An acute effect was seen in 53.6% of the workers with byssinosis . Mean respirable dust concentrations are still above the permissible limits and thus the risk of byssinosis remains . workers in the cotton industry where obsolete technology is used and standardized protection measures are not applied should be followed for byssinosis.

STUDIES RELATED TO NOISE INDUCED HEARING LOSS

Dr. Nirmalya Manna MD1 Dr. Gandhari Basu MD(2012) conducted An In-depth Cross-Sectional Study in West Bengal, India for to find out the prevalence of occupational deafness and the association between occupational noise exposures, socio-demographic and other risk factors with deafness of the employees. Among a total of 278 employees under this study, 235 employees were exposed to more than the permissible occupational noise level (90dB), out of whom 82 (34.90%) employees were deaf; which was significantly ($\chi 2 = 17.97$, df = 2, p = 0.0001) much more than deafness among the non-exposed workers who were 3 (6.98%). Hearing impairment increased as exposure level increased and this trend was statistically significant ($\chi 2 = 17.97$, df = 2, p = 0.0001). Hearing impairment also increased as duration of exposure to occupational noise increased and the relationship was found to be statistically significant ($\chi 2 = 7.12$,).Pre-placement & periodic medical examination is vital before putting up any employee in an industry with high noise exposure .Regular use of personal protective devices by the employees is to be ensured.

M .Mohammadi Roozbahani et.al (2008) conducted a cross sectional study was conducted in order to assess the risks associated with workers hearing loss, due to exposure to noise pollution, at the Boroujerd Textile Factory .60 workers from the spinning and weaving workshops and official staff were randomly selected as case an control groups and their hearing were tested by audiometry. Noise pollution was measure in each workshop: phase 1 spinning workshop 97dBA, phase 2 spinning workshop 90 dBA, phase 1 weaving workshop 100 dBA and phase 2 weaving workshop 99 dBA. The case group comprised of 40 workers from the spinning and weaving workshops from of

phases 1 and 2 who had worked for four different job history. Therefore these findings verify meaningful difference between hearing loss of the workers in relevant frequencies.

Yildirim et.al (2007) conducted an experimental study observed that mean pure tone audiometric thresholds in textile workers were significantly higher than in control subjects at frequencies 2,000, 4000 an 6000Hz($p<0.05$).hearing loss more evident at high frequencies (4-6kHz)than at low frequencies in worker group ($p<0.05$).also textile workers with longer employment duration had poorer hearing thresholds and the hearing loss had started on those who had worke for 5-8 y .

Thoria Mohamed and hosnia S.abd (2004) conducted a study on occupational health hazards among spinning factory workers. 550 workers were participated in study, findings revealed that workers were expose to various hazards like cough, dyspnoea; ear diseases; hearing loss; chronic bronchitis and various minor and major accidents, the findings also reveals that there was shortage of health services to workers to nursing services in the factory were not present. There was shortage of safety equipment mask only was provided for the exposed workers. Training and health education programs about occupational health hazards and prevention are not available. And if possible the factory should look into the possibility of replacing the old machines with new ones ,which is less noisy.

Erterm (2004) studied on the hearing of 260 textile workers exposed to noise levels between 85-95 dBA in carpet an cotton textile factories by means of air an bone conconductance audiograms obtained. The subjects were grouped into five hearing

categories according to hearing thresholds at 125 to 8000 Hz with klockhoffs classification. The prevalence of yhe grade -3 hearing loss was 47.92% and grade 4-5 was9.21% on exposed subjects in both factories. There was significant difference between exposed an unexposed control subjects working in the same factories ($p<0.001$).

STUDIES RELATED TO OCCUPATIONAL ACCIDENTS

HorwitZ IB, McCall BP, (2007) conducted a study of Adolescents occupational injuries and work place risks with the objectives of to quantify Adolescent injury Rates ,analyzed risk factors, and measure the severity of injuries in occupational work area .it reveals that continued safety intervention and increased training are needed for to prevent occupational injury.

S Calvin,B Joseph (2006) done on occupation related accidents in selected garment industries in Bangalore city revealed that the incidence of accidents was 2.49/1000 workers during the six weeks of the study, and the continuous use of personnel productive equipments that are recommended for each task in the industry. The study concluded that awareness of the workers in important to prevent the accidents and further injuries.

Mohammed Irfan farooq (2006) at landhi, Karachi, Pakistan cross sectional study to identify Byssinosis in cotton spinning mill workers, probable associations of disease with factors such as different work areas, safety gadget usage and overtime and to ascertain proportions of byssinosis to accidental injuries with a conventional sample of 83and pulmonary function test was done. Mean age of the sample was 30 ± 6.9 years, of all the workers 72%, used safety gadgets (masks) while working and 50% availed overtime. Smokers amounted to 31% of the total subjects. Around 35% workers complained of having respiratory ailments of which 19% (16 workers) closely matched byssinotic symptoms. Pulmonary Function Tests (PFTs) confirmed 13 of 16 workers to be byssinotics, with the remaining being labeled as Probables. The overall proportion of Byssinotics in the mill was 19.28% and that of accidental injuries was 22.9. Results indicate a very high probability of association of disease to non-usage .of safety gadgets and overtime working. Studies comprising of a greater sample size would show precisely the overall prevalence of the disease.

Sherly Thomos(2003) conducted a study on the health problems of women working in a textile unit in Coimbatore. The study found out that many of them suffered from backache joint pain headache and general tiredness. Primary data collected from a sample size of 60 women who were permanent employees of this particular mill and information collected with the help of a well structure from the study it was revealed that 50 women (31.65%) use to get headache frequently and 15 women (9.49%) were affected by fever once a month 19 women (12.03%) suffered from cough ,20 women (12.66%) had knee pain,9 women (5.9%)had stomach pain and three women (1.9%)suffered from

blood pressure.36 women (60%)had injuries at work place,18 women (30%)were affected by asthma,11 women(18%)had respiratory problem and 6 women (10%)had congestion in the chest and breathlessness . And long standing cause back pain for 42 women (70%).The medical expenses were a big burden for these women. Therefore as long as they can try to put up with all difficult situation and manage. This is a peculiar and unique feature we see in women.

STUDIES RELATED TO INTERVENTION

The above finding are consistent with the findings of **Iftikhar ahmad, Muhammed, Samina, (et.al) 2012** conducted a study among 50 textile workers by age in years, age group, residence and language with the purpose of to determine the knowledge ,attitude and practice of workers about occupational health. Result indicate the correlation between the knowledge, attitude and practice of workers were statistically significant.

Akash H.A (2010) conducted pre-experimental study among 60 textile industries workers at Bangalore with the objectives of to assess the knowledge of textile weavers regarding existing health problems in textile industry. During the pre test the workers had inadequate knowledge regarding health problems in textile industry .The investigator used audio visual teaching device and puppet as a teaching devices for to create awareness among textile workers regarding prevention of occupational health illness in textile industry. After the intervention of the knowledge of textile workers level was increased.

Shermila stella jeyaraja(2009) conducted Experimental study with the objectives of to assess the knowledge and attitude of weavers regarding the prevention of selected occupational health hazards in Madurai. In this study 60 sample are included 30 experimental and 30 control groups. The study reveal that pre test of experimental and control was 50% had inadequate. This may be due to lack of education, unawareness regarding the prevention of occupational health hazards. After the structured video assisted teaching programme the experimental group knowledge and attitude score was higher than the pre test value. It was 86.46 % and 63.26% respectively. It reveals that the health education programmes play an important role in improving the knowledge and attitude of weavers. And also moderate positive correlation also present between the knowledge and attitude.

Paramasivam Parimalam and Narayani Kamalamma (2007) A cross sectional study conducted to assess the level of occurrences of health problems among garment workers and their attitudes and practices to prevent occupational health problems. In this study a total of 216 workers were included. Among them 93% of workers has experienced in one or other type of occupational health hazards. All workers had some knowledge of personal protection measures to prevent health problems who are working in the garment manufacturing units, but only few workers (4%) in the cutting section were using personal protection equipment.

Lakshmi Prasanna (2007) had done a comparative study on cotton mill workers with an objective to develop health education module with 100 samples and results shows

that 4% had high 36% average and 60% had low knowledge regarding health problems and its prevention. In the conclusion researcher recommended that the same study can be replicated on large sample, same study can be done at other setting and generalize the finding.

Jessica S Kale (2007) in Belgaum, Karnataka conducted quasi-experimental experimental study, with an objective to assess the knowledge and practice of preventing occupational health hazards among textile weavers with a sample size of 55 through implementing planned teaching program. Result showed that 11% (6) had good knowledge during pre test, has improved to 100% (55) during post test. The researcher further recommended that same study can be conducted in other setting

Mohammed Irfan farooque (2007) at landhi, Karachi, Pakistan conducted a cross sectional study by to identify Byssinosis in cotton spinning mill workers, probable associations of disease with factors such as different work areas, safety gadget usage and overtime and to ascertain proportions of byssinosis to accidental injuries with a conventional sample of 83and pulmonary function test was done. Mean age of the sample was 30 ± 6.9 years, of all the workers 72%, used safety gadgets (masks) while working and 50% availed overtime.. Around 35% workers complained of having respiratory ailments of which 19% (16 workers) closely matched byssinotic symptoms.. The overall proportion of Byssinotics in the mill was 19.28% and that of accidental injuries was 22.9. Results indicate a very high probability of association of disease to non-usage .of safety

gadgets and overtime working. Studies comprising of a greater sample size would show precisely the overall prevalence of the disease.

Raja gopal (2002) conducted a descriptive study to identify the existing health problems among cotton mill workers and their knowledge on all aspect of safety measures .majority o cotton mill workers had one or the other health problems like throat irritaton, pain in lower extrimities, frequent, common cold ,back pain and nasal irritation. there was a gross inadequacy of knowledge

CHAPTER III

"Every human being is the author of his own health or disease."-Sandy

METHODOLOGY

This chapter deals with research approach, research design, setting of the study, population, sampling technique, sample, sample size, criteria for sample selection, description of the instruments, scoring procedure, validity and reliability of tool, description of the intervention, pilot study, data collection procedure, and plan for data analysis.

RESEARCH APPROACH

The investigator adopted an evaluative approach because the aim of the investigator was to determine the efficacy of video assisted teaching programme on prevention of selected occupational health hazards among cotton industry workers.

RESEARCH DESIGN

The research design was quasi experimental, one group pre test, manipulation and post test was adopted in this study.

O_1 X O_2

O_1 → Observation (pre test)

X → video assisted teaching programme

O_2 → Observation (post test)

VARIABLES UNDER THE STUDY

In this study knowledge and attitude of cotton industry workers were the dependent variables and the independent variables was video assisted teaching programme.

SETTING OF THE STUDY

The study was conducted among cotton industry workers at selected cotton industry in Dindigul. Chola cotton industry was selected as the setting of the study. The cotton industry was situated at Vadasandur in Dindigul district since 1999. It include 799 cotton industry workers. It was situated 18 kms away from sakthi college of nursing, Dindigul .

POPULATION OF THE STUDY

The target population was Cotton industry workers. Accessible population was the cotton industry workers working in selected industry at dindigul

SAMPLE

Cotton industry workers working in selected cotton industry.

SAMPLE SIZE

Cotton industry workers who fulfill the inclusion criteria will be considered as samples and sample size was 60.

SAMPLING TECHNIQUE

The sampling technique adopted for this study was Simple random sampling technique.

CRITERIA FOR SAMPLE SELECTION

INCLUSION CRITERIA

- Cotton industry workers those who know to converse Tamil
- The selected cotton industry workers working at selected industries.

EXCLUSION CRITERIA

- Cotton industry workers who were not willing to participate.
- Cotton industry workers who were working in other than the selected industry

DESCRIPTION OF THE INSTRUMENT

After an intensive library, internet search and consultation with experts a structured interview schedule was developed to measure the knowledge and Likert type attitude scale was developed to measure the attitude of cotton industry workers regarding the prevention of selected occupational health hazards.

The tool consists of three categories.

Part I

It consists of demographic variables such as age, sex, educational status, marital status, and type of family, income, duration of work and year of work experience.

Part II

It consists of a questionnaires on knowledge related to health problems of cotton industry workers which consists of 21 structured interview questionnaire's in the following areas,

1. General aspects -5
2. Respiratory problem -6
3. Noise induced disorder-4
4. Occupational Accidents-6

Part III

It consists of Likert type attitude scale to assess the attitude regarding occupational health hazards among cotton industry workers. It consists of 15 statements, with 5 point scale

SCORING PROCEDURE

Part II

The correct response to items in parts II was respectively knowledge related to prevention health problems of cotton industry workers was given a numerical score. The knowledge was measured in terms of knowledge score. The maximum possible knowledge score was 100.A score of 1 (one) was given to every correct response and a score of 0 (zero) was given to every wrong or no response. All questions had more than one correct response. For the purposes of the study, the knowledge score was classified as follows,

0-50% -Inadequate

51-75% -Moderate

76-100% -Adequate

Part III

The correct response to items in parts II was respectively Attitude related to prevention health problems of cotton industry workers was given a numerical score There are totally 15 statements; the item will be measured on a 5 point scale from strongly agree, agree, uncertain, disagree, to strongly disagree.

For attitude the possible,

Minimum score -75

Minimum score-15

Attitude score will be interpreted as follows.

>80 % -Positive attitude

60-80% -Neutral attitude

0 -59% -Negative attitude

VALIDITY AND RELIABILITY OF TOOL:

The structured questionnaires was developed by the investigator with the help of extensive literature review and expert opinion .Expert opinion was obtained to conform the content validity of the tool .it was obtained from 5 experts in the field of Nursing and Medicine. The expert was requested to check the relevance sequence and adequacy of the

items in the interview schedule. Based on their valid suggestions a few items were modified and final tool was prepared as per the suggestion given by the experts. The tool of Tamil translation was validated by Tamil experts.

Reliability of the tool was established through test retest method. The tool was administered to 6 cotton mill workers (10% of sample population). After a gap of 1 week, the retest was given. The Karl Pearsion`s coefficient of correlation was computed and the reliability of 0.87 for knowledge and 0.83 for Attitude was found.

DEVELOPMENT OF VIDEO ASSISTED TEACHING PROGRAMME:

The investigator made video assisted teaching programme with review of literature and with the expert opinion .the content of video assisted teaching programme includes the definition ,causes ,signs and symptoms, management ,prevention and complications of various occupational health problems like respiratory problem, noise induced disorder and occupational accidents among cotton industry worker .The average time taken for the programme was around 30 minutes.

PILOT STUDY

Pilot study was conducted to evaluate the feasibility and reliability of the study. The pilot study was conducted among separate cotton industry workers in Dindigul. 6 Sample were taken for pilot study. Pre test was conducted than video assisted teaching program was given as a intervention. Post test was conducted a week after video assisted teaching pogramme. The method of organizing data, analysis method, statistical tests to be employed and presentations of data were formulated. The feasibility with regard to the

availability of sample, cooperation of respondents, and accessibility of setting and financial requirement was established. The result of pilot study showed that the study was feasible. Pilot study helped the investigator to confirm the feasibility of carry out the main study.

DATA COLLECTION PROCEDURE

The data collection was done for a period of 6 weeks except on Sundays. Before commencing the present project the permission to conduct the study was obtained from the Manager of selected cotton industry. With the guidance of the concern manager of the organization, the investigator met cotton industry workers. The investigator established rapport with study subjects and purposes of the study was explained to each subject. Written consent was received from each participant.

The list of cotton industry workers were obtained from the industries and were short listed based on sample selection criteria. Using simple random sampling without replacement, a sample of 60 cotton industry workers was selected.

The date collection procedure was held in three phases. In the first phases knowledge and attitude on prevention of occupation health hazards was assessed. During the second phase the video assisted teaching program was administered among selected cotton industry workers. The video was run around 30 minutes. At the end of the video programme was discussed among the group for another 15 minutes. In third phase the post test was administered to the same group with same structured interview questionnaire to assess the knowledge and attitude after one week of video assisted teaching programme

SCHEDULE FOR DATA COLLECTION

DURATION	ACTIVITY	NO OF CLIENTS/ SHIFT
13.05.2013	**Pre Test**	**20**
27.05.2013	**Video Assisted Teaching**	**20**
10.06.2013	**Post Test**	**20**

PLAN FOR DATA ANALYSIS

The data was analyzed in terms of the objectives of the study using descriptive and inferential statistics. The plan of data analysis was follows

1. Organize the data in a master data sheet
2. Frequency and percentage distribution were used to analyze the demographic data for cotton industry workers regarding prevention of occupational health hazards
3. Frequency and percentage distribution were used to assess the level of knowledge and attitude of cotton industry workers regarding prevention of selected occupational health hazards
4. Mean, Mean Percentage, Standard deviation and inferential measures were used to assess and compare the pretest and post test knowledge and attitude regarding prevention of selected occupational health hazards

PROTECTION OF HUMAN RIGHTS

The study was conducted after obtaining the approval of the dissertation committee and the officials. The investigator explained the objectives, purpose and goal

of the present study to the cotton industry manager and also to the samples in order to get their maximum cooperation.

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

"Data is only meaningful when grouped and analyzed"

This chapter deals with the analysis and interpretation of the data. The data were collected through structured interview questionnaire among cotton industry workers regarding the prevention of selected occupational health hazards. This result was computed using descriptive and inferential statistics based on the objectives of the study. The data were collected from 60 samples.

OBJECTIVES OF THE STUDY

SECTION A :- Distribution of subjects based on demographic variables.

SECTION B : - Distribution of pretest and posttest level of knowledge and attitude regarding prevention of selected Occupational health Hazards among cotton industry workers.

SECTION C :- Comparison of pretest and posttest level of knowledge and attitude

regarding prevention of selected Occupational health Hazards among cotton industry workers.

SECTION D: - Correlation of knowledge and attitude of cotton industry workers regarding prevention of selected Occupational health Hazards.

SECTION E :- Association of knowledge and attitude cotton industry workers regarding prevention of selected Occupational health Hazards with selected demographic variables

SECTION A :- Distribution of subjects based on demographic variables.

Table 1: Distribution of cotton industry workers based on their demographic data

N=60

S.NO	**VARIABLES**		**f**	**%**
1	Age in years	20-30	34	57
		31-40	22	37
		Above 40	4	6
2	Sex	Male	31	52
		Female	29	48
3	Qualification	Illiterate	35	58
		literate	25	42

	4 Marital Status		Unmarried	2 5	4 1
			Married	3	5
			Widow	2	3
			Divorced	1	2
			Separated	1	2
				1	2
	5 Type of family		Joint	2	3 3
			Nuclear	0	5
			Extended family	3 1	2 1
			Broken family	7 2	2 3
	6 Income/month		Below Rs.4, 000	1	2
			Rs.4001 to 6,000	3 5	5 8
			Rs.6001 to 8000	2 3	3 8
			Above Rs .8000	1	2
	7 Year of experience		<1 year	1	1
			1-5 years	0	7
			Above 5 years	4 9	8 2
				1	2
8	Duration of work per day		1-5 hours	- 5	- 8
			5-8 hours	1	5
			>8 hours	9	1 5

The table 1 reveals that majority 34 (57%) of cotton industry workers belongs to the age group of 20-30 years. Regarding sex, majority 31(52%) of workers are male.

Regarding Qualification majority 35(58%) of the cotton industry workers were illiterate. In relation marital status of the respondents, majority 32(53%) of the cotton industry workers were married.

With regards to type of family majority 31 (52%) of cotton industry workers belongs to nuclear family. In relation to income majority 35(58%) of the cotton industry workers were under the income group of Rs.4001 to 6000 per month.

Regarding the occupational experience majority 49(82%) of cotton industry workers were having 1-5 years of experience. Regarding the duration of work majority 51 (85%) of cotton industry workers working between 5-8 hours per day.

Figure 2: Distribution of subjects according to Age

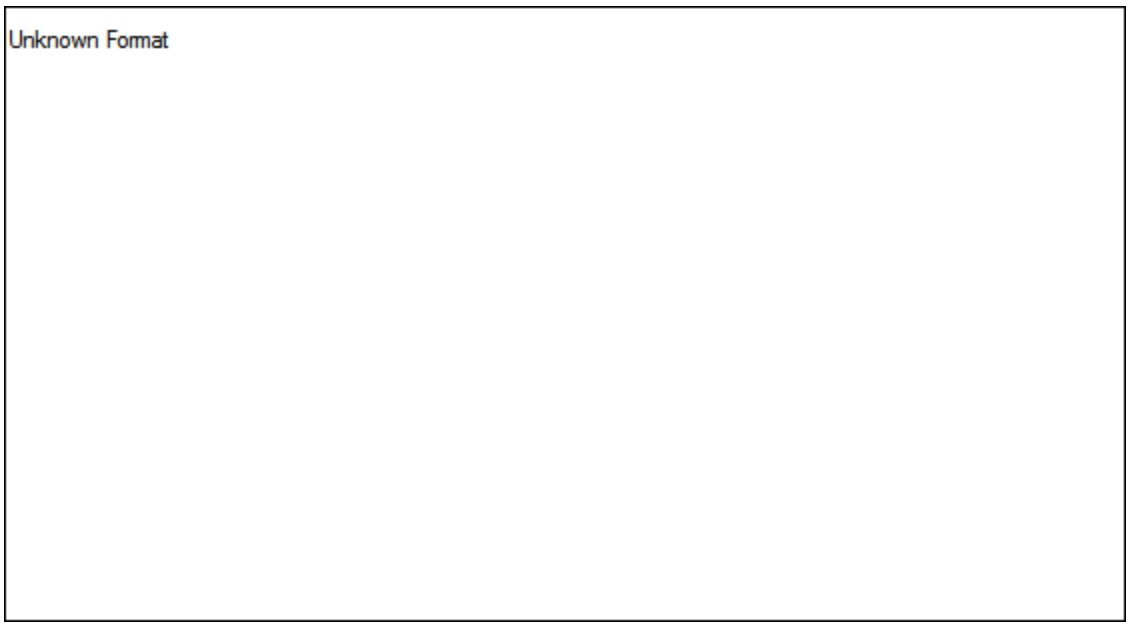


Figure 3: Distribution of subjects according to Sex

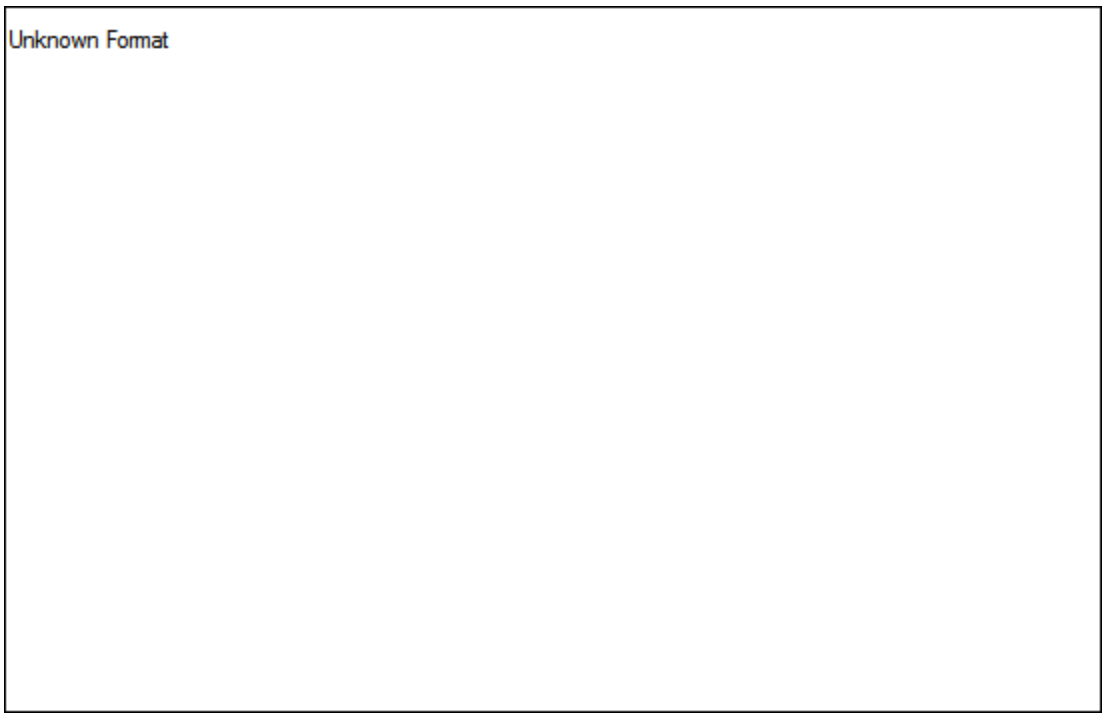


Figure 4: Distribution of subjects according to educational status

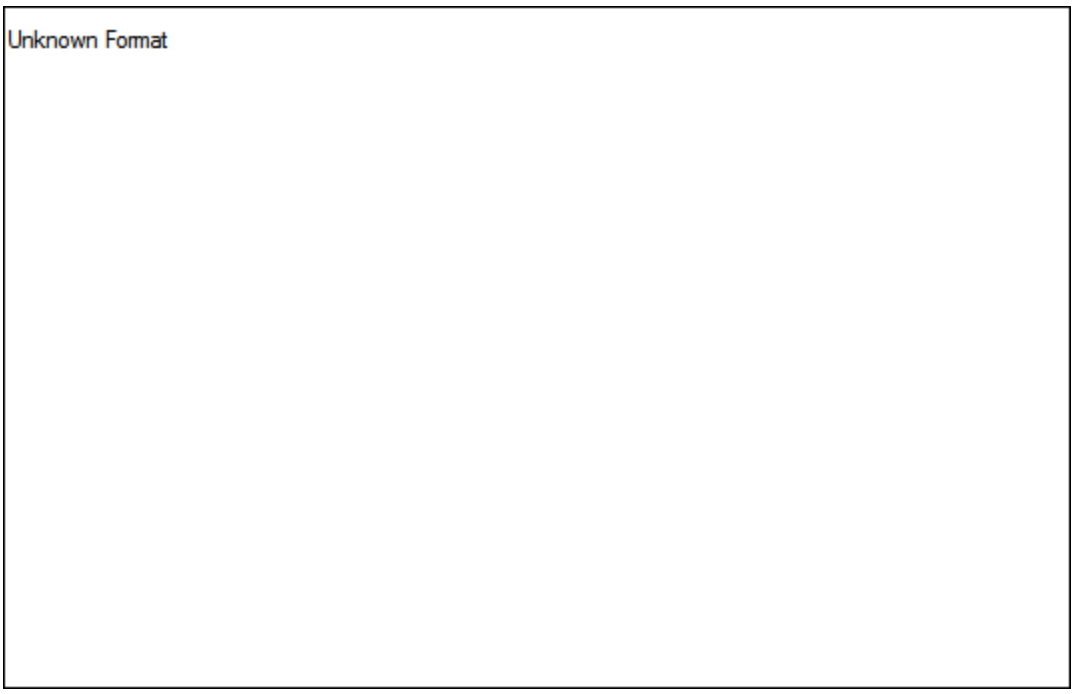


Figure 5: Distribution of subjects according to year of experience

Table 2: Distribution of cotton industry workers based on health history

N=60

S.NO	VARIABLES		f	%

	Have you been Prolong suffering from any of these health problem	Joint pain Asthma Breathing difficulty Hearing problem	0 2 5 6	4 6 2 6 4 5 3 0	6 3 7 6
2	Do you undergone any injury in the working place?	Yes No	3 7	2 8 3 2	3 6
3	If yes state the parts of body injured	Hand Legs Face Back	1	31 60 7 -1	5 1 1 -
4	Are you doing any exercise?	Yes No	0	-6 00	- 1
5	If yes state the type of exercise regularly	Walking Breathing exercise Yoga		- - - -	- - - -

		Any other			
	6 Have you been hospitalized?	Yes No	8 2	27 33	45

The table 2 describes that majority 45(75%) of cotton industry workers had breathing difficulty problem .Regarding injury 23(38%) of cotton industry workers were had injury in this Majority 31(51%) had injury in hand. Regarding exercise majority 60(100%) of cotton industry workers are not doing any regular exercise. Regarding hospitalization majority 32(53%) of cotton industry workers were hospitalized.

SECTION B : - Distribution of pretest and posttest level of knowledge and attitude regarding prevention of selected Occupational health Hazards among cotton industry workers.

Table 3: Distribution of pre test and post test knowledge level of selected occupational health hazards among cotton industry workers

N=60

TEST	**LEVEL OF KNOWLEDGE**		
	Inadequate	**Moderate**	**Adequate**

Pre test	**60**	**0**	**0**
Post test	**0**	**19**	**41**

The Table 3 reveals that pre test knowledge of cotton industry workers regarding prevention of occupational health hazards all 60(100%) was inadequate. The post test level of knowledge revealed 41(68%) had adequate knowledge and 19(32%) had moderate knowledge.

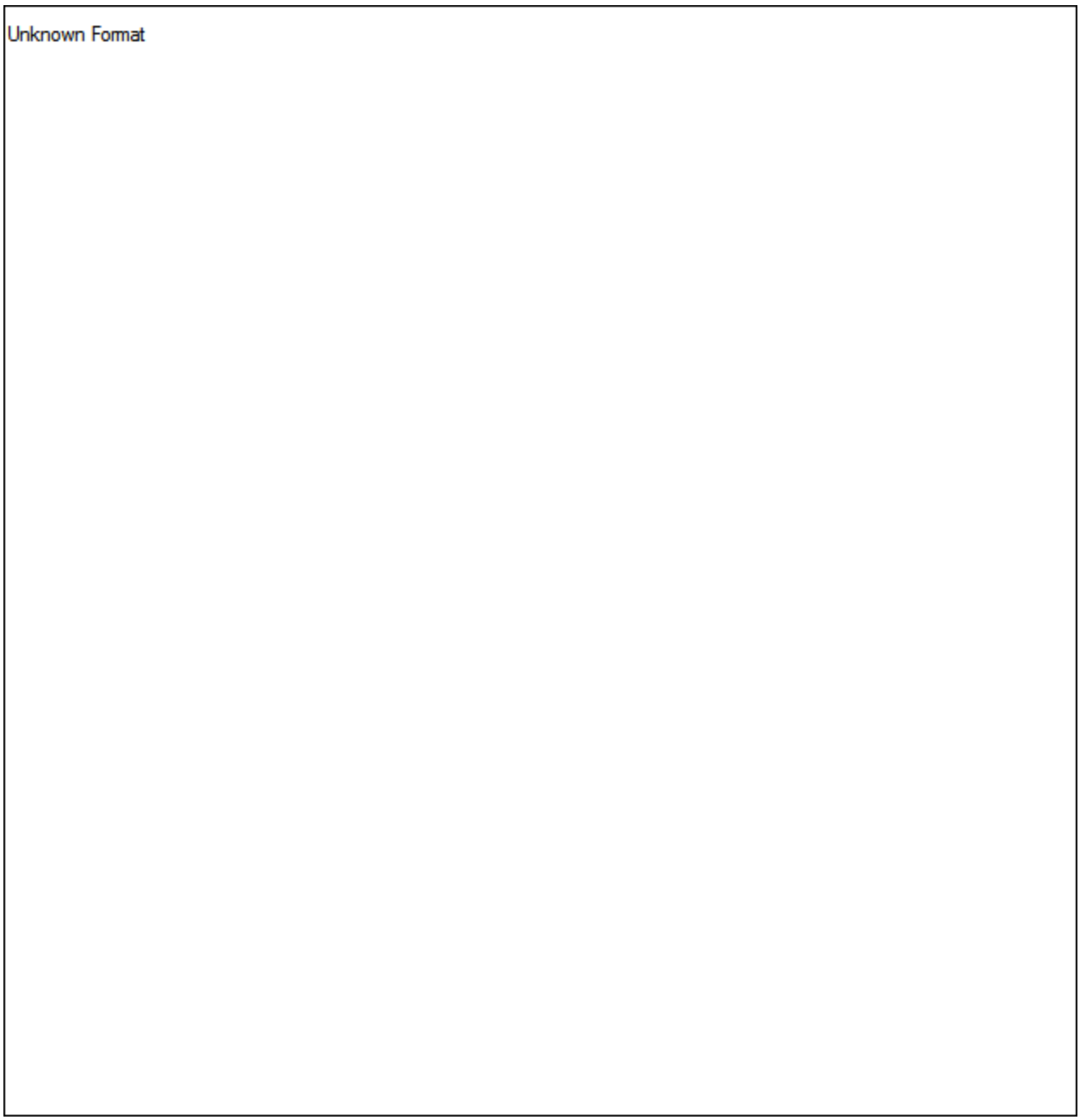

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Figure 6: Distribution of pre test and post test knowledge level of cotton industry workers

Table: 4 Distribution of pre test and post test attitude level of selected occupational health hazards among cotton industry workers

N=60

TEST	LEVEL OF ATTITUDE		
	Negative	Neutral	Positive
Pre test	15	45	0
Post test	0	3	57

The table 4 shows that the attitude level of selected occupational health hazards among cotton industry workers Before the video teaching program the obtained value was

15(25%) were negative attitude and 45(75%) were neutral attitude. After the video teaching program the level of attitude was greatly increased to 57(95%) positive attitude and 3(5%) were neutral attitude

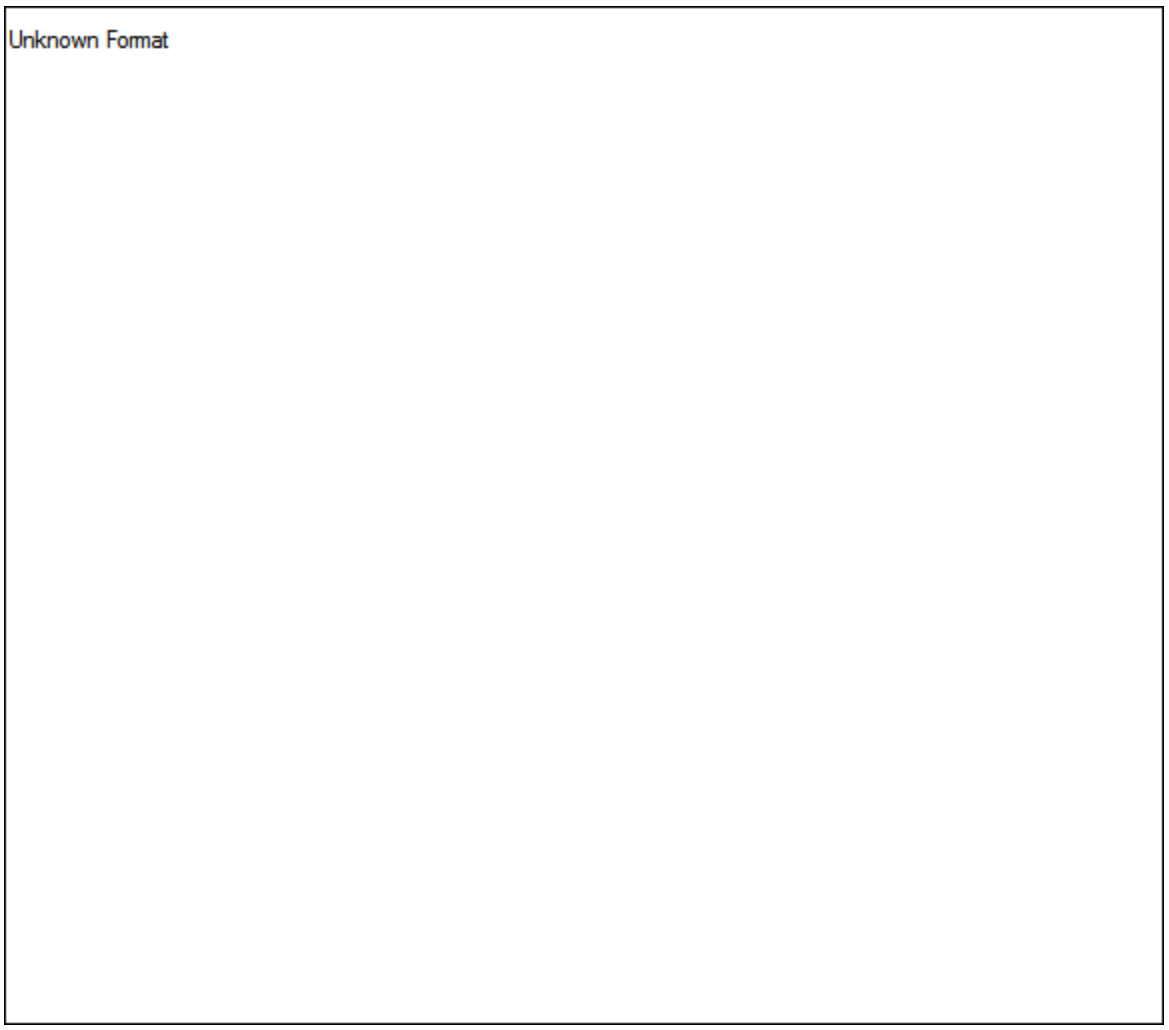
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Figure 7: Distribution of pre test and post test attitude level cotton industry workers

SECTION C :- Comparison of pretest and posttest level of knowledge and attitude regarding prevention of selected Occupational health Hazards among cotton industry workers.

Table 5: Comparison of cotton industry workers based on level of knowledge regarding prevention of selected occupational health hazards in the pre and post test.

Group	n	Mean	SD	Paired 't' Value
Pre Test	**60**	**21.91**	**5.16**	**52.02**
Post Test	**60**	**73.98**	**6.94**	

p>0.05

The above table 5 shows that the obtained ‘t’ value for the level of knowledge of cotton industry workers regarding prevention of occupational health Hazards is 52.02.The ‘t’ value is significant at 0.05 level. It reveals that, video teaching programme has an effect on level of knowledge of cotton industry workers after the intervention

Figure 8: Comparison of mean pre and post test level of knowledge of cotton industry workers

Table 6: Comparison of cotton industry workers based on level of attitude regarding prevention of selected occupational health hazards in pre and post test.

Group	n	Mean	SD	Paired‘t’ Value
Pre Test	60	**43.92**	**5.89**	
				64.11
Post Test	**60**	**82.95**	**3.87**	

$p<0.05$

The above table 6 shows that the obtained ‘t’ value for cotton industry workers attitude regarding prevention of selected occupational health Hazards is 64.11. The ‘t’

value is significant at 0.05 level. It reveals that, video teaching programme has an effect on level of Attitude of cotton industry workers after the intervention.

Figure 9: Comparison of mean pre and post test level of Attitude of cotton industry worker

SECTION D: - Correlation of knowledge and attitude of cotton industry workers regarding prevention of selected Occupational health Hazards.

Table 7: Correlation between knowledge and attitude of cotton industry workers regarding prevention of selected occupational health hazards.

Variables	N	Mean	SD	'r' Value
Knowledge	**60**	**73.98**	**6.94**	**0.51**
Attitude	**60**	**82.95**	**3.86**	

Significant $p<0.05$

Correlation value (r=0.51) implies that there is a positive correlation between knowledge and attitude .It means that there is a moderate positive relationship between the knowledge and attitude of cotton industry workers regarding prevention of selected occupational health Hazards

SECTION E :- Association of knowledge and attitude cotton industry workers regarding prevention of selected Occupational health Hazards with selected demographic variables

Table 8: Association of knowledge with selected demographic variables on prevention of selected occupational health hazards among cotton industry workers.

N=60

S.No	Variables	Inadequate	Moderately Adequate	Adequate	X^2

1	**Age in years** 20-30 31-40 Above 40	- - -	1 1 5 3	23 16 2	2.46 (NS)
	2 Sex Male Female	- -	1 2 6	19 23	2.0 (NS)
	Qualification 3 Illiterate literate	- -	1 2 7	13 28	16 ***
	4 Year of experience >1 year 1-5 years Above 5 years	- - -	8 1 1 -	2 38 1	12.6*

NS-Not Significant

* - P<0 *** P<0.001

Table 8 shows that the obtained chi square values for age 2.46, sex 2.0 which are not significant at any level. Chi square value for qualification is 16 and it is significant at 0.001 level. The obtained chi square value for year of experience 12.6 and it is significant at 0.05 level. This means that there is significant association between qualification and year of experience of the cotton industry workers and their knowledge level on prevention of selected occupational health hazards.

TABLE 9: Association of Attitude level with selected demographic variables on prevention of selected occupational health hazards among cotton industry workers.

N=60

S.No	Variables	Negative	Neutral	Positive	X^2
1	**Age in years**				
	20-30	-	7	27	0.5 (NS)
	31-40	-	3	19	
	Above 40	-	1	3	
2	**Sex**				
	Male	-	47	22	1.6 (NS)
	Female	-			
3	**Qualification**				
	Illiterate	-	10	3	15.72***
	literate	-	1	36	
4	**Year of experience**				
	>1 year	-	6	4	16.16**
	1-5 years	-	4	45	
	Above 5 years	-	-	1	

NS-Not Significant

**P<0.01 *** P<0.001

Table 6 reveals that the obtained chi square value for Age 0.5, Sex which are not significant at any level. For Qualification 15.72 it is significant at 0.001 level. For Year of Experience 16.16 and it is significant at 0.01 level. It shows that there is a significant association between educational status and year of experience of the cotton industry workers and their Attitude level on prevention of selected occupational health hazards.

CHAPTER V

Start where you are. Use what you have. Do what you can. –Arthur Ashe

DISCUSSION

This study was conducted to evaluate the effectiveness of video assisted teaching programme on knowledge and attitude regarding the prevention of selected occupational health hazards among cotton industry workers at selected cotton Industries in Dindigul

The discussion was based on the objectives specified in this study.

The first objective of this study was to assess the knowledge and attitude regarding prevention of Occupational health Hazards among cotton industry workers.

The finding showed that majority of cotton industry workers had inadequate knowledge 60(100%) regarding prevention of Occupational health Hazard and 15(25%)

had negative attitude and 45(75%) and a neutral attitude of prevention of selected occupational health hazards among cotton industry workers.

The above findings consistent with the finding of a cross sectional study conducted by **Paramasivan et.al.(2007)** regarding assess the level of occurrences of health problems among garment workers and their attitudes and practices to prevent occupational health problems. All workers had some knowledge of personal protection measures to prevent health problems who are working in the garment manufacturing units, but only few workers (4%) in the cutting section were using personal protection equipment.

The second objectives of this study to determine the effectiveness of video assisted teaching programme on knowledge and attitude regarding prevention of selected occupational health hazards among cotton industry workers

The 't' value **52.02** P (<0.05) shows that there is a statistical difference between the pre and post test knowledge level of the cotton industry workers regarding prevention of occupational health hazards. For attitude the 't' value of **64.11** P (<0.05) showed that there is statistically significant difference between the pre test and post test attitude of the cotton industry worker regarding prevention of occupational health hazards.

Similar type of quasi-experimental experimental study conducted in **2007 by Jessica S Kale** in Belgaum, Karnataka, with an objective to assess the knowledge and practice of preventing occupational health hazards among textile weavers with a sample size of 55 through implementing planned teaching program. Result showed that 11% (6)

had good knowledge during pre test, has improved to 100% (55) during post test. The researcher further recommended that same study can be conducted in other setting.

The above finding consistent with **Akash H.A (2010)** conducted pre-experimental study among 60 textile industries workers at Bangalore with the objectives of to assess the knowledge of textile weavers regarding existing health problems in textile industry. During the pre test the workers had inadequate knowledge regarding health problems in textile industry .The investigator used audio visual teaching device, and puppet as a teaching devices for to create awareness among textile workers regarding prevention of occupational health illness in textile industry. After the intervention of the knowledge of textile workers level was increased.

The third objective of this study is to correlate between the knowledge and attitude regarding Occupational Hazards among cotton industry workers.

The post test knowledge mean value is 73.98 and SD was 6.94 the post test attitude mean value was 82.95 and SD is 3.87. The relationship between post test knowledge and attitude 'r' value was 0.51. It implies that there is a positive moderate relationship between post level of knowledge and attitude of cotton industry workers on prevention of selected occupational health hazards. This indicates that the attitude of the cotton industry workers can be influenced by knowledge to some extent.

The above finding are consistent with the findings of Experimental study conducted by **Shermila stella jeyaraja(2009)** with the objectives of to assess the knowledge and attitude of weavers regarding the prevention of selected occupational

health hazards in Madurai. In this study 60 sample are included 30 experimental and 30 control groups. The study revealed that pre test of experimental and control was 50% had inadequate. This may be due to lack of education, unawareness regarding the prevention of occupational health hazards. After the structured video assisted teaching programme the experimental group knowledge and attitude score was higher than the pre test value. It was 86.46 % and 63.26% respectively. It reveals that the health education programmes play an important role in improving the knowledge and attitude of weavers. And also moderate positive correlation also present between the knowledge and attitude.

The above finding are consistent with the findings of **Iftikhar ahmad, Muhammed, Samina, (et.al) 2012** conducted a study among 50 textile workers by age in years, age group, residence and language with the purpose of to determine the knowledge ,attitude and practice of workers about occupational health. Result indicate the correlation between the knowledge, attitude and practice of workers were statistically significant.

The fourth objective of this study is to associate the knowledge and attitude of prevention of Occupational health Hazards among cotton industry workers with selected demographic variables

The Chi square value for association of knowledge with qualification is 16 and was significant at 0.001 level , year of experience 12.6 and was significant at 0.05 levels. Association of Attitude with Qualification 15.72 was significant at 0.001 level, Year of Experience 16.16 and was significant at 0.01 level. It reveals that there was a significant

association between knowledge and attitude with selected demographic variables such as educational status and year of experience and there was no association between age, sex, marital status, income, type of family, and working hours.

The above finding consistent with **Akintayo, W.L (2013),** was conducted a cross sectional study to assess the level of knowledge, attitude and practice on the use of personal protective equipment by textile workers In this study, knowledge level on using PPE was significant association with all of the socio-demographic characteristics i.e. age ($p< 0.01$), gender ($p< 0.05$), level of education ($p< 0.05$). The result also showed that attitude was significant association with level of education and aging group ($P< 0.05$).

CHAPTER-VI

'Be the change that you wish to see in the world." - Mahatma Gandhi

SUMMARY AND RECOMMENDATIONS

This chapter deals with the summary and conclusion drawn. It focuses on the implications and gives recommendations for Nursing practices, Nursing research, Nursing administration, and nursing education.

SUMMARY

The focus of the study was to "evaluate the effectiveness of video assisted teaching program on knowledge and attitude regarding the prevention of selected occupational health hazards among cotton industry workers at selected cotton Industry in Dindigul".

The objectives set for the study were,

1. To assess the knowledge and attitude regarding prevention of selected Occupational health Hazards among cotton industry workers.
2. To determine the effectiveness of video assisted teaching programme on knowledge and attitude regarding prevention of selected occupational health hazards among cotton industry workers.
3. To correlate between the knowledge and attitude regarding prevention of selected Occupational Hazards among cotton industry workers.
4. To associate the knowledge and attitude of prevention of selected Occupational health Hazards among cotton industry workers with selected demographic variables.

The Hypothesis set for the study was,

H1- There will be a significant difference in the pre test and post test knowledge regarding prevention of selected occupational health hazards among cotton industry workers.

H2 - There will be a significant difference in the pre test and post test attitude regarding prevention of selected occupational health hazards among cotton industry workers.

H3- There will be a significant correlation between the post test knowledge and attitude regarding prevention of selected occupational health hazards among the cotton industry workers.

H4- There will be a significant association of post test knowledge and attitude regarding prevention of selected occupational health hazards with the selected demographic variables.

The design of the study was Quasi experimental, one group pre test, manipulation and post test design. The conceptual frame work based on Imogene King's goal attainment model. At The basic assumption of the theory of goal attainment that nurses and clients communicate information, set multigoals, and then act to attain those goals is also the basic assumption of this study.

The Sample size of the study was 60. Simple Random Sampling technique was adopted for the selection of the sample.

The tool used for data collection by the investigator consisted of III part namely demographic variables, Structured Interview Questionnaire's For to Assess the Knowledge and Likert type Attitude scale to assess the attitude.

Data were collected for a period of 6 weeks at selected cotton industry in Dindigul. The data were analyzed using both descriptive and inferential statistics.

MAJOR FINDINGS OF THE STUDY

1. The obtained‘t’ value for the Mean difference between the pre and post test knowledge level of the cotton industry workers regarding prevention of occupational health hazards was 52.02 and it was significant at 0.05 level.
2. The obtained‘t’ value for the Mean difference between the pre and post test Attitude level of the cotton industry workers regarding prevention of occupational health hazards was 64.11 and it was significant at 0.05 level.
3. There was positive correlation between post level of knowledge and attitude of cotton industry workers on prevention of selected occupational health hazards (r=0.51).
4. There was significant relationship between qualification and knowledge of cotton industry workers regarding prevention of occupational health hazards.($P<0.001$).
5. There was significant relationship between year of experience and knowledge of cotton industry workers regarding prevention of occupational health hazards ($P< 0.05$).
6. There was significant relationship between qualification and Attitude of cotton industry workers regarding prevention of occupational health hazards.($P<0.001$).
7. There was significant relationship between year of experience and Attitude of cotton industry workers regarding prevention of occupational health hazards ($P< 0.01$).

CONCLUSION

The conclusion of the study is drawn as follows:

There is a significant improvement in the knowledge and attitude of cotton industry workers after the video assisted teaching program. There was a positive correlation between knowledge and attitude of cotton industry workers regarding prevention of selected occupational health hazards.

The result supported that the video assisted teaching program are the types of teaching methods, which depicts the real life situations and capture rapt attention through the total involvement of the all sensory organs, these are easy to handle and provides latest information to update knowledge, in-turn it gives novelty and variety of experiences to the recipients. The video assisted teaching program developed and displayed for the study proved effective in improving knowledge and attitude prevention of selected occupational health hazards among cotton industry workers.

IMPLICATIONS

Emerging research has refined the video assisted teaching program related to prevention of occupational health hazards. The occupational health Nurse are one of the important team members can help the cotton industry workers for prevention of occupational health hazards. The findings of the study have several implications in following field. It can be discussed of in four areas namely Nursing practice, Nursing administration, Nursing education and Nursing research.

Implications of Nursing Practice

1. The study findings will help the Community Health Nurses to create awareness to the cotton industry workers regarding the prevention of selected occupational health hazards.
2. The findings of the study will show the need for preventive education regarding prevention of selected occupational health hazards through public health personnel to increase the knowledge and attitude among cotton industry workers.
3. This study finding will encourage the community health nurses to create awareness among cotton industry workers about prevention of selected occupational health hazards by intensifying group health and individual health education programs with effective audio visual aids.

Nursing Administration

1. The present study helps the nursing administrative authority to recognize the need for conducting awareness programme on occupational health hazards.
2. Administration of both government and private sectors organize in-service education and continuing education programme on occupational health hazards.
3. Nursing administration should provide necessary facilities to conduct public private partnership programme on occupational health hazards in nearby primary health center and government hospitals.
4. The administration should allocate a portion of budget for educational materials like pamphlets, posters, slides, cassettes, models, flexes, etc. which contain information about occupational health hazards.

Nursing Education

1. The study emphasizes the need for educating the nursing personnel through in-service or continuing education program to update their knowledge regarding occupational health hazards and its prevention.
2. The nursing education should prepare the nurses to practice as 'Nurse Counselor', 'Nurse communicator' and 'Nurse consultant' to identify the signs and symptoms of occupational health hazards by physical assessment.
3. Nursing student must gain skills in identifying occupational health hazards through history of the patient and warning signs of selected occupational health hazards.

Nursing Research

1. The findings of the study help to expand the scientific body of professional knowledge.
2. Large scale studies can be conducted in consideration of other contributing variables.
3. The study provides scope for future research

LIMITATIONS

1. The study is conducted only at selected cotton industry.
2. The limitation of the study included the relatively smaller sample size .

RECOMMENDATIONS

1. A similar study can be undertaken by utilizing other domain like practice.
2. A similar study can be undertaken with large number of samples which might lead to generalization.
3. A similar study can be conducted with control group.

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APPENDIX -II

CONTENT VALIDITY

From

CHINTHAMANI.A
M.Sc Nursing II[nd] Year ,
Sakthi College Of Nursing.
Oddanchatram, Dindigul.

To

Respected Sir / madam,

Sub:-Requisition from expert opinion and content validity reg.

I CHINTHAMANI.A am 2[nd] year MSc Nursing student Sakthi College of Nursing Oddenchattram , Dindigul under Tamilnadu Dr.MGR Medical University. As a partial fulfillment of M.Sc Nursing Degree program, I am conducting a research study "A study to evaluate the effectiveness of video assisted teaching programme on knowledge and attitude regarding the prevention of selected occupational health hazards among cotton industry workers at selected cotton industry in Dindigul". For the study I have developed a questionnaire to assess the knowledge and Rating scale to assess the attitude among cotton mill workers.

I am sending the research tool for content validity and request you to give your expert and valuable review and opinion. I will be very thankful if your return at the earliest. Here with I have enclosed the necessary documents.

Thanking you.

Enclosed: Yours sincerely.

- Statement of the problem and objectives of the study]
- Tool with blueprint and scoring key
- Brief note on the research methodology and intervention tool
- Certificated of content validity

CERTIFICATE OF CONTENT VALIDITY

TO WHOM SO EVER IT MAY CONCERN

This is to certify that the tool prepared by CHINTHAMANI.A IInd year M.Sc Nursing student of Sakthi College of Nursing for the conduction of the "A study to evaluate the effectiveness of video assisted teaching programme on knowledge and attitude regarding the prevention of selected occupational health hazards among cotton industry workers at selected cotton industry in Dindigul", is valid .She can proceed in conducting the data collection with it.

Place:

Date:

Signature

APPENDIX -III

LIST OF EXPERTIES

1. **Mrs.Janaki Devi M.Sc(N).,**

   Principle,

   Sakthi College Of Nursing,

   Oddanchatram,

   Dindigul.

2. **Mrs.Juliet M.Sc(N).,Ph.D.,**

   Department Of Community Health Nursing,

   Sacred Heart College Of Nursing,

   Madurai.

3. **Dr.JohnSamArunPrabhuM.Sc(N).,Ph.D.,**

   CSI College of nursing,

   Madurai**.**

4. **Dr. Navaneetha,Ph.D,**

   Assistant Professor,

   Pandicherry Institute of Medical Science.

5. **Mrs.Sheeba,M.Sc (N)**

   Dept of Community Health Nursing

   Christian College Of Nursing

   Ambilikkai.

6. **Mrs.Muthulakshi,M.Sc (N)**

   Principal,

   Annai Dora College of Nursing,

   Andipatti, Theni (Dt).

7. **Dr.Swaminathan,**
   Staistician ,

   Chennai.

APPENDIX-VI

RESEARCH PARTICIPANT'S CONSENT FORM

I am a M.Sc Nursing students of sakthi college of nursing, Dindigul As a part of my study a research on to evaluate the effectiveness of Video teaching programme regarding knowledge and attitude on selected occupational health hazards among cotton industry workers in selected cotton industry at Dindigul Is selected to be conducted. The finding of the study will be helpful in improving knowledge and attitude selected occupational health hazards among cotton industry workers.

I here seek your consent and cooperation to participate in the study please be frank and honest in your response.the information collected will be kept confidentiality and anonymity will be maintained.

Signature of the researcher

_____ here by consent to participate and undergo the study.

Signature of the participants

ஆராய்ச்சியில் பங்குபெறுவதற்கான ஒப்புதல் படிவம்

அன்பார்ந்த தொழிலாளர்களே,

நான் சக்தி செவிலியர் கல்லூரியில் செவிலியர் பயிற்சியில் முதுகலை பட்டம் பெறுவதற்கு பயிற்சியின் ஒரு பகுதியாக பஞ்சாலை தொழிலாளரிகளுக்கு வரக்கூடிய தொழில் சம்பந்தமான நோய்கள் பற்றியும், அதற்கான தடுப்பு முறைகள் பற்றியதான அவர்களின் அறிவுக் கூர்மை மற்றும் மனப்பாங்கைக் கண்டறியும் ஆராய்ச்சி மேற்கொண்டுள்ளேன்.

இதனால் இந்த ஆராய்ச்சியில் நீங்கள் பங்குபெற உங்களுடைய ஒப்புதல் மற்றும் ஒத்துழைப்பையும் வேண்டுகிறேன். தயவுசெய்து உங்களுடைய பதில்கள் வெளிப்படையாகவும், உண்மையாகவும் இருக்க வேண்டுகிறேன். உங்களுடைய குறிப்புகள் இரகசியமாக வைக்கப்படும் மற்றும் உங்களுடைய பெயர் வேறு எங்கும் வெளியிடப்படமாட்டாது.

ஆராய்ச்சியாளரின் கையொப்பம்

_____ என்ற நான் இந்த ஆராயிச்சியில் பங்குபெற ஒப்புதல் அளிக்கிறேன்.

பங்குபெறுவோரின் கையொப்பம்

APPENDIX – VII

PART-I

BASE LINE PROFORMA

INSTRUCTION: PLACE A TICK (√) MARK ON THE ANSWERS WHICH THE RESPONDENTS FIND AS MORE APPROPRIATE.

SAMPLE NO:

1. AGE IN YEARS:-

a. 20-30 years
b. 31-40 years
c. Above 40 years

2. SEX:

a. Male

b. Female

3. QUALIFICATION:

a. Literate
b. Illiterate (No formal education)

4. MARITAL STATUS:

a. Married
b. Unmarried
c. Widow
d. Divorced
e. Separated

5. TYPE OF FAMILY:

a) Joint
b) Nuclear
c) Extended family
d) Broken family

6. INCOME/MONTH:

a) Below Rs.4,000
b) Rs.4001 to 6,000
c) Rs.6001 to 8000
d) Above Rs .8000

7. OCCUPATIONAL EXPERIENCE IN YEARS:

a. Less than 1 years
b. 1-5 years
c. Above 5 years

8. DURATION OF WORK PER DAY:

a. 1-5 hours
b. 5-8 hour
c. More than 8 hours

HEALTH HISTORY

9 .HAVE YOU BEEN PROLONGLY SUFFERING FROM ANY OF THESE HEALTH PROBLEM ?

a. Joint pain
b. Asthma
c. Severe cough and common cold
d. Hearing problem

8. DO YOU UNDERGONE ANY INJURY IN THE WORKING PLACE ?

a) Yes b) No

9. IF YES STATE THE PARTS OF BODY INJURED

a) Hand b) Legs c) Face d) Back

10. ARE YOU DOING ANY EXERCISE ?

a) Yes b) No

11. IF YES STATE THE TYPE OF EXERCISE REGULARLY

a) Walking b) Breathing exercise c) Yoga d) Any other

12. HAVE YOU BEEN HOSPITALIZED?

a) Yes b) No

PART -II

QUESTIONNAIRE TO ASSESS THE KNOWLEDGE OF FEMALE COTTON MILL WORKERS ON PREVENTON OF OCCUPATIONAL HEALTH HAZARDS

INSTRUCTION

- PLACE (√) TICK MARK ON THE NUMBERS WHICH THE RESPONDENTS FIND AS MORE APPROPRIATE
- FOR CERTAIN QUESTIONS MORE THAN ONE RESPONSE MAY BE FOUND APPROPRIATE
- EVERY CORRECT ANSWER CARRIES ONE SCORE

GENERAL QUESTION

1. What you mean by occupational health?
   a) Physical mental social well being of workers in an occupation
   b) Prevention of workers departures from health
   c) Production of workers
   d) Adaptation of human being to work
   e) Don't know

2. What do you mean by Occupational hazards?

   a) Disease arises in the course of occupation
   b) Injury of the body parts during the work
   c) Harm or adverse effect under working condition.
   d) Don't know

. 3. How frequently medical checkup is needed?

   a) Once in six month
   b) whenever the problem arise
   c) Once in a year
   d) Workers return from medical leave
   e) don't know

4. Do you know how many hours a worker can work at a stretch in a day?

   a) Continuously for 5 hrs
   b) 8 hrs with one hour break
   c) 9 hours with one hour break
   d) Don't know

5. What are all the common occupational health hazards among cotton mill workers?

    a) Respiratory problem
    b) Musculoskeletal problem
    c) Hearing impairment
    d) Accident
    e) Don't know

RESPIRATORY PROBLEM

6. What are all the common respiratory diseases among cotton mill workers?

    a) Asthma
    b) Chronic obstructive pulmonary disease
    c) Byssinosis (Monday morning fever)
    d) Chronic bronchitis
    e) Don't know

7. What are all the common causes of respiratory problem among cotton mill workers?

    a) Prolonged exposure of cotton dust
    b) Allergies
    c) Air pollution
    d) Cigarette smoking
    e) Stress
    f) Don't know

8. What are all the symptoms of respiratory illness?

    a) Severe Coughing
    b) Chest tightness
    c) chest pain
    d) Sneezing
    e) Breathing difficulty
    f) Weight loss
    g) Don't know

9. How can you manage the respiratory problem?

    a) Drug therapy
    b) Adequate rest
    c) Breathing exercise
    d) Nebulization

e) Well balanced diet
f) Follow-up
g) Regular bathing
h) Don't know

10, What are all the ways the respiratory problem can prevented?.

a) Avoiding exposure to dust
b) Wearing personal protective devices, such as facial masks.
c) Flu Vaccination
d) Good nutrition
e) Periodical medical examination
f) Stop smoking
g) Washing face, hand and palms thoroughly with soup and water before eating and toileting
h) Avoid dry sweeping
i) Use exhaust ventilation
j) Don't know

11. What are all the effects of the respiratory problems?

a) Symptoms that interfere with sleep, work or recreational activities
b) Sick days from work
c) Permanent narrowing of the bronchial tubes
d) Persistent cough
e) Chronic bronchitis
f) Don't know

NOISE INDUCED DISORDER

12. The causes of hearing loss among cotton mill workers

a) Excessive exposure to noise
b) Improper maintenance of machine
c) Entering of cotton dust in the ear
d) Don't know

13. What are all the symptoms that occur due to prolonged exposure to noise?

a) Avoiding conversation
b) Decreased Social interaction
c) Difficulty in hearing

d) Ringing sound in the ear
e) Depression
f) Feeling of fullness of ear
g) Head ache and nausea
h) Fear and stressful
i) Don't know

14. What are all the ways to treat the hearing loss?

a) Using Hearing aids
b) Follow up examination
c) Avoid exposure to loud noise
d) Don't know

. 15. What are all the preventive measures for Hearing loss?

a) Avoiding exposure to loud noise for long period.
b) Periodic hearing test
c) Using ear plug and muffs
d) Maintain the machine in good working conditions.
e) Don't know

OCCUPATIONAL ACCIDENTS

16. What do you mean by Occupational accidents?

a) Any accidents in the working environment at the time of work
b) Unexpected and unplanned accident in working
c) Harm and adverse effect to the workers in occupation
d) Don't know

17. What are all the common causes of occupational accidents?

a) Unsafe machines
b) Increased working hours
c) Inexperience in work
d) Psychological status of the workers
e) Environmental factors
f) Don't know

18. Do you know the psychological factors that will induce accident in working environment?

    a) Overconfidence
    b) Carelessness in work
    c) Ignorance of safety rules
    d) Emotional stress
    e) Inexperience in work
    f) Don't know

19. What are all the environmental factors can induce occupational accidents?

    a) Temperature
    b) Poor ventilation and lighting
    c) Noise
    d) Unsafe machines
    e) Don't know

20. How do you prevent occupational accidents?

    a) Adequate preplacement examination
    b) Periodical examination of machine
    c) Knowledge of handling machine
    d) Adequate training to the workers
    e) Maintaining good physical and psychological health
    f) Attending training programms
    g) Don't know

21. What are all the protective devices can prevent occupational health hazards among cotton mill workers?

    a) Face masks
    b) Apron
    c) Ear plugs and muffs
    d) Cap
    e) Safety shoes and gloves
    f) Don't know.

PART-III

QUESTIONNAIRE TO ASSESS THE ATTITUDE OF FEMALE COTTON MILL WORKERS ON OCCUPATIONAL HEALTH HAZARDS

S. NO	ATTITUDE	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
	I FEEL THAT,					
1	Good ventilation is necessary in any work.					
2	There is no relationship between health and type of work.					
3	Periodic medical examination is necessary					
4	Prober body mechanism is essential for preventing musculoskeletal problem.					
5	Entertainment relax our mind and body					
6	Doing regular Exercise is important for our health					
7	Work is important than my health.					
8	Maintaining moist in the floor of an working environment reduce cotton dust.					
9	Mild hearing problem was not important to take care in hospital					
10	Occupational accidents are more common in cotton mill workers.					

11	Cotton dust, heat and noise are the common sources of occupational hazards among cotton mill workers.					
12	Experience and training is not important to do any work.					
13	Using protective equipment can prevent occupational health hazards.					
14	Prevention play important role to improve and maintain the health in normal state.					
15	Early diagnosis and treatment can prevent complication of occupational health hazards					

APPENDIX-VIII

PART-I

உபகரணம்

நேர்காணலுக்கான படிவம்

குறிப்பு : ஒன்றன் பின் ஒன்றாகக் கேள்விகளை வாசித்து மக்கள் தரும் பதிலுக்கு (√) குறியிடவும்.

பின்னணித் தகவல்கள்

மாதிரி எண் :

1.வயது (வருடங்கள்)

அ) 20 – 30

ஆ) 31 – 40

இ) 41 வயதிற்க்கு மேல்

2.படிப்பு

அ) படித்தவர்கள்

ஆ) படிக்காதவர்கள்

3.திருமணம்

அ) திருமணமானவர்

ஆ) திருமணமாகாதவர்

இ) விதவை

ஈ) விவாகரத்தானவர்

4.குடும்ப வகை

அ) கூட்டுக்குடும்பம்

ஆ) தனிக்குடும்பம்

5.வருமானம்

அ) ரூ.4,000 to 5,000

ஆ) ரூ.5,001 to 6,000

இ) ரூ.6,001 to 7,000

ஈ) ரூ.7,000 க்கு மேல்

6.தொழில் அனுபவம்

அ)ஒரு வருடத்திற்கு குறைவாக

ஆ)1 – 5 வருடங்கள்

இ)5 வருடத்திற்கு மேலாக

7.வேலை செய்யும் கால அளவு

அ) 1 – 5 மணி நேரம்

ஆ) 5 – 8 மணி நேரம்

இ) 8 மணி நேரத்திற்கு மேல்

தேகநிலை பற்றிய குறிப்பு

8.நீங்கள் எப்பொழுதாவது கீழ்க்கண்ட நோய்களினால் பாதிக்கப்பட்டுள்ளீர்களா?

அ) மூட்டுவலி

ஆ) ஆஸ்துமா

இ) அதிக இருமல் மற்றும் சளித்தொல்லை

ஈ) காது கேளாமை

9.உங்களுக்கு எப்பொழுதாவது வேலை செய்யும் போது விபத்து ஏற்பட்டுள்ளதா?

அ) ஆம்

ஆ) இல்லை

10 ஆம் என்றால் கீழ்க்கண்டவற்றுள் எந்த உடல் உறுப்பு?

அ) கை

ஆ) கால்கள்

இ)முகம்

ஈ)மற்ற உறுப்புகள்

11நீங்கள் ஏதாவது உடற்பயிற்சி தினமும் செய்வதுண்டா?

ஆ) ஆம்

ஆ) இல்லை

10. ஆம் என்றால் கீழ்க்கண்டவற்றுள் எந்தவகையான உடற்பயிற்சியை செய்கிறீர்கள்?

அ) நடைப்பயிற்சி

ஆ) மூச்சுப் பயிற்சி

இ) யோகா

ஈ) வேறு ஏதேனும்

11. நீங்கள் எப்பொழுதாவது மருத்துவமனையின் சிகிச்சை எடுத்துள்ளீர்களா?

ஆ) ஆம்

ஆ) இல்லை

PART-II

பஞ்சாலை தொழிலாளிக்கு வரக்கூடிய தொழில் சம்பந்தப்பட்ட நோயை தடுக்கும் முறைகளைப் பற்றியதான அவர்களின் அறிவுக் கூர்மையை அறியும் படிவம்.

குறிப்பு :

1) ஒன்றன் பின் ஒன்றாகக் கேள்விகளை வாசித்து அவர்கள் சொல்லும் பதிலுக்குக் (√)குறியிடவும்.
2) ஒரு கேள்விக்கு ஒன்றிற்கு மேற்பட்ட சரியான பதில்கள் இருக்கலாம்.
3) ஓவ்வொரு சரியான பதிலுக்கு ஒரு மதிப்பெண் கொடுக்கப்பட்டுள்ளது.

பொது கேள்விகள்

1) தொழில் சார்ந்த ஆரோக்கியம் என்றால் என்ன?

அ) உடல், மனம், சமூகம் சார்ந்த பணியாளர் ஆரோக்கியம்

ஆ) தொழில் செய்யும் போது எந்த ஒரு ஆரோக்கிய இழப்பும் இல்லாமை

இ) பாதுகாப்பான பணி

ஈ) தன் உடல் ஆரோக்கியத்திற்கு தகுந்த பணியை செய்தல்

உ) தெரியவில்லை

2) தொழில் சம்பந்தப்பட் நோய் என்றால் என்ன?

அ) தொழில் செய்வதால் வரும் நோய்கள்

ஆ) தொழில் செய்யும் போது உடல் சேதாரம் ஏற்படுதல்

இ) தொழில் செய்வதால் பணியாளர்களுக்கு ஏற்படும் பின் விளைவுகள்

ஈ) தெரியவில்லை

3) எத்தனை நாட்களுக்கு ஒருமுறை மருத்துவ பரிசோதனை தேவை?

அ) ஆறுமாதத்திற்கு ஒரு முறை

ஆ) உடலில் பிரச்சனைகள் ஏற்படும் பொழுது

இ) வருடத்திற்கு ஒரு முறை

ஈ) மருத்துவ விடுமுறை முடிந்து வேலைக்கு வரும் பொழுது

உ) தெரியவில்லை

4). ஒரு தொழிலாளி ஒரு நாளைக்கு எவ்வளவு நேரம் வேலை செய்யலாம்?

அ) தொடர்ச்சியாக 5 மணி நேரம்

ஆ) ஒரு மணி நேர இடைவேளையுடன் 8 மணி நேரம்

இ) ஒரு மணி நேரம் இடைவேளையுடன் 9 மணி நேரம்

ஈ) தெரியாது

5) பஞ்சாலை தொழிலாளிக்கு பொதுவாக ஏற்படும் தொழில் சார்ந்த உடல்நல பாதிப்பு என்ன?

அ) சுவாச கோளாறு

ஆ) தசை மற்றும் எலும்புகளில் ஏற்படும் பாதிப்பு

இ) காது கேளாமை

ஈ) விபத்து

உ) தெரியாது

சுவாசக் கோளாறுகள்

6. பஞ்சாலை தொழிலளர்களுக்கு வரக்கூடிய பொதுவான சுவாசநோய்கள் என்ன?

அ) ஆஸ்துமா
ஆ) நீண்டகால நுரையீரல் அடைப்பு நோய்
இ) பிஸ்னஸ்சோசிஸ்
ஈ) மூச்சுகுழாய் தோற்றுநோய்
உ) தெரியாது

7. பஞ்சாலை தொழிலாளர்களுக்கு ஏற்படும் சுவாச கோளாறுக்கான காரணம் என்ன?

அ) நீண்டகால பஞ்சு தூசுகளுக்கு உட்படுதல்
ஆ) அலர்ஜி (ஒவ்வாமை)
இ) காற்று மாசுபடுதல்
ஈ) புகை பிடித்தல்
உ) மன அழுத்தம்
ஊ) தெரியாது

8. சுவாச கோளாறுக்கான அறிகுறிகள் யாவை?

அ) அதிக இருமல்
ஆ) நெஞ்சு அடைப்பு
இ) நெஞ்சு வலி
ஈ) மூச்சு இளைப்பு
உ) தும்மல்
ஊ) மூச்சு இளைப்பு
எ) உடல் எடைகுறைதல்
ஏ) தெரியாது

9. பஞ்சாலை தொழிலாளர்களுக்கு வரும் சுவாச கோளாறுகளுக்கான சிகிச்சை முறைகள் யாவை?

அ) மருந்து மாத்திரைகள் உட்கொள்தல்
ஆ) தேவையான அளவு ஓய்வு எடுத்தல்
இ) சுவாச சம்பந்தமான உடல் பயிற்சிகள்
ஈ) ஆவி பிடித்தல்

உ) சரிவிகித உணவு
ஊ) தொடர்ந்து சிகிச்சை எடுத்தல்
எ) தினமும் குளித்தல்
ஏ) தெரியாது

10. சுவாசக் கோளாறுகளைத் தாடுக்கும் முறைகள் என்ன?

அ) தூசு உள்ள இடங்களைத் தவிர்த்தல்
ஆ) தாற்காப்பு பொருட்களை அணிதல் (முகத்திரை அணிதல்)
இ) தடுப்பு ஊசி
ஈ) சத்தான உணவுகள் உட்கொள்ளுதல்
உ) தொடர் மருத்துவ பரிசோதனைகள்
ஊ) புகை பிடித்தலை தவிர்த்தல்
எ) சோப்பை பயன்படுத்தி முகம் மற்றும் கைகளை கழுவ வேண்டும்
ஏ) ஈரப்பதம் இல்லாத தரையை அடிக்கடி சுத்தம் செய்வததை தவிர்க்காலம்
ஐ) தெரியாது

11. சுவாச கோளாறுகளினால் வரும் பின் விளைவுகள் என்ன?

அ) தூக்கம் இன்மை
ஆ) வேலையின் போது நோய்வாய்படுதல்
இ) நிரந்தரமான குறுகிய சுவாச குழாய்கள் பிரச்சனைகள்
ஈ) தொடர்ச்சியான இருமல்
உ) சுவாச தொற்று
ஊ) தெரியாது

அதிக ஓலியினால் ஏற்படும் பிரச்சனைகள்

12. பருத்தி ஆலைகளில் வேலை செய்யும் தொழிலாளிகளுக்கு ஏற்படும் காது கேளாமைக்கான காரணம்?

அ) தொழிலில் தொடாச்சியாக ஏற்படும் சத்தம்
ஆ) இயந்திரங்களைச் சரியாக பராமரிக்காததினால் ஏற்படும் சத்தம்
இ) காற்றில் பறக்கும் பஞ்சு காதுகளில் நுழைதல்
ஈ) தெரியாது.

13. தொடர்ச்சியாக அதிக சத்தத்திற்கு உட்படும் போது காணப்படும் அறிகுறிகள்:

அ) மற்றவர்களிடம் பேசுவதை தவிர்த்தல்
ஆ) பழகுவதை தவிர்த்தல்
இ) கேட்கும் திறனில் பாதிப்பு
ஈ) காதினுள் இரைச்சல் ஒலி கேட்கும்
உ) மனச் சோர்வு
ஊ) காதினுள் அடைத்திருப்பது போன்ற உணர்வு
எ) பயம் மற்றும் மன அழுத்தம்
ஐ) தெரியாது

14. காது கேளாமைக்கான சிகிச்சை முறைகள்

அ) காது கேட்கும் திறன் கொண்டகருவி
ஆ) தொடர்ச்சியாக பரிசோதனை
இ) அதிக சத்தத்திற்கு உட்படுவதைத் தவிர்த்தல்
ஈ) தெரியாது

15. காது கேளாமையைத் தடுக்கும் முறைகள்?

அ) தொடர்ச்சியாக அதிகமான சத்தத்திற்கு உட்படுவதைத் தவிர்த்தல்
ஆ) தொடர்ச்சியாக காது பரிசோதனை செய்தல்
இ) காது அடைப்பாணை உபயோகித்தல்
ஈ) இயந்திரங்களை நல்ல முறையில் பராமரித்தல்
உ) தெரியாது.

தொழிலினால் ஏற்படும் விபத்துகள்

16. தொழில் ரீதியான விபத்து என்பது என்ன?

அ) வேலை செய்யும் இடங்களில் வேலை செய்யும் நேரத்தில் ஏற்படும் விபத்துகள்
ஆ) வேலை செய்யும் இடங்களில் எதிர்பாராமல் திடீரென்று விபத்துகள் ஏற்படுவது
இ) தொழிலாளிகளுக்கு அவர்கள் செய்யும் வேலைகளில் ஏற்படும் தீமைகளும் பாதிப்புகளும்
ஈ) தெரியாது

17. விபத்துக்கள் நடக்க முக்கிய காரணங்கள் என்ன?

அ) உடல் ரீதியான பிரச்சனைகள்
ஆ) அதிக நேரம் வேலை பார்த்தல்
இ) வேலையில் முன்அனுபவம் இல்லாமை
ஈ) தொழிலாளியின் மனநிலை
உ) சுற்றுப்புற சூழ்நிலை
ஊ) தெரியாது

18. எந்தவகையான மனரீதியான காரணங்கள் விபத்து ஏற்பட காரணமாக உள்ளது?

அ) அதிக தன்னம்பிக்கை
ஆ) கவனக்குறைவாக வேலை செய்தல்
இ) பாதுகாப்பு விதிகளை மீறுதல்
ஈ) மன உளைச்சல்
உ) வேலையில் முன்அனுபவம் இல்லாமை
ஊ) தெரியாது

19. எந்த எந்த சுற்றுப்புற சூழ்நிலை காரணிகள் விபத்தை தூண்டுகின்றன?

அ) வெப்பநிலை
ஆ) காற்றோட்டமின்மை
இ) போதிய வெளிச்சம் இன்மை
ஈ) சத்தம்
உ) பாதுகாப்பற்ற இயந்திரங்கள்
ஊ) தெரியாது

20. தொழில் சம்பந்தமான விபத்துகளை எப்படி தடுக்காலம்?

அ) பணியாளர்களுக்கு பணிமுன் பரிசோதனை செய்தல்
ஆ) மாதம் ஒருமுறை இயந்திர பரிசோதனை செய்தல்
இ) இயந்திரத்தை உபயோகிக்கும் வழிமுறையை கற்றுக் கொடுத்தல்
ஈ) பணியாளர்களுக்கு தேவையான பயிற்சி அளித்தல்
உ) நல்ல உடல் மற்றும் மன ஆரோக்கியத்துடன் இருந்தல்
ஊ) அதிகநேரம் வேலை பார்ப்பதை தவிர்த்தல்
எ) தெரியாது.

21. தொழில் சம்பந்தமான வியாதிகளை தடுக்க எந்த வகையான பாதுகாப்பு உபகரணங்கள் பயன்படுத்தாலம்?

அ) முகத்திரை
ஆ) பாதுகாப்பு மேல் அங்கி
இ) காது அடைப்பான்
ஈ) தலைகவசம்
உ) பாதுகாப்பு காலனிகள், கை உறை.
ஊ) தெரியாது.

PART-III

தொழில் சம்பந்தப்பட்ட நோயைத் தடுப்பதை குறித்த பஞ்சாலை தொழிலாளர்களின் மனப்பாங்கு

வ எண்	திட்ட பரிணாமம்	முழு மனதுடன் ஆமோதிக் கிறேன்	ஆமோதி க்கிறேன்	உறுதியாக தெரியாது	ஆமோதிக் கவில்லை	முழு மனதுடன் ஆமோதிக்க வில்லை
1	நான் நினைக்கின்றேன் ஏந்த ஒரு வேலை செய்வதற்கும் நல்ல காற்றோட்டம் அவசியம்					
2	உடல் நலத்திற்கும் செய்யும் தொழிலாளர்களுக்கு எவ்வித தொடர்பு இல்லை.					
3	தகுந்த இடைவெளியில் மருத்துவ பரிசோதனை செய்வது மிக அவசியம்					
4	வேலை செய்யும் போது தகுந்த உடல் அசைவுகளை பின் பற்றினால் தசை சம்பந்தமான பிரச்சனைகளை தவிர்க்கலாம்					
5	பொழுதுபோக்கு உடலையும் மனதையும் சீராக வைக்கிறது.					
6	தினமும் உடற்பயிற்சி மேற்கொண்டால் உடல் நலத்திற்கு நல்லது.					
7	உடல் நலத்தை விட செய்யும் வேலை முக்கியம்					
8	வேலை செய்யும் இடத்தில் தரையை ஈரப்பதத்துடன் வைப்பதன் மூலமாக பஞ்சுகளில் இருந்து வரும் தூசியை குறைக்கலாம்.					

9	தொடக்கத்தில் ஏற்படும் மிக குறைந்த அளவு காது கேளாமை பிரச்சனைக்கு மருத்துவ பரிசோதனை தேவையில்லை.					
10	தொழில் சம்பந்தப்பட்ட விபத்துக்கள் பஞ்சு ஆலை தொழிலாளர்களுக்கு அதிகமாக ஏற்படுகிறது.					
11	பஞ்சிலிருந்து வரும் தூசி, வெப்பநிலை மற்றும் சத்தம் போன்ற காரணிகளால் தொழில்சார்ந்த வியாதிகள் அதிகம் ஏற்படுகிறது.					
12	வேலை செய்வதற்கு முன் அனுபவமும் பயிற்சியும் தேவையில்லை.					
13	தொழில் சம்பந்தப்பட்ட வியாதிகளை பாதுகாப்பு உபகரணங்களை பயன்படுத்துவதன் மூலமாக தடுக்கலாம்.					
14	நமது உடல் நலத்தை நல்ல முறையில் வைத்துக் கொள்ள பாதுகாப்பு என்பது இன்றியமையாதது					
15	தொழில் சம்பந்தப்பட்ட நோய்களை அறிந்து ஆரம்பத்திலேயே கண்டறிந்து சிகிச்சை அளிப்பதன் மூலம் பின் விளைவுகளை தடுக்கலாம்.					

APPENDIX-IX

KNOWLEDGE QUESTIONNAIRE KEY ANSWERS

S.NO	CORRECT RESPONSE	SCORES
1	1,2,3,4	4
2	1,2,3	3
3	1,2,3,4	4
4	1,2,3	3
5	1,2,3,4	4
6	1,2,3,4	4
7	1,2,3,4,5	5
8	1,2,3,4,5,6	6
9	1,2,3,4,5,6,7	7
10	1,2,3,4,5,6,7,8,9	9
11	1,2,3,4,5	5
12	1,2,3	3
13	1,2,3,4,5,6,7,8	8
14	1,2,3	3
15	1,2,3	3
16	1,2,3	3
17	1,2,3,4,5	5
18	1,2,3,4,5	5
19	1,2,3,4,5	5
20	1,2,3,4,5,6	6
21	1,2,3,4,5	5
	TOTAL SCORE	**100**

ATTITUDE QUESTIONNAIRE KEY ANSWERS

S.NO	**Strongly agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly disagree**	TOTAL
1	5	4	3	2	1	5
2	1	2	3	4	5	5
3	5	4	3	2	1	5
4	5	4	3	2	1	5
5	5	4	3	2	1	5
6	5	4	3	2	1	5
7	1	2	3	4	5	5
8	5	4	3	2	1	5
9	1	2	3	4	5	5
10	5	4	3	2	1	5
11	5	4	3	2	1	5
12	1	2	3	4	5	5
13	5	4	3	2	1	5
14	5	4	3	2	1	5
15	5	4	3	2	1	5
TOTAL SCORE						**75**

APPENDIX-X

CONTENT OF VIDEO ASSISTED TEACHING PROGRAMME

INTRODUCTION

Occupation plays a important role the heath of all the people. Occupational health hazards are those which may arise in the course of an occupation. The working environment has got direct effects on the health of persons who are present in the area .the environment may be responsible in causation of occupational diseases or in exacerbations of other non-occupational diseases .The state of physical, mental and social health of workers can influence his ability to work safely and efficiently.

Occupational health is concerned with health in its relation to work and also the working environment occupational health implies not only health production but also health promotion , wide range of preventive ,curative services, rehabilitative services and emergency care .so occupational health that includes everything that can apply to promote the health and working capacity of worker. Occupational health hazards not only affect the individual but it also affect the family and society and its economical development.

QUESTION	CONTENT
What is health?	**HEALTH** Health is a state of complete physical ,mental, social well being and not merely an absence of disease or infirmity
What is occupational environment?	**OCCUPATIONAL ENVIRONMENT** It is the sum of external conditions and influence which prevail at the place of work and which has a bearing on the health of working population
List down the aims of occupational health ?	**AIMS OF OCCUPATIONAL HEALTH** ➢ The Promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations. ➢ The prevention among workers of departures from health caused by their working conditions. ➢ The protection of workers in their employment from risk resulting from factors adverse to health ➢ The placing and maintenance of the workers in an occupational environment to his physiological and psychological equipment ILO/WHO committee on occupational health
What do you mean by occupational hazards?	**OCCUPATIONAL HAZARDS:** Disease arising out or in the course of employment

List down the occupational diseases?	**OCCUPATIONAL DISEASE:** Occupational diseases partially affect workers only and generally have a clear cause effect relationship. The factors in occupational environment, that may affect health are Physical hazards - Heat , Cold, Light , Noise , Radiation , Pressure Chemical hazards - Silica , Asbestos, Coal, Cotton, Cane dust, Tobacco dust, hay dust, Biological hazards - Brucellosis , Leptosporiosis , Anthrax ,Tetanus ,Encephalitis Mechanical hazards - Protruding or moving parts of machinery Psychological hazards - Frustrations at work or at home, lake of job satisfaction.

What are all the common occupational health hazards among cotton mill workers?	Common occupational health hazards among cotton industry workers: • Respiratory problem • Musculoskeletal problem • Hearing impairment • Accident
	RESPIRATORY PROBLEM
What is the meaning of respiratory problem?	Respiratory problem is one of the main occupational hazards among cotton mill workers due to exposure of cotton dust. Three main occupational diseases are Byssinosis, Asthma, and Chronic obstructive pulmonary disease (COPD).
Explain the type of respiratory problem among cotton industry workers	**DEFINITION** **Byssinosis** (brown lung disease) is a lung disease caused by exposure to dusts from cotton processing,. The small airways become blocked, severely harming lung function. **Asthma** is characterized by paroxysmal and reversible obstruction of the airways. It is increasingly understood as an inflammatory condition combined with bronchial hyper-responsiveness. Acute asthma involves:

Enumerate the causes of respiratory problem	• Broncho spasm (smooth muscle spasm narrowing airways) • Excessive production of secretions (plugging airways) **Chronic obstructive pulmonary disease (COPD)** refers to a group of lung diseases that block airflow and make breathing difficult. **CAUSES** ✓ Prolonged exposure of cotton dust ✓ Allergies ✓ Air pollution ✓ Cigarette smoking ✓ Stress ✓ Changes in weather (most often cold weather) ✓ Chemicals in the air or in food ✓ family history of allergies
List down the clinical manifestation?	**CLINICAL MANIFESTATION** • Chest tightness • Cough • Wheezing • breathing difficulties Symptoms will get worse at the beginning of the work week, and then improve while you are away from the workplace, or later in the work week • chest pain • Shortness of breath • Weight loss

How do we identify the disease?	**DIAGNOTIC EVALUATION** • History collection • Physical examination • Chest x-ray • CT scan chest • Pulmonary function tests
Explain the management?	**MANAGEMENT** ✓ Drug therapy ✓ Adequate rest ✓ Breathing exercise ✓ Nebulization ✓ Well balanced diet ✓ Follow-up ✓ Regular bathing ✓ Quit smoking
How can we prevent the respiratory problem?	**PREVENTION** ▪ Avoiding exposure to dust ▪ Wearing personal protective devices, such as facial masks. ▪ Flu Vaccination ▪ Good nutrition ▪ Periodical medical examination ▪ Stop smoking ▪ Washing face, hand and palms thoroughly with soup and water before eating and toileting

List down the complication	▪ Avoid dry sweeping in working environment ▪ Provide adequate ventilation ▪ Deep breathing and coughing exercise ▪ Wash the hands and face with soup and water thoroughly before going to eat in working area **COMPLICATION** • Symptoms that interfere with sleep, work or recreational activities • Sick days from work • Permanent narrowing of the bronchial tubes • Persistent cough • Chronic bronchitis
	NOISE INDUCED DISORDER
What is the meaning of noise induced disorder?	**DEFINITION** Auditory dysfunction pertaining to the sense of hearing affects an individual's ability to hear sounds .
List down the causes	**CAUSES** ❖ Excessive exposure to noise ❖ Improper maintenance of machine
Explain the symptoms	**SYMPTOMS** **that occur due to prolonged exposure to noise are,** ❖ Avoiding conversation

	❖ Social interaction ❖ Difficulty in hearing ❖ Ringing sound in the ear ❖ Depression ❖ Feeling of fullness of ear ❖ Head ache and nausea ❖ Fear and stressful
Enumerate the diagnostic evaluation	**DIAGNOSTIC EVALUATION** ❖ History collection ❖ Tuning fork test, ❖ otoscopic examination ❖ Hearing loss audiometry, ❖ Rinne and weber test
Explain the treatment measure and Prevention	**TREATMENT** ❖ Hearing aid can be used **PREVENTION** ❖ Avoiding exposure to loud noise for long period. ❖ Periodic hearing test ❖ Using ear plug and muffs ❖ Maintain the machine in good working conditions. ❖ Any noise above 85dBA is considered dangerous ❖ Avoid long period in noisy surroundings ,wearing protective devices when indicated ❖ When loud noise cannot be avoided ,ear plug or ear head phones can be used ❖ Everyone should have periodic hearing tests as part of their annual medical visits, specially they work or live in an environment that has excessive noise levels ❖ The earlier the loss is identified the more quickly the management can be started.

List the complications	**COMPLICATION** ❖ Otitis media ❖ Perforated tympanic membrane ❖ mastoidities
Explain the causes of occupational accident	**OCCUPATIONAL ACCIDENT** Accidents are a common feature in most industries. Some textile industries are known for accidents, and other mining industries work , quarries, contructions works etc. CAUSES: ✓ Physical impairment of the worker ✓ Increased working hours ✓ Inexperience in work ✓ Psychological status of the workers ✓ Environmental factors **PSYCHOLOGICAL FACTORS:** • Overconfidence • Carelessness in work • Ignorance of safety rules • Emotional stress • Inexperience in work **ENVIRONMENTAL FACTORS** • Temperature • Poor ventilation

Enumerate the preventive measures	• Poor lighting • Noise • Unsafe machines **PREVENTION OF OCCUPATIONAL ACCIDENTS** • Adequate preplacement examination • Periodical examination of machine • Knowledge of handling machine • Adequate training to the workers • Maintaining good physical and psychological health • Attending training programms

பஞ்சு ஆலை தொழிலாளர்களுக்கு வரும் தொழில் சம்பந்தப்பட்ட நோய் பற்றிய விளக்கப்படம்

முன்னுரை :

தொழில் சம்பந்தப்பட்ட நோய் என்பது தொழில் செய்து கொண்டிருக்கும்போதோ, தொடர்ச்சியாக செய்து கொண்டிருக்கும் நீண்ட நாளைய வேலையின் காரணமாகவோ வரக்கூடிய நோய். ஒருவர் வேலை செய்யும் இடத்தில் அவரை சுற்றியுள்ள சூழ்நிலை அவருடைய ஆரோக்கியத்தை நேரடியாக பாதிக்கிறது. ஒருவர் வேலை செய்யும இடமே தொழில் சம்பந்தப்பட்ட நோய் வருவதற்கும், தொழில் சம்பந்தம் இல்லாத நோய் வருவதற்கும் காரணமாகிறது. ஒருவரின் உடல்நிலை அவரின் வேலை செய்யும் திறனை பாதிக்கிறது. இதனால் பாதிக்கப்படுவது அவரின் உடல்நிலை மட்டும் இல்லாது அவரின் குடும்பம் மற்றும் சமுதாயத்தின் வளர்ச்சியையும் பாதிக்கிறது.

கேள்விகள்	உள்ளடக்கம்
தொழில் சம்பந்தப்பட்ட நோய்கள் என்றால் என்ன?	**சுவாசக்கோளாறுகள்** தொழில்சார்ந்த வியாதிகளில் மூச்சுகுழாய் பிரச்சனை பஞ்சு ஆலை தொழிலாளர்களுக்கு அதிகமாக ஏற்படுகிறது. இதற்கு காரணம் பஞ்சுகளில் இருந்து வரும் தூசுகளை சுவாசிப்பது. மூன்று விதமான மூச்சுகுழாய் பிரச்சனைகள், பிஸ்னஸ்சோசிஸ், ஆஸ்துமா, மற்றும் நுரையீரல் அடைப்பு நோய்கள் பஞ்சு ஆலை தொழிலாளர்களுக்கு அதிகமாக ஏற்படுகிறது. பிஸ்னஸ்சோசிஸ் என்ற நுரையீரல் நோய் பஞ்சுஆலை தொழிற்சாலையில் வேலைசெய்யும் போது. தூசுகளுக்கு உட்படுவதால் ஏற்படுகிறது. இதனால் மூச்சுகுழாய் அடைக்கபட்டு நுரையீரலின் வேலை பாதிக்கப்படுகிறது. ஆஸ்துமா ஏன்பது தொடர்ந்து மூச்சுகுழாய் அடைப்பதனால் ஏற்படுகிறது. இதற்கு முக்கிய காரணம். மூச்சு குழாயில் ஏற்படும். நோய்கிருமிகளின் தாக்கம்.
பஞ்சாலை தொழிலாளர்களுக்கு ஏற்படும் சுவாச கோளாறுக்கான காரணம் என்ன?	**காரணங்கள்:** ➢ நீண்ட கால பஞ்சு தூசுகளுக்கு உட்படுதல் ➢ அலர்ஜி (ஒவ்வாமை) ➢ காற்று மாறுபடுதல் ➢ புகை பிடித்தல் ➢ மன அழுத்தம் ➢ காலநிலை மாற்றங்கள் (குளிர்காலம்) ➢ காற்று மற்றும் உணவில் ரசாயனம் கலந்திருத்தல் ➢ குடும்பத்தில் வேறு எவரேனும் பாதிக்கபட்டு இருந்தால்.

சுவாச கோளாறுக்கான அறிகுறிகள் யாவை?	**சுவாச கோளாறுக்கான அறிகுறிகள** ➢ நெஞ்சு அடைப்பு ➢ அதிக இருமல் ➢ மூச்சு இளைப்பு ➢ மூச்சு திணரல் ➢ தும்மல் ➢ மூச்சு இளைப்பு ➢ உடல் எடைகுறைதல> போன்ற அறிகுறிகள் விடுமுறைக்கு பின் வேலைக்கு செல்லும் பொழுது அந்த முதல் நாளில் அதிகமாக ஏற்படுகிறது. அடுத்த அடுத்த நாட்களில் இந்த அறிகுறிகள் குறைய ஆரம்பிக்கின்றன.
பஞ்சாலை தொழிலாளர்களுக்கு வரும் சுவாச கோளாறுகளுக்கான சிகிச்சை முறைகள் யாவை?	➢ நெஞ்சு வலி ➢ தும்மல் ➢ உடல் எடைகுறைதல் ➢ உடல் பரிசோதனை ➢ X-ரே ➢ CT ஸ்கேன் முலம் கண்டறியலாம **சிகிச்சை முறைகள்** ➢ மருந்து மாத்திரைகள் உட்கொள்தல் ➢ தேவையான அளவு ஓய்வு எடுத்தல் ➢ சுவாச சம்பந்தமான உடல் பயிற்சிகள் ➢ ஆவி பிடித்தல் ➢ சரிவிகித உணவு

	➢ தொடர் சிகிச்சை எடுத்தல் ➢ தினமும் குளித்தல் ➢ புகைபிடித்தலை தவிர்த்தல்
சுவாச கோளாறுகளுக்கான தடுப்பு முறைகள் என்ன?	**தடுப்பு முறைகள்:** ▪ தூசு உள்ள இடங்களை தவிர்த்தல் ▪ தடுப்பு ஊசி ▪ சத்தான உணவுகள் உட்கொள்ளுதல் ▪ தொடர் மருத்துவ பரிசோதனைகள் ▪ புகை பிடித்தலை தவிர்த்தல் ▪ சோப்பை பயன்படுத்தி முகம் மற்றும் கைகளை கழுவ வேண்டும் ▪ ஈரப்பதம் இல்லாத தரையை அடிக்கடி சுத்தம் செய்வததை தவிர்க்கலாம்
சுவாச கோளாறுகளினால் வரும் பின் விளைவுகள் என்ன?	**பின்விளைவுகள்:** ▪ தூக்கம் இன்மை ▪ வேலையின் போது நோய்வாய்படுதல் ▪ நிரந்தரமான குறுகிய சுவாச குழாய்கள் பிரச்சனைகள் ▪ தொடர்ச்சியான இருமல் ▪ சுவாச தொற்று
பஞ்சாலை ஆலைகளில் வேலை செய்யும் தொழிலாளிகளுக்கு ஏற்படும் காது	**அதிக ஒலியினால் ஏற்படும் பிரச்சனை** ஒருவருடைய காது கேட்கும் திறன் பாதிக்கப்படுவதை காது கேளாமை என்கிறோம் **அதிக சப்தம்** திடீரென ஏற்படும் அதிக சப்தம் அல்லது ஒருவர் வாழ்நாள் முழுவதும் தொடர்ச்சியாக அதிக சப்தத்திற்குட்படுவது. **தொழில் சம்பந்தப்பட்ட காரணிகள்** அதிக ஒலி ஏற்படுத்தும் என்ணெய் ஆலைகள் நூற்பு ஆலைகள் (துணி) பஞ்சாலை இரும்பு

கேளாமைக்கான காரணம் என்ன?	தொழிற்சாலைகள் மரம் அறுக்கும் தொழிற்சாலைகள், அச்சகங்கள் முக்கிய காரணிகள் ➢ தோழிலில் தொடர்ச்சியாக ஏற்படும் சத்தம் ➢ இயந்திரங்களைச் சரியாக பராமரிக்காததினால் ஏற்படும் சத்தம் ➢ காற்றில் பறக்கும் பஞ்சு காதுகளில் நுழைதல்
தொடர்ச்சியாக அதிக சத்தத்திற்கு உட்படும் போது காணப்படும் அறிகுறிகள் யாவை?	**அதிக சத்தத்திற்கு உட்படும் போது காணப்படும் அறிகுறிகள்:** • மற்றவர்களிடம் பேசுவதை தவிர்த்தல் • பழகுவதை தவிர்த்தல் • கேட்கும் திறனில் பாதிப்பு • காதினுள் இரைச்சல் ஒலி கேட்கும் • மனச் சோர்வு • காதினுள் அடைத்திருப்பது போன்ற உணர்வு • பயம் மற்றும் மன அழுத்தம்
காது கேளாமைக்கான சிகிச்சை முறைகள்	**காது கேளாமைக்கான சிகிச்சை முறைகள்** • காது கேட்கும் திறன் கொண்டகருவி • தொடர்ச்சியாக பரிசோதனை • அதிக சத்தத்திற்கு உட்படுவதைத் தவிர்த்தல்
காது கேளாமையைத் தடுக்கும் முறைகள் யாவை?	**காது கேளாமையைத் தடுக்கும் முறைகள்** ▪ தொடர்ச்சியாக அதிகமான சத்தத்திற்கு உட்படுவதைத் தவிர்த்தல் ▪ தொடர்ச்சியாக காது பரிசோதனை செய்தல் ▪ காது அடைப்பாணை உபயோகித்தல் ▪ இயந்திரங்களை நல்ல முறையில் பராமரித்தல்
	தொழிவினால் ஏற்படும் விபத்துக்கள் **தொழில் ரீதியான விபத்து** ▪ வேலை செய்யும் இடங்களில் வேலை செய்யும் நேரத்தில் ஏற்படும் விபத்துகள் ▪ வேலை செய்யும் இடங்களில் எதிர்பாராமல் திடீரென்று விபத்துகள் ஏற்படுவது

தொழில் ரீதியான விபத்து என்பது என்ன?	▪ தொழிலாளிகளுக்கு அவர்கள் செய்யும் வேலைகளில் ஏற்படும் தீமைகளும் பாதிப்புகளும
விபத்துக்கள் நடக்க முக்கிய காரணங்கள் என்ன?	**விபத்துக்கள் நடக்க முக்கிய காரணங்கள்** • உடல் ரீதியான பிரச்சனைகள் • அதிக நேரம் வேலை பார்த்தல் • வேலையில் முன்அனுபவம் இல்லாமை • தொழிலாளியின் மனநிலை • சுற்றுப்புற சூழ்நிலை ❖ **மனரீதியான காரணங்கள்:** • அதிக தன்னம்பிக்கை • கவனக்குறைவாக வேலை செய்தல் • பாதுகாப்பு விதிகளை மீறுதல் • மன உளைச்சல் • வேலையில் முன்அனுபவம் இல்லாமை ❖ **சுற்றுப்புற சூழ்நிலை காரணிகள** • வெப்பநிலை • காற்றோட்டமின்மை • போதிய வெளிச்சம் இன்மை • சத்தம் • பாதுகாப்பற்ற இயந்திரங்கள்
தொழில் சம்பந்தமான விபத்துகளை எப்படி தடுக்கலாம்?	**தொழில் சம்பந்தமான விபத்துகான தடுப்பு முறைகள்** ▪ பணியாளர்களுக்கு பணிமுன் பரிசோதனை செய்தல் ▪ மாதம் ஒருமுறை இயந்திர பரிசோதனை செய்தல் ▪ இயந்திரத்தை உபயோகிக்கும் வழிமுறையை கற்றுக் கொடுத்தல் ▪ பணியாளர்களுக்கு தேவையான பயிற்சி அளித்தல்

தொழில் சம்பந்தமான வியாதிகளை தடுக்க எந்த வகையான பாதுகாப்பு உபகரணங்களை பயன்படுத்தாலம்?	▪ நல்ல உடல் மற்றும் மன ஆரோக்கியத்துடன் இருந்தல் ▪ அதிகநேரம் வேலை பார்ப்பதை தவிர்த்தல **பாதுகாப்பு உபகரணங்கள்:** • முகத்திரை • பாதுகாப்பு மேல் அங்கி • காது அடைப்பான் • தலைகவசம் • பாதுகாப்பு காலனிகள், கை உறை பேன்ற பாதுகாப்பு உபகரணங்களை சரியான முறைகளிள் பயன்படுத்தி தொழிவினால் ஏற்படும் சுவாசக்கோளாறுகள் , அதிக ஓவியினால் ஏற்படும் பிரச்சனை, மற்றும் விபத்துக்களை தடுக்கலாம்.