

Age were in between 18-25 years  
**B: Distribution of subject in relation to their gender**  
 Majority of Industrial worker 66 (94.28%) are married and no industrial worker are divorced, while widow.

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**marital status**  
 Majority of Industrial worker 65 (92.85%) are married and only 5 (7.14%) industrial worker are married and no industrial worker are divorced, while widow.

**Distribution of subject in relation to their educational level**  
 Majority of Industrial worker 44 (62.85%) had completed their secondary level of education, 22 (31.42%) industrial worker had completed their education up to primary level and only 3(4.28%) industrial worker had completed their graduation, industrial worker are illiterate and none of the industrial worker are post graduated.

**E: Distribution of subject in relation to their years of experience in job**  
 Majority of Industrial worker 34 (48.5%) have more than 10 years of experience, 11(15.71%) industrial worker have 3-5 years of experience, 11(15.71%) industrial worker have 8-10 years of experience and only 4 (5.71%) industrial worker have 0-2 years of experience.

**F: Distribution of subject in relation to their mode of work**  
 Majority of Industrial worker 40 (57.14%) are on temporary work and 30 (42.85%) industrial worker are permanent in factory.

**G: Distribution of subject regarding medical history**

**Table 1G: Distribution Of Subject Regarding Medical History**

Sr. no.	Present medical condition	Frequency	%
1	Heart disease	1	1.42
2	Asthma	0	0
3	Hyper tension	7	10
4	Thyroid disease	0	0
5	Diabetes mellitus	3	4.28
6	Kidney disease	0	0
7	Arthritis	7	10
8	Cancer	0	0

**Fig. 1G** This table reveals that majority of industrial worker 47 (67.14%) are having no medical illness but 7 (10%) industrial worker are having hypertension and arthritis, 5(7.14%) industrial worker are having allergy due to dust penicillin, etc, 3(4.28%) industrial worker are suffering from diabetes mellitus and 1(1.42%) industrial worker is having heart disease.

## Section 2

This section deals with the percentage wise distribution of industrial worker in relation to their physical health status

**2A: Distribution of subject in relation to their body type.**

Majority of Industrial worker 70(100%) are having happy facial expression and are oriented to time, place and person.

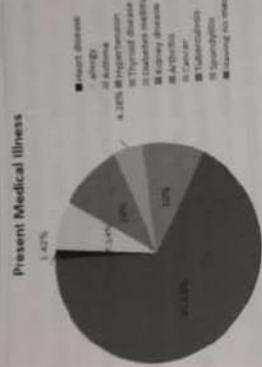
**2B: Distribution of subject in relation to their**

**Physical health status**  
**2C: Distribution of subject in relation to any**

Majority of Industrial worker 53 (75.71%) are having average body built, 22 (31.42%) industrial worker are healthy, 5 (7.14%) industrial worker are thin and only 3 (4.28%) industrial worker are well built

**Illness in their Head.**  
 Majority of Industrial worker 17(24.28%) industrial worker are suffering from headache.

**2D: Distribution of subject in relation to any Eye Problems.**  
 Majority of Industrial worker 40 (57.14%) uses



improved our nursing skills which will help us in our further life. Apart from that it gave us determination, perseverance, compassion, autonomy, critical thinking and hardworking aspects which are important in career as well as daily living.

### Implication of the study

The findings of the study have certain important implication for nursing service, education, administration and nursing research.

### Nursing Services

Nurses serve as agents in providing education about the safety measures and can help industrial workers to plan their diet and daily schedule according to their shifts.

Mental health promotion is a vital function of the nurse and nurses can prevent psychological factors leading to mental problems which are caused by workplace.

### Nursing education

Nursing students must be encouraged to utilize knowledge about industrial health hazards of using working in a chemical industry to give health education to the workers and community.

Nursing education should help in inculcating a sense of responsibility in the students to identify needs and problems as to render optimum care.

### Nursing administration

The nurse administrator can provide in-service education to the industrial workers regarding the occupational health hazards and prevention of those.

### Nursing Research

The tool can provide guidelines for the future investigators who are interested in conducting similar studies. The present study may serve as a reference material.

### Suggestions and recommendation :

1. This study could have been conducted on a large sample to get more accurate result.
2. This study could have been conducted in proper setting like factory where they are working, to get more sample for research.
3. A comparative study could be taken in various factory settings to assess the health status of workers.
4. Protocol could be made for reducing occupational hazards and evaluation of the protocol can be

5. carried out.
- A study could have been conducted other than chemical factory.

### Limitations :

1. This study was time consuming.
2. Some of the industrial workers were reluctant in sharing their personal information.
3. Some of the industrial workers have not given appropriate feedback.
4. No interventions were carried out to improve health status of industrial workers, hence limited to self reporting.
5. More time could have been spent with the samples for increasing the data authentically.

### Conclusion :

The following conclusions were drawn from the study,

1. This study proved that most of the factory workers were having health problems due to working environment.
2. Majority of industrial workers were male.
3. Majority of industrial workers were having health problems such as hypertension, acidity, arthritis etc.
4. No such intervention was done for workers the study was only limited to self reporting.

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in factory of Ahmednagar District  
2) To associate the health status of industrial  
worker in factory of Ahmednagar district with selected  
demographic variable

**Research Methodology:**

**Research Approach:**

A descriptive non-experimental method is used  
(for the study)

**Research Design:**

A descriptive quantitative research design is used  
(for the study)

**Setting of the Study:**

Study was conducted in Godavari Bio refineries  
Chemical Factory at Sikarwadi in Ahmednagar District

**Population:**

Population of the study consist of 70 factory  
workers of Godavari Bio refineries Chemical Factory

**Sample & Sampling Technique:**

The sample of the study consists of 70 factory  
workers of Godavari Bio refineries Chemical Factory  
Sampling technique was used purposive sampling  
technique

**Sample Size:**

Sample size is of 70 factory workers of Godavari  
Bio refineries Chemical Factory

**Sampling Criteria:**

The sample collected were those who are available  
in the Chemical Factory in morning shift

**DEVELOPMENT OF RESEARCH TOOLS:**

In present study, interview method through  
valuable questionnaire and physical examination  
techniques were used.

**Tools:**

It includes

- Section A : Demographic data
- Section B : Physical examination
- Section C : Personal health questionnaire
- Section D : Occupational health
- Section E : Workplace stress checklist

### Description Of The Tools:

The tools was divided into 4 sections  
**Section A:** consists of demographic data of  
samples. The items includes,

- Age
- Sex

### 1A: Distribution of subject in relation to their age in years.

Majority of Industrial worker 28 (40%) belongs  
to age group >41 years, and 17 (24.28%) industrial  
worker were found to be in between 34-41 years,  
whereas 15 (21.42 % ) industrial worker were in  
between 26-33 years and only 10(14.28%) industrial

Marital status

Education

Years of experience

Department of work

Mode of work in department

Sample no, height, weight, BMI, Hb

Medical history

**Section B:** Consist of physical examination of  
sample. Its items includes

- General appearance
- Body type
- Assessment of head eyes, nose, ears, mouth, neck,  
chest, abdomen, upper and lower extremities,  
back, skin, Gastrointestinal, Genitourinary etc

**Section C :** Consist of personal health  
questionnaire about

- Diet
- Exercise
- Habit
- Health check up
- Any acute problem
- Pain
- History of fracture
- Experience of drowsiness, dizziness during work

**Section D:** Consist of occupational health which  
includes

- Experience of injury
- Facilities of break, mediclaim, sick leaves
- personal protective equipments by company
- History of inhalation of chemicals, allergy and  
infection

**Section E: Workplace Stress Checklist:**

This checklist is for to assess the level of stress  
among the factory workers. The checklist is consist of  
ten questions and each question carries 10 marks 50  
total score will be 100

- 10-30 score indicates workers can handle stress  
on job well
- 40-60 moderately well
- 100- encountering problems that needs to be  
resolved.

### 3F: Distribution of subject regarding acute problem.

Majority of industrial workers 15(21.42%) suffer from cough and cold 15(21.42%) industrial workers doesn't have any problem, 10(14.28%) industrial workers use to have fever, 10(14.28%) industrial workers have backache, 9(12.8%) industrial workers have vomiting and diarrhoea, 8(11.42%) industrial workers having headache, 2(2.85%) industrial workers have joint pain and only 1(1.42%) industrial workers have from abdominal pain.

**Table 3G: Distribution of subjects about pain**

<b>limiting their activity.</b>	❖ Majority of industrial workers 67(95.71%) doesn't have any pain that limits their daily activity but 3(4.28%) industrial workers has pain limiting them during their daily activity.
<b>3H: Distribution of subjects about their history of fracture.</b>	❖ Majority of industrial workers 60(78.57%) doesn't have any history of fracture, and 10 (8.57%) industrial workers has history of fracture.
<b>3I: Distribution of subjects whether they have ever experienced drowsiness during working hours.</b>	❖ Majority of industrial workers 66(94.28%) don't experience drowsiness during working hours but 4(5.71%) industrial workers experiences drowsiness during working hours.
<b>Section 4</b>	This section deals with the analysis of occupational health status of industrial worker.

**Table 4: Distribution of subjects regarding their occupational health status.**

<b>their occupational health status.</b>	❖ Majority of industrial workers 67(95.70%) doesn't have any injury while handling machine Majority of industrial workers 55(78.50%) get breaks between shifts and 15(21.40%) industrial workers doesn't get break between shifts.
	❖ Medi-claim are provided by company to 45(64.2%) industrial workers.
	❖ Majority of industrial worker get sick leaves by company 64(91.4%).
	❖ Majority of industrial workers 69(98.5%) did not inhaled any chemical while work.
	❖ All industrial workers 70(100%) used to get personal protective equipment by company.

### Section 5

This section deals with analysis of mental health

status of industrial worker by using checklist method.

**Table 5: Distribution of subjects regarding their mental health status**

<b>their mental health status</b>	❖ Majority of industrial workers 40(57.14%) agree somewhat that things getting off their chest at work.
	❖ Majority of industrial workers 52(74.92%) strongly agree that they have a lot of responsibility but not authority.
	❖ Majority of industrial workers 58(82.85%) strongly agree that they can do better job if given more time.
	❖ Majority of industrial workers 53(75.71%) strongly agree that they receive appreciation when the work done is good.
	❖ Majority industrial workers 63(90%) strongly disagree that they are proud with their job.
	❖ Majority of industrial workers 64(91.42%) strongly disagree that they picked on against a work.
	❖ Majority of industrial workers 46(65.71%) agree somewhat that working environment is not safe.
	❖ Majority of industrial workers 57(81.42%) agree somewhat that their job interferes with their personal needs.
	❖ Majority of industrial workers 46(65.71%) agree somewhat that they tend to have frequent argument with colleagues.
	❖ Majority of industrial workers 36(51.42%) agree somewhat that they feel little control over life at work.

### Personal experience :

Research was carried out in sakarwadi, Godavani Bio-refineries which is a chemical factory. The objectives of our research was to assess the health status of factory workers. During the process of data collection the industrial workers co-operated very well with the researcher where they were patient and interested in the assessment. But some of the workers were expecting more of interventions rather than history and data collection. The other thing which researcher noticed is due to limitation of time and shift duties of workers. It was difficult to collect data but the researcher made it on respected time. The overall experience of research was amazing. It offered us tremendous opportunities and learned the communication skills, being patient it

# A descriptive study to assess the health status of industrial worker in factory of Ahmednagar District.

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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 safety and health is the science of anticipation, recognition, evaluation and control of hazards arising in or from the workplace, which could impair the health and well-being of workers, and also impact the surrounding communities and the environment.

Occupational hazard is defined as the "potential risk to the health of a person emerging from an unhealthy environment" which is a significant public health issue. It can also be referred to as any activity, materials, processes or situation that is likely to cause an accident or disease at the work place. Although improvement in occupational health have been seen in many developed countries, however, the protection of workers from work-related disorders is not a priority in many developing countries, partly because several other health issues have competed with occupational health. This situation has existed for long owing to various socio-economic, cultural and political challenges which often make occupational health not prioritized. This has made occupational health and safety which is a fundamental right in maintaining workers' wellbeing to remain neglected in developing countries.

Workers in their own workplaces are exposed to many different hazards and hazardous conditions that can threaten health and life. Although some hazards are less likely to happen in some work spaces than others, it's important to assess which hazards are most damaging to the organization and its employees. Apart from the chemical, physical, mechanical, biological, and ergonomic agents, spiritual pressure and mental

tensions exist in workplaces. These factors and their effects on humans must be controlled. If anybody spent about one-third of their own day at work, it is necessary to assess and control adverse situations based on this fact.

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 etiology.

## Need Of Study:

Health is complete state of physical mental and social wellbeing and not merely absence of disease. Workers in their own work places are exposed to many different hazards and hazardous conditions that can threaten health and life. Apart from the chemical, physical, mechanical, biological and mental tension exists in workplaces. Everybody has their own coping mechanism to fight against infections in certain environment. Because of that there is need to assess the health status of industrial workers.

As a researcher during community health posting observed that many workers are having health issues like Pulmonary tuberculosis, Asthma, Allergic Reactions, etc. which are not limited only to the workers but also carried by the family members causing the entire family and spreading to the community. The main goal of study is to assess the health status of the workers for early identification of their problems and early intervention for health protection and health promotion.

## Objectives Of The Study

- 1) To assess the health status of Industrial worker



Spectacles 16 (22.85%) industrial worker are having no problem in eyes, about 6 (8.57%) industrial worker are having Dry eyes, 4(5.71%) industrial worker are having itching problem and 4(5.71%) industrial worker are having redness in eyes.

**2E: Distribution of subject in relation to any** Majority of Industrial worker 69 (98.57%) are having no problem in nose but 1(1.42%) industrial worker is having complaints of running nose.

**Ears Problems** All industrial worker 70(100%) are not having any hearing problem or any Ears abnormalities.

**2F: Distribution of subject in relation to any** All industrial worker 70(100%) are not having any hearing problem or any Ears abnormalities.

**2G: Distribution of subject in relation to any** Majority of Industrial worker 68 (97.14%) are having no problem in mouth but 2 (2.8%) industrial worker are having missing teeth.

**2H: Distribution of subject in relation to any** All industrial worker 70(100%) are not having any problem in neck.

**2I: Distribution of subject in relation to any** All industrial worker 70(100%) are not having any chest abnormalities.

**2J: Distribution of subject in relation to any** All industrial worker 70(100%) are not having any abdominal problem.

**Abnormalities in Abdomen.** All industrial worker 70(100%) are not having any abdominal problem.

**2K: Distribution of subject in relation to any** All industrial worker 70(100%) are not having any abdominal problem.

**Abnormalities in Upper and Lower Extremities.** Majority of Industrial worker 29(41.42%) are having joint pain, 25(35.71%) industrial worker are having no problem in extremities, 14 (20%) industrial worker are having knee pain and 1 (1.42%) industrial worker is having complaints of numbness and tingling sensation.

**2L: Distribution of subject in relation to any** All of the industrial workers 70(100%) go for health check up.

**Problems in Back** Majority of Industrial worker 36 (51.42%) are having problem of back pain and 34 (48.57%) industrial worker are having no complaints of back problem.

**2M: Distribution of subject in relation to any** Majority of Industrial worker 62 (88.57%) are not having any skin problem but 5(7.14%) industrial

**2N: Distribution of subject in relation to any** etc. Majority of Industrial worker 28 (40%) are having problem of Acidity, 24 (34.28%) industrial worker are having complaints of indigestion, 11(15.71%) industrial worker are suffering from constipation and only 2(2.8%) industrial worker are having any GU problem but 2 (2.85%) industrial worker are having nausea/vomiting.

**2O: Distribution of subject in relation to any** Majority of Industrial worker 68 (97.14%) are not any GU problem of burning micturition.

### Section 3

This section deals with the percentage wise distribution of industrial worker in relation to their personal habit.

#### 3A: Distribution of subjects in relation to they perform any exercise to improve their health.

Majority of industrial workers 48 (68.57%) don't perform exercise and 22(31.42%) industrial workers perform exercise.

#### 3B: Distribution of subjects regarding bad habits.

All industrial workers 70 (100%) eat balanced diet to improve their health.

#### 3C: Distribution of subjects in relation to their any bad habits.

Majority of industrial workers 26(37.14%) chews tobacco, 18(25.70%) industrial workers doesn't have any bad habits and 17(24.28%) industrial workers drink alcohol, 8(11.42%) industrial workers smokes and 1(1.42%) industrial workers use betel leaves.

#### 3D: Distribution of subjects regarding health check up.

All of the industrial workers 70(100%) go for health check up.

#### 3E: Distribution of subjects in relation to their frequency of health check up.

Majority of industrial workers 37(52.52%) for health check up every 6 month and 27(40%) industrial workers worker go for yearly health check up and industrial workers 6(8.57%) go for monthly health check up.