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# A STUDY TO EVALUATE THE WORK PLACE SAFETY FOR HEALTHCARE WORKERS

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## Abstract

A hospital ranks among the most risky working environments, as stated by the Occupational Safety & Health Administration (OSHA) of the US Department of Labour. The safety of employees is the most important part of an organization. Safety is the measures or techniques used to reduce the risk of injury, loss or risk to people, property or the environment in any facility. The purpose of the study is to evaluate the current state of workplace safety for healthcare workers and suggest interventions to improve workplace safety. Quantifiable methodology of dataset is used through circulating questionnaire to the healthcare workers using the convenience sampling method. The study's findings will help identify areas of improvement in workplace safety for healthcare workers and provide recommendations for interventions to mitigate the risks faced by healthcare workers. This in turn can help promote a safer work environment for healthcare workers, ensure the provision of high-quality healthcare services and ensures employee morale, increases efficiency and productivity, reduces staff turnover and prevents the cost impact of occupational hazards and illnesses.

**Keywords:** work safety, healthcare, safety practices, safety environment.

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## INTRODUCTION

Everyone Highlighted the patient safety movements and verifies the patient safety whenever receiving health care. But, importantly, health care workers also face lot of risks during the treatment in the workplace. There are two primary components in Indian healthcare system private and public, Public is a Government sector, it comprises restricted secondary and region care organizations in key cities and concentrates on supplying a basic health care utilities in the form of Major health care centers in country regions. The private or corporate sector supplies major of secondary, region and quadrant healthcare organizations with a primary focus in metros, and top cities. Medical workers in India are well-trained, which gives them a competitive supremacy. Compared to its Western and Asian competitors, India is also cost-competitive country. The expense of surgery in India is very low compared to foreign companies like US and Western Europe. India ranks 145<sup>th</sup> place among the 195 countries in the concerning quality and availability. The Indian Law makes the delivery of health service system in India is the authority of the state governments, instead of central federal government. It makes every state government is authority of “increasing the standard in terms of nourishment and the living people standards and the development of government healthcare sector as among its major duties”. In India 1983 was (NHP) was approved by the Parliament and updated in 2002 and also 2017. In 2017 four main updates were delivered, that explains the need of concentration on the adding burden of non-infectious diseases, on the appearance of the tough healthcare industry, on increasing events of unjustifiable expenditure cause of the healthcare expenses and the improvement level of economic growth empowering advancement fiscal quantity. In practice

regardless, the private or corporate healthcare sector is authority for the primary of healthcare in India. And most healthcare costs are compensated directly out of pocket by family of the patients, instead of health insurance. To date, government health policy has largely favored private sector expansion in combination with well-thought-out but limited public health programs. In 2018 Government of India launched a project named Ayushman Bharat, this is a government financed health insurance project. In 2015 the degree of GDP was 3.89 percent is the total cost of the health care through the World Bank. The government sector healthcare sector expense as an amount of GDP is just in 1 percent out of 3.89 percent, and the out of pocket as an amount of the current health cost was 65.06 percent in 2015.

## REVIEW OF THE LITERATURE

Peter L Bradshaw, Gwendolan Bradshaw (2004), [1] Health care Workers having a latest guide to the health service system in Health Policy (HP) its beginning and current schedule, which concentrates on the problems faced by health care professionals in executing government sector policy at the initial level. Aim of this work is to support health service workers make evaluation of HP by helping them an acknowledging of the conceptual basis of the Indian health care system and the issues facing in the modern technology.

Salvador J. Esparza, Yolanda Chasiakos (2018), [2] Public or Private sector health care service workers have accomplished dramatic change both through the execution of the obtainable care Act as well as in progress efforts to revoke it.

Harish Singh (2017), [3] The hospital is the primary service providers and other service providers are the Medical care and Industry. They are operating their business

with principles. The hospitals are bringing highly unique and complex.

Mary Bismark, Kareyn Willis, Sophie Leis, Natasha Small wood, (2022), [5] The Work records the tough emotions health care professionals accomplished as in the Covid-19 epidemic unwrapped, and the problems they faced in the institution and their families and patients also faced lot of challenges. This study shares their point of views about health care workers and how they survived on this pandemic.

David J. Tipton, (2015), [6] The Personal development of the Health care workers related with the problems to their professional and personal development their combined with both aspects. Personal and professional growth of the health care workers will help to the students associate the logics of professionalism to themselves with related case studies and questionnaires.

James T. O'Reilly, Philip Hagan, Peter De la Cruz, (1996), [7] This book covered about Environmental safety and security of the health care workers and also the work place safety is very important to the health care professionals their also having family this books explained how to avoid hazards and injuries in work place.

Lynda T. Kohn, Jennet, Mollah S. Donaldson, (2000), [8] 98,000 People dies every year cause of medical errors that happened in hospitals and organizations that is calculated by industrial experts. Highest death rates from vehicle accidents, cancer, or AIDS these three issues receive more people attention. Certainly, many people die yearly from medical errors than from work location accidents. Adding the financial expenses to the human disaster, and hospital error easily increases to top rates of emergency situations, extensive public problems.

Dan Hope wood, Stave Thompson, (2006), [9] This is a guide for short and middle ranged companies, utilizes direct approach to developing basic components of a

successful safety programs. This study will gives enhanced data about real world samples explaining how to avoid as well as face the common health care and safety challenges that increases in the workplace.

Bill Runnciman, Alan, Merlyn, (2012), [10] It is more burdens to young people to care their old parents are relatives; it is really tough to survive people in their old ages. In spite of the fact now it is possible to mitigate many of alliance that best humankind, currently available and technically possible healthcare can't be afforded by any society. Now a days several people working in health care and medical side.

Barling, J., & Froze, M. (2003), [11] This Study explains about the nature and significance of security and safety environment in organizations. The approach of safety environment can impact employee's behaviour's towards safety, the way employee doing their work and the way of employee's communicate with each other with deliberation of safety challenges. One of these aspects can have a straight impact on security and safety results such as incidents.

## OBJECTIVES

The primary objective of this study is understands the work safety precautions for health care professionals. The secondary objective is to evaluate the prevailing safety practices in organisations, understand the employees training in work safety in organisations, measure employee's satisfaction towards work safety measures in organisations, and identify the expectation towards work safety measures in organisations.

## LIMITATIONS

The Limitations of the research is to analysis of the study is supported only with respondents response. The size of sample is confined to 150 only. Therefore, the generation is not appropriate. The study is confined to the healthcare employees only. It is not suitable for other

healthcare organizations. Some respondents did not answer properly.

## RESEARCH METHODOLOGY

The study is descriptive. Both primary and secondary data is used for this study. Primary data is collected with the help of structured questionnaires by circulating the

forms virtually to 150 healthcare employees. Convenience sampling method is used to collect the primary data and the secondary data is collected from published sources. The tools used in this study are Descriptive statistics ( frequency and percentage), chi-square and correlation analysis.

## DATA ANALYSIS AND INTERPRETATION

### DESCRIPTIVE STATISTICS (Performance Analysis):

Variables	Categories	N=150	Percentage
<b>Gender</b>	Male	82	54.7
	Female	68	45.3
<b>Age</b>	Below 25	50	33.3
	26-35	80	53.3
	36-45	7	4.7
	Above 45	13	8.7
<b>Educational Qualification</b>	Upto HSC	12	8.0
	Graduate	104	69.3
	Post-graduate	27	18.0
	Diploma	2	1.3
	Others	5	3.3
<b>Service year</b>	Below 1 Year	31	20.7
	1-3 Years	62	41.3
	3 – 5 Years	35	23.3
	5 – 8 years	4	2.7
	Above 8 years	18	12.0
<b>Salary</b>	Below 2 Lakhs	84	56.0
	2-5 Lakhs	53	35.3
	5-10 Lakhs	10	6.7
	Above 10 Lakhs	3	2.0

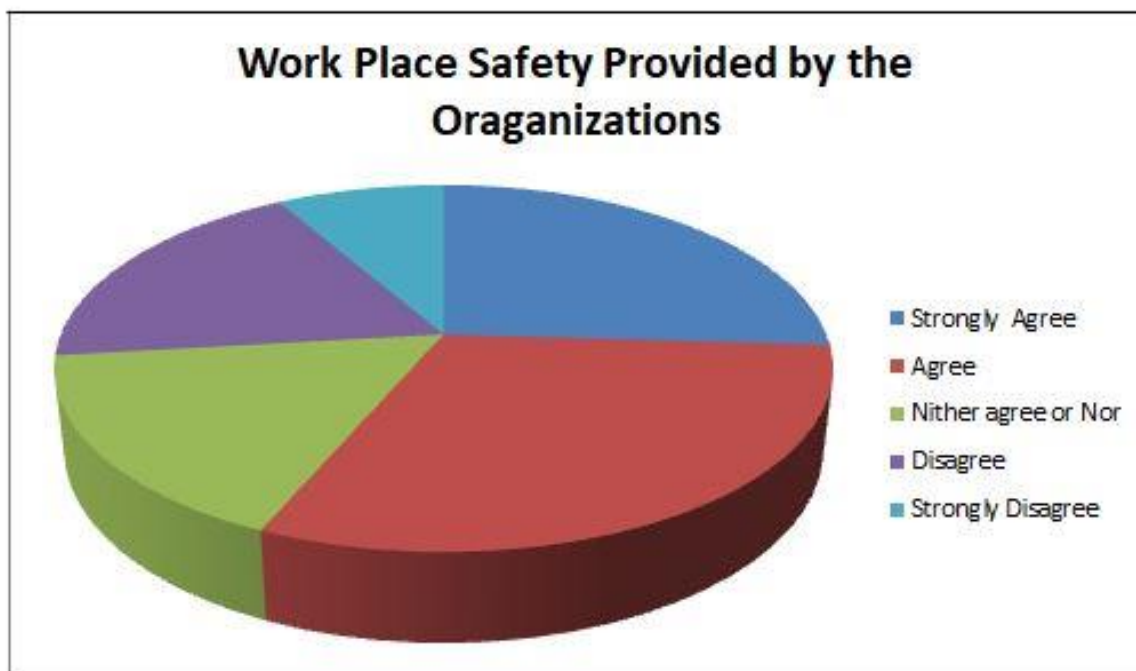
Table 1 – Demographic characteristics of the respondents

A total of 150 respondents have responded to the survey, of which 54.7% were Male and 45.3% were Female. Details regarding Age and Educational Qualification, Service year and Salary are presented in the **Table 1**.

S. No	Variables	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Sufficient hand hygiene arrangements in the work place	133 88.7%	13 8.7%	3 2%	1 0.7%	-
2	Arrangements for right clothes	61 40.7%	84 56%	3 2%	2 1.3%	--
3	Availability of right tools to handle	79 52.7%	61 40.7%	8 5.3%	2 1.3%	-
4	Sufficient time of cleaning and disinfection system	94 62.7%	46 30.7%	6 4%	3 2%	1 0.7%
5	Proper disposal of wastages from the work place	114 76%	24 16%	5 3.3%	5 3.3%	2 1.3%
6	Proper tools and accessories for disinfection	114 76%	25 16.7%	7 4.7%	2 1.3%	2 1.3%
7	Supplying protective gloves for the employees	56 37.3%	84 56%	4 2.7%	4 2.7%	2 1.3%
8	Providing respirator masks for employees	68 45.4%	66 44%	11 7.3%	4 2.7%	1 0.7%
9	Sufficient emergency exits in the organization	80 53.3%	53 35.3%	10 6.7%	5 3.3%	2 1.3%
10	Availability of sufficient first aid boxes	105 70%	30 20%	7 4.7%	6 4%	2 1.3%

Table 2 – Assessing respondent's work safety measures for healthcare

**Table 2** represents the variables related to work safety measures for healthcare. After analysing the data, it can be noticed that majority of the respondents were satisfied with the safety measures provided to them in the organization. **Chart 1** depicts the statement of the respondents.



### CHI SQUARE ANALYSIS

The Chi-Square test is a statistical method for assessing the discrepancy between the actual and anticipated data. This analysis may be performed to see if our data's classified variables are related to it. It is useful to determine whether a discrepancy between two categorized variables is the result of coincidence or an association between them.

This study tries to test the association between Gender and Prevailing safety practices.

The hypotheses are as follows:

**Null Hypothesis (H<sub>0</sub>):** There is no significant association between Gender and Prevailing safety practices.

**Alternate Hypothesis (H<sub>1</sub>):** There is a significant association between Gender and Prevailing safety practices.

The following result is obtained:

The significant level is which is greater than 0.05 (P value >0.05). Hence, we accept the null hypothesis, so there is no significant association between Gender and Prevailing safety practices.

### KARL PEARSON CORRELATION ANALYSIS:

A statistical technique called correlation analysis is employed to determine whether or if there is a connection between two variables or data and how powerful that relationship might be. This signifies that, in the context of market study, correlation analysis can be utilized to examine quantitative data acquired from research techniques like surveys and polls, for the purpose of determining whether there notable relationships, trends, or patterns between the two. Correlation analysis is mostly used to identify patterns in a set of data. Whereas a negative relationship suggests that when one variable drops, the other improves, a strong relationship means that both get higher with respect to one another.

This study tries to test the relationship between Age and satisfaction towards work safety measures. The hypotheses are as follows:

**Null Hypothesis (H<sub>0</sub>):** There is no significant relationship between Age and satisfaction towards work safety measures.



Alternate Hypothesis (**H<sub>1</sub>**): There is a significant relationship between Age and satisfaction towards work safety measures.

The following result is obtained:

**r value** is positive and significant 2-tailed value is less than 0.01, hence we reject the null hypothesis and accept the alternate hypothesis. Since **r = 0.156**, there is a weak positive correlation between Age and satisfaction towards work safety measures.

## DISCUSSIONS

The organization need to maintain sufficient hand hygiene arrangements in the work place for all employees. There must be proper arrangements for the right clothes for the employees. The organization must arrange proper tools to handle for the employees in order to ensure the work place safety. There must be sufficient time for cleaning and disinfection system in the organization. The organization must facilitate proper disposal of wastages from the work place to maintain hygiene in the environment. There must be proper tools and accessories for disinfection in the organisation to have safe environment. The organisation must supply protective gloves for the employees for ensuring hygiene work place. Every employee must wear the masks during the working hours as well as the organisation must strictly monitor the regulations. The organisation has to arrange to fix sufficient amount of first aid boxes for the employees at the proper places.

## CONCLUSION:

Healthcare personnel in organisations were reported to be satisfied with the safety measures. It is disclosed from the research that, the security and safety measures accepted in the Institution to the healthcare workers corresponding to the healthcare equipping act. It is recommended the Institution should strictly follow the safety

precautions after it has Doctors, Nurses, Patients and ill cure Workers. Besides the continued incidents like injuries, electric shocks are happened in the work place must be stopped. The acceptable schemes were recommended to reduce those incidents and to enhance precautions. The responsibilities of management in executing safety in the institutions are most effective. If the institutions implementing effective discipline procedures, this will help the health care professionals to go with their policies and also can preserve work place safety for its workers.

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