

# An assessment of Occupational Health and Safety practices at Hospitals in Vehari District (Punjab, Pakistan)

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## Abstract

Occupational Safety and Health (OSH) serves as a mechanism to minimize workplace accidents to an acceptable level, safeguarding the health, protection and well-being of employees at work. Hospitals as the largest proportion of healthcare workers face severe associated consequences categorized as chemical, biological, physical, ergonomic and psychologic hazards. Health facilities are aimed towards ensuring a safe atmosphere for patients, staff and visitors. Hospital security procedures maintain patients, staff and visitors protected from inappropriate behavior like acts of violence and assault. The sector, however, is among the most hazardous, with multiple accidents and safety problems. Underbalanced workplace health and safety strategy has a decline impact for both the staff and the organization. Some of these include salary costs earned for the missed hours or installation product or service, the cost of overtime work due to injury, etc. Hospital safety and health procedures in Vehari District are evaluated with an aim of improving the firm's performance in relation to health and safety. A survey questionnaire was administered to the staff of randomly selected three hospitals. Study purpose was among other things, to explore the impact of occupational safety and health on the work efficiency. It has been found that the actual occupational safety and health policies at the hospitals were insufficient. Employee engagement and compliance were also low with the safety and health regulations. Staff does not know that safety and health is a dynamic problem, only 8.33% employees were known about what is actually occupational health and safety means. Hospital management was advised to form a safety committee at each hospital to provide regular supervision, inspection and evaluation and progress reports.

## Keywords:

Occupational Health and Safety; Safety; Hospitals; Health; Safety practices

## Introduction

Occupational Safety and Health (OSH) is multidisciplinary study that includes medicines, economics, technology, psychology and some other fields such as economy and law.

Despite the broad relationships created by the nature of manufacturing industries and divided according to the subsectors, it is necessary and possible to define some primitive principles called International Labour Standards and defined by the International Labour Organization (ILO).

OSH may play a significant role for staff at work. It seeks to reduce and increase the risk of industrial incidents and illnesses as well as to provide a healthy and secure atmosphere for achieving the company's aim both effectively and efficiently.

The Occupational Safety and Health Authority (OSHA) indicated that hospital is among the most hazardous areas to operate.

Across the USA it is reported that the average 8 hospital employees are disabled or harmed by workplace illness for every 100 of full-time employees.

In the private sector this number was nearly double. Workplace safety and wellbeing have not been the employer's focus at work in the past.

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**How to cite this article:** Ali K, et al.. An assessment of Occupational Health and Safety practices at Hospitals in Vehari District (Punjab, Pakistan). AMHSR. 2021;11:1-8

An employee did not have any health and safety facilities, so when doing his/her duties; he was at risk of getting hurt at work [1].

The employers are responsible for safety of employees against any hazard that could put their safety and health at risk. The ability to provide occupational health and safety initiatives at work area exposes employees to various types of health hazards which in turn cause illness, infection and harm to employees, thus influencing their ability to perform. The issue is therefore to identify "safety measures at work and to assess employee's satisfaction or dissatisfaction with the safety measures taken." Nonetheless, any government or employer safety plan or intervention would indicate worthless if the workers are not focused to the concept of health. Furthermore, companies slump to recognize occupational health and safety as a measure. It is not sufficient to enforce safety actions and fail to deliver appropriate knowledge and trainings on certain initiatives and regulations.

Essentially, management is actively pursuing the implementation of safety guidelines and ensuring that such regulations are adhered to force workers to be constantly aware of safety. A broad view of occupational health and safety is needed in order for hospital administration to formulate effective workplace safety policies in line with international standards, attain the organizational goals of delivering professional patient care and client satisfaction, aligned with regional agendas at the same time.

A worker in the hospital is subjected to several workplace hazards which can cause significant safety and well-being damage to his or her employees and which can have far-reaching implications for the quality and productivity of patient service. OHS services have been the primary occupational action in identifying these risks and promptly minimizing their effect on hospital workers. There are more than 1000 causes at a typical hospital (infections, fire, medicines, natural disasters and improper working condition, etc.) which could affect human health.

It is aligned with this that this work seeks to assess the activities of various hospitals in District Vehari for health and safety. This is also essential to review each hospital's departments/units and describe the different safety hazards that employees face. The research objected at examining the impact of occupational safety and health policies on health care workers at hospitals. Acknowledge any gaps of hospital's safety and health facilities by the staff members of the hospitals. To examine the effectiveness to which employers and staff members comply with workplace health and safety practices. The research will enhance to identify the value of determining to what degree employers and staff complies with occupational health and safety practices. The research will also enhance to identify the roles of employers and staff in safety and health matters. It will help develop successful policies relating to occupational safety and health. It will help to decide how job efficiency would be improved

when working in a healthy and safe climate and to recognize health hazards associated with work [2].

## Materials and Methods

### The study area

The research field was District Vehari hospitals in the public as well as private sectors. There were one DHQ, two THQs, ten RHCs (Rural Health Centres) and seventy-seven BHUs (Basic Health Units) and many small- and large-scale private clinics and hospitals in throughout District Vehari.

### Sampling technique and data collection

The researcher followed techniques of stratified as well as basic random sampling. Data was drawn based on time and financial constraints from sixty staff members which are randomly selected from three different hospitals (twenty staff members from each hospital) naming Hospital A, Hospital B and Hospital C for study.

### Research Instruments

**Primary source interviews:** It's an interaction with a definite goal to get some facts. Interview questions were designed to gather relevant, accurate information through the interviewee's response. Interview has taken structured as well as unstructured forms. Interview answered the problem of question which are not understood in the questionnaire. That's because; the researcher has to explain every question which is the interviewee didn't get.

**Questionnaire:** It consists of a set of questions posed to the participants, with the justification for describing the topic under review. In questionnaires, there were two types for the question; open-ended question and close-ended question. The close-ended question provided alternative responses from which workers were asked to select the one that represents their views most accurately. Open-ended questions were not given through some form of option. With this, the full replies from the respondents were noted. The respondents responded to the questions again the way he/she grasped them. It is shown that the questionnaires gave participants time to think about the question in order to give specific answer.

The author performed pretesting of the design questionnaires in an informal manner with few possible respondents until full scale follow-up administration of the questionnaires. To ensure precision, completion of data and consistency, interview and questionnaires guide were serially numbered. The author who collected completed questionnaire carefully reviewed to make sure participants replied to questionnaires.

As the concept of ethics, the different organizations that participated in the study requested permission. The study's intent has been clarified to hospital officials and those who replied to the interviews and questionnaires.

**Personal observation:** The author used self-observation to survey the architecture, provision of departure entry points, waste management system among others through the

hospitals general climate. Once again, the researcher visited the selected units and departments to clarify the operating structure in the hospitals and to ensure that workers follow safety precautions in carrying out their responsibilities.

**Secondary sources:** Secondary data has been obtained for other purposes than analysis in this matter. Examples of secondary data source are encyclopedias, journals, textbooks, newspapers, blogs, websites and documents. Secondary data is readily accessible from inexpensive sources, already produced etc.

### Data analysis plan

An evaluation of data gathered is performed at the completion of data collections. The respond was categorized and synthesized based on the participants' knowledge. The research was conducted using qualitative as well as quantitative methods. The latest version of the data analysis software SPSS, percentages, absolute numbers, Microsoft Excel, tables and statistical resources such as maps, charts, diagrams, graphs were used for the quantitative tools, while qualitative input analysis from interviews, surveys and personal experiences used explanations [3].

## Results and Discussions

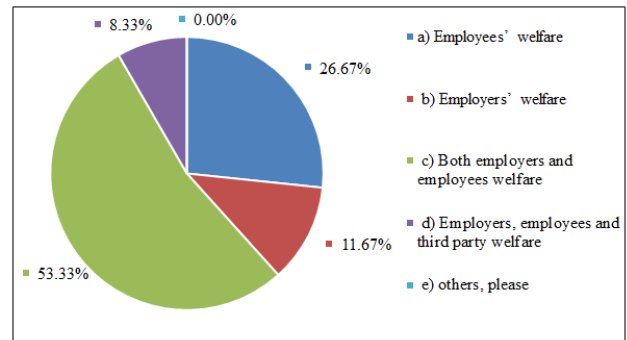
Attempting to gather data related to the study, the researcher classified twenty (20) copies of the questionnaires to each hospital. With this amount there were sixty (60) total copies of the questionnaires administered. It is important, however, to state that every hospital selects twenty (20) employees at random. As a consequence, presentation, conclusion and interpretation of the research were based on these questionnaire copies as shown under the different heading:

### The meanings of occupational safety and health

A query that questioned respondents to figure out what the workplace safety and health they understand. The response of the participants is described in Figure 1, It can be noted that sixteen (16) respondents comprising 26.67% suggested that OHS is the wellness of employees at hospital. Seven (7) respondents comprising 11.67% suggested that OHS is the protection only for workers. Thirty-two (32) respondents suggested that both workers and employers constitute workplace health and safety. It can be noted that only five (5) respondents comprising 8.33% suggested that employees, employers and third parties were involved in workplace safety and health. It suggests that staff do not know that safety and health is a dynamic problem that matters for all other actors to handle, to the workforce and also to defence. Many of them confirmed that staff and contractors were interested with workplace health and safety (Figure 1) [4]. As some of the workplace health and safety policies in place in their respective units and departments, the participants reported the following:

- Safety trainings
- Acceptable waste management system

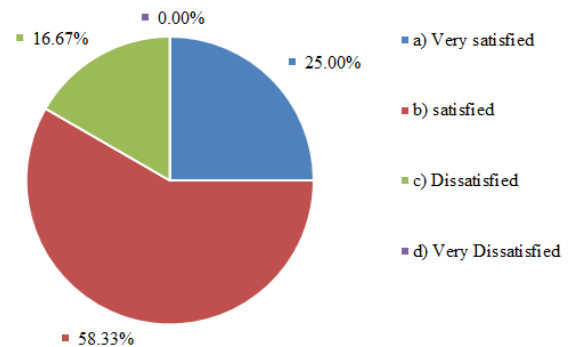
- Regularly monitoring on safety and health
- Using PPEs
- Immediate reporting of fatalities / injuries



**Figure 1:** Response of the respondents about understanding by occupational safety and health (Probability  $P \leq 0.05$ ).

### Existing occupational safety and health measures

The response of employees on existing safety and health measures is described in Figure 2. Fifteen (15) participants comprising 25.00% said they were very happy with existing OHS procedures in place. Thirty-five (35) participants comprising 58.33 % said they were pleased with existing OHS procedures in place, while ten (10) respondents said they were unhappy with the existing workplace health and safety policies in place at hospital. The responses indicated that a great deal is already done on OHS.

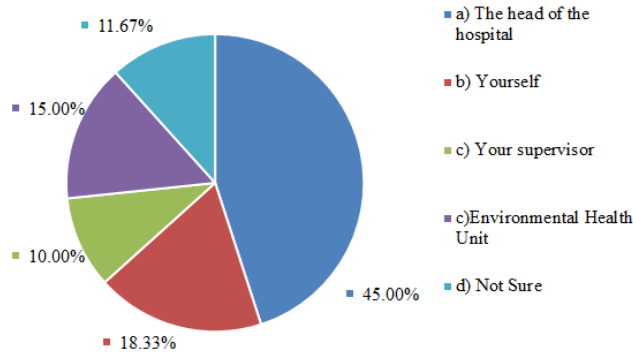


**Figure 2:** Response of the respondents about satisfaction with the existing occupational safety and health measures (Probability  $P \leq 0.05$ ).

### Responsibilities for occupational safety and health

Depicts the response of employees on understanding of responsibilities for OS and H. Twenty-seven (27) respondents or 45.00 percent of respondents suggested that OHS is primarily the accountability of the hospital's director. On the other hand, eleven (11) participants comprising 18.33% reported that OHS is more an accountability of a member of staff than supervisors, management or some other official, unit or department. Six (6) participants suggested that the supervisors are accountable for occupational health and safety. Nine (9) respondents with a 15.00 percentage suggested that the Environmental Health Unit, whereas seven

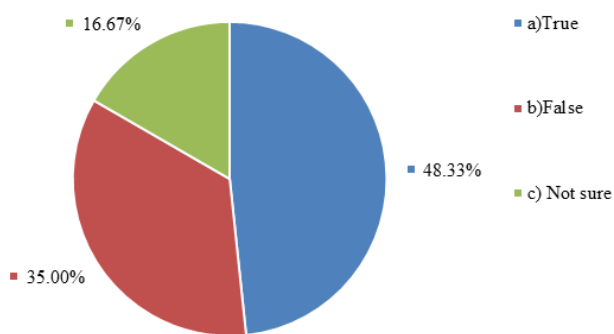
(7) respondents are not sure who is accountable for their hospital health and safety. Analyzing the above responds, it is clear to see that workers accept the concept that their safety and health as employees is in their own hands and in the hands of the head of the hospital (Figure 3).



**Figure 3:** Response of the respondents about who is ultimately responsible for your health and safety (Probability  $P \leq 0.05$ ).

### Lighting and Ventilation

The depicts response of employees about work area light and ventilation. Twenty-nine (29) respondents representing 48.33% indicated that adequate lighting is needed for work areas, but ventilation is a secondary concern. Twenty-one (21) respondents, representing 35.00% stated that ventilation is just as critical as sufficient lighting, while ten (10) respondents, 16.67% indicated that ventilation is not a secondary concern or that both are equally important. From the above definition, it can be deduced that most hospital personnel are not trained on workplace safety and health cuts across a range of problems. Hence, having one of these services is not sufficient (Figure 4) [5].

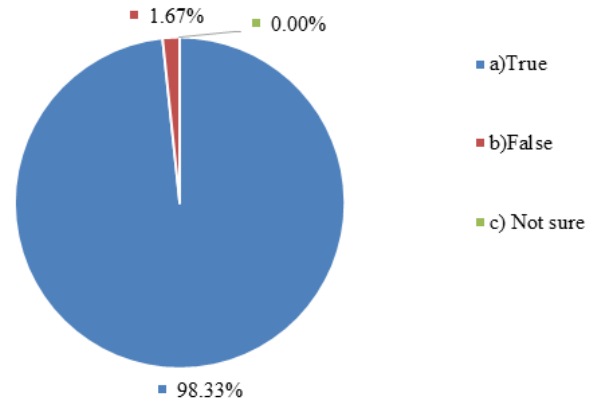


**Figure 4:** Response of the respondents about work area needs adequate lighting but ventilation is secondary priority (Probability  $P \leq 0.05$ ).

### Using of protective clothing

Response on using protective clothing and Personnel Protective Equipments (PPEs) is shown in Figure 5. It can be seen that out of sixty (60), fifty-nine (59) respondents indicated that in carrying out their duties they have to put on protective clothing. This is clear that workers know that

when conducting their lawful duties, they need to protect well to prevent accidents and injuries.



**Figure 5:** Response of the respondents about requirement of protective clothing while performing their duties (Probability  $P \leq 0.05$ ).

### Responsibilities of Employees and Employers

Response to question about responsibilities of employees and employers were recorded. All sixty (60) participants comprising 100% confirmed that workers as well as employer have accountabilities and obligations for good health and safety at work. The participants stated the following as workplace rights and duties:

- Wearing protective equipment and clothing
- Detect any administrative contravention of the rule
- The right to reject risky work

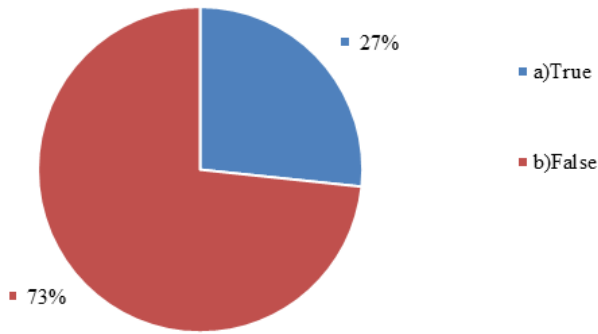
The respondents' suggestion on employers' rights and responsibilities are described below:

- Filing government accidental reports
- Keeping reports on safety and health problems
- Publishing legislative regulations and safety notices
- Deliver training and education on safety and health

### Accidents and Injuries Suffered

Figuring out if respondents had witnessed any incident or illness at the hospital since being employed, results are shown in Figure 6. Only sixteen (16) participants, 26.67% indicated that they had experienced accidents / injuries in different ways since their hospital participation, while 44 respondents, 73.33% said they had not experienced any injuries or accident. Sixteen (16) participants who experienced accident/injuries claimed that the causes of the incidents were the following:

- Absence of adequate safety and health training
- Failing to adopt guidelines about the usage of instruments and equipment
- Non-provision of required protective equipment and clothing
- Ignorance on safety and health matter



**Figure 6:** Response of the respondents about suffering accident or injury in the hospital since they were engaged (Probability  $P \leq 0.05$ ).

### Reporting of Accidents/Injuries

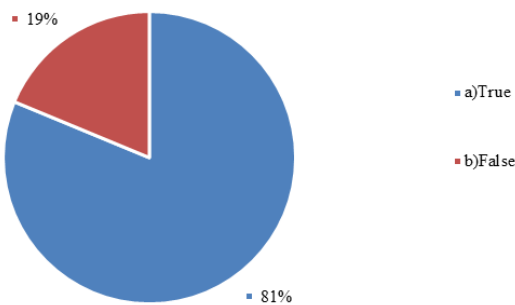
A query that asked participants to figure out whether they registered the incidents or injury to the local authority, i.e. those that reported incidents / injury response are presented in Figure 7. Thirteen (13), out of the sixteen (16) participants who reported having experienced accident or injury confirmed that they were registered the incidents to the proper authority. They reported the following actions taken by management in these cases:

- Cases of accident were directed to an emergency committee
- Investigations have been initiated
- Reports later published.

Some of the investigative findings stated the following;

- Absence of PPEs and protective clothing
- Absence of professional knowledge of health and safety laws at work
- Lack of workplace safety and health training

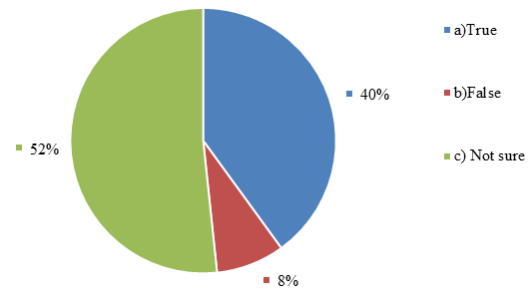
From the above interpretation it has been seen that, in order to provide a solution and stop recurrence of accidents / harm, employee understand that they should notify any sort of incidents / casualties to the proper authority in their hospital [6].



**Figure 7:** Response of the respondents about reporting the accident to the appropriate authorities (Probability  $P \leq 0.05$ ).

### Safety Committee

Depicts the response of employees on question about safety committee. It says, from the statistics that twenty-four (24) of the participants suggested that the hospital already have a safety committee. While, five (5) participants stated that the hospital did not have a safety committee, while 31 participants with 51.67% explained that they were not sure whether the hospital had a safety committee. It is obvious that there is no safety committee in the hospitals. This committee would have the responsibility of addressing all health and safety problems as they arise (Figure 8).



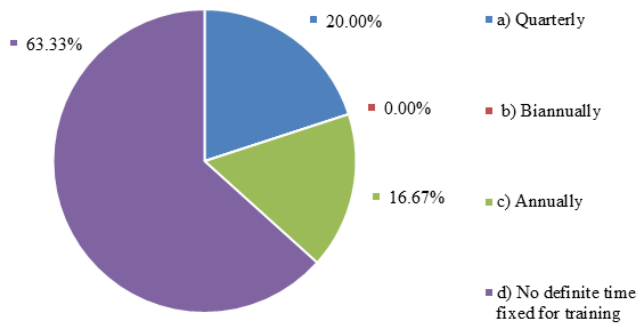
**Figure 8:** Response of the respondents about does the hospital have a safety committee (Probability  $P \leq 0.05$ ).

### Trainings on Occupational Safety and Health

A question containing information about “how routine trainings for workers on workplace health and safety is structured” was asked the response is described in Figure 9. Twelve (12) participants representing 20.00% reported that on a quarterly basis preparation is arranged for them. Ten (10) respondents reported that they organize training annually. Thirty-eight (38) respondents representing 63.33% reported that institution has no specific time schedules for health training. In the course of safety training, participants identified the following as safety and health concerns to be discussed:

- Findings from adhoc committees are discussed for previous periods
- Suggestions on occupational health and safety are received from the staff
- Staff who are described as being sensitive to safety are granted

This can be seen that while safety and health training is planned by the hospital, this mechanism is not systemized. It is imperative that workers are aware of and actively engage in health and safety training programs.



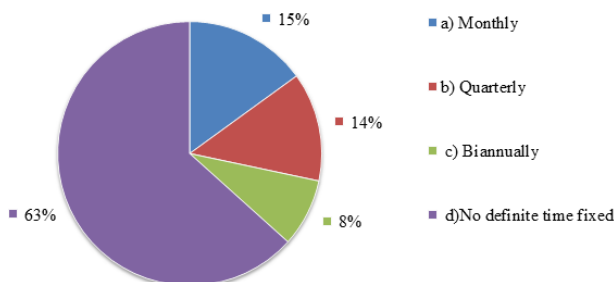
**Figure 9:** Response of the respondents about how regular is training organized for staff on occupational safety and health (Probability  $P \leq 0.05$ ).

### Monitoring, Inspection and Evaluation of Safety Practices

A query that asked the participants to figure out to what degree they believe that safety practices need to be monitored, inspected and evaluated for efficient workplace health and safety. All 60 i.e 100% of the employees were either agree or strongly agree. Thirty (30) participants indicated that they were strongly in agreement, whereas thirty (30) respondents with 50 percent indicated that they agreed that tracking, inspecting and evaluating safety procedures was necessary for an efficient program of safety and health. The staff agreed that efficient safety and health cannot be achieved if inspection, evaluation and monitoring are not conducted.

### Time Frame for Monitoring, Inspection and Evaluation of Safety Practices

A query which asked the respondents how often the safety practices have been monitored, inspected and evaluated, response is shown in Figure 10. Nine (9) respondents representing 15.00% revealed that observation, assessment and inspection of safety and health policies is performed on a monthly basis from the above figures. Eight (8) and five (5) respondents each revealed that these actions are performed on a quarterly and biannual basis respectively. However, 38 responders or 63.33% suggested that the hospital does not have a defined time period for inspecting, monitoring and assessing safety and health processes. The staff reported that this is not done routinely while monitoring, reviewing and evaluating. Routine monitoring is important, so that results can be properly classified.



**Figure 10:** Response of the respondents about how often is monitoring, inspection and evaluation conducted (Probability  $P \leq 0.05$ ).

### Level of Satisfaction with Health and Safety

A question on level of satisfaction of employees with current health and safety situation was asked.

Thirty-five (35) respondents expressed satisfaction with what administration is actually doing to enhance workplace health and safety but twenty-five (25) respondents suggested that they are unhappy with what administration is currently doing to enhance OHS.

The participants reported that they believed some of the things that administration have to do to improve hospital OHS. This includes:

- Safety expert's commitment to re-design workplace health and safety procedures of hospital
- Safety and health procedures constantly reviewed
- Enhance good sanitation and housekeeping
- Managing supervision and safety

Many of the staff at each hospital is dissatisfied with existing arrangements for enhancing OHS from the above interpretation.

### Employee Assistance Programs

A query asked the participants to what degree they thought the hospital should provide support services to workers as a requirement to avoid workplace hazards. Thirty-one (31) or 51.67 % of participants reported that they agree strongly that employee assistance programs are critical to minimizing workplace risks while the remaining twenty-nine (29) respondents indicated that they agree with the employee assistance programs are important in avoiding workplace hazards.

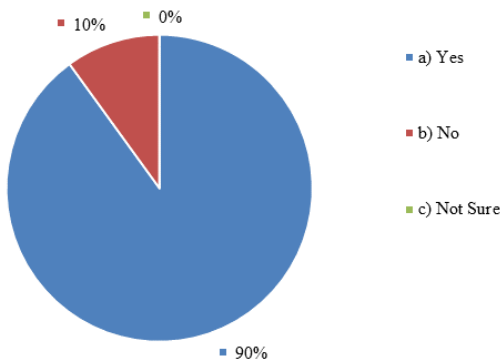
### Impact of Occupational Safety and Health on Job

Depicts the response on a query about how to decide whether participants believe that effective safety and health measures in the workplace have an impact on job performance. It is evident from the statistics that fifty-four (54) respondents revealed that they believe successful workplace health and safety policies have an impact on job efficiency. However, only six (6) or ten 10% respondents revealed that they do not believe effective policies on workplace safety and health have any effect on job efficiency. The participants suggested that the following as the benefits are derived from good occupational health and safety programs for the workers.

- Reduce accident
- Reduces compensation charges for injured workers
- Loss or death of workers
- Reduces labor turnover
- Hospital corporate image is improved

From the above, it is patentable that any company cannot accomplish its safety goals in the absence of workforce;

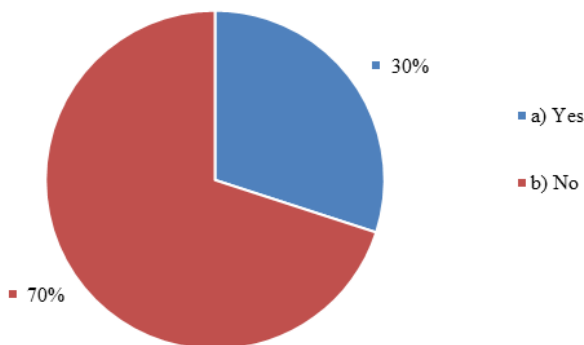
therefore it should be a priority for the safety and health of the workforce (Figure 11) [7].



**Figure 11:** Response of the respondents about impact of occupational safety and health policies on job performance (Probability  $P \leq 0.05$ ).

### Documented Guidelines on Health and Safety

On question about how to figure out whether the participants already had a written version of the occupational safety and health policies of the hospital as individual staff or their unit or department. Only eighteen (18) respondents revealed that their department or section had a written version of the hospital's occupational safety and health policy, but the remaining forty-two (42) respondents indicated that they did not have a written version of the hospital's occupational safety and health policy as individual staff or as a unit or department. From the above, it is clear that hospitals do not have documentary version to act as a guide or reference on workplace safety and health. Results are described in Figure 12.



**Figure 12:** Response of the respondents about written copy of occupational safety and health policy of the hospital (Probability  $P \leq 0.05$ ).

### Analysis and Findings from Interview/Personal Observation

The hospital administrator, clerical staff, account manager and other coordinating offices are managed by the administration department. The hospital has installed adequate ventilation and lighting services, and also

practicable and well-tested fire extinguisher that are prepared to fight in the event of fire incidents to ensure safety for employees. Urine, blood, fecal materials and other body fluids are examined by the laboratory team. They are subjected to sharp tools and several penetrating particles which pose a safety and health risk. The hospital is supplying them with gloves; workers are also given with protective jackets to shield their bodies from polluted liquids. There are also protection boxes in which scratching and sharp objects are held to save workers from bruises and cuts. The laboratory premises are large enough to permit the freedom of movement of employees and are well insulated to facilitate the spreading of any contaminants in the case of any mishap. The maternity ward in which infections can be spread to an employee or from employee to patient due to body liquids such as blood and liquor, where workers get in touch with regular delivery services [8].

Daily disinfection happens at the maternity and general wards with the aid of chemical to destroy germs and prevent patients and staff. Waste bins are also distributed and are labelled with black, red and yellow. Red labelled waste bins carry radioactive products, human parts and some contagious products. Yellow labelled waste bins containing clinical residues such as cottonwood, syringe, etc. Black-labelled waste bins carry waste from households. At maternity it was discovered that; some midwives tend to perform their job without using the goggles given to them as they complain that they cannot work comfortably. The patient being treated is well-dressed to safeguard his / her health. One policy adopted on health and safety is the cross-checking of products before and after use. Using this method, surgeon count every tool used to see if they are up to the amount brought into the room before eventually stitching the patient.

All patients and staff are exposed to radiation that is detrimental to their wellbeing (Faraj and Mohammed, 2018). Protective clothes are given for their use to ensure the health of both the patients and staff. X-ray professionals have a proper safety badge used to determine the level of the radiation. Hospitals have three discarded units: the first is an incinerator which discards dangerous tools and other unwanted tools. The second is the placenta pit where living organism are disposed of from the maternity ward as well as other divisions and the last unit is the section on general waste where non-contagious and rubbish waste are disposed of. They are often protected by Wellington boot given to prevent slipping on sharp and damaging items [9].

### Conclusion

No appropriate occupational health and safety systems could be placed if both workers and employer or one of them fails to fulfill their relevant safety and health duties in hospital. The safety committee is accountable for the study of accidental trends with a purpose of making suggestions for corrective measures, making recommendations for future or modified safety protocols, evaluating risk assessments and putting forward plans for preventing injuries and evaluating and describing reports from security legislators. Accidents,

indirect costs (injured workers' insurance charges), employee loss or death and labour turnover can be reduced. In addition, the hospital's corporate image will be enhanced via the application of successful occupational health and safety policies. Accidents harm the individual affected as well as the company involved. Therefore, any attempt should be taken to prevent them occurring at work. It is therefore, suggested that the management should implement a proper training and education system, a guidance, knowledge and monitoring of OHS standards as per requirements. Proper distribution of hazards information is vital to assure a healthy and safe workplace for work. The government should also set up monitoring teams to periodically monitor whether employers are complying with the regulations set out in the Labour Act 1934.

### Conflict of Interest

The authors declare no conflict of interest.

### Acknowledgment

Authors convey the sincere gratitude to all study participants, who extended their fullest support and Chairman Center of Earth and Environmental Sciences, The University of Punjab, Lahore for his support to carry out the study.

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