

Enhancing the Productivity by Reducing the Occupational Hazards through Culture of Safety

Gaurav Loria , Yogamaya Nayak , Akash Sharma

Abstract

A culture of safety in an organization plays a very important role in beliefs, values and attitudes and these are shared by the majority of people within the company or workplace. A positive culture of safety in the organization can result in improved workplace health and safety. While productivity and profits are both top priorities for any organization, nothing is more important than the safety and wellbeing of personnel.

Focus of this project was to mitigate and address the occupational hazards within the workforce at Apollo Hospitals and promoting the wellbeing of the employees. The initiative was aimed to established a culture of safety in the workforce of Apollo by identifying an minimizing the potential risk, enhancing the preventive measures and fostering a supportive environment for well-being of workforce.

Project was started in 2021 when numerous issues were recognized related to occupational hazards in the employees. Issues related to 1. High incidents of workforce related injuries

1. Mental health concerns - High-stress environments, job insecurity, and lack of support systems contribute to psychological distress among employees.
2. Financial burden: Both employees and employers bear a considerable financial burden as a result of occupational hazards and related incidents. As a result of workplace accidents, organizations may face higher healthcare costs, legal repercussions, and potential losses of skilled employees, which may adversely affect the financial stability of the company as a whole.

These issues were identified by a combination of 9 questions in a survey “Culture of safety”. The framework constructed with 13 behavioral questions.

The aim was to focus on problems by analyzing the survey result and to implement interventions to reduce various workforce related issues like increase in non-punitive actions against errors, communication openness, frequency of events reported, management support on safety etc.

To reduce the occupational hazards and to lower down the cost involved, these issues were addressed by the Apollo. A plan was developed and focus was on Bi-annual Culture of safety survey. A strategic map was developed and all the stakeholders were involved from the leaderships.

Methodologies

Methodology: Methodology is survey-based studies. A survey questionnaire was prepared and it was distributed across the organization. To reduce the occupational hazards and to lower down the cost involved, these issues were addressed by the Apollo. A plan was developed and focus was on Bi-annual Culture of safety survey. A strategic map was developed and all the stakeholders were involved from the leaderships.

Result

This project has been a major success when we talk about reducing the occupational hazards through safety culture. Our project demonstrates the organization's commitment to sustaining its healthcare workers' wellbeing by implementing safety culture to address occupational hazards and promote a culture of safety. By effectively managing and mitigating risks, the organization

showcases excellence and outstanding achievement in prioritizing the health and wellbeing of its workforce.

Results were analyzed after successful implementation of all the interventions and the findings according to the survey.

Here are some significant results, that can be measured to demonstrate the success of the initiative:

Over all Safety Rating for the year 2022 was 87.5% as compared to 2021 82%.

Conclusion:

In conclusion, has demonstrated the organization's commitment to sustaining the wellbeing of its healthcare workers by fostering a culture of safety and addressing occupational hazards. Through the implementation of a comprehensive survey, involvement of various stakeholders, and strategic interventions, significant improvements have been achieved.

Introduction:

Improved occupational health and safety can only be attained by establishing a good safety culture inside an organization. This culture goes beyond merely adhering to rules and guidelines; rather, it demonstrates a steadfast dedication to the welfare of workers, which has multiple advantages for both the business and its staff. Employee morale and engagement rise when they sense that their company actually cares about their safety and well-being. Employees are more likely to adhere to safety rules, report possible dangers, and work together to identify solutions as a consequence of this positive attitude, which results in a more proactive approach to safety. Gunningham, 1999a, Gunningham, 1999b, Gunningham, 2005 argues that government regulation may not be enough to control workplace hazards and raises an important question about what can guarantee a hazard free work environment if statutory regulation alone cannot accomplish this outcome.¹

However, more recent studies highlight the importance of other effective interventions to create and maintain positive safety cultures, such as social processes (Pedersen, 2020), peer feedback, continuous improvement, and safety leadership (Zuschlag, Ranney, & Coplen, 2016), regulation, incentives and information (Hasle, Limborg, & Nielsen, 2014), and effective leadership (Kessler et al., 2020, Yanar et al., 2019).²

Objectives:

Goals of the project: Reducing workforce related occupational hazards and injuries by 90%. Targets will be analyzed by identifying trends and patterns through survey results. The survey is conducted bi-annually, and a survey questionnaire is sent out along with a digital link. Individuals who submit feedback in these surveys remain anonymous, and the form doesn't have an option for their name, designations, or division.

Survey form Annexures 1

Goal 2: Enhancement of workforce well-being by addressing the physical and psychosocial hazards. By minimize these physical hazards in the workplace, such as ergonomic risks, exposure to harmful substances, and unsafe machinery or equipment a strategic approach was established.

Mitigate psychological hazards, including stress, workplace bullying, and lack of social support, to improve overall mental health and job satisfaction were also some of the factors which were involved.

Goal 3: Improving the preventive measures and risk management strategies.

Enhance risk assessments to identify potential hazards more effectively and proactively. Strengthen preventive measures, such as implementing engineering controls, developing safe work practices, and ensuring availability and proper use of personal protective equipment (PPE).

Continuously monitor and improve occupational safety measures. Implement regular safety audits and inspections to identify areas for improvement and ensure compliance with safety standards.

Establish a feedback loop with employees to assess the effectiveness of safety initiatives and make necessary adjustments.

The success of the initiative in reducing workplace risks and promoting a safety culture at Apollo is gauged using these specific goals and targets. They remain in place so that they can lead the implementation of programmes and measures to promote a safer and healthier workplace and deliver demonstrable outcomes.

Methodology:

Methodology for this project was survey based. A questionnaire was designed with distinct questions for the staff. These issues were identified by a combination of 9 questions in a survey “Culture of safety”. The framework constructed with 13 behavioral questions.

The aim was to focus on problems by analyzing the survey result and to implement interventions to reduce various workforce related issues like increase in non-punitive actions against errors, communication openness, frequency of events reported, management support on safety etc.

Inclusion Criteria

All the employees of Apollo Hospitals working under the brand.

Exclusion Criteria

No other outside staff.

Procedure Step by Step

We have implemented a survey which is a bi-annual survey to identified what we need to improve and what our workforce expects from us. Survey questionnaire is thirteen question form which is sent to each and every employee via digital link.

Project was started with a moto to reduce the occupational hazards and promoting a culture of safety in the organization. The factors which promote culture of safety (Communication openness, Training, Risk assessment, reporting hazards) were influencing through this survey. Culture of safety and employee’s well-being is directly proportional to each other. Both have same factors and influence each other.

One of the major factors in promoting a culture of safety is reporting hazards. With the intentions of reporting of hazards from different departments Project WWOH was divided into the 3 parts,

1. **Safety Committee Implementation:** a dedicated safety committee comprising representatives from various departments and levels within the organization was implemented. This committee played a crucial role in designing and implementing the survey.

2. **Survey design:** We developed a comprehensive survey questionnaire that covered various aspects of safety culture, including employee perceptions, attitudes, and behaviors towards safety. Annexure 1
3. **Identification of Hazards through Survey:** Hazards are majorly categorized from more overloaded department, these department were identified,
 - a) Clinical Nursing
 - b) Laboratory
 - c) Radiation
 - d) ManagementThese areas were identified and potential hazards were predicted from each department. Risk analysis from each department was done. For example, what kind of hazards can happen in radiology vs laboratory.
4. **Communication and confidentiality:** All the employees were informed about the culture of safety survey. We explained the objectives, the importance of their participation, and the benefits that will result from their feedback. All employees were assured that their responses would remain confidential and would only be used for improving safety conditions.
5. **Data Collection and Analysis**
6. **Monitoring and Evaluation.**
 - **Involvement of Leadership:** A cost analysis report was submitted to leadership and the root cause was occupational hazard where hospital was paying more amount.
 - **Allocating the right resources:** Clear safety objectives were decided among high leaderships and responsibility was distributed to project managers, responsibilities like allocating the resources, active training programs and participation of workforce, occupation related resources to minimize the hazards, risk analysis of the departments etc.
 - **Daily Huddles:** Operation managers were asked to take daily rounds and note down all the observations which can be a part of these occupational hazards. By identifying these observations small corrective actions were taken. For example: Employee clinic was setup in the facility for all the illness and psychological support employee needed.
 - **Employee engagement and Empowerment:** Engagement of employee is very much important in healthcare organization when one is trying to promote culture of safety. Open communication forum “OPEN HOUSE”
 - was setup each Wednesday for each department HOD’s where they discussed the challenges and problems faces by their department employees.

Statistical Analysis

Results were analyzed after successful implementation of all the interventions and the findings according to the survey.

Here are some significant results, that can be measured to demonstrate the success of the initiative:

Over all Safety Rating for the year 2022 was 87.5% as compared to 2021 82%.

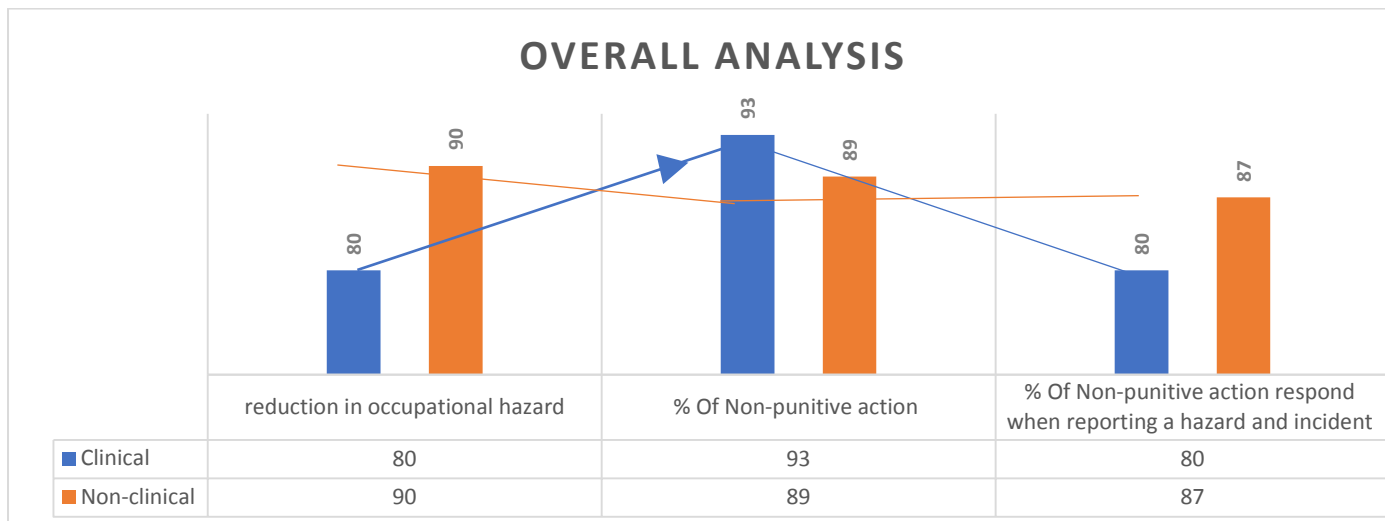
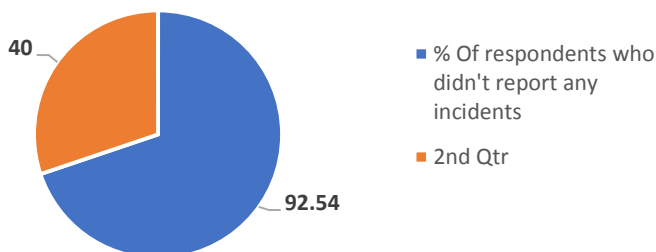
% Of participants who gave a positive grade for their work area/ unit in the hospital on patient safety – 92.54%

% Of respondents who didn't report any incidents since past one year – 40%

% Of reduction in occupational hazard is 80% in clinical and 95% in non-clinical.

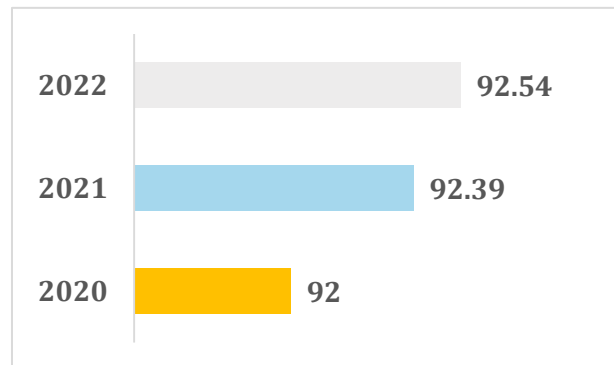
% Of Non-punitive action respond when reporting a hazard and incident – 80%

Organization learning and continuous improvement – 93%



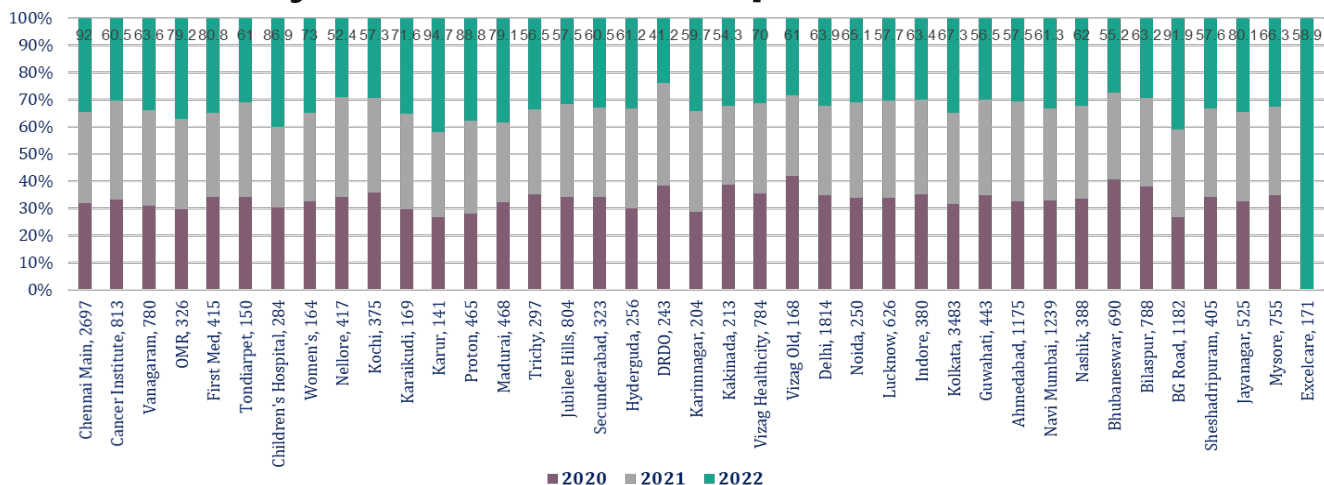
Patient Safety Grade

% of participants who gave a positive grade for their work area/ unit in the hospital on patient safety



| Safety Culture Composite | Definition: The extent to which... |
|--|--|
| 1. Communication openness | Staff freely speak up if they see something that may negatively affect a patient and feel free to question those with more authority. |
| 2. Feedback and communication about error | Staff are informed about errors that happen, are given feedback about changes implemented, and discuss ways to prevent errors. |
| 3. Frequency of events reported | Mistakes of the following types are reported: (1) mistakes caught and corrected before affecting the patient, (2) mistakes with no potential to harm the patient, and (3) mistakes that could harm the patient but do not. |
| 4. Handoffs and transitions | Important patient care information is transferred across hospital units and during shift changes. |
| 5. Management support for patient safety | Hospital management provides a work climate that promotes patient safety and shows that patient safety is a top priority. |
| 6. Non-punitive response to error | Staff feel that their mistakes and event reports are not held against them and that mistakes are not kept in their personnel file. |
| 7. Organizational learning—Continuous improvement | Mistakes have led to positive changes and changes are evaluated for effectiveness. |
| 8. Overall perceptions of patient safety | Procedures and systems are good at preventing errors and there is a lack of patient safety problems. |
| 9. Staffing | There are enough staff to handle the workload and work hours are appropriate to provide the best care for patients. |
| 10. Supervisor/manager expectations and actions promoting patient safety | Supervisors/managers consider staff suggestions for improving patient safety, praise staff for following patient safety procedures, and do not overlook patient safety problems. |
| 11. Teamwork across units | Hospital units cooperate and coordinate with one another to provide the best care for patients. |
| 12. Teamwork within units | Staff support each other, treat each other with respect, and work together as a team. |
| 13. Second Victim | Staff awareness on second victim concept and support given by the units |

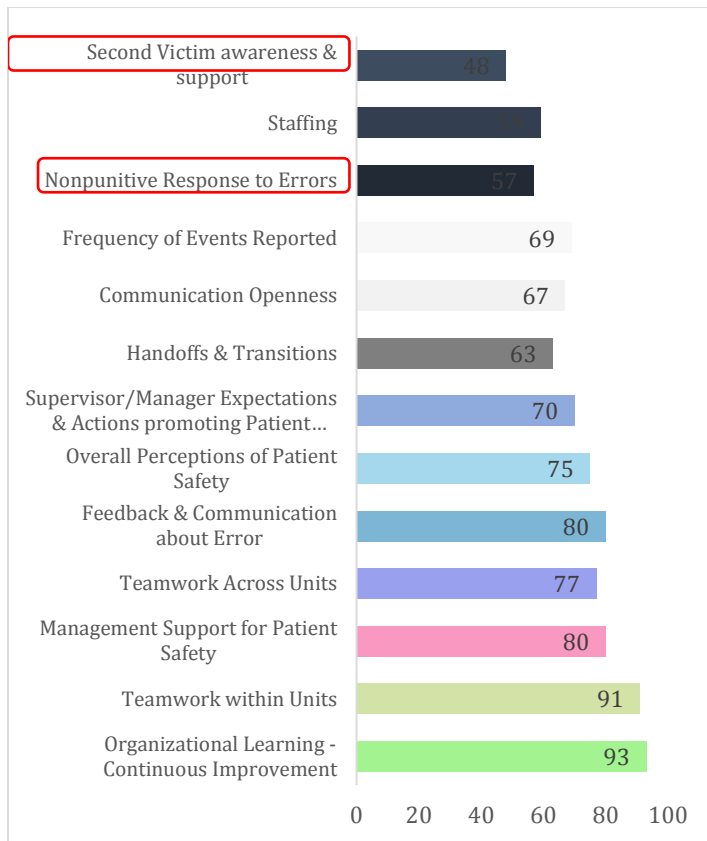
Safety Culture Score Comparison



*The numbers in front of hospital names indicate the number of responses collected by each hospital in the current survey

Overall Composite Level Results (%)





 Keep it up!

 Area for improvement

Discussion:

In conclusion, this project has demonstrated the organization's commitment to sustaining the wellbeing of its healthcare workers by fostering a culture of safety and addressing occupational hazards. Through the implementation of a comprehensive survey, involvement of various stakeholders, and strategic interventions, significant improvements have been achieved. The project successfully reduced workforce-related injuries, mitigated mental health concerns, and alleviated the financial burden associated with occupational hazards.

The engagement of leadership, allocation of resources, and active participation of employees have contributed to the outstanding outcomes and measurable results. The organization's excellence in sustaining healthcare workers' wellbeing is reflected in the improved safety ratings, positive grades on patient safety, reduced incidents reported, increased non-punitive actions, and a culture of continuous learning and improvement.

By prioritizing the safety and wellbeing of their workforce, Apollo Hospitals has set a benchmark for promoting a healthy and supportive work environment, making it a leader in the healthcare industry. This project serves as an exemplary model for other organizations seeking to create a culture of safety and enhance the productivity and wellbeing of their personnel.

Conclusion

In conclusion, this has demonstrated the organization's commitment to sustaining the wellbeing of its healthcare workers by fostering a culture of safety and addressing occupational hazards.



Through the implementation of a comprehensive survey, involvement of various stakeholders, and strategic interventions, significant improvements have been achieved.

References

1. <https://www.sciencedirect.com/science/article/abs/pii/S0022437522000512>
2. <https://www.editorialmanager.com/tldigitalhealth/default2.aspx>
3. Apollo Hospitals data System.