

Assessing Workplace Hazards in Small and Medium Enterprises: An Empirical Study from Southern Pakistan

Miskeen Ali Gopang^{1*}, Shakeel Ahmed Shaikh¹, Inayat Ali², Rano Khan Wassan³, Safdar Ali Larik⁴

¹Department of Industrial Engineering and Management, Mehran University of Engineering and Technology, Jamshoro, Pakistan

²Department of Public Health & Allied Sciences and Department of Anthropology, Fatima Jinnah Women University, Rawalpindi, Pakistan

³Department of Industrial Engineering and Management, Dawood University of Engineering and Technology, Karachi, Pakistan

⁴Department of Textile Engineering, Dawood University of Engineering and Technology, Karachi, Pakistan

*Corresponding author: miskeen.gopang@faculty.muets.edu.pk

Abstract: Employees are undeniably among an organization's most valuable assets. In the course of their daily work, millions of individuals labor in environments that substantially expose them to various hazards. Mitigating and eliminating these hazards not only ensures workplace safety but also contributes significantly to the attainment of the Sustainable Development Goals (SDGs) set forth by the United Nations. This study explored the status of occupational health and safety practices related to workplace hazards while focusing on 35 Small and Medium-sized Enterprises (SMEs) situated in the SITE area of Kotri, Sindh, Pakistan. An empirical study was conducted using a questionnaire adapted from the work of Ezekiel M. Makori [1]. Further, data was analyzed in three stages with the help of the Statistical Package for Social Sciences (SPSS) software. In the first stage, data reliability was checked with Cronbach's alpha, which was 0.80. In the second stage, descriptive statistics were used to compute the frequency, mean, and standard deviation of the variables, and in the third stage, inferential statistics were applied. Results showed that many hazards that exist in the working environment of the SMEs, notably noise, fire, temperature, and working environment, with a greater mean value. In Addition, a negative correlation ($\beta = -0.051$) between Occupational Health and Safety Practices (OHSPs) and workplace hazards was found. It implies that OHSPs have the potential to reduce workplace hazards. Therefore, it is recommended that effective OHSPs be put in place to mitigate workplace hazards.

Keywords: Occupational Health and Safety (OHS), Workplace Hazards, SMEs, Sustainable Development Goals (SDGs); Sindh, Pakistan.

I. INTRODUCTION

Since employees are the precious assets of any organization, it is the moral responsibility of organizations to ensure that their employees are safe and free from hazards [2]. Considering this importance, the Sustainable Development Goals (SDGs) are also framed to promote solutions to challenges affecting humanity. One of these goals is to ensure good health and well-being for all by 2030 [3]. An initiative to contribute to the above SDG is the enforcement of health and safety practices in Small and Medium Enterprises (SMEs), as 60-70 percent of the world's labor force works in the SME sector [4]. These workers work in such an environment in which they are exposed to many hazards [5]. As a result, hundreds of millions of people suffer from hazardous exposure. When the number of people working in the SME sector is considered, the magnitude of the implications of workplace hazards on sustainable development can be put into proper perspective [6].

In 2011, the Chief of the Health and Safety program at the International Labor Organization (ILO), while addressing the 15th World Congress on Occupational Safety and Health, mentioned that approximately two million work-related deaths occur annually worldwide. Workplace accidents and exposure to workplace hazards affect the lives of hundreds of millions of workers annually [7]. Although workplace hazards are common in many countries, however rate of workplace hazards in developing countries is significant [6]. According to the ILO and the World Health Organization (WHO) reports, many manufacturing workers are injured on the job [7], i.e., 153 workers get injured, and a worker dies every 15 seconds due to occupational accidents [8]. These provoke prolonged absenteeism, leading to health damage and economic losses [3]. Workers' productivity and performance can also be affected when injuries and fatalities occur [9]. Countries lose an estimated four percent of Gross Domestic Product (GDP) due to occupational accidents and diseases [10].

Prevention of occupational injuries has remained a top priority for all [11] considering them as the negative outcomes of workplace hazards. Policies related to Occupational Health and Safety (OHS) can be formed to ensure decent work for the workers of SMEs, which will ultimately reduce the probability of the occurrence of occupational accidents. It is obvious that workplace safety and health are about ensuring good on-the-job physical working conditions [12]. Creating a safe and healthy working environment will prevent exclusion and poverty, as well as decrease the suffering and economic costs borne by victims and their families, businesses, insurance companies, and governments [13]. All the negative results that are outcomes of workplace hazards are challenges to the sustainable development of organizations and economies. However, they can be reduced and mitigated with effective Occupational Health and Safety Practices (OHSPs). To this aim, this research study was conducted to explore and analyze the influence of Occupational Health and Safety Practices (OHSPs) on workplace hazards.

A. Theoretical Background:

In the realm of Occupational Health and Safety (OHS), hazards represent a critical aspect of workplace environments. Workplace Hazards encompass various elements, such as situations, activities, and events, which possess the potential to inflict harm on individuals [14]. The workplace, in particular, serves as a milieu where numerous hazards can manifest [15]. These hazards are typically categorized into five distinct classes, as elucidated by Reinhold and Tint [16](1) physical hazards, (2) chemical hazards, (3) biological hazards, (4) ergonomic or work design hazards, and (5) stress or psychosocial hazards [17]. In the following section, we discuss each of them briefly.

B. Physical Hazards:

Physical hazards exist in the workplace, i.e., radiation, vibration, noise, and temperature (extreme hot or extreme cold) [14]. They harm workers if exposed to them. Noise will hurt workers in terms of loss of hearing (permanent or temporary) [18]. In addition, exposure to any of the conditions, i.e., extreme hot and cold temperatures, affects workers in terms of stroke, and exhaustion; however, excessive heat during work creates heat cramps, which is an occupational health risk [16]. It restricts a worker's physical functions and capabilities, work capacity, and productivity [19].

C. Chemical Hazards:

Chemical hazards prevail in the workplace in the form of fumes, vapors, dust, mists, solids, liquids, and gases. These hazards can be inhaled, absorbed, or ingested into the body. Cleaners, degreasers, cutting oils, solvents, paints, and acids are the main causes of chemical hazards [17]. These hazards affect workers in many ways, especially by causing cancer, depression of the nervous system, lung disease, irritation, allergic reactions, and asphyxia [19], [20]. Due to exposure to chemicals, the reproductive system of workers can also be affected [17].

D. Biological Hazards:

Biological hazards exist in the form of living things, organisms, or substances that are products of living things. This type of hazard causes illness in workers. Examples of these hazards include viruses, fungi, plants, bacteria, and parasites [21]. Exposure to these hazards can affect workers in terms of food and blood poisoning, tetanus, boils, ringworm, measles, hepatitis, thrush, tuberculosis, mumps, and rabies [17].

E. Ergonomic or Work Design Hazards:

These hazards arise due to the way work is structured or organized, as noted by Tak & Calvert [22]. They can put significant stress on the musculoskeletal system, impacting muscles, tendons, ligaments, joints, blood vessels, and nerves, as highlighted by the Industrial Accident Prevention Association (IAPA) [17]. Ergonomic hazards are the results of repetitive work activities that pose biomechanical stress to the neck, wrists, arms, trunk, and lower extremities of workers [23] because of working on machines and the design of workstations, which forces them to work in awkward postures [22].

F. Stress or Psychosocial Hazards:

These hazards are associated with ill health, dissatisfaction with the job, and stress [24]. Stress is of two types: Physical and organizational stress. Physical stress is caused by both vibration & noise, and organizational stress is caused by isolation, extra workload, workplace violence, conflict, uncertainty, and lack of control on the job. These hazards can affect in terms of heart disease and high blood pressure [17].

II. MATERIALS & METHODS

To respond to the objective of the research study, which was related to exploring the impact of Occupational Health and Safety Practices (OHSPs) on workplace hazards, researchers have taken 35 respondents from different SMEs located at SITE Kotri, Pakistan. SMEs were used as a unit of analysis, and convenient sampling was used. The questionnaire from the study [1] was used as an instrument to collect the data.

The questionnaire was structured into five distinct sections. Section A was intended to gather demographic information about the respondents and workplace hazards. Section B had statements and questions related to Occupational Health and Safety Practices (OHSPs), while Section C centered on statements and questions related to productivity. Section D inquired about the contextual factors, posing statements and questions about this aspect. Finally, Section E focused on performance-related aspects, featuring statements and questions aimed at capturing relevant data. This manuscript primarily discusses workplace hazards, presenting descriptive statistics of hazards followed by an assessment of OHSPs' impact on these hazards. The questionnaire sections used for the analysis presented in this manuscript are shown in Appendix A. From the list, two hazards were eliminated due to not suitability with the workplace hazards. Those were bombs and robberies. Notwithstanding, part of the analysis is published in the earlier study [3] in which we examined the impact of Occupational Health and Safety Measures (OHSMs) on the performance of SMEs.

The questionnaire encompassed a five-point Likert scale ranging from 1-5. The reliability of data was checked using Cronbach's alpha. The data was analyzed using descriptive and inferential statistical tests with the help of SPSS (Statistical Package for Social Sciences). Percentage, mean, standard deviation, and frequency tables were used for descriptive statistics. Furthermore, linear regression analysis was used to investigate the impact of OHSPs on workplace hazards.

III. RESULTS & DISCUSSION

In this section, we present our research findings and engage in a detailed discussion of their implications. The significance of our findings was illuminated by our analysis and interpretation of the results. Providing a thorough understanding of the connection between occupational health and safety practices and workplace hazards.

A. Designation:

The study included respondents from various designations within the organization. The breakdown of participants is as follows: 2.86% were General Managers, 8.57% were Plant Managers, 22.86% were Managers, 37.14% were Assistant Managers, 2.86% were Safety Engineers, 22.86% were Engineers, and 2.86% were Supervisors, as illustrated in Figure 1.

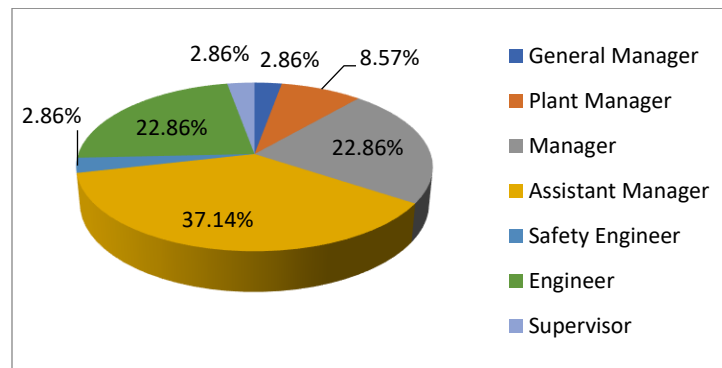


Figure 1. Designation of the Respondents

B. Data Reliability:

Data reliability is determined by being familiar with the internal consistency of the items. Cronbach's alpha, a well-established statistical tool, was used to assess the internal consistency of the items. Cronbach's alpha reliability coefficient has a normal range of 0 to 1 [25]. The coefficient, however, has no lower bound. If it is close to one, it indicates that the items are more consistent internally. Cronbach's alpha coefficient values greater than 0.9 indicate excellent internal consistency of items, greater than 0.8 indicate good, greater than 0.7 indicate acceptable, greater than 0.6 indicate questionable, and greater than 0.5 indicate poor and unacceptable internal consistency, respectively [25]. Cronbach's alpha coefficient value for the current data's internal consistency was 0.80, indicating good and consistent reliability.

C. Physical Hazards:

Respondents were asked to rate the variables as hazardous and respond to the questions on a five-point Likert scale, i.e., 1 for not sure, 2 for not at all, 3 for some extent, 4 for great extent, and 5 for very great extent. Table 1 presents the statistics related to the Physical hazards. At the top of all is Noise. It reveals that 17 (48.6%) SMEs ranked noise as hazardous to a great extent, 9 (25.7%) of them ranked it as hazardous to a very great extent, 8 (22.9%) of them ranked it as hazardous to some extent and 1 (2.9%) of them responded not sure, whereas; none of them responded for not at all hazardous for noise. The mean (3.97) and standard deviation (0.78) computed for it showed that the mean was nearest to 4. This statistic shows that all respondents agree that noise is hazardous to a great extent and is one of the most prominent hazards among the physical hazards, which directly or indirectly creates hindrances in performance. Noise is considered the most hazardous element in the physical hazards, followed by fire and temperature.

Secondly, it presents statistics related to fire hazards. It shows that respondents from 03 (8.6%) SMEs responded that fire is not at all hazardous, and respondents from 10 (28.6%) SMEs stated that it is hazardous to some extent. Respondents from 13 (31.7%) SMEs shared that fire is hazardous to a great extent, and respondents from 09 (25.7%) SMEs responded that fire is a hazardous element at the workplace to a very great extent. After that mean (3.97) and standard deviation (0.78) were computed. The mean is nearest to 4, therefore it is considered as 4. This statistic reveals that respondents consider fire as a hazardous element to a great extent at their workplace and as a hurdle that affects their performance. Regularly checking the workplace for potential fire risks is essential to ensure the safety of employees and property. This practice involves identifying potential sources of ignition, fuel, and oxygen that can contribute to the spread of fire. Safe working practices should be implemented to minimize the risk of fire. This includes proper storage and handling of flammable materials, regular maintenance of electrical equipment, and adherence to fire safety protocols such as keeping fire exits clear and knowing the location of fire extinguishers [26].

Table 1. Responses to Physical Hazards

Physical Hazards	Level of Extent					Mean	Standard Deviation
	1	2	3	4	5		
Noise	0	1	8	17	9	3.97	0.78
Fire	0	3	10	13	9	3.8	0.93
Temperature	2	3	6	14	10	3.77	1.14
Floors	0	10	17	6	2	3	0.84
Trailing Wires	2	12	13	6	2	2.83	0.98
Lifts	4	14	4	11	2	2.8	1.18
Staircases	4	12	9	10	0	2.71	1.01

The third-ranked hazardous variable in physical hazards, according to SMEs, is temperature. Table 1 demonstrates that 14 (40%) of SMEs have reported that temperature is hazardous to a great extent, 10 (28.6%) of the SMEs reported that it is hazardous to a very great extent, 6 (17.1%) of SMEs reported that it is hazardous at some extent whereas; 3 (8.6) and 2 (5.7%) of them reported it not at all hazardous and not sure respectively. The mean (3.77) and standard deviation (1.14) computed for this element reveal that the mean is nearest to 4. It can be concluded from the above statistics that all the SMEs ranked temperature as hazardous to a great extent.

Floors were ranked fourth by SMEs, as 17 (48.6%) of the SMEs mentioned that floors are hazardous at the workplace to some extent, 10 (28.6%) mentioned not at all, 6 (17.1%) of them mentioned floors as hazardous at great extent, 2 (5.7%) of SMEs mentioned it as hazardous at very great extent whereas; none of them mentioned it for not sure. The mean value of this element is 3, which reflects that SMEs ranked floors as hazardous to some extent. Trailing wires took the 5th place in physical hazards as 13 (37.1%) of SMEs responded that trailing wires are hazardous to some

extent, 12 (34.3%) responded that it is not at all hazardous, 6 (17.1%) of them responded it hazardous at great extent, 2 (5.7%) of them responded that trailing wires are hazardous at very great extent. After that mean value (2.83) and standard deviation (0.98) were computed. The mean value of trailing wires is nearest to 3, which reveals that SMEs agree that this element is hazardous at the workplace to some extent. Staircases stood at the sixth rank as 12 (34.3%) of SMEs mentioned that staircases are not at all hazardous, 10 (28.6%) and 9 (25.7%) of SMEs mentioned staircases hazardous to a great extent and to some extent respectively, 4 (11.4) of SMEs mentioned that they are not sure that staircases are hazardous either, whereas none of SMEs mentioned staircases hazardous at very great extent. After that mean (2.71) and standard deviation (1.01) were computed. The mean value for staircases is also nearer to 3, which reveals that SMEs also ranked staircases as hazardous to some extent. In comparison to the findings of the study [1], Noise, Fire, and Temperature were the three topmost physical hazards that were likely to be studied [1]; however, they were reported to a lower extent in this study. Moreover, all the physical hazards reported a level lower than the extent stated in the study [1], except lifts, which were reported at a level higher in this study.

D. Psychosocial Hazards:

Workload was considered at the top hazardous among psychosocial hazards as 14 (40%) of SMEs reported workload as hazardous to some extent, 11 (31.4%) and 6 (17.1%) of SMEs reported that workload is hazardous to a great extent, and very great extent respectively, whereas; 3 (8.6%) and 1 (2.9%) reported that not at all hazardous and for not sure respectively. Mean and standard deviation were computed, which are 3.51 and 0.98, respectively. It is seen that SMEs consider workload hazardous to a great extent.

Table 2. Responses to Psychosocial Hazards

Psychosocial Hazards	Level of Extent					Mean	Standard Deviation
	1	2	3	4	5		
Workload	1	3	14	11	6	3.51	0.98
Strict deadlines	2	8	14	11	0	2.97	0.89
Overcrowding	2	15	10	6	2	2.74	1.01

Table 2 refers to strict deadlines taking the second rank as 14 (40%) of SMEs reported strict deadlines as hazardous to some extent, 11 (31.4%) of them reported that it is hazardous to a great extent, 8 (22.9%) of SMEs reported that it is not at all hazardous, 2 (5.7%) of SMEs reported for not sure, whereas; none of them reported it hazardous at very great extent. Mean (2.97) and standard deviation (0.89) reveal that SMEs consider it hazardous to some extent.

Overcrowding was placed at the third rank as 15 (42.9%) SMEs reported that overcrowding is not at all hazardous, 10 (28.6%) SMEs reported it hazardous to some extent, 6 (17.1%) and 2 (5.7%) SMEs reported it hazardous at great and very great extent, respectively. The mean (2.47) and standard deviation (1.36) state that SMEs also consider overcrowding as hazardous to some extent. All the Psychological hazards were reported with the same level of extent as in the study [1] However, their mean values are slightly lower in the findings of this study.

E. Ergonomic Hazards:

The working environment was reported as the topmost hazard in the list of ergonomic hazards as 15 (42.9%), 10 (28.6%), and 6 (17.1%) SMEs reported working environment hazardous to a great extent, to some extent and very great extent respectively, 4 (11.4%) SMEs reported it as not at all hazardous, whereas; none of them reported for not sure. 3.66 & 0.9 are computed mean and standard values for the working environment, respectively. It is seen from the above statistics that SMEs ranked the working environment as hazardous to a great extent.

Table 3. Responses to Ergonomic Hazards

Ergonomic Hazards	Level of Extent					Mean	Standard Deviation
	1	2	3	4	5		
Working environment	0	4	10	15	6	3.66	0.9
Working Hours	1	7	17	8	2	3.09	0.88
Computers	2	7	16	7	3	3.06	0.99
Furniture	2	20	9	3	1	2.46	0.85

Table 3 shows that working hours were considered the second place hazardous among ergonomic hazards, as 17 (48.6%) and 8 (22.9%) SMEs reported working hours as hazardous to some and a great extent, respectively. In addition to this, 7 (20%) SMEs reported that it is not at all hazardous, 2 (5.7%) SMEs reported it as hazardous to a very great extent, whereas 1 (2.9%) SMEs reported not sure. 3.09 & 0.88 are the mean and standard deviation values for working hours.

In addition to these, computers are considered in third place among ergonomic hazards, as 16 (45.7%) and 7 (20%) SMEs reported that computers as hazardous to some and a great extent, respectively. Also, 7 (20%) SMEs reported that it is not at all hazardous, 3 (8.6%) SMEs reported it as hazardous to a very great extent, whereas 2 (5.7%) SMEs reported not sure. 3.06 & 0.99 are the mean and standard deviation values for computers. It is seen from the statistics of both working hours and computers that SMEs consider them hazardous to some extent.

Furniture took last place among ergonomic hazards as 20 (57.1%) SMEs reported that furniture is not at all hazardous, 9 (25.7%) and 3 (8.6%) reported it as hazardous to some and great extent respectively, 2 (5.7%) SMEs reported for not sure, whereas; 1(2.9%) SMEs reported it as hazardous at very great extent. 2.46 and 0.85 are the mean and standard deviation values for furniture, respectively. It is seen from the above statistics that SMEs reported that furniture is not at all hazardous. In comparison to the study [1], working environment and working hours were reported to a similar extent in this study. Whereas furniture was reported at a level lower in extent, while computers were reported at a level higher in extent.

F. Biological Hazards:

Among biological hazards, toilets were reported as the topmost hazards as 21 (60%) and 6 (17.1%) SMEs ranked toilets as hazardous to some and great extent respectively, 5 (14.3%) SMEs reported that it is not at all hazardous, 2 (5.7%) SMEs ranked it hazardous to a very great extent, whereas 1 (2.9%) SMEs reported for not sure. 3.09 & 0.81 are the mean and Standard deviation values for toilets, respectively.

Table 4. Responses to Biological Hazards

Biological Hazards	Level of Extent					Mean	Standard Deviation
	1	2	3	4	5		
Toilets	1	5	21	6	2	3.09	0.81
Drinking water	1	12	9	10	3	3.06	1.05

As seen in Table 4, SMEs ranked drinking water as the second most biological hazard as 12 (34.3%) SMEs reported that drinking water is not at all hazardous, 10 (28.6%), 9 (25.7%) and 3 (8.6%) SMEs reported that water is hazardous as great extent, some extent and very great extent respectively, whereas; 1(2.9%) SME reported for not sure. 3.06 & 1.05 are the mean and standard deviation values for drinking water, respectively. It is seen from the statistics that both toilets and drinking water are near to three (03) that SMEs consider both as hazardous to some extent.

In comparison to the study [1]Toilets were reported to the same extent, whereas drinking water was reported to a level lower in extent.

G. Chemical Hazards:

Chemical exposure was ranked as 12 (34.3%) SMEs rated chemical exposure as not at all hazardous, 8 (22.9%), 7 (20%), and 6 (17.1%) SMEs rated it as hazardous to a great extent, very great extent, and some extent respectively, whereas; 2 (5.7%) SMEs rated it for not sure. After that mean (2.46) and standard deviation (0.85) were computed.

Table 5. Responses to Chemical Hazards

Chemical Hazards	Level of Extent					Mean	Standard Deviation
	1	2	3	4	5		
Chemical exposure	2	12	6	7	8	2.46	0.85

As shown in Table 5, the above statistics reveal that SMEs consider chemical exposure hazardous to some extent. In comparison to the study [1], Chemical exposure was reported to the same extent. However, the mean value is slightly lower in the findings of this study. As a summary of the results, mean values greater than 3 indicate that respondents agreed that these variables exist in their working environment, which affect the performance of employees and ultimately the performance of organizations, notably the Noise, Fire, Temperature, and working Environment.

H. The Impact of Occupational Health and Safety Practices (OHSPs) on Workplace Hazards:

A Multiple linear regression statistics technique was used to investigate the impact of Occupational Health and Safety Practices (OHSPs) on workplace hazards. Towards this aim, the mean of Occupational Health and Safety Practices (OHSPs) was regressed against the mean of workplace hazards. Table 6 presents the overall average of Occupational Health and Safety Practices (OHSPs) against workplace hazards. As shown in Table 6, OHSPs have a negative relationship with workplace hazards, as $\beta = -0.051$ (standardized coefficient), though in the hypothesized direction, as it is negative. However, the relationship is not significant (p value = 0.772) and is greater than the confidence level. It implies that Occupational Health and Safety Practices (OHSPs) have potential and can reduce workplace hazards, as the negative coefficient for OHSPs suggests that higher and better OHSPs are associated with the reduction of workplace hazards, even if this relationship is not statistically significant, as shown in Table 6.

Table 6. Regression of the Means of Occupational Health and Safety Practices against Workplace Hazards.

Multiple R		0.051			
R Square		0.003			
Adjusted R Square		-0.028			
Standard Error		0.618			
	df	sum of Squares	Mean Square	F	Sig. F
Regression	1	0.033	0.033	0.085	0.772
Residuals	33	12.622	0.382		
Variables in the Equation					
Variable	B	SE B	Beta	t	Sig. t
Mean OHSP	-0.8	0.274	-0.051	-0.292	0.772
(Constant)	3.413	1.032		3.307	0.002

IV. CONCLUSION

The respondents in the study strongly agreed that there are workplace hazards present in their working environment. The most commonly mentioned workplace hazards were noise, fire, temperature, and the overall working environment, with a greater mean value(s) of 3.97, 3.80, 3.77, and 3.66, respectively. The rating of these hazards indicates that they are perceived as significant risks by the respondents. This is consistent with previous research conducted by Musa and his colleagues [27], which also highlighted noise as a prominent hazard. These safety hazards have the potential to negatively impact the performance of the employees and, consequently, the overall organizational performance. Further study indicated that ($\beta = -0.051$, p value = 0.772) showed a weak negative correlation between OHSPs and workplace hazards. This revealed that though SMEs have OHSPs, it does not significantly affect (reduce) the workplace hazards. However, there is potential in the OHSPs to mitigate them. Keeping the adverse outcomes in mind, hazards should be eliminated as these are the potential causes of the adverse events and the risk factors for developing occupational diseases. It is recommended that regular factory inspections be conducted to identify and eliminate workplace hazards. The government's stance on this issue may need to be reconsidered, as regulatory agencies will need to keep a closer eye on potentially hazardous factories to ensure workers' health and safety. Furthermore, one of the reasons for worsening work-related injuries has been documented as a lack of effective factory inspection.

It is worth mentioning here that a safe and harmless working environment requires strong coordination between employers and employees. Employers are capable enough and responsible for providing the training, safety protocols, guidelines, and or SOPs for adequate applications of tools and techniques at the workplace. The employers are also accountable for assessing and addressing any unfortunate or potential hazards that may occur. Similarly, it is incumbent upon the employees to follow the training and instructions for proper use of the equipment at the workplace, use personal protective equipment (PPE where necessary, and report any potential hazard or unsafe situation that may occur at the workplace. This strong cooperation between employees and employers will certainly lead to making the workplace less hazardous and keep the employees feeling autonomous so that they can effectively identify and address potential risks before they escalate into major OHS disasters.

V. LIMITATIONS AND FUTURE RESEARCH

Though the current research has the potential to develop a safer and healthier working environment, there are limitations (especially when research is carried out in developing countries) related to data collection from Industries, sample size, narrow geographical focus, use of cross-sectional design, and a managerial perspective. Future research should encompass the above-mentioned areas at a wider spectrum to make it more generalized and acceptable for organizations maintaining health and safety management practices and hazard reduction in different workplace settings.

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