

Workers' Perceptions and Awareness of Occupational Safety and Health Legislation in the Food Manufacturing Industry in Zimbabwe

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Abstract

The research investigated workers' awareness and perceptions of safety and legislation in the food industry of Zimbabwe as a strategy to minimize occupational accidents. The research adopted a descriptive survey design focusing on three purposively selected companies in the food manufacturing sector in Harare. A sample size of 122 workers representing 10% of the total labourforce was selected through stratified random sampling for questionnaires. Results of the survey revealed that most workers were not sure if their work environment was safe and less than half of these workers were aware of safety and health legislation in Zimbabwe. This scenario presents a challenge to improvement in safety and health at workplaces due to workers' ignorance of prescribed legislative standards and practices. A massive collaborative campaign must be done to ensure that workers are aware of safety and health laws and their application in order to minimize occupational incidences.

Keywords: Workers, Awareness, Safety and health legislation, Food industry.

Introduction

Public efforts to improve employees' safety and health worldwide through legislation date back to the very beginning of industrialisation. Meanwhile, sound occupational safety and health laws and regulations were initiated in the early 1900s. The first consolidated legislative framework on occupational safety and health was enacted in USA in 1970. This piece of legislation influenced most of the legislation on safety and health (SH) in the world. Despite existence of SH laws, millions of people throughout the world are working under circumstances that foster ill health. It was estimated that among the world's 2.7 billion workers, some 2.2 million workers die every year as a result of work-related ill-health and injury (ILO, 2003). This annual figure is slightly higher than the current population of Botswana at 2,065,398.

About 350 000 of the reported occupational deaths were due to accidents and the rest were due to occupational illnesses and diseases (Pearson 2009). However, the global estimates for fatalities were a tip of the iceberg because data for estimating non-fatal illness and injury was not available for most of the globe due to poor reporting systems (ILO, 2003; Loewenson, 1999a). Only a third of International Labour Organisation's members, mainly developed countries, reported reasonably reliable accident figures (Pearson, 2009). However, more accurate reporting in developing countries can also be achieved if workers know what the law says about safety and health issues at their workplace for improved working conditions and possible litigation.

The level of occupational safety and health in Africa is low compared with the rest of the world (Pearson, 2009a; Tadesse and Kumie, 2007). Sub-Saharan Africa had about one tenth of the world's occupational injuries and fatalities despite prevalence of high unemployment rates (Loewenson, 1999a). The general view among scholars is that, in Africa, public health problems were so massive that occupational health problems were subordinate to those like child mortality and malnutrition. Meanwhile, the process of industrialization in Africa had resulted in the advent of different forms of technology and machinery. Surveys of occupational health practice found that workers in Southern Africa were exposed to new occupational health risks that were emerging from new forms of industrial processes and work organisation (Loewenson, 1999a). This led to an increase in occupational problems while the traditional hazards like high dust or noise levels at the workplace were not dealt with adequately (ILO, 2003).

In Southern Africa, research revealed that stress arising from production changes, more intense production systems, target oriented production, reduced job and market security, presenteeism and reduced wages were also major problems in workplaces compromising workers' safety and health (Jerie, 2012; Katsuro et al. 2010; Hermanus, 2009; Loewenson, 1999a; Mariwo, 2008). Moreover, low penalties for safety and health regulations violators applied in most southern African countries were not deterrent and inspection systems were weak (Loewenson, 2009b). For instance, in Zimbabwe there is low coverage of occupational safety and health issues by NSSA which is attributed to budgetary constraints (Murape, 2012). This makes it imperative to look at workers' participation in enforcement of existing occupational safety and health legislation since they are the ones directly affected by unsafe work conditions.

Information obtained from National Social Security Authority (NSSA) in Zimbabwe shows that serious accidents in industry appears to be on an increase (Table 1). The statistics for occupational injuries and deaths in Zimbabwe were too high for an economy that was not operating at full capacity. This is a worrisome trend considering the associated socio-economic impacts.

Table 1: Occupational injuries and deaths in Zimbabwe

Year	Serious injuries	Occupational related deaths
2006	6369	81
2007	6117	72
2008	3810	65
2009	3122	64
2010	4410	90
2011	4111	75
*2012	1216	29
Total	29155	476

*Figures presented were for the first three months (Source: Murape 2011 and NSSA 2012).

The causes of high occupational injuries in Zimbabwe include improvement in industrial production capacity after a decade of economic meltdown, restricted industrial recapitalisation due to liquidity problems and lack of credit lines, use of outdated and old machinery and equipment, increase in new investors who did not incorporate occupational safety and health issues in their business management system, engagement of new employees who were not aware of the safety and health procedures, re-engagement of old employees from long layoffs which made them forget crucial safety and health rules and excessive use of contract workforce with no training for the job (Murape, 2012; Katsuro et al. 2010; Loewenson, 1999a). Research also confirmed that most food factories in Zimbabwe did not carry out proper occupational safety and health induction training (Katsuro et al. 2010), thus their employees were not well informed about safety and health precautions.

No sector is safe, but some are more dangerous (Loewenson, 2009a). Although the food industry was not among high risk sectors worldwide, the proportion of non-fatal accidents taking place in the food manufacturing sector globally were comparably high as a large proportion of people were employed in this sector (Pearson, 2009; ILO, 2003). Production workers were oftenly required to lift heavy objects, use cutting, grinding and other dangerous tools or perform strenuous tasks for long hours in order to increase productivity (Katsuro et al. 2010; Hermanus, 2009). Major occupational hazards in the food industry in Zimbabwe are noise, heat, dust, steam and musculo-skeletal depending on the stage of production (Katsuro et al. 2010).

Zimbabwe has an array of fragmented safety and health legislation meant to address occupational hazards. These include the Factories and Works Act (Chapter 14:08), Pneumoconiosis Act (Chapter 15:08), the Labour Relations Act (Chapter 28:01) and National Social Security Authority Act (Chapter 17:04). However, these legislative instruments sometimes overlap and/or are outdated; hence this calls for their harmonisation or review as enforcement is difficult where fragmentation exists (Alfers, 2006). Considering that Zimbabwe has laws which covered factories, obliged employers to provide safe work environment, compelled reporting of accidents and give workers the right to refuse dangerous work, it is important to ascertain the extent to which employees know and uphold these legal provisions. Awareness of legislation would save employees' lives as they become knowledgeable of the potential hazards in their workplace, emergency preparedness and response strategies available, prompts employees to know and comply with all regulations, promotes more efficient reporting of unsafe acts and unsafe conditions and make workers aware of the employers' contractual obligations (National Social Security Authority, 2012; Rosenstock et al. 2007).

It is against this background that the paper aims to investigate the level of employees' awareness and their perceptions of safety and health legislation in the food manufacturing industries in Zimbabwe. Katsuro et al (2010) argued that it is important to empower, educate and persuade workers to exercise their powers in the protection of their occupational safety and health as this would improve reporting and monitoring of accidents at workplace; hence their subsequent reduction. This research will establish employees' views on the level of safety conditions in their workplace, knowledge of the relevant safety and health legislation meant to protect them and their familiarity with the channels to follow to exercise their safety and health rights. This is important in light of the fact that workers were reluctant when it comes to occupational safety and health issues as they think it was a prerogative of employers (Katsuro et al. 2010).

Methods and Materials

The research adopted a descriptive survey design based on case studies. The descriptive survey methodology was hinged on triangulation as quantitative and qualitative data collection and analysis techniques were used. The research focused on three purposively selected food manufacturing industries located in Harare which is the capital city of Zimbabwe. These companies were among the few which had reopened after the formation of Government of National Unity in 2009. The selected companies were based in Ardbennie and Southerton industrial sites. The companies' activities range from beverage production to food processing or manufacturing and distribution.

The companies selected were of different sizes, representing small, medium and large corporations with unique ownership and management structures. Owners of the selected companies include a multinational company (Company A), government (Company B) and a small-scale indigenous enterprise (Company C). Company A is involved in production and distribution of beverages and Company B manufacture and distribute edible foods such as cooking oil, flour and salt among others. Company C mainly focused on processing and distribution of cereal products. The spectrum of companies selected represents categories of major employers and workers in the food processing and manufacturing sector of Zimbabwe; hence a representative research output will be useful for policy development, implementation and improvement. Note that pseudo names were used for selected companies as they did not want to be identified with the results despite their full co-operation during fieldwork. Their co-operation guaranteed truthful reporting of situations prevailing in their organizations as far as safety and health issues were concerned.

The research targeted workers, safety, health and environment officers or managers and a NSSA inspectorate division officer. Both permanent and contract workers employed for at least three months were targeted through questionnaires since they were perceived to have more informed input on safety and health issues due to their longevity at workplace. Employees were supposed to contribute on their level of safety and health legislation awareness, the level of safety at their workplace, their familiarity with channels to follow in reporting occupational incidences and the extent to which employers exercise their legal obligations.

The researcher used stratified random sampling to select workers from the three companies. This sampling technique was adopted to ensure proportional representation of each company. Workers' distribution in the three companies was as follows; company A 795, company B 610 and company C 178. However, not all employees were included but only those from high risk departments in terms of hazard occurrence such as packaging, production, engineering and quality assurance. This means that workers from marketing and human resources departments were excluded. Distribution of workers in high risk departments was as follows; company A 617, company B 461 and company C 143. Therefore, the combined total for target employees was 1221. A sample size of 122 was selected representing 10 percent of the target population. A proportional sample of 10 percent was allocated to each company in relation to the size of its employees and random sampling was used to select the desired sample for questionnaires administration. In order not to interfere with operations in selected companies, a drop and pick strategy was used in questionnaires administration among workers. Safety, health and environment (SHE) officer or manager from each company was purposively selected for semi-structured interviews. The interviews were meant

to enhance the researchers' understanding of existing safety and health practices at each organisation. However, company C did not have a SHE officer and the human resource officer was in charge of safety and health issues of workers; hence was included for interviews. NSSA officer from the factories inspectorate and the promotions sections was also interviewed. The factories inspectorate section was responsible for enforcing safety and health legislation. It was also responsible for investigating accidents as well as monitoring of hazards. It was because of its field of expertise that NSSA was of colossal importance as it provided the researchers with accident reports thus revealing the level of safety in the targeted companies. NSSA records for accidents prevalence rate and for safety and health legislation awareness programs were obtained. Questionnaire data was presented in tables and graphs. Descriptive statistics were used to show variations in response from questionnaires. Interview data was summarized in appropriate categories.

Results and Discussion

Socio-demographic Data of Respondents

Most of the respondents were predominantly males (78%) compared to females who constituted 12% of the total workforce of the three companies. This scenario was attributed to the physical nature of the industrial activities as women were mainly found in the quality assurance and packaging departments. The mean age of respondents was 33.1, meaning the labourforce in the three companies was fairly young. It was established that 25% of workers in Company A and B had served for at least five years (Figure 1); hence they had wealthy knowledge on SH issues at their workplaces.

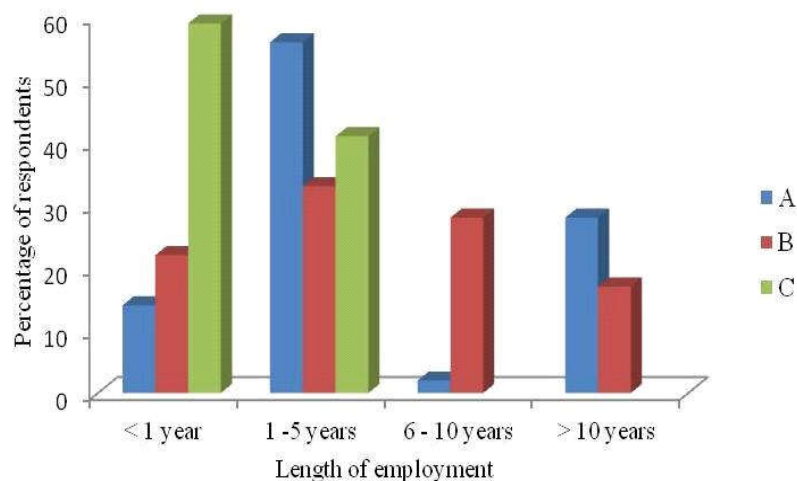


Figure 1: Workers' work experience

The reason why the majority of the workers at the two companies had less than five years of employment service was that most of them were mainly replacements of people who abandoned their jobs for greener pastures in the region and beyond at the height of economic meltdown in Zimbabwe, especially in year 2008. On the contrary, Company C which is a small scale indigenous enterprise had all its employees having served for at most two years as the company had been in operation for the same period as confirmed by the human resources manager. All employees were literate by Zimbabwean standards as they had at least completed primary education.

Employees' Perceptions of Safety Conditions at their Workplace

There were variations between departments and companies in perceptions of workers on the safety of their work environment. Generally, most workers in the three firms rated their work conditions as neutral, meaning that they neither agree nor disagree that safety was being upheld in their companies (Table 2 and Figure 2). This is against the background where the three companies had recorded 7 serious injuries in 2012. The unearthed perceptions of workers on the safety of their workplaces were worrisome since accident prevention can only be achieved if workers to a larger extent know safety conditions at their workplace. This concurs with findings by (Meitéa et al. 2009) that application of SHE principles in Africa was still poor and adherence was low compared to developed countries. The prevailing situation explains why there was absence of data on stop-work due to unsafe conditions in Africa (Katsuro et al. 2010). The main reason why most workers were not confident with the safety of their workplace was absence or inadequacy of awareness training or campaigns. The current perceptions of workers clearly show that it is difficult to improve safety conditions in these organizations as there was inadequate reliable baseline information from workers.

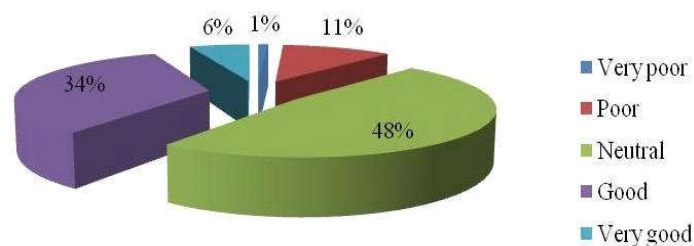


Figure 2 Workers' rating of safety at their workplace in the three companies.

However, 48% of workers in the engineering departments indicated that safety conditions were good and likelihood of hazards occurrence was minimal. In the packaging department, 22% of the workers were not happy with the safety of their working environment which they said put their lives at risk. These workers were concerned with heavy loads they were subjected to as well as lack of proper personal protective equipment like dust masks especially in companies B and C where operations included milling. Safety and health conditions were said to be at least good in the quality assurance section by 87% of the workers in that department. There was high workers' consciousness of safety in the quality assurance departments. Workers in the quality assurance section were highly literate since they all had tertiary education qualifications and know their labour rights, which included a safe and healthy working environment. Quality assurance department also include laboratories where hygienic conditions were strictly adhered to. There was also intense use of toxic chemicals in the quality assurance department which needed due care, hence work procedures had to be followed.

Table 2 Workers views on safety conditions in their departments in percentages

<i>Rating</i>	<i>Engineering</i>	<i>Production</i>	<i>Packaging</i>	<i>Quality Assurance</i>
Very poor	0	0	5	0
Poor	8	12	17	0
Neutral	44	63	56	13
Good	48	25	12	50
Very Good	0	0	10	37

Overall, 12% of the workers indicated that their working conditions were poor to very poor. The majority of these workers were from company C where safety of the work environment was reported to be pathetic. This was evidenced by lack of clear structures to address safety and health issues. According to the human resources manager of company C, the company prioritised production targets and no meaningful investment was being made on SH issues since the company had limited cash flow as it was still young. This contradicts with findings in Europe that SHE problems were not related to the size of the company as small companies were performing well (Harms-Ringdahl et al. 2000). According to National Social Security Authority (2012) many companies in Zimbabwe were reluctant to invest in safety, for example, purchasing of protective clothing, hiring safety, health and

environmental professionals or creating a safety, health and environmental department.

Knowledge of Safety and Health Legislation among Workers in the Food industry

Generally, most workers (53%) were not aware of safety and health (SH) legislation that govern their operations and welfare. On the contrary, only 43% were aware of some SH laws and 4% were non committal in divulging their opinions. The scenario prevailing in the food manufacturing sector clearly shows that enforcement of SH laws relying on information from workers was likely to have limited success. This situation also confirms that workers were most unlikely to fight for their right to safe working conditions due to their ignorance of SH law. This augments the position that options to collect data on prevalence of occupational injuries and fatalities were in disarray in most African countries (Pearson, 2009, Loewenson, 1999b) as in this case workers who were supposed to be another valuable source of information were not clear about their role as outlined under existing SH laws. Findings from this survey implies that there is limited monitoring of work conditions and prevalence of occupational hazards by workers. Therefore, the level of SH legislation awareness among workers in the food industry largely undermines the position by NSSA that improved awareness of regulatory requirements reduces the likelihood of contraventions of the occupational safety, health and environmental laws in every sector of the economy (National Social Security Authority, 2012).

Despite general low levels of workers' knowledge of SH laws, variations were noted from company to company as follows; Company A (69%), Company B (28%) and Company C (3%). Company A which is a multinational company had more workers who were aware of SH laws. This situation was attributed to frequency of awareness campaigns and training programs. As shown in Table 3, most of the respondents in Company A indicated that training and awareness campaigns were done on a quarterly basis and this helped employees to remain informed about SH issues and to some extent laws that govern them. Frequency of training was confirmed by the company's Safety, Health and Environment (SHE) Manager, who in an interview revealed that training programs were periodically carried out in different departments. The training sessions were mainly on hazard communication and raising workers' awareness on safety and health issues.

Table 3 Frequency of training and awareness campaigns in the departments of Company A.

<i>Frequency</i>	<i>Departments</i>			
	<i>Quality Assurance</i>	<i>Packaging</i>	<i>Brewing</i>	<i>Engineering</i>
Every month	0	0	18	26
Quarterly	41	61	82	55
Bi-annual	25	26	0	19
Yearly	34	13	0	0

Meanwhile, workers in all departments at Company C did not acknowledge any training that was conducted in the area of safety and health, including awareness on SH legislation. This was confirmed by the human resources manager who indicated that SH issues were given peripheral priority as evidenced by absence of set functional structures to cover safety and health issues. Therefore lack of management commitment was identified to be the major stumbling block in enhancing workers' knowledge about SH laws. Company B employees (96%) on the other hand, revealed that training and awareness campaigns were inconsistent and were no longer sure on when they were lastly done. According to the SHE officer, the company had budgetary constraints as its main focus was to resuscitate production which was affected by the deterioration of the economic climate to crisis level before the inception of multicurrency system in the country.

It was further observed that among the workers (43%) who were aware of SH legislation and its rational, only 30% managed to identify some particular pieces of SH laws which covered the food industry. Figure 3 shows variations in responses of those who managed to identify some pieces of SH legislation. The Factories and Works Act and NSSA Act were popular amongst workers. Factories and Works Act was mainly known by workers (56%) in the engineering, quality assurance and production departments where there was high use of sophisticated machinery and equipment with operational procedures which were supposed to be followed. According to SHE officer and manager for company A and B respectively, engineering section normally interacted with NSSA personnel during boiler inspections, thus they know expectations of the regulatory authority. However, some employees who indicated that they know NSSA Act were mainly conversant with compensation which was paid when one was injured instead of how it promoted the safety and health of workers at workplaces.

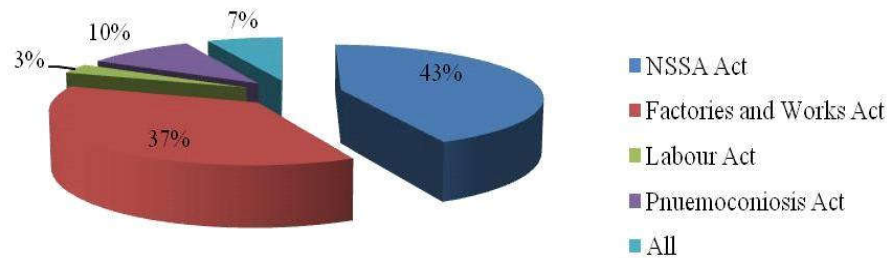


Figure 3 Workers' knowledge of specific safety and health pieces of legislation

Research survey results revealed that only 7% of the employees were able to name all the SH legislation. This shows that workers were not fully aware of how safety and health issues were supposed to be enhanced at workplaces and how their rights were to be exercised due to their ignorance of law. Key informants noted that the fragmentation of SH legislation made it difficult for employees to comprehend the stipulations of various laws that touch on SH issues. Some employees thought that there were super laws when it comes to SH issues, with the majority thinking of NSSA Act. The NSSA officer further indicated that whilst legislation to protect the safety and health of workers was available, the problem was that the workers were not aware of their legal rights and thus continues to work in non-conductive workplaces. Despite the fact that about 89% of workers had at least secondary education, the findings proved that sometimes education does not enlighten workers to understand and champion for their rights.

Familiarity with Channels to Follow when Addressing Safety and Health Issues

Results from the research revealed that most workers (74%) in all three companies were aware of the people they need to contact to express their concerns on SH issues. Company B which is government owned had the highest number of workers (44%) who were not clear of procedures followed in reporting and addressing safety and health issues. This shows that the government as the custodian of all laws in the country was not setting exemplary standards in fighting against occupational accidents in companies under their jurisdiction. Company C did not have a SHE department which was at variance with modern practices in industry (Table 4). This was mainly related to its small size whereby SHE issues were covered by the human resources department in order to minimize operational costs.

Table 4 Employees' responses on channels followed when reporting occupational incidences

<i>Company</i>	<i>Responsible department</i>		
	<i>Safety, Health and Environment (%)</i>	<i>Human resources (%)</i>	<i>Not aware (%)</i>
A	69	22	9
B	39	17	44
C	0	65	35

Around, 54% of workers in Company C were not comfortable with their employer being the handler of SH issues as they always felt threatened, hence poor reporting of occurring occupational incidences. According to the SHE manager in company A, whilst all SH issues were handled by their department, workers reported first to their immediate supervisors and or SHE representatives who were found in each department and shift. However, all workers from the three companies did not know that accidents at workplace can be reported to NSSA; hence they unknowingly give their employers the leverage to abuse the law in their favour especially where penalties were supposed to be applied.

Challenges Undermining Employees' Knowledge of Safety and Health Legislation and its Application

A myriad of challenges were identified by most respondents ranging from lack of management commitment, obsolete equipment and fear of victimization among employees. Management's failure to prioritize safety and health issues was identified as the major stumbling block to achievement of safe working conditions and awareness of SH legislation. Workers felt that management put more emphasis on meeting production targets than on their health and safety. Therefore, little time and resources were committed to training of workers on SH issues. Lack of management commitment was also confirmed by key informants.

Workers also indicated that they had no power to object to work in unsafe environments in fear of victimization by top management or lose their jobs in a country where unemployment rate was over 70%. As a result, workers would continue to work in unsafe environments against their legislative rights. Some equipment was reported to be obsolete and some did not have easily understood safety instructions hence putting lives of workers at risk. Key informants further revealed that no meaningful budgets were put in place for safety and health programs thus inhibiting their capacity to implement safety and health programs.

From the NSSA official's perspective, the major challenge in the awareness and implementation of safety and health legislation among workers was that they provide awareness and training service upon request at a cost due to their limited fiscal space. Moreover, the awareness and training programs offered by NSSA were not mandatory which made their implementation optional and less effective. Due to lack of coercion in implementation of SH programs particularly on awareness of legislation and financial challenges in organizations, companies become reluctant and did not prioritise safety programs; hence exposing workers to unsafe conditions. NSSA official further indicated that only a third of the companies in the food manufacturing industry had adopted training programs for their employees on safety and health. Company A and B were among the organizations in the food industry which had adopted training programs as per NSSA records. However, there is very little evidence to suggest that such training was being conducted as exhibited by few employees who were aware of existing SH legislation, especially in company B.

The NSSA official further hinted that the manipulative behaviour of some employers made them prefer keeping their employees in the dark about their rights. This was attributed to their fear of demands from the workers for such things as protective clothing and employees' objection to working under unsafe conditions which had potential of reducing productivity. Furthermore, it was observed by NSSA that even where some workers know SH law and object to work in unsafe conditions, companies quickly silence them by bribing or giving them incentives. This concurs with responses of workers who revealed that in the event of an accident they were given money to silence them or were given medical treatment without the knowledge of NSSA as required by NSSA Act. In some cases workers complained that they were merely given leave days so that they could recover whilst away from their workplaces. All these tactics were employed by employers to protect the image of their organizations and avoid backlash from law enforcement agencies.

The other challenge was presented by pieces of legislation like Factories and Works Act. It was noted that most interaction was between the inspector and the employer, as prescribed by the Act. When inspectors go for inspections, they reported and discussed their findings with the employer and they did not consult workers who in this case were involved in daily operations. Therefore the inspectors had no opportunity to understand the views of workers. Workers also indicated that most inspectors were corrupt as they received bribes from owners or management of firms resulting in their failure to report truthfully. This made employees think that the existing pieces of legislation were toothless and of no use since they rarely saw tangible benefits coming on their way.

Conclusion

The level of SH legislation awareness among workers was poor as the majority of them did not know whether SH laws exist. Even the workers who showed some knowledge did not indicate all the pieces of legislation that touches on SH issues and their rational. Lack of awareness of SH legislation among workers was worrisome considering that most workers were not sure about the safety of their work environment. Inadequate knowledge on SH laws made workers fail to clearly outline their perceptions on the existing laws which means their implementation leaning on workers was likely to have limited success. Lack of management commitment on safety and health issues as well as poor inspections riddled with corruption by the regulatory authority undermined workers' knowledge on SH issues. Surprisingly, almost all workers were clear about the channels followed when reporting safety and health issues in their organizations. This somehow implies that companies were protective of their images and did not impart workers with knowledge of SH laws in fear of incurring financial losses due to litigation in the event that they violate some provisions of the law. If safety is to be enhanced in the food industry in Zimbabwe, there must be a collaborative drive to educate workers about SH legislation and its implementation.

Recommendations

- Workers' unions must embrace SH legislation awareness strategies as a key objective of their mandate so as to enhance workers' knowledge of safety and health at workplace.
- Employees must abandon their '*I don't care attitude*' when it comes to SH laws as this was detrimental to their safety and health.
- Awareness campaigns among workers must be increased by responsible authorities instead of waiting for invitations from the employers.
- SH legislation must make employees' education on SH issues by organizations mandatory.
- The frequency of monitoring adherence to SH laws by companies must be increased by regulatory authorities.
- Regulatory authorities must make their findings on SH issues available to employees so as to enhance their confidence to report unsafe conditions in their institution.
- Establishment of SHE departments must be mandatory in all companies.
- SH legislation must be harmonised for them to be easily comprehended by workers.

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