SAFETY AND HEALTH MANAGEMENT PRACTICES IN SMES IN HARARE – ZIMBABWE

Denver Mapetere

Faculty of Commerce, Centre for Entrepreneurship, Midlands State Univeisty, Zimbabwe mapetered@staff.msu.ac.zw

Shingirai Sikomwe

Faculty of Commerce, Centre for Entrepreneurship, Midlands State University, Zimbabwe

Abstract

The aim of the study is to carry out an evaluation of the SHE practices being used by SMEs in Zimbabwe. Given the number of SMEs and the number of workplace related matters reported in the 2012 national survey, there is a clear need for a study to understand how SMEs are managing workplace safety and health matters. The study used a guantitative approach for data collection and analysis. A total of 48 SME owner/managers participated in the study. The results show that the majority of SMEs have not adopted or implemented safety and health promoting practices. Empirical findings from the study have shown that SMEs do not invest in safety and health promotion regardless of the nature of work, workforce size and prevalence of safety and health problems in their organisations. The study recommends that SMEs need to recognise the importance of an environment that promotes safety and health of their employees and to make considerable investments towards creating such an environment.

Keywords: Safety, workplace health, SME, health promotion, safety and health policy



© Mapetere & Sikomwe

INTRODUCTION

A safe and healthy workplace is a key factor in improving the productivity of any employee, furthermore, investment in safety and health can improve an organisation's market share as consumers are keen to transact in a conducive operating environment. It is estimated that SMEs in Zimbabwe employ an average of 5,7 million people and are contributing close to 70% of the gross domestic product. However, for these institutions to continue making valuable contribution to economic and social development of the country they have to invest resources towards safety and health management in the workplace.

Consequently the subject of occupational safety and health is increasingly gaining the interest of policy makers and researchers given that the economic and social losses from workrelated injuries and diseases are guite substantial (Drakoppulos, Economou and Grimani 2012). In Zimbabwe workplace safety and health is influenced through various Acts enshrined in National Social Security Authority Act, [Chapter 17:04], that guide the administration of Safety and Health at work. The Factories and Works Act, [Chapter 14:08] Revised Edition, 1996, provides for the registration and control of factories, regulation of conditions of work in factories, supervision of the use of machinery and prevention of accidents, among other issues (Zimstat 2014).

According to Zimstat (2014) a total of 425 545 work related injuries and diseases were recorded in the year 2014 alone. The actual safety and health figures might actually be higher than the ones provided for by various national agencies because not all occupational injuries and diseases are reported for compansation purposes and also because the majority of small businesses are operating either informally or illegally. UNISON (2013) also reported that the 2008/09 Labour Force Survey estimated that 17,000 people in the UK suffer deafness, ringing in the ears or other ear conditions caused by excessive noise at work. These statistics makes the study of safety and health in SMEs more imperative given that they are the largest employer in Zimbabwe.

The following were noted by Zimstat (2014) to be the major work related injuries and diseases in Zimbabwean organisations; mechanical and physical factors caused 45 percent of injuries/illness at work while the lack of protective clothing and equipment accounted for 36 percent. In addition Zimstat (2014) in a workplace survey noted the following nature of injury/illness and their frequency as shown in Table 1.



Nature and number of										Total
injuries	æ tre,	0	turing	y, gas supply	tion	le & int &		ğ		
	Agriculture, Hunting, Forestry & Fishing	Mining & Quarrying	Manufacturing	Electricity, gas & water supply	Construction	Wholesale & retail Restaurant & hotel	Other	Not stated	% Numbe	Number
Wounds, fractures,	67.4	4.4	4.3	0.9	5.6	2.5	14.9	0.0	100	232 081
dislocations										
Internal injuries	74.5	3.6	4.1	0.5	5.4	1.4	10.4	0.0	100	61 713
Dermatitis & other skin	65.4	0.0	0.0	0.0	13.2	13.0	8.5	0.0	100	2 763
diseases										
Effects of radiation (welders	20.1	0.0	20.5	0.0	0.0	0.0	59.5	0.0	100	1 547
flash, ionising radiation etc)										
Repetitive strain injuries or	70.3	7.3	1.9	0.0	2.9	4.9	12.6	0.0	100	35 791
overuse										
Physical stress factors eg.	36.0	0.0	0.0	0.0	0.0	46.6	17.4	0.0	100	2 845
Noise induced vibrations										
Lung and respiratory tract	64.4	6.1	2.4	0.2	1.3	5.0	20.1	0.0	100	54 270
diseases										
Foreign bodies eg. in the	66.9	6.0	6.4	0.0	0.0	0.0	20.7	0.0	100	8 767
eye/ear										
Chemical poisoning	95.9	4.1	0.0	0.0	0.0	0.0	0.0	0.0	100	5 836
Multiple injuries	0.0	0.0	28.4	0.0	0.0	0.0	71.6	0.0	100	1 418
Mental illness	0.0	0.0	0.0	0.0	100	0.0	0.0	0.0	100	267
Other	65.6	0.0	1.7	0.0	1.5	14.2	17.0	0.0	100	18 247
Total	67.9	4.5	3.8	0.6	4.4	3.6	15.0	0.0	100	425 545

Table 1 Safety and Health Record in Zimbabwe

Source: ZIMSTAT 2014 labour Force Survey

Safety and health in any institution is influenced by a number of factors, such as gender, size of the business and level of income, managerial and employee attitudes, type and nature of work activities, workstation design are some of the other leading causes of safety and health problems in the workplace.

Gender

According to European Agency for Safety and Health at Work, (2003) there is evidence that taking a gender-neutral approach to occupational safety and health is contributing to the



© Mapetere & Sikomwe

maintenance of gaps in knowledge and to less effective prevention. Gender plays a key role in causing safety and health related issues and women have twice the rate of injury than men. Gender differences in social conditions and employment conditions have an impact on occupational safety and health and cannot be ignored (European Agency for Safety and Health at Work, 2003). For instance, workplace safety and health statistics reported in most organisations do not look at women specific issues such as mensural related problems mostly due to the point that both men and women are not comfortable debating such gender specific matters. Moreover, statistics provided by organisations are not segregated to represent gender differences irregardless of size of organisation. UNISON gender, safety and health guide (2013) argues that because of strong occupational segregation in the labour market, women and men may be exposed to different workplace environments and hazards and experience different demands, even in the same sector or when carrying out the same roles or tasks.

Size of the business and level of income

Small firms are more vulnerable in relation to health and safety management in the workplace predominantly due to lack of sufficient staff, and the costs involved in managing an efficient workplace health management system.

Bradshaw et al (2001) noted that very few SMEs carried out some form of preemployment screening, some form of health promotion, collected health related absence data or organised some form of health promotion. During periods of economic recession many businesses either large or small face financial viability challenges that leads to cost restucturing and in most cases safety and health management receives less financial support. SMEs by their nature are characterised by low levels of income which then affects their ability to develop formal safety and health management system. WHO (2014) compled all institutions to promote and create an enabling environment for healthy working environments through occupational safety and health measures, including, where appropriate, through good corporate practices, workplace wellness programmes and health insurance plans.

CBI and AXA (2007) indicated that although absence figures are low in smaller organisations the effect of absent staff for these firms is likely to have a greater impact on productivity and service levels.

Type and nature of work activities

The working environment in which SMEs operate is prone to safety and health problems. Most SMEs in developing countries due to the informality of their operations are located in areas that are not regulated by local authorities, or utility providers therefore are mostl likely to cause



safety and health problems. Thus for any organisation to provide a safe environment for its employees and customers it has to operate in areas whose environment has been properly designed to promote safety and health. The work environment including mostly the equipment that is being used in the raw material conversion process or service delivery has to be designed in a way that does not harm or expose the user to any safety and health problems. Galveza, Marsota, Martinb, Siadatb, Etienneb (2016) denotes that: "It is important to underline that in France, production equipment is mostly designed and manufactured by small and medium enterprises (according to the 2014 data of French Chambers of Commerce and Industry). Therefore, since designers belonging to these SMEs are not specialized in prevention and have no formal resources or tools adapted to perform a priori risk assessments, they are limited on the one hand to the risk families closest to their field of experience (e.g., mechanical) and, on the other hand, to carrying out this assessment at the end of the project, once all the technical solutions have been selected."

UNISON (2013) sets that men are more likely than women to experience fatal or nonfatal injuries at work as more men than women work in jobs that expose them to a higher risk of "accidents". Safety and health problems due to the type and nature of work, include manual handling injuries, psychological problem, occupational cancer and hazardous substance related injuries.

According to Ahola and Mugge (2016) one way to influence safety and health is through organisational design. Small to medium scale enterprises are characterised by long working hours, where in most cases employees work for an average of 10 hrs and 7 days a week. Thus it has been observed that SME employees spend an average of 41.67% of their time in their workplace and mostly doing manual work due to the lower levels of automation. Such working conditions become a huge contributor to workplace safety and health problems. Amponsah-Tawaih and Adu (2016) corrobates this by concluding that work pressure negatively co-related with safety behaviour at the workplace.

According to UNISON (2013) manual handling causes over a third of all workplace injuries, including work-related musculoskeletal disorders (MSDs) such as upper and lower limb pain or disorders, and joint and repetitive strain injuries. In 2014, out of the 621 111 work accidents declared in France, about 8% were associated with machines, and thus partially with production equipment, according to French statistics on professional accidents (Galveza, Marsota, Martinb, Siadatb, Etienneb 2016). This is supported by the Zimstats (2014) reports where an average of 232 081 wounds, fracture, dislocations and 61 713 internal injuries were recorded. Due to the low levels of automation most of these injuries can be attributed to manual handling especially in SMEs. The general decline in the Zimbabwean economy created a



© Mapetere & Sikomwe

platform for the widespread growth of SMEs whose owners and managers can not practice proper ergonomics. SMEs by they are nature generate low revenues that hinders them from adopting modern way of operation, or to hire ergonomics consultants who would profer advice on how best to design the work in order to avoid work related injuries.

A number of SMEs operate in poorly equipped workplaces marred by a general lack of protective equipment such as helmets, inhalation masks, and skin protective clothing. The lack of such protective equipment has lead to the exposure of employees to dangerous chemical, gases, radiation and many other injury or disease causing metals and substances. Effects of radiation caused by welders flash, and ionising radiation amongst many other factors accounted for 1547 reported cases in Zimbabwe. Exposure to workplace radiation effects has been one of the named causes of work place related cancer cases. According to UNISON (2013) about 8,000 cancer deaths per year in Great Britain could be attributed to past occupational exposure to known carcinogens and estimates that the true level is likely to be well over 20,000 cases a year with 15,000-18,000 deaths.

Managerial and employee attitudes

Studies in workplace safety have suggested that management involvement is important for the safey work within companies. Furthermore, the success of safety management systems is often said to be dependent on the commitment of all staff and all members must be aware of their responsibility for safety. Safety participation has been found to be positively affected by various organizational, leadership and individual factors, such as safety climate (Wei, Guoa, Yea, Liaoa, Yang 2016)

Positive managerial attitudes that value the importance and costs of safety will lead to the development of proper institutional administration structures that places safety and health matters as an integral part of day to day operations in order to improve production and reduce employee compensation costs. Safety and health levels of organisation are therefore influenced by managers attitudes towards safety and the perceived priority given to safety training in an orgaisation (Antonsen 2009). The World Health Organisation (2010) stated that "a healthy workplace is a place where everyone works together to achieve an agreed vision for the health and wellbeing of workers and the surrounding community. It provides all members of the workforce with physical, psychological, social and organisational conditions that protect and promote health and safety. It enables managers and workers to increase control over their own health and to improve it and to become more energetic, positive and contented". In essence it becomes the key responsibility of every individual within the organisation to maintain a safer workplace. However, management has to take a proactive role that would also help promote a



positive attitude amongst their employees. Diugwu (2011) raises that a good occupational safety management culture improves reputation, lowers costs, and sustains the competitiveness of SMEs. Employee adherence or awareness of safety and health matters in their organisations may also be viewed as a function of how much they understand the importance of maintaining an accident free working environment, hence it becomes imperative that management develop frameworks that help these employees value safety and health. Research indicates that employee's lack of knowledge on the number of accidents, severity and costs caused by workplace accidents may not be keen on understanding safety and health issues unless they have or are being personally affected by workplace injuries. The World Health Organisation (2010) denotes that creating a healthy workplace that does no harm to the mental or physical health, safety or well being of workers is a moral imperative and employers are recognising the competitive advantage that a healthy workplace can provide to them. Hence forth, to gain a competitive advantage stemming from workplace safety and health excellence Hagan (2009) cited by Taufek, Zulkifle and Kadir (2016) concludes that management should craft and put in place technical administrative measures and documented systems such as health and safety policies, instructions, training and guidelines as well as proper reporting and enforcement systems. WHO (2010) denotes that The American National Institute for Occupational Safety and Health (NOISH) in trying to foster workplace safety and health had adopted a worklife initiative that "envisions workplaces that are free of recognized hazards, with health-promoting and sustaining policies, programmes and practices and employees with ready access to effective programmes and services that protect their health, safety and well being. Fernandez-Muniz et al (2009) corroborates this by noting that the presence of a safety policy comprises commitment of organisation for continuous improvement and has a positive impact on the productivity of the organisation. Amponsah-Tawaih and Adu (2016) posits that when employees perceive that safety and health training and safety systems to be positive, they are more likely to comply with safety and health procedures.

METHODOLOGY

The study adopted a random sampling approach where 50 manufacturing SMEs were randomly selected in Harare. A YES/NO scaled questionnaire designed by the researchers was administered to the sample and only 48 SMEs responded to give a 96% response rate. Survey data from both primary and secondary sources was collected and coded before it was analysed. Descriptive statistics were adopted for the purposes of presenting research results as percentage frequencies during data analysis. Stata statistical package was used to analyse data



and test hypothesis sets where t-stat and p-values were employed to accept or reject hypothesis.

ANALYSIS AND FINDINGS

Availability of a SHE policy

Results from the study indicates that only 20.83% of the respondents had a safety and health policy at their workplace where as 79.17% had no safety and health policy. The study also sought to establish whether the number of employees in a small to medium scale enterprise would influence the availability of a safety and health policy. Research results indicated that only 10 SMEs with a staff complement ranging between 1-20 had a safety and health policy whilst, 38 SMEs with employees ranging between 1-15. To test the hypothesis that number of employees in SMEs has influence on the availability of a SHE policy a T test and p value statistics were computed.

Table 2 Relationship between number of employees and adoption of SHE policy

Number of employees	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
Safety and health policy	8947368	.3976324	-2.25	0.029	-1.695129	0943443
_cons	4.394737	.7304974	6.02	0.000	2.924322	5.865152

A t test of 6.02 indicated that there was no relationship between number of employees and availability of a SHE policy, further the p value statistics was used to confirm the results by indicating a p value statistic of 0.000 which was indicative that number of employees does not influence the availability of a SHE policy in Zimbabwe SME.

Prevalence of injury induced accidents and availability of Safety and Health policy

The study premised that the prevalence of injury induced accidents has implications on the willingness of SME owner/managers in the manufacturing sector to ensuring an injury free environment by developing a safety and health policy.

Table 3 Relationship between Shift absence due to accident and adoption of SHE policy

Shift absence due to accident	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
Safety and health policy	1	.0497131	-2.01	0.050	2000674	.0000674
_cons	1.2	.0913289	13.14	0.000	1.016165	1.383835



A t test stat of 13.14 and a p value of 0.000 which is greater than 2 and lower than 0.05 respectively showed that SMEs do not craft SHE Policies regardless of of the number of injury caused absenteeism at their workplace. From the primary data collected 100% of the study participants (owner/managers) indicated that they had experienced accident induced absenteeism where the injured employees did not report for work in more than 2 months.

Safety and health systems in SMEs

The study also sort to establish the commitment of SMEs owners and managers to creating a safety and health promoting environment in their workplace. For the purpose of this study a safety and health promoting environment was defined by the following variables: availability of an accident reporting system, availability of first aid facilities, site clinic facilities, ambulance services, site safety meetings, safety and health induction for new employees, provision of protective clothing to their employees.

	YES	NO
Our organisation has a clear accident reporting system	25%	75%
Our organisation has a vehicle that can be used as a workplace ambulance in the event of a serious accident	25%	75%
Our organisation as first aid tool kit that can be easily accessed by employees	60%	40%
Our organisation has an onsite room/facilities where injured employees take a bed rest	6%	94%
Our organisation holds on site Health and safety meeting to promote an accident free work environment	17%	83%
Our organisation carries out safety and health induction for all new employees	27%	73%
Our organisation provides adequate protective clothing to its employees	25%	75%

The study envisaged that some SMEs did not have higher levels of commitment to creating a safety and health promoting workplace. For instance only 25% of the owner/managers indicated that they has instituted a clear accident reporting system in their organisations. With regards to availability of onsite medical facilities 60% of respondents indicated that they had first aid facilities, 25% noted that they had a vehicle that could be used as an ambulance in the event that serious safety and health problems arise whereas a meager 6% indicated that they had a room on site that is used as a clinic in cases of emergency. A safety and health conducive environment is one where there are frequently held safety and health meetings. However, the



research obtained that most SMEs do not frequently hold safety and health meetings as indicated by 83% of the respondents. 27% of the respondents also indicated that they held safety and health induction for all new employees, whereas 25% provided protective clothing for their employees.

CONCLUSIONS

Findings from empirical research pointed out that the majority of SMEs have not adopted or implemented safety and health promoting practices as signified by the absence of formal safety and health policies. This maybe an indication of the under-recognition of the role that safety and health plays in the workplace although for some who do recognise it are mostly affected by the accompanying economic costs. Empirical findings have shown that generally SMEs do not invest in safety and health promotion regardless of their workforce size, type of operation, number of or prevalence of workplace safety and health problems. Thus if the number of workplace safety and health related disruptions to SME productivity have to be eliminated there have to be a considerable investment towards promoting a safe and healthy workplace ecosystem in SMEs.

RECOMMENDATIONS

First and foremost the study recommends that SMEs owner/managers have to undergo Safety and health training in order for them to gain insights on how best they can maintain an accident free workplace. Training of owner/managers of SMEs will help bridge the safety and health knowledge gap that exist in SMEs by equipping them with knowledge on the economic costs of work place accidents and new strategies that can be adopted by smaller firms without increasing operational costs.

The study further recommends that SMEs should include safety and health meetings in their organisations in order to promote an accident free work environment. Such meetings should include unit reports on accidents and also serve as a strategy to inform their employees on the importance of practicing good safety and health practices.

In addition the study recommends that SMEs should provide protective clothing to all employees such as worksuits, safety shoes, dust masks, hand gloves and many other safety items depending on the nature of work being carried out by the employees.

In Zimbabwe the majority of SMEs operate in clusters and thus the study recommends that they come up with community medical facilities where their employees can get medical attention in the event of an accident. The setting up of community medical facilities equipped



with basic first aid tool kits can help SMEs in managing safety and health costs through resource pooling.

LIMITATIONS AND FURTHER RESEARCH

The study was limited to responses provided by manufacturing SME owner/managers operating in Harare and thus may fail to capture the views of all manufacturing SMEs in Zimbabwe. Also the study relied more on the respondents of owner/managers and did not solicit the view of employees.

The study recommends that a national survey onto the safety and health management practices adopted by SMEs be carried out in order to get a full understanding of the nature and extend of adoption of safety and health practices.

REFERENCES

Antonsen, S. (2009). Safety Culture Theory, Method and Improvement. Surrey: Ashgate Publishing Company.

Amponsah-Tawaih, Kwesi, and Michael Appiah Adu. "Work Pressure and Safety Behaviors among Health Workers in Ghana: The Moderating Role of Management Commitment to Safety." Safety and Health at Work 7.4 (2016): pp. 340-346.

Bradshaw, L. M., Curran, A. D., Eskin, F. and Fishwick, D. (2001) 'Provision and perception of occupational health in small and medium-sized enterprises in Sheffield', UK Occupational Medicine, 51(1): pp. 39-44.

CBIAXA (2007) Attending to Absence: CBI/AXA Absence and Labour Turnover Survey, http://www.orghealth.co.uk

European Agency for Safety and Health at Work (2003) Gender issues in safety and health at work. A review. Luxembourg: Office for Official Publications of the European Communities, (2003).

Fatini Hanim Binti Mohamed Taufek, Zulhafiza Binti Zulkifle, Siti Zubaidah Binti Abdul Kadir (2016): Safety And Health Practices And Injury Management In Manufacturing Industry. Procedia Economics and Finance 35 (2016) pp. 705 – 712

Fernández-Muñiz, B., Montes-Peón, J.M. & Vázquez-Ordás, C.J. (2009). Relation between occupational safety management and firm performance. Safety Science 47(7), pp. 980–991.

Ikechukwu A. Diugwu (2011). Re-Strategising for Effective Health and Safety Standards in Small and Medium-Sized Enterprises. Open Journal of Safety Science and Technology, 2011, 1, pp. 115-128.

Markus Ahola. Ruth Mugge Safety in passenger ships: The influence of environmental design characteristics on people's perception of safety. Applied Ergonomics Volume 59, Part A, (March 2017), pp. 143-152

Nicholas De Galvez, Jacques Marsot, Patrick Martin, Ali Siadat, Alain Etienne, et al.. Design for safety: proposition of a model to detect hazards through energy flows analysis. 48th CIRP Conference on MANUFACTURING SYSTEMS, Jun 2015, Ischia (Naples), Italy. Elsevier, Procedia CIRP (CMS 2015), 41, pp.1107-1112, 2016,

Stavros Drakopoulos, Athina Economou, Katerina Grimani, (2012) "A survey of safety and health at work in Greece", International Journal of Workplace Health Management, Vol. 5 Issue: 1, pp.56-70

UNISON 2013 Gender, safety and health; A guide for UNISON safety reps. https://www.unison.org.uk

Wei Wei, Ming Guoa, Long Yea, Ganli Liaoa, Zhehan Yang (2016) conflict and safety participation of high-speed railway drivers: Job satisfaction as a mediator.

WHO Healthy Workplace Framework and Model: Background and Supporting Literature and Practices. http://www.who.int

WHO (2014) POLICY BRIEF: PROMOTING AND CREATING AN ENABLING ENVIRONMENT FOR HEALTHY BEHAVIOURS AMONG WORKERS December 2014 http://www.who.int

Zimstat 2014 Labour Force Survey, www.zimstat.co.zw

