

## The contribution of health and safety practices on employee turnover in flower farms in north rift Kenya

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### Abstract

The protection of employees in their employment from risks resulting from factors adverse to health is a duty of every organization. Organisations should provide a safe working environment for its employees and to minimize the risk of accidents, diseases and injuries. Lack of health and safety facilities can lead to job stress and job dissatisfaction. Workers are at high risk due to lack of personal protective equipment and non-compliance of re-entry rules to greenhouses following spraying. Respiratory problem and gastro intestinal problems top the illness list of these workers. Lack of adherence to safety practices especially use of personal protective equipments is associated with presence of various health problems among the workers in floriculture. Frequent illness will prompt an employee to leave the organization. To realize good health organizations need to accelerate the prevention of chronic disease and improve safety measures in workplaces to reduce labour turnover.

**Keywords:** health and safety, employee turnover, practices, hazards, flower farms

### Introduction

A definition by ILO and the WHO states that health and safety is the promotion and maintenance of the highest degree of the physical, mental and social well-being of the workers in all occupations. The prevention among workers of departures from health caused their working conditions. Occupational safety and health (OSH) is generally defined as the science of the anticipation, recognition, evaluation and control of hazards arising in or from the workplace that could impair the health and well-being of workers (Alimario, A. 2011) <sup>[1]</sup>. Hattingh and Acutt (2009) <sup>[2]</sup>. Premier Occupational Healthcare (2010) <sup>[3]</sup> added that Occupational Health and Safety is the processes, or procedural strategies to protect and promote the health and safety of workers. This is to eliminate all factors, behaviours and conditions hazardous to human health and safety at work. Health and safety enhances the physical, mental and social well-being of workers, and supports the development and maintenance of employees working capacity.

According to Hughes, (2007) <sup>[4]</sup>, health is the protection of the body and mind of employees from illness resulting from work. He also defined safety as a protection of people from physical injury. With Hughes view health and safety is the welfare of people at work: the maintenance of facilities to maintain the health and well-being of individuals at the workplace. Safety hazards according to Cole (2002) <sup>[5]</sup> are those aspects of the work environment that have the potential of immediately causing violent harm to an employee whilst health hazards slowly and cumulatively lead to deterioration of employees' health.

### Materials and Methods

This study investigates the contribution of health and safety on employee turnover by means of a descriptive and analytical methodology. This is a quantitative study that has adopted a survey of 4922 employees. Structured questionnaire was utilized to obtain primary data from the respondents. The collected data is then analyzed using descriptive statistics and Pearson correlation analysis. The study was undertaken in flower farms in North Rift Region of Kenya.

### Conceptual Framework

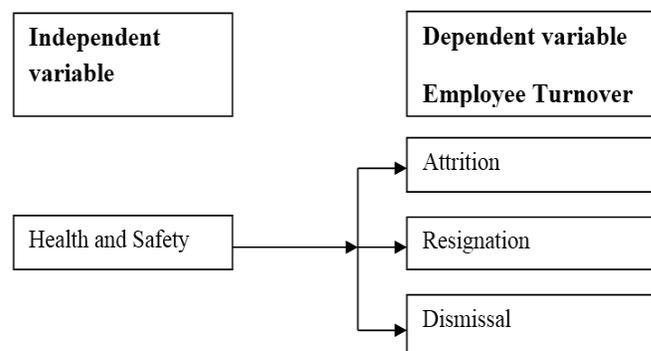


Fig 1

Above is a hypothesized model of the relationships between health and safety on employee turnover.

**Table 1:** Relationship between Health and Safety Practices and Employee Turnover in Flower Farms

Safety and Health Practices	Employee Turnover		
	Attrition	Resignation	Dismissal
Occupational safety and health issues	r = -.820** p = .000	r = -.185** p = .001	r = .023 p = .003
Accidents	r = -.895** p = .000	r = .239** p = .000	r = -.529** p = .000
Safety management systems	r = -.770** p = .000	r = -.406** p = .000	r = .128* p = .022

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Results above shows that safety and health practices had significant and negative correlation with all the indices of employee turnover (attrition, resignation and Dismissal). This implies that there was a statistically significant but negative relationship between safety and health practices and employee turnover in flower farms in North Rift region.

**Results and Discussions**

**Health and Safety Practices and Employee Turnover**

The employees were asked to rate their level of agreement in a five likert scale items in the questionnaire on the things that flower farm management usually does to improve on occupational health and safety at the farms.

**Responses on Managements’ Improvement of Occupational Health and Safety**

**Table 2**

Statement	SD		D		U		A		SA	
	F	%	F	%	F	%	F	%	F	%
Involvement of safety expert to prepare occupational health and safety guidelines	218	67.9	62	19.3	0	0.0	37	11.5	4	1.2
Continuous revision of health and safety practices	188	58.6	98	30.5	0	0.0	35	10.9	0	0.0
Improving on good housekeeping and sanitation	154	48.0	98	30.5	0	0.0	69	21.5	0	0.0
Create the environment for staff to freely report on health and safety issues	203	63.2	64	19.9	5	1.6	39	12.1	10	3.1
Supervision and safety management	138	43.0	118	36.8	2	.6	35	10.9	28	8.7
Hazard prevention and control	146	45.5	96	29.9	6	1.9	34	10.6	39	12.1
Work site analysis	121	37.7	102	31.8	0	0.0	65	20.2	33	10.3

Source: Field Data, 2015

The study sought to find out on the agreement of the employees on management improvement of occupational health and safety. The results presented on Table 4.26 shows that majority (218,67.9%) employees strongly disagreed that the organisation involves safety experts to prepare occupational health and safety guidelines for the flower farm, (62,19.3%) employees disagreed with the statement while (41,12.7%) employees were in agreement with the statement. The study findings showed that majority (67.9%) of the employees believe that their organisations do not involve safety experts in the preparation of health and safety guidelines for the flower farms. This implies that most flower farms do not adhere to the health and safety standards as required and therefore the health and safety needs of the employees are not well taken care of in the organizations. Lack of health and safety facilities can lead to job stress and job dissatisfaction. This concurred with research by Ayieko (2011) [6] which pointed out that flower farms have poor adherence to safety practices at work place. This could be attributed to the non-involvement of health and safety experts in designing the health and safety procedures for the organisations. Similarly, (188, 58.6%) employees strongly disagreed with the statement that there was continuous revision of health and safety practices by the flower farm management, 98(30.5%) employees disagreed with the statement while (35, 10.9%) employees were in agreement with the statement. The

responses showed that majority (89.1%) of the employees believed that their management does not do continuous revision of health and safety practices. This can have effect on employees’ health and safety and could result in emergency of diseases or injuries to workers which in turn affect their productivity leading to early retirement or dismissal. It is important to revise health and safety practices so as to reduce on the workers absenteeism from work place and injuries incurred which leads to employee turnover. This is consistent with the works of Dorman (2000) [7] who found a significant relationship between occupational health and safety and individual commitment to work. The study revealed that in terms of priority, environmental factors, such as supervision, working conditions, organizational policies and size, safety, health and relationship with the colleagues were most important. Further, (154, 48.0%) employees strongly disagreed with the statement that the management keep on improving housing and sanitation at work place, (98, 30.5%) employees disagreed with the statement while (69, 21.5%) employees were in agreement with the statement. This shows that majority (78.5%) of the employees in the flower farms believed that their management does not keep on improving housing and sanitation at the flower farms. This shows that there is poor adherence to occupational health and safety regulations in the flower farm industry. Marchington, & Wilkerson, (2000) [8] noted that adherence to health and

safety regulations enhances employee productivity and low turnover.

Moreso, (203,63.2%) employees strongly disagreed with the statement that the management had created a conducive environment for staff to freely report on health and safety issues, (64,19.9%) employees disagreed with the statement and (49,15.2%) employees were in agreement with the statement while (5,1.6%) employees were undecided on the statement. It emerged that majority (83.1%) of the employees believed that the management has not created a conducive environment for them to report health and safety issues. This implies that the health and safety issues of workers in the flower firms are not well catered for by the management and this could make them leave the organizations. Roelofsen (2002) [9] reported that improving working environment results in a reduction in a number of complaints and absenteeism and lower turnover. When reporting systems for health and safety needs are improved, there could be improved health and wellbeing of the employees resulting to job satisfaction and reduced employee turnover.

On the statement that the management has improved on the supervision and safety management, (138, 43.0%) employees strongly disagreed with the statement, (118, 36.8%) employees disagreed with the statement while (63, 19.6%) employees were in agreement with the statement. From the responses, it can be shown that majority (79.8%) of the employees at flower farms in North Rift Region believed that there was no improved supervision of safety management. This implies that the flower farms lack well trained occupational health and safety managers to oversee the health and safety programs within the farms. This has an effect on the safety of the employees and could result in high chances of injuries at work places and sickness related to the

occupations within the flower farms. This has an effect on employee’s decision productivity and decision to leave the organization. Mosadeghrad *et al.* (2008) [10] concluded that there was a negative relationship between occupational health and safety supervision and turnover. This implies that an improved supervision will lead to low employee turnover and vice versa and therefore flower farms need to improve on occupation health and safety supervision.

Similarly, (146, 45.5%) employees strongly disagreed with the statement that the management has improved on hazard prevention and control, (96, 29.6%) employees disagreed with the statement while (73, 22.7%) employees were in disagreement with the statement. From the study finding, it emerged that majority (75.4%) of the employees their management had not improved on hazard prevention and control. This implies that in flower farms there are a lot of cases of occurrence of various hazards which harm the employees reducing their ability and will to work in the organizations. This supports Massey *et al.* (2006) [11] who pointed out that business typically strive to become more productive and in doing so are driving their workers to work longer, harder and with higher utilization often in extremely hazardous conditions. This shows that flower farms have done little as far as occupational health and safety of the employees is concerned. For example, van der Aa *et al.* (2012) [12] found that higher perceived job quality reduced employee turnover in customer contact centres. Elsewhere, adverse conditions (harm, hazard, uncertainty, emotional distress, lack of promotion and discrimination) have been shown to have variable impacts on quitting.

Further the respondents were asked to rate their level of agreement on a five point likert scale items on the causes of accidents in their organizations.

**Responses on Causes of Accidents at Flower Farms**

**Table 3**

Statement	SD		D		U		A		SA	
	F	%	F	%	F	%	F	%	F	%
Lack of adequate training on health and safety for employees	64	19.9	6	1.9	28	8.7	87	27.1	136	42.4
Non provision of adequate protective clothing and equipment	35	10.9	29	9.0	0	0.0	93	29.0	164	51.1
Ignorance of health and safety rules and procedures	32	10.0	28	8.7	13	4.0	53	16.5	195	60.7
Slippery floors	31	9.7	50	15.6	15	4.7	59	18.4	166	51.7
Defective machines	35	10.9	41	12.8	4	1.2	54	16.8	187	58.3
Unsafe machines	31	9.7	37	11.5	10	3.1	63	19.6	180	56.1
Failure to use personal protective equipment	34	10.6	39	12.1	14	4.4	52	16.2	182	56.7
Exposure to poisonous chemicals	35	10.9	39	12.1	0	0.0	54	16.8	193	60.1

Source: Field Data, 2015

The results on employees’ causes of accidents at flower farms are presented on above table. It shows that majority (136,42.4%) employees strongly agreed with the statement that accidents occurred in their places of work due to lack of adequate training on health and safety for employees, (87,27.1%) employees agreed with the statement while (70,21.8%) employees were in disagreement with the statement. The study finding showed that a majority (69.5%) of the employees in flower farms in North rift region believed that most accidents in their place of work occurred due to lack of adequate training on health and safety of employees.

This was found to be consistent with the findings of Ayieko (2011) which showed that, workers in flower farms lack basic training on health and safety in what they do and have poor adherence to safety practices at work place. There is therefore need for employees training on occupational health and safety procedures so as to reduce on cases of work absenteeism and turnover.

Similarly, (164, 51.1%) employees strongly agreed with the statement that accidents are caused by Non provision of adequate protective clothing and equipment, (93, 29.0%) employees agreed with the statement while (64, 19.9%)

employees were in disagreement with the statement. From the responses, it can be shown that majority of the accidents in flower farms could be caused by the lack of adequate provision of personal protective equipments as shown by (80.1%) of the flower farm employees. This further supports the arguments of Ayieko (2011) [6] which indicated that flower farm workers were at high risk due to lack of personal protective equipment. The management of flower farms should therefore provide adequate personal protective equipments to employees to reduce on cases of occurrence of accidents at the farms.

Notwithstanding, (195, 60.7%) employees strongly agreed with the statement that Ignorance of health and safety rules and procedures causes accidents at the flower farms, (53, 16.5%) employees agreed with the statement while (60, 18.7%) employees were in disagreement with the statement. It emerged therefore that majority (77.2%) of the flower farm employees believed that most accidents occur as a result of ignorance of health and safety rules by the employees. This is attributed to weak health and safety standards supervision by the management. This implies that the management needs to be strict on the health and safety procedures of the organization.

Similarly, (187, 58.3%) employees strongly agreed with the statement that accidents in their place of work were caused by defective machines, (54, 16.8%) employees agreed with the statement while (76, 23.7%) employees were in disagreement with the statement. It can therefore be shown that accidents in flower farm industry in North rift region are mostly caused by defective machines as reported by (75.1%)

of the flower farm workers and therefore machines should be updated and well-maintained as supported by Abassi and Hollman, (2000) [13].

Further, (180, 56.1%) employees agreed with the statement that accidents in their place of work are caused by unsafe machines, (63, 19.6%) employees agreed with the statement while (68, 21.2%) employees were in disagreement with the statement. From the results, it can be argued that unsafe machines causes majority accidents in flower farms in North Rift as supported by (75.7%) of the employees. This means that training need to be undertaken to all workers in the farms on proper use of machines and incase of introduction of new machines users should be trained on how to properly use them.

On the statement that exposure to poisonous chemicals in flower farms causes accidents, (193, 60.1%) employees strongly agreed with the statement, 54(16.8%) employees agreed with the statement while (74, 23.0%) employees strongly disagreed with the statement. The study finding showed that majority (76.9%) of the employees believed that poisonous chemicals caused accidents in flower farms. Therefore employees should be encouraged to use personal protective equipments when using chemicals while in the farm for benefit of firm and employees.

In addition, the respondents were asked to rate their level of agreement on a five point likert scale items on the occupational health and management systems in their organizations. Their responses were scored and the results are presented in table below

**Responses on Occupational Health and Safety Management Systems in Flower Farms**

**Table 4**

Statement	SD		D		U		A		SA	
	F	%	F	%	F	%	F	%	F	%
Risk assessment measures	143	44.5	95	29.6	15	4.7	40	12.5	28	8.7
Monitoring of the working environment and its impact on the general environment	142	44.2	115	35.8	10	3.1	48	15.0	6	1.9
Regular medical check ups	4	1.2	35	10.9	9	2.8	90	28.0	183	57.0
Record-keeping and notification of injuries and diseases	172	53.6	96	29.9	10	3.1	37	11.5	6	1.9
Preventive and protective measures	148	46.1	119	37.1	12	3.7	38	11.8	4	1.2
Environmental protection measures	192	59.8	94	29.3			35	10.9		
Employers' and workers participation			35	10.9	29	9.0	99	30.8	158	49.2

Source: Field Data, 2015

The results on occupational health and safety management systems in flower farms are presented on Table above. It shows that majority (143, 44.5%) employees strongly disagreed with the statement that their organization had put in place risk assessment measures, (95, 29.6%) employees disagreed with the statement while (68, 21.2%) employees were in disagreement with the statement. The study finding showed that majority (80.0%) of the employees believed that their organization had not put in place risk assessment measures to reduce on the likely of hazards occurring in the farm. This implies that for improved safety of the employees, the flower farm management need to consider the use of risk assessment as an hazard control tool. According to Griffeth *et al.* (2000) [14] pay and pay-related variables have a modest effect on turnover. Their analysis

also included studies that examined the relationship between pay, a person's performance and turnover. They concluded that when high performers are insufficiently rewarded, they quit. If jobs provide adequate financial incentives the more likely employees remain with organisation and vice versa. There are also other factors which make employees to quit from organizations and these are poor hiring practices, managerial style, lack of recognition, lack of competitive compensation system in the organization and toxic workplace environment

Further, (142, 44.2%) employees strongly disagreed with the statement that there was monitoring of the working environment and its impact on the general environment, (115, 35.8%) employees disagreed with the statement while (54, 16.9%) employees were in agreement with the statement.

From the responses, it emerged that the flower farms were not doing environmental monitoring to understand the health and safety issues affecting both the environment and the employees. This implies that flower farms need to adhere to EMCA (1999) <sup>[15]</sup> regulations on environmental monitoring. However, (183, 57.0%) employees strongly agreed with the statement that there were regular medical checkups in the organization, (90, 28.0%) employees agreed with the statement while (39, 12.1%) employees were in disagreement with the statement. The study showed that regular medical checkups were conducted by the management of the flower farms and this assisted in understanding the health needs of the employees and preventing their exit from the organization.

Data analysis shows that (Natural Resource Institute, 2006) <sup>[16]</sup> study supports that approximately 96% of the workers reported that their employer provided medical care for them. However, only in about two thirds of the cases did this medical care include family members. Interestingly, some workers did not know whether medical care was extended to their families or not, because nobody had informed them about it. The type of care provided included out-patient (57%); in- and out-patient (15%); out-patient and first aid (14%); in-patient (9%); and a combination of in- and out-patient, plus first aid. Most of the outpatient treatment was received from the company facility. However, in some cases, the employers paid for medical services in public health facilities because the company did not have a health facility. A small number of workers reported that they received medical care from private or mission facilities.

Further (192, 59.8%) employees strongly disagreed with the statement that the organization had put in place environmental protection measures, (94, 29.3%) employees disagreed with the statement while (35, 10.9%) employees were in agreement with the statement. It seems therefore that majority (89.1%) employees believed that there were no environmental protection measures put in place by the management of flower farms in North Rift Region and this contravenes the EMCA Act (1999).

According to Muinde (2012) <sup>[17]</sup>, Health and safety practices include workplace health and safety, occupational health programs, health and safety training, health and safety management, and health and safety inspection. By implementing proper health and safety standard in the workplace improves the performance of the organization through employees by avoiding and reducing costs related disabilities, accidents, absenteeism and illness (Bratton & Gold, 2000) <sup>[18]</sup>. This result more employee retention. Similarly occupational health programs allows organizations to minimize the stress level of employees with higher productivity, less absence to work improve staff determination (Armstrong, 2006) <sup>[19]</sup> causing to reduce employee turnover.

Health and safety training among employees provided special courses to deal with the health and safety areas to be careful and have safety problems. This builds the confidence and commitment of the employee towards and organization (Armstrong, 2006) resulting further improvement in employee retention. Also safety and health management helps the organization to reduce costs, reduce risk in for employees at the workplace increasing their productivity because this practice motivates employees and keeps them in

good health (Health and Safety Executive, 1997) <sup>[20]</sup> thereby reducing employee turnover. Health and safety inspection prevents injury illness and property damage in the workplace and builds a positive health and safety culture, which enhances employee productivity, commitment and performance (Armstrong, 2010) <sup>[21]</sup> causing to reduce employee turnover.

### Conclusions

The study concluded that flower farms hardly adhere to the health and safety standards as required and therefore the health and safety needs of the employees are not well taken care. The flower farms lack health and safety facilities this lead to job stress and job dissatisfaction hence employee turnover. Most of the flower farms do not involve safety experts in the preparation of health and safety guidelines for the flower farms which are important to health and safety of the employees. The study findings will benefit flower farms management, employees and policy formulators in improving health and safety practises to reduce employee turnover.

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