

**ASSESSMENT OF WORKPLACE HIV PROGRAM AT THE  
RAIPLY FACTORY: ELDORET, KENYA**

**BY:**

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## DECLARATION

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## DEDICATION

To my loving daughter, Genyl Hirani, your sparkle has continued to give meaning to my life and your presence continues to inspire me to work harder and achieve more. To my late mother, Patricia Kioko, even though you were not able to see me realize my dream of graduating with a Master's degree, I know that you are proud of my accomplishment. May your soul rest in peace!

## ABSTRACT

**Background:** The HIV pandemic is having a negative impact on the workplace. In order to address HIV prevention and control among its employees, Raiply Factory in Eldoret instituted a workplace HIV program that has been developed and implemented at the Factory since 2007. Workplace programs refer to a range of company-based interventions including the institution of an HIV and AIDS policy, VCT, and provision of ART that are a response to the epidemic. The Raiply program has been providing different interventions at the workplace and therefore there was need for its assessment to ascertain if it was meeting the intended purpose.

**Objectives:** The overall study objective was to carry out an assessment of the Raiply workplace HIV program while the specific objectives were to: determine employee perceptions of the program; establish employees' utilization of services provided under the Raiply workplace HIV program; and identify its implementation challenges.

**Methods:** This was a descriptive cross-sectional study that entailed quantitative data collection and analysis. The study aimed to assess the Raiply workplace HIV program and was conducted in June and July 2017. Stratified sampling was used to select 333 study participants based on department/section and gender stratum. Using a structured questionnaire, data was collected on demographic and employment profile, employee perceptions towards the program, utilization of its services, and implementation challenges. All data analysis was done using SPSS V.17.

**Results:** The study found that employees' perception towards the workplace HIV program was positive as majority were able to seek (94.2%; n=302) and utilize (70.2%; n=231) the services and generally believed the workplace program had made a positive contribution. Majority (98.5%; n=320) of the respondents were aware of the workplace HIV program's existence at Raiply. Knowledge of HIV status was high at 96.7% (n=321) of respondents. Other findings included absence from work due to illness which was reported by a significant 81.5% (n=264) respondents, an indication that this posed a challenge to the Factory. This was despite the finding that 94.1% (n=304) of respondents perceived that this absenteeism had reduced since establishment of the workplace HIV program. The main implementation challenges cited were fear of one's status being known (73.3%, n=209) and lack of management support (39.3%, n=112).

**Conclusion:** The workplace HIV program had led to high level of awareness and utilization of HIV services. Employee absence episodes emerged as a major issue due to the high number of episodes reported at the Factory and this requires specific interventions to address the problem. The findings of this study can help workplace organizations that have initiated workplace HIV programs carry out assessments of their programs to determine if they are meeting the intended purpose.

**Recommendation:** The Raiply Management should continue supporting the workplace HIV program and sustain the high levels of awareness and service utilization. There is need to monitor the trends in absenteeism in order to institute mitigation measures. Future research can target more organizations with workplace HIV programs in order to show benefits better and give more definitive results from the employees' perspective.

## TABLE OF CONTENTS

|   |      |
|---|------|
| DECLARATION .....   | ii   |
| DEDICATION .....  | iii  |
| ABSTRACT.....   | iv   |
| TABLE OF CONTENTS .....   | v    |
| LIST OF FIGURES .....   | viii |
| LIST OF TABLES .....  | ix   |
| LIST OF ACRONYMS AND ABBREVIATIONS .....                        | x    |
| ACKNOWLEDGEMENT .....   | xi   |
| CHAPTER ONE: .....  | 1    |
| INTRODUCTION .....  | 1    |
| 1.0 Introduction.....   | 1    |
| 1.1 Background .....  | 1    |
| 1.2 The Raiply Workplace HIV Program .....                      | 4    |
| 1.2.1 Raiply Factory.....                                       | 6    |
| 1.2.2 AMPATH Program.....                                       | 8    |
| 1.3 Problem Statement .....                                     | 9    |
| 1.4 Justification of the Study .....                            | 10   |
| 1.5 Research Questions .....                                    | 11   |
| 1.6 Objectives.....   | 11   |
| 1.6.1 General Objective .....                                   | 11   |
| 1.6.2 Specific Objectives .....                                 | 12   |
| 1.7 Limitations of the Study.....                               | 12   |
| 1.8 Conceptual Framework .....                                  | 12   |
| 1.9 Operational Definition of Terms.....                        | 14   |
| CHAPTER TWO .....   | 17   |
| LITERATURE REVIEW .....   | 17   |
| 2.0 Introduction.....   | 17   |
| 2.1 Employee Perceptions regarding Workplace HIV Programs ..... | 20   |
| 2.2 Utilization of Workplace HIV Program Services .....         | 23   |
| 2.3 Workplace HIV Program Implementation Challenges .....       | 28   |

|   |    |
|---|----|
| CHAPTER THREE:  | 31 |
| RESEARCH METHODOLOGY  | 31 |
| 3.0 Introduction  | 31 |
| 3.1 Study Setting   | 31 |
| 3.2 Study Design  | 31 |
| 3.3 Study Population  | 32 |
| 3.4 Sample Size Calculation                                     | 32 |
| 3.5 Sampling Method   | 33 |
| 3.6 Eligibility Criteria  | 34 |
| 3.7 Measurement of Variables                                    | 34 |
| 3.8 Data Collection Instruments and Procedures                  | 37 |
| 3.9 Validity and Reliability of Research Instruments            | 38 |
| 3.9.1 Validity  | 38 |
| 3.9.2 Reliability   | 39 |
| 3.10 Data Management and Statistical Analysis                   | 39 |
| 3.11 Ethical Considerations                                     | 40 |
| CHAPTER FOUR:   | 41 |
| RESULTS   | 41 |
| 4.0 Introduction  | 41 |
| 4.1 Demographic Profile   | 41 |
| 4.2 Employee Perceptions regarding the Workplace HIV Program    | 43 |
| 4.3 Utilization of the Raiply Workplace HIV Program Services    | 46 |
| 4.4 Challenges in implementing the Raiply Workplace HIV Program | 51 |
| CHAPTER FIVE:   | 53 |
| DISCUSSION  | 53 |
| 5.0 Introduction  | 53 |
| 5.1 Demographic and Employment Profile                          | 53 |
| 5.2 Employee Perceptions of the Workplace HIV program           | 54 |
| 5.3 Utilization of the Raiply Workplace HIV Program Services    | 55 |
| 5.4 Challenges in Implementing the Raiply Workplace HIV Program | 58 |
| CHAPTER SIX:  | 60 |
| CONCLUSION AND RECOMMENDATIONS                                  | 60 |
| 6.1 Conclusion  | 60 |

|  |    |
|--|----|
| 6.2 Recommendations .....  | 61 |
| 6.3 Implications for Further Research.....   | 61 |
| REFERENCES .....   | 63 |
| APPENDICES .....   | 66 |
| Appendix I: Consent Form.....  | 66 |
| Appendix II: Questionnaire for Raiply Employees .....                                      | 67 |
| Appendix III: Site Location Map of Raiply Factory (Kenya) Limited in Eldoret<br>Town ..... | 72 |
| Appendix IV: Approval Letter to Conduct Study .....  | 73 |
| Appendix V: Introduction Letter from Moi University .....                                  | 74 |
| Appendix VI: Introduction Letter from Raiply .....   | 75 |

**LIST OF FIGURES**

|   |    |
|---|----|
| Figure 1: Conceptual Framework for the Assessment of Workplace HIV Program ...            | 13 |
| Figure 2: Where Respondents were tested for HIV .....                                     | 46 |
| Figure 3: Other Chronic Conditions reported by Respondents .....                          | 48 |
| Figure 4: Illness that led to Absence from Work by Respondents .....                      | 48 |
| Figure 5: Number of Days Reported Absent from Work due to Illness by<br>Respondents ..... | 50 |
| Figure 6: Respondents' Means of paying for Medical Expenses .....                         | 50 |
| Figure 7: Challenges in implementing the Workplace Program.....                           | 51 |



**LIST OF TABLES**

|   |    |
|---|----|
| Table 1: Sampling Plan for Raiply Factory Employees.....                          | 34 |
| Table 2: Demographic data for the respondent .....                                | 42 |
| Table 3: employment characteristics of the respondents .....                      | 43 |
| Table 4: Employee Perceptions regarding the workplace HIV Program.....            | 45 |
| Table 5: Profile of Respondents reporting HIV Positive Status .....               | 47 |
| Table 6: Relationship between having other Chronic Condition and Absenteeism .... | 49 |

**LIST OF ACRONYMS AND ABBREVIATIONS**

|                  |  |
|------------------|--|
| <b>AIDS</b>      | Acquired Immune Deficiency Syndrome                |
| <b>AMPATH</b>    | Academic Model Providing Access to Healthcare      |
| <b>ART</b>       | Antiretroviral therapy                             |
| <b>CCC</b>       | Comprehensive Care Centre                          |
| <b>CD4</b>       | Cluster of differentiation 4                       |
| <b>HIV</b>       | Human Immunodeficiency Virus                       |
| <b>HR</b>        | Human Resource                                     |
| <b>IQR</b>       | Interquartile range                                |
| <b>IREC</b>      | Institutional Research and Ethics Committee        |
| <b>MPH</b>       | Master of Public Health                            |
| <b>MTRH</b>      | Moi Teaching and Referral Hospital                 |
| <b>NGO</b>       | Non-Governmental Organization                      |
| <b>PGH</b>       | Post Graduate Public Health                        |
| <b>PLHIV</b>     | People living with HIV                             |
| <b>SD</b>        | Standard Deviation                                 |
| <b>SPH</b>       | School of Public Health                            |
| <b>SPSS V.17</b> | Statistical Package for Social Sciences version 17 |
| <b>UNAIDS</b>    | Joint United Nations Program on HIV and AIDS       |
| <b>VCT</b>       | Voluntary Counselling and Testing                  |

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## **CHAPTER ONE:**

### **INTRODUCTION**

#### **1.0 Introduction**

This chapter introduces the study by providing the context of the research problem on a global, regional and country scale. The chapter outlines the background of the study, problem statement, justification, research questions and objectives, limitation of the study, the conceptual framework and the operational definition of terms.

#### **1.1 Background**

The number of people living with human immunodeficiency virus (HIV) worldwide has continued to grow, reaching an estimated 35 million by the end of 2012 (UNAIDS, 2013), of which 70% are in Sub-Saharan Africa. In Kenya, HIV and acquired immune deficiency syndrome (AIDS) have profoundly disrupted the economic and social bases of families. It mainly affects people in their prime years of life, the hardest hit being those in the productive ages of between 15 and 49 years. Stigma and discrimination related to HIV and AIDS lead to frequent violations of fundamental rights at the workplace (Kenya Ministry of Public Service, Youth and Gender Affairs, 2017).

In 2015, the National HIV prevalence among people aged 15 to 49 years in Kenya was estimated to be 5.9% corresponding to approximately 1.5 million People Living with HIV (PLHIV) in the country. Although the spectrum results show a continued decline in HIV prevalence among adult population aged 16+ years over a period of time, the decline has almost stabilized since 2008. This notwithstanding, the HIV epidemic in Kenya is geographically diverse across counties and in Uasin Gishu County, the location for the current study, the HIV prevalence is lower than the national prevalence at 4.7%. Kenya has also seen a sharp decline in HIV incidence among adults aged 15-

49 years from 0.41% in 2010 to 0.27 in 2015 possibly due to the scale up of various prevention programs. The high burden of HIV and AIDS in Kenya accounts for an estimated 29% of annual adult deaths. In 2015, annual AIDS-related deaths were 35,822 and of these deaths, 30,817 (86%) were adults aged 15 years and over. The epidemic has also negatively affected the country's economy by lowering per capital output (Kenya Ministry of Health, 2016).

At a prevalence rate of 5.9% and an annual HIV incidence of 0.27%, many workplaces risk losing out significantly if they fail to take action. HIV and AIDS manifests in increased labour costs due to absenteeism, bereavement, sick leave, medical costs and labour turnover. It also manifests in reduced productivity and employee morale, increased need for training and mentoring of replaced staff. These effects lead to decrease in demand and declining customer base resulting into an enormous impact on the country's productivity hence a negative impact on the National Gross Domestic Product. In addition, HIV and AIDS present an enormous challenge to the development of Kenya and this exerts immense pressure on Kenyan workplaces. The epidemic has led to loss of skilled and experienced workers due to HIV-related deaths, loss of working hours due to HIV-related illnesses, increased absenteeism, reduced performance, increased stress, HIV-related stigma and discrimination, and loss of institutional memories, among others. As a result of the negative impact of HIV and AIDS at the workplace, the Government of Kenya, as being a major employer, recognized that a workplace policy framework is central to putting in place and implementing effective workplace programs (Kenya Ministry of Public Service, Youth and Gender Affairs, 2017).

The approach by which South African companies make HIV and AIDS care and treatment available to employees has been categorized into four models: (1) Employer provider – where the employer finances and delivers treatment for HIV-positive employees using a ‘closed’ health insurance service (i.e. one designed only for employees and their dependents) and company clinic facilities; (2) Medical aid scheme – where employers subsidize health insurance premiums for HIV treatment through ‘medical aid schemes’; (3) Independent disease management program – where a specialized HIV and AIDS management company is contracted by an employer to manage the costs and treatment of HIV-positive employees: for example, CareWorks; and (4) Clinic provider – where an employer contracts a medical non-governmental organization (NGO) or general medical practitioner to provide HIV-related services either at the workplace or at an outside clinic (Dondo, 2012).

The workplace is where a considerable number of men and women meet, interact and educate one another on many issues of importance to human life. It is therefore seen to be a convenient and conducive setting for HIV and AIDS control activities and workplace-based interventions (Dondo, 2012). A workplace HIV and AIDS program can be viewed as an action-orientated plan that an organization can utilize to prevent new HIV infections, to provide care and support for employees who are infected or affected by HIV and AIDS, and to manage the impact of the epidemic on the organization (Naude, 2008). Workplace HIV and AIDS programs refer to a range of company-based interventions including the institution of an HIV and AIDS policy, voluntary counselling and testing (VCT), and provision of antiretroviral therapy (ART) that are a response to the epidemic (Mahajan, *et al.* 2007). The purpose of a workplace HIV and AIDS policy is to ensure uniform and fair approaches to the effective

prevention of HIV and AIDS amongst employees and the comprehensive management of HIV-infected employees and employees living with AIDS (Mabuza, 2011).

In order to maintain their businesses, labor-intensive enterprises require a healthy and productive workforce. Raiply is one such establishment and among the notable industries in Uasin Gishu County, western Kenya region. The Raiply Factory in Eldoret is a major employer within the Academic Model Providing Access to Healthcare (AMPATH) Program's catchment area. As a labour-intense establishment, Raiply has had to deal with HIV and AIDS in order to mitigate the negative effects associated with the condition. To address this challenge, the Factory initiated a workplace HIV program in 2007 in collaboration with AMPATH. The Raiply workplace HIV program is run as a clinic provider model where AMPATH provides HIV-related services both at the workplace and its outside clinics.

## **1.2 The Raiply Workplace HIV Program**

The Raiply Workplace HIV Program was established in 2007 as the company's response to HIV and AIDS at the Factory. The responsibility of implementing the program at Raiply is vested in the Human Resource Department with the Human Resource Manager as the patron. The program is run by a twelve-member HIV steering committee whose membership is voluntary and includes PLHIV. The role of the committee is to organize and coordinate all HIV activities within the Factory and offer continued support and education. The committee also provides direction to the workplace HIV program and networks with stakeholders, collaborators and relevant government agencies. In addition, to the steering committee, there is a committee for PLHIV that addresses specific issues for this group.

The Raiply workplace HIV program employs a multi-faceted approach to tackle HIV at the workplace. AMPATH provides the HIV prevention, care and treatment services free of charge, and this has been made possible by funding support from the United States' President's Plan for AIDS Relief (PEPFAR). Through this support, a number of focused activities and services are offered. The specific services under the workplace HIV program are:

1. *HIV and ADIS Awareness and Sensitizations:* Awareness sessions are conducted to provide HIV and AIDS education for all employees within the Raiply Factory premises. This is undertaken by the steering committee members who were trained by AMPATH as HIV and AIDS Resource Persons in May 2007. The Resource Persons in turn are responsible for reaching out to their peers to provide HIV information and education on a regular basis.
2. *Voluntary counselling and testing (VCT) services for HIV:* These services are arranged periodically and provided within the Raiply premises. AMPATH works with the Raiply management and the steering committee to create an environment that allows a high percentage of the employees to volunteer to have an HIV test and assists those who are HIV infected to enroll for care and treatment. After awareness sessions, one-on-one pre-test counselling is conducted which enables participants to ask any unanswered or sensitive questions which could not be raised in a group context. This also helps in preparing for testing for those who choose to do so. After the counselling, participants are given an opportunity to get tested for HIV. Participation in HIV testing is voluntary and confidential. AMPATH does not share testing data for individual employees with Raiply but rather provides a detailed report giving only statistics to Raiply management on the number of participants and percentage of HIV positive employees.



3. *Comprehensive HIV care clinic (CCC) for ART:* Initially, all employees found to be HIV positive would be referred to CCCs run by AMPATH but located outside the Factory such as Huruma Sub-County Hospital, Uasin Gishu District Hospital and AMPATH Centre within Moi Teaching and Referral Hospital (MTRH). However, with time, the need to offer HIV care and treatment services within the Factory led to the opening of the Raiply AMPATH Satellite Clinic in 2009 as an onsite facility. The clinic runs once every month for HIV infected individuals.
4. *Condom Distribution:* Promotion, demonstration and distribution of condoms is an important aspect of all HIV program activities at the workplace. The program ensures condoms are available at strategic points within the Factory premises such as the CCC, Resource Center, selected offices and through self-service dispensers in toilets for access by employees.
5. *Psychosocial Support:* HIV infected employees formed psychosocial support groups as part of their care and these groups have been running their activities within the Factory.
6. *Resource Centre:* The Factory employees also benefited from the opening of a Resource Centre within the premises. This Centre provides a learning point for those seeking information on HIV as well as other matters of health.

### **1.2.1 Raiply Factory**

Rai Plywoods (Kenya) Limited started its operations in Eldoret in 1973 and is more commonly identified by its brand name "RAIPLY". The Company has grown to become a major timber manufacturer in Kenya and the East African region starting with a workforce of about 800 and rising to the current 2,500 employees. The registered Head Office and Factory of the Company is located in Eldoret town approximately two

kilometers from the General Post Office along the Eldoret-Malaba Highway opposite Huruma Estate.

Raiply's main raw material is timber and the primary products include veneer, plywood, flush doors, chipboard, block boards and finished furniture products. In addition, the Company has polypropylene bags manufacturing plant, a foam mattress plant and furniture section. The Factory comprises various departments/sections namely: 1) Information Technology; 2) Technical - Production (Plywood, Polypropylene Plant, Furniture, Foam Plant, New/Old Saw Mill, Chipboard, Block Board, Urea Formaldehyde Glue Plant, Lamination) and Service (Power Plant, Mechanical, Electrical, Fire, Civil); 3) Finance; 4) Sales (Exports/Imports); Stores; Garage/Transport; and 5) Human Resource - Personnel and Security. It has put up a power plant which generates power using by-products such as saw dust, wood shavings etc. Most Raiply workers reside in the nearby Huruma and Mwanzo estates within Eldoret town; women account for 6% – 10 % of the total workforce. The Factory operates a 24-hour work schedule with employees working in shifts. There are 44 hours/week, 48 hours/week and 60 hours/week shifts and each employee belongs to one of these shifts.

Majority of the Company employees are permanent while a few are employed on contract terms. When one leaves employment, the vacancy is not filled immediately. This gives rise to the hiring of casual employees who serve for two to three months and depending on performance, casual employees occasionally fill the vacancies. At any given time, there are approximately ten contract employees and 30 – 40 casuals. Productivity for each employee depends on the role s/he is assigned with employees in

the production sections having set targets. If an employee does not perform, normal disciplinary procedures are instituted against him/her.

Raiply has put in place a mechanism to cater for its employees' healthcare needs. In the event of an occupational injury, the management assumes full responsibility in accordance with the laws governing workplace injury. For healthcare services, Raiply provides an insurance cover for all its employees. In case of sickness, the senior employees are allowed to go to any health facility of choice and pay directly for the medical expenses and make a claim from the Company or the Company pays directly to the health facility. For junior employees, one is allowed to go to any public health facility, pay directly for the medical expenses and make a claim from the Company. When an employee is sick, s/he is entitled to a sick-off provided this is certified by a clinician from the health facility visited. The sick-off is granted upon filling of a sick sheet which is submitted to the Human Resource Office. After processing, the information is captured in a computerized employee database and the sick sheets are filed in the respective employee's file.

### **1.2.2 AMPATH Program**

AMPATH was established in 2001 as a partnership between Moi Teaching and Referral Hospital (MTRH), Moi University - School of Medicine and a consortium of North American Universities led by Indiana University. It seeks to provide comprehensive HIV care services to its catchment population in the western Kenya region through its mission of care, research and training. AMPATH's role in the workplace HIV program is to provide technical competence in addressing HIV prevention, and care and treatment services for Raiply employees. AMPATH provides these services to employees free of charge through funding support from PEPFAR. Raiply's policies

complement these efforts through the provisions which the Company has put in place to cater for its employees' healthcare needs.

### **1.3 Problem Statement**

Workplace HIV programs provide a convenient setting for HIV and AIDS control activities and workplace-based interventions. Raiply established its workplace HIV program in collaboration with AMPATH to address some of the challenges posed by HIV and AIDS among its employees. Since its establishment, there has been no formal assessment to determine how the program has influenced employees' lives or benefited the Factory. Consequently, no documented assessment has been carried out targeting the management or employees in order to determine the state of the program.

According to Dondo (2012), a large number of workplace HIV and AIDS programs which implement a variety of interventions are rarely evaluated to determine their effectiveness. The author further documents findings where CareWorks, a specialized HIV/AIDS management company, suggests that companies can readily assess the effectiveness of their own HIV programs by asking themselves the following six questions: (a) How many employees have received HIV training? (b) How many employees have taken an HIV test and know their status? (c) Of the employees who have tested HIV positive, how many are on ARV treatment programs? (d) Of employees who are getting treatment, how many are adhering to the medication? (e) How many employees within the company have disclosed their status? (f) Over a period of time, is there a reduction in the number of new HIV infections? i.e. is there evidence that the company's prevention strategy is working?

Workplaces have a notable difficulty with respect to monitoring and evaluation of programs (Chatora, *et al.* 2018). Monitoring and evaluation are important aspects of a workplace HIV program in order to assess if the program is having the desired effects (Dondo, 2012). This study therefore aimed to focus on the problem of lack of assessment of workplace HIV programs after implementation.

#### **1.4 Justification of the Study**

Few studies have focused on evaluating the direct and indirect effects of workplace HIV programs in the Kenyan context. The importance of assessing such programs after implementation is to evaluate whether the programs are achieving the intended purpose. Through the interventions provided, workplace HIV programs can contribute to lowering the rate of absenteeism after sick employees are initiated on ART. Increased knowledge on HIV and AIDS and utilization of HIV-related service among employees can also lead to a better understanding of the disease among those infected and the affected. This is likely to reduce fear and stigma associated with the condition, allowing infected workers to attend to their duties without undue hindrance. This will therefore lead to increased productivity and overall benefit to the Factory.

At the time of conducting this study, there was limited current scholarly literature on assessments of the workplace response to HIV in Kenya particularly in the private sector. Based on the literature accessed, most recent studies in Kenya have focused on the impact of HIV and AIDS as a disease on staff or employee performance and overall productivity. Mbaeh, *et al.* (2015) survey targeted the hotel industry while Fox, *et al.* (2004), Kipkalom (2008), Larson, *et al.* (2008) and Nzube and Chelangat (2014) – conducted studies within the tea sector. The current study therefore aimed to focus on

Raiply, a private company specializing on timber and timber-related products and a labor-intensive establishment in a Kenyan setting.

The study carried out an assessment of the workplace HIV program which has been in place for several years at the Raiply Factory in a survey-type approach. The assessment was limited to HIV and AIDS only since this is the target of the services and interventions offered under the workplace HIV program. Its findings provide in depth information on the state of the workplace HIV program at Raiply Factory and provide an opportunity to gather baseline data that would provide a reference for investigators willing to conduct further research in this area in future.

## **1.5 Research Questions**

This study sought to answer the following questions:

1. What are employee perceptions regarding the workplace HIV program at Raiply Factory in Eldoret?
2. Do employees utilize the services provided under the workplace HIV program at the Raiply Factory in Eldoret?
3. What implementation challenges has the workplace HIV program faced?

## **1.6 Objectives**

### **1.6.1 General Objective**

To carry out an assessment of the workplace HIV program at the Raiply Factory in Eldoret - Uasin Gishu County, Kenya.

### **1.6.2 Specific Objectives**

1. To determine the perceptions of employees regarding the workplace HIV program at Raiply Factory in Eldoret
2. To establish the employees' utilization of services provided under the workplace HIV program at the Raiply Factory in Eldoret
3. To identify the challenges faced in implementation of the Raiply workplace HIV program

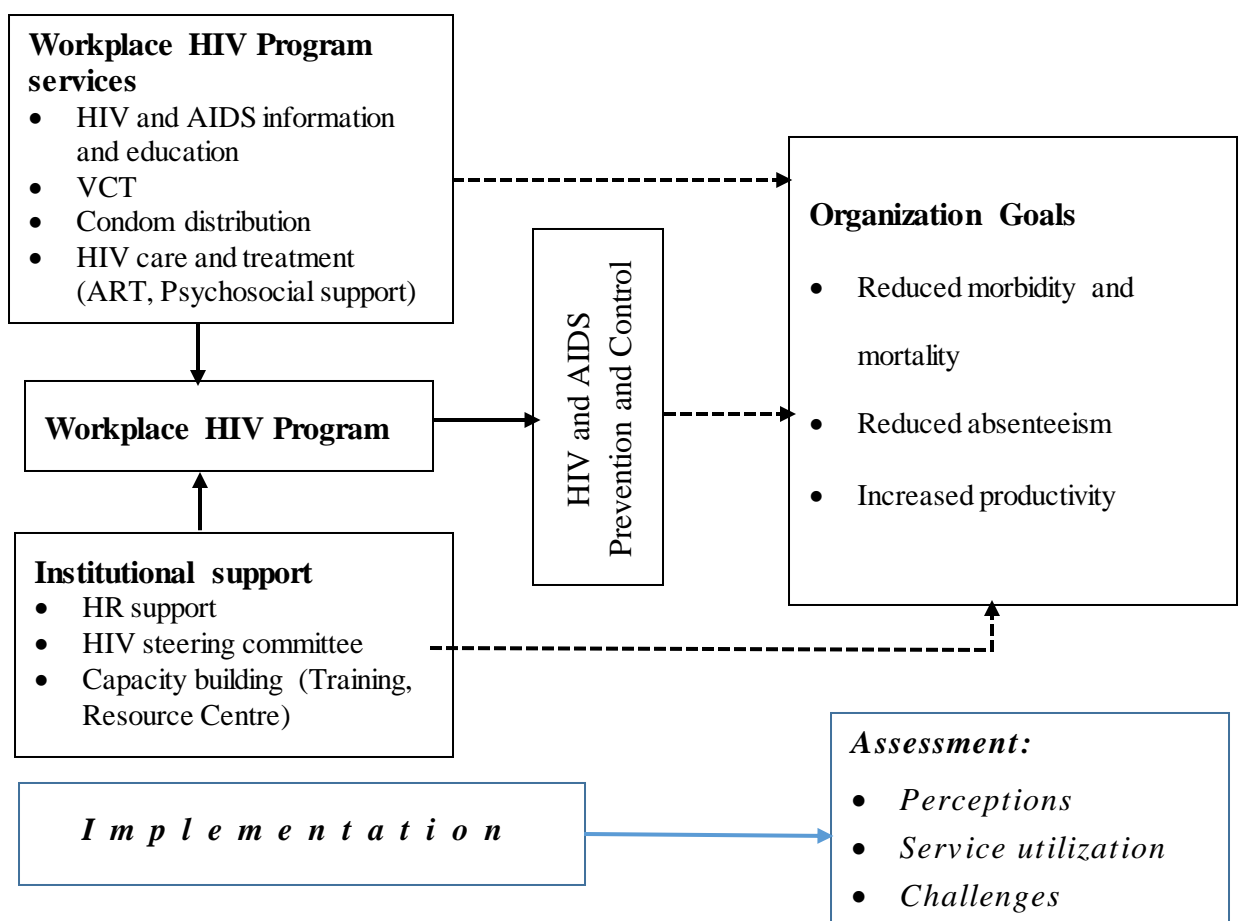
### **1.7 Limitations of the Study**

This study evaluated the Raiply Factory's workplace HIV program since this is the only institution where AMPATH has established a workplace HIV program. Therefore, the research findings are generated from a single establishment hence the results may not be generalizable to all workplaces. Considering the sensitivity of HIV and AIDS, obtaining statistical data relating to the HIV status of individual employees would have been difficult. This study therefore relied on respondents' self-reports to obtain data on HIV status for employees at Raiply. However, this may lead to under-reporting which depicts a lower burden of HIV in the Factory than is the case.

### **1.8 Conceptual Framework**

A conceptual framework is the researcher's own position on the problem and gives direction to the study. Aside from showing the direction of the study, it can be able to show the relationships of the different constructs that the researcher wants to investigate. The framework in figure 1 was adapted from "Challenges in program evaluation of health interventions in developing countries" (Wynn, *et al.* 2006). It maps out the relationship between implementation of workplace HIV program interventions and organization goals.

The diagram illustrates how *workplace HIV programs* may contribute to organization goals. A workplace HIV program provides several *services* such as HIV and AIDS information and education; VCT; condom distribution; and HIV care and treatment or CCC services (ART, psychosocial support). Implementation of the workplace HIV program requires *institutional support* to ensure the program benefits are realized. This includes support of the Human Resource; establishment of a HIV steering committee; capacity building through training to equip those responsible with the necessary knowledge and skills; and a learning Resource Centre for continued access to health information by employees.



**Figure 1: Conceptual Framework for the Assessment of Workplace HIV Program**

Source: Researcher



After *implementation*, it is important to carry out *assessment* on whether the program has met the intended purpose. Employees are the primary beneficiaries and the target of the program's interventions and are central in such an assessment. The assessment therefore should entail establishing their *perceptions* towards the program services, determining their *utilization* of the services and ascertaining what *implementation challenges* are faced. The *organization goals* of implementing a workplace HIV program include reduced morbidity and mortality; reduced absenteeism and increased productivity.

The organization goals are described further by Wynn, *et al.* (2006) who state that in terms of a workplace HIV program's effect, the process of providing HIV patients with treatment may significantly reduce the social stigma associated with the disease. This in turn may encourage people to get tested or disclose their HIV positive status. Even if reduction of viral load through ART does little to reduce population-wide transmission of HIV, the reduction may make HIV patients healthy enough to remain in the workforce or to care for their families, producing significant economic benefits. Thus, if evaluators use only health outcomes as surrogate measures for overall development, they may miss a significant proportion of the potential impacts - positive and negative - of an intervention. As program operators face increasing pressure to prove favorable cost-benefit returns, comprehensive evaluation of the multiplicity of impacts conferred through program implementation becomes even more critical (*ibid*).

### **1.9 Operational Definition of Terms**

Major terms used in the study are defined in this section based on how they are used in the study:

**Acquired immune deficiency syndrome (AIDS):** It is a life-threatening syndrome caused by the human immunodeficiency virus (HIV) and characterized by the breakdown of the body's immune defenses (Stine, 2010). This definition was used in this study.

**Employee:** An employee or worker was defined as a person who works part time or full time under a contract of employment whether oral or written, express or implied and has recognized rights and duties.

**Human immunodeficiency virus (HIV):** This is a retrovirus that causes AIDS by targeting the T4 or CD4 subset of T lymphocytes, which regulate the immune system (Stine, 2010).

**Intervention:** An intervention was defined as any attempt(s) made or action(s) taken to improve a situation within the workplace.

**Perception:** It is the way in which the mind infers and deduces an event, an occurrence, an object, a system or a behavior. Perception could be different from reality (Mauno, *et al.* 2007).

**Workplace:** A workplace was defined as an occupational place, settings or stations where workers spend time for gainful employment.

**Workplace HIV program:** refers to a range of company-based interventions including the institution of an HIV and AIDS policy, VCT, and provision of ART that are a response to the epidemic (Mahajan, *et al.* 2007).

**Workplace HIV Program services:** This refers to any or all of the following services: HIV and AIDS awareness and sensitizations, voluntary counseling and testing,

antiretroviral treatment, treatment of opportunistic infections and psychosocial support among others.

In summary, this chapter has given background information on the study and introduced workplace HIV programs as well as a brief profile of the institutions involved namely Raiply and AMPATH. A statement of the problem; justification of the study and the research questions to be answered together with the objectives to be achieved by the study have been described. The chapter has further presented the study limitations, conceptual framework and brief definitions of key terms used in the study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter reviews pertinent literature undertaken in order to achieve the research objectives. The chapter details review of literature pertaining to workplace HIV and AIDS programs, employee perceptions and utilization of workplace programs services and implementation challenges. While there is considerable information generally on the field of HIV and AIDS and the workplace, literature on workplace HIV and AIDS program assessments that have been conducted targeting or within a single entity following implementation particularly in the Kenyan context is relatively limited.

#### **2.1 Workplace HIV and AIDS Programs**

The rapid spread of HIV/AIDS is having an increasingly adverse impact on the operations of many companies and employee households (Kenya Ministry of Health, 2013). For more than a decade, many businesses have experienced increased costs and reduced productivity as a result of HIV and AIDS. The degree to which businesses experience negative impacts of the pandemic differs tremendously - that is, a business' size, industry, location, and workforce composition do matter. Many companies are responding to the HIV and AIDS crisis through investment in prevention programs, especially in employee education and condom distribution. A smaller, but increasing number of companies have supported a range of care and treatment services for employees and their families (Zellner & Ron, 2008).

The HIV and AIDS epidemic poses a serious challenge to development because it is capable of reversing the modest human capital gains made since independence. HIV and AIDS has profound social and economic effects which impact severely on

enterprises, workers and their families since it affects the most productive segment of the labour force and reduces earnings. Its impact is seen through declining productivity, increasing health care bills, and increasing labor costs due to increasing staff absenteeism (Nachibanga, 2010). A workplace HIV/AIDS program can be viewed as an action-orientated plan that an organization can utilize to prevent new HIV infections, to provide care and support for employees who are infected or affected by HIV/AIDS and to manage the impact of the epidemic on the organization (Naude, 2008). It is therefore important to assess the state of workplace HIV programs to determine whether their implementation has served to mitigate some of these negative effects.

HIV and AIDS workplace policies, and their implementation, are an important part of a company's response to the epidemic (Lee, *et al.* 2010). The workplace is where a considerable number of men and women meet, interact and educate one another on many issues of importance to human life. The workplace is therefore seen to be a convenient and conducive setting for HIV and AIDS control activities and workplace-based interventions. Workplace HIV programs refer to a range of company-based interventions including the institution of an HIV and AIDS policy, VCT, and provision of ART (Mahajan, *et al.* 2007).

Studies to evaluate the effect of HIV and AIDS on staff productivity and performance of multiple firms have been done in different settings. It has been argued that in Kenya, the concept of workplace programs has mainly been on prevention and control of HIV and AIDS and related illness. However, this HIV and AIDS prevention model is limiting since other influences on the health of employees (other diseases and workplace related factors that put employees at risk of becoming ill) are not taken into account (Ngeno & Muathe, 2014).

Based on available literature, most recent studies in Kenya have focused on the impact of HIV and AIDS as a disease on staff or employee performance/overall productivity. Mbaeh, *et al.* (2015) survey targeted the hotel industry while Fox, *et al.* (2004), Kipkalom (2008), Larson, *et al.* (2008) and Nzube and Chelangat (2014) – conducted studies within the tea sector. The study done by Kipkalom (2008) among tea pluckers in tea estates of Nandi South District, Kenya, found there was an association between the amount of tea plucked and the HIV status ( $X^2 = 14.4$ ,  $P = 0.013$ ). The cases (HIV positive) lost 8,808 man-days (67.3%) while the controls (HIV negative) lost 4,286 man-days (32.7%). This difference was highly significant and indicated significant relationship between HIV status and man-days lost ( $x^2=50.3$ ,  $P=0.002$ ). This study recommended that policy should be formulated in the tea estates that will ensure programs are set to reduce HIV infection among workers thereby countering the impact of HIV and AIDS on their productivity.

Bergström and Liljeqvist (2010) observed that few HIV/AIDS programs do any type of evaluation by themselves, which is a common problem. The authors quoted a study by Kirby, *et al.* (2006) which revealed that, few described their respective HIV/AIDS programs effectively, some had problems with implementation and an unknown number had measurement problems; many were statistically underpowered and few measured the impact on STDs. Generally, all of these programs failed in evaluation, and the ones that were published always had a positive outcome; they never tell what not to do. They therefore concluded that new companies' workplace HIV/AIDS programs never learn from each other and keep on doing the same mistakes over and over again.

In a study of four Sub-Saharan countries, namely, Ethiopia, Kenya, Namibia, and Zambia on HIV/AIDS services provision by 121 companies, the study population targeted included human resources personnel and health care providers, with no information captured from employees. A significant limitation of underreporting could have occurred on questions that would have been more appropriate for other types of respondents. For example, data on the insight into the quality of HIV/AIDS services could have been more appropriately collected from the companies' employees because they are recipients of the services (Zellner & Ron, 2008).

The foregoing informed the current study's basis of assessing the Raiply workplace HIV program by targeting employees as the study population since they are the primary beneficiaries of the program's interventions and activities. However, the study excluded casual employees at Raiply as study participants. This was supported by Dondo's assertion that it has been recognized many companies in the construction industry have incurred significant expenses in providing HIV related training and testing to employees who are only working for the company for a month or two and in situations where the company has no immediate benefit other than through their contribution to fighting the national pandemic (Dondo, 2012).

## **2.1 Employee Perceptions regarding Workplace HIV Programs**

Nzuve and Chelagat (2014) cited Mauno, *et al.* (2007) who sought to explain perception in terms of psychology. According to the authors, perception is looked at as the way in which the mind infers and deducts an event, an occurrence, an object, a system or a behavior. Perception could be different from reality. Individuals perceive things differently, according to a number of factors. Emotional state, experience and motivational state are some of the factors that influence perception. Two individuals

observing the same phenomenon will have different perceptions of the same, depending on the above factors. In different emotional and motivational states, the two individuals will perceive the same phenomenon from different angles. Perception is an essential aspect of human behavior (ibid).

Scott, *et al.* (2013) conducted literature review and interviews with HIV positive workers in Zimbabwe to explore their experiences and perspectives on HIV support at the workplace. Their findings illustrated that employees frequently lacked information on their company's stance towards HIV. In fact, most interviewees stated that the primary reason they delayed being tested for HIV was because they feared that being found HIV-positive would lead to losing their jobs or being demoted or transferred to a different department. The interviewees explained that these fears were based on rumours and witnessing the re-assignment of workers who were constantly ill to physically easier tasks. However, informants noted that people were not re-assigned, demoted or fired because of HIV status but only because of illness. They clarified that in their workplaces, HIV status was not acknowledged as long as workers were able to handle the physical elements of their duties, something those on ART could do.

In a survey conducted for selected hotels in the North Coast, Kenya to determine the impact of HIV/AIDS on hotel staff productivity (Mbaeh, *et al.* 2015), it was found that most respondents (77%, n=23) agreed that HIV illness caused absenteeism while few (23%, n=7) had not experienced absenteeism. The study further investigated whether in the hotel there had been cases of staff turnover brought about by HIV illness. Most respondents indicated there was a decrease in staff turnover caused by illness: 24 (80%) while 6 (20%) stated that few of staff turnovers had been experienced due to the illness. This could be attributed to access to life-saving ART by the infected staff. However,



while this study was focusing on employee perception, it did not give a very clear definition of HIV illness.

According to the Kenya Demographic and Health Survey (KDHS) 2014, widespread stigma and discrimination against people living with HIV can adversely affect people's willingness to be tested and their adherence to antiretroviral therapy. The survey revealed that 30% of women and 47% of men in the age group 15-49 expressed accepting attitudes towards people living with HIV. Whereas the percentages are comparable to the national averages, there is still need for more anti-stigma messages in the country in order to encourage more people to know their HIV status and improve adherence to treatment among HIV-infected persons (Kenya National Bureau of Statistics, 2014).

Respondents in a study by Dondo (2012) measured the success of treatment programs through various methods by: monitoring the CD4 count, assessing feedback from VCT, observing the health of staff members, monitoring absenteeism, receiving monthly reports and assessing the wellness and productivity of HIV positive employees. One respondent reported measuring success by recording the number of new cases of HIV/AIDS every year. Based on reports from the previous year, they had not had any new cases, indicating a measure of success. Another respondent reported on the positive impact of success stories and shared these at quarterly HIV facilitator meetings (*ibid*).

Based on the above literature, there were few aspects of workplace HIV programs explored or addressed by the authors and none provided basis for other researchers willing to focus on employee perspectives towards workplace HIV programs. The current study therefore sought to describe perceptions of Raiply employees, as primary

beneficiaries of the program's interventions, regarding the Raiply workplace HIV program and its activities. This would be done using a Likert scale and would help establish whether the employees attributed any outcomes within the Factory to the workplace program.

## **2.2 Utilization of Workplace HIV Program Services**

A key factor that companies must consider when establishing workplace HIV programs is how high the uptake for HIV/AIDS services will be among employees, especially if companies are considering offering services at onsite health facilities. In countries with higher HIV prevalence, there is a greater chance that companies will have employees who are HIV positive but that may not correspond with high employee usage of services (Connelly & Rosen, 2005). Research has found that in some instances where companies have offered HIV/AIDS services to employees, the use of these services has been low. Therefore, there may be a gap between perceived need for HIV/AIDS services and actual demand by employees (Dondo, 2012).

In the South African workplace, a high level of access to HIV/AIDS services has been observed but low uptake by employees is prevalent (Connelly & Rosen, 2005). The low uptake of services undermines attempts by companies to provide HIV/AIDS treatment to HIV positive employees. A small multi-national company in Zambia which was offering on-site ART services highlighted the reluctance of employees to access ART (Zellner & Ron, 2008).

The approach by which South African companies make HIV and AIDS care and treatment available to employees has been categorized into four models: (1) Employer provider – where the employer finances and delivers treatment for HIV-positive

employees using a ‘closed’ health insurance service (i.e. one designed only for employees and their dependents) and company clinic facilities; (2) Medical aid scheme – where employers subsidize health insurance premiums for HIV treatment through ‘medical aid schemes’; (3) Independent disease management program – where a specialized HIV and AIDS management company is contracted by an employer to manage the costs and treatment of HIV-positive employees: for example, CareWorks; and (4) Clinic provider – where an employer contracts a medical non-governmental organization (NGO) or general medical practitioner to provide HIV-related services either at the workplace or at an outside clinic (Dondo, 2012).

The Raiply workplace HIV program adopted the clinic provider model where AMPATH provides HIV-related services both at the workplace and its outside clinics. In instances where the employer contracts an independent service provider or clinic provider, the employer pays the provider to deliver a set of health services (Zellner & Ron, 2008). However, in the Raiply workplace HIV program, provision of services by AMPATH is free of charge owing to the availability of donor support to the latter. AMPATH also offers most of the services within the Factory premises with very few referrals to its outside clinics. Another system that is increasingly becoming popular is where employers make treatment services available to employees through a referral system. In the study by Zellner and Ron, the referral system was made available to employees who could not afford medical insurance offered by their companies. Employees were referred to outside providers that can be public facilities or private providers. This method was most common among small companies, who relied on referrals for free or highly-subsidized antiretroviral treatment (ibid).

A study of HIV/AIDS services in the workplace conducted in four Sub-Saharan African countries reported on-site services as the most popular form of HIV/AIDS service delivery. The described on-site services were similar to the clinic provider model that offered services for opportunistic infections (OIs) management, tuberculosis treatment, VCT, and ART treatment. Such services provide workers with immediate and convenient access to HIV/AIDS services but uptake of such services can be low due to fears of being singled out by other employees as HIV positive when seen seeking these services (Zellner & Ron, 2008). Onsite clinics are a focal point of delivery because they offer employees immediate and convenient access to HIV/AIDS services. AMPATH avails HIV/AIDS services to employees at designated onsite locations within the Raiply Factory premises. By ensuring the services are closer geographically for the employees, it may benefit the company by reducing employee absenteeism for offsite appointments. Onsite clinics can also offer companies a mechanism to track HIV prevalence data within the company. Companies may be able to use district-wide or national HIV-prevalence data to estimate the potential HIV prevalence within their workforce, but determining the actual prevalence of HIV among employees requires their consent in revealing their HIV status. Collecting this information may be difficult to obtain given that some employees fear stigmatization or discrimination (Connelly & Rosen, 2005). This study used knowledge of HIV status and where the test was done from the employees to determine whether they were able to utilize the workplace program services without fear of the stigma associated with HIV.

George (2006) revealed that employees' uptake of VCT and ART was slow in the early stages of workplace treatment due to factors like stigmatization and, in the case of ART, lack of awareness of HIV status. Thus, if employees do not utilize services as quickly

as expected, treatment programs could be abandoned. Educating employees about the HIV/AIDS services and benefits available is therefore instrumental in creating demand for and uptake of these services. Convenient and accessible VCT will have higher uptake. Corbett, *et al.* (2006) found that uptake of VCT is higher if the services are offered on-site rather than through vouchers for off-site testing (51% uptake versus 19% in their study of a workplace in Zimbabwe).

Cross-sectional surveys were conducted by Colvin *et al.* (2007) in 22 public and private sector organizations to determine the prevalence and distribution of HIV in South African workplaces. A weakness highlighted in the research was the likeliness of non-participation of HIV-positive employees or those who suspected they were HIV-positive. Employees on sick leave could not be included in the study. This meant that the estimates of HIV in the workforce could have been biased downwards. The absence of reported HIV/AIDS cases can be attributed to the invisibility of HIV/AIDS and fears of stigmatization. Invisibility makes it difficult for employers to be certain that an employee is in fact suffering from the disease and fear of stigmatization makes it difficult for employees to disclose their HIV status in fear of victimization. Disclosure of HIV status is an important aspect in the prevention, care, treatment and support for people living with HIV/AIDS. It facilitates access to treatment and support services, but due to fears of discrimination and stigmatization in the workplace, HIV positive employees seldom disclose their HIV status (Ncama, 2007). In order to establish the HIV status of employees for the purposes of this study, the researcher relied on the status as self-reported by each individual respondent.

A study by Nzuve and Chelangat (2014) evaluated the effects HIV and AIDS has had on the performance of five tea factories in Bomet County, Kenya. The study found that 54.17% of the managers in the tea factories had worked for between 2 to 5 years and that of the 37.50% of the factories that had a HIV policy, only 11.11% had had the policy for more than 5 years. On the impact of HIV and AIDS on performance, the study established that increased absenteeism had the highest mean of 4.46 followed by reduced output level of HIV positive employees with a mean of 4.21. Increased customer dissatisfaction had the least impact on Factory performance with a mean of 3.54. These findings showed that most tea factories in Bomet County experienced increased absenteeism due to sick leaves and this had the greatest impact on performance. The study recommended that increased absenteeism due to sick leaves as a result of HIV/AIDS should be addressed adequately. The author suggested that this can be done through establishment of contingency plans and giving employees health insurance covers in order to reduce the adverse effects on performance.

Habyarimana, *et al.* (2007) exploited an unusually long panel dataset of worker absenteeism from the Debswana Diamond Company as well as information on one of Africa's first firm-based antiretroviral treatment programs to understand the effect of HIV/AIDS and antiretroviral treatment. They found evidence that compared to other workers at the firm, individuals who were infected with HIV/AIDS displayed similar patterns of absenteeism until roughly one year prior to treatment start, when absenteeism started to increase sharply. From an absenteeism peak of five days in the month of treatment onset, the workers quickly recovered within the first year of treatment and then continued for the next three years to have patterns of absenteeism that were similar to those of healthy workers. In this study, it was assumed that HIV-

infected employees have taken up ART use under the Raiply workplace HIV program and would have similar characteristics with employees reporting to be HIV negative. This finding would be important in informing the need for continued provision of ART at Raiply.

### **2.3 Workplace HIV Program Implementation Challenges**

Implementing workplace HIV programs and providing support for HIV infected employees within the work environment requires companies to invest in practical approaches to ensure service uptake and sustainability. Participation in workplace HIV programs by both management and employees affects successful implementation. It should include people living with HIV and AIDS, as well as women. This ensures that issues affecting different groups are addressed as key stakeholders. In a study that evaluated HIV and AIDS programs in the ministry of education in Zambia it was found that low management involvement in programs affected employee morale to get involved in programs (Chatora, *et al.* 2018). Management's involvement and commitment is important in encouraging employees to engage with HIV and AIDS programs and empowering them to know their HIV status (Rajak, 2010).

Workers who know there is an official policy of non-discrimination and support are more likely to be willing to engage in workplace HIV programs. Emphasizing that management cannot access the HIV test results instills worker trust in the program's confidentiality and leads to higher uptake; having an independent organization conduct the testing is one way to increase worker trust (Stevens, *et al.* 2006). This environment promotes uptake especially of HIV testing by reducing fear that one's status will be known by the management or fellow employees.

Scott, *et al.* (2013) observed that support from management is important not only in influencing VCT uptake but also in terms of supporting HIV-positive workers on disease management programs. As one Zimbabwean worker explained, supervisors can make life on ART more difficult as some departments are so busy and production oriented that one cannot take a minute. If a supervisor does not understand they say: “you AIDS patients are difficult to work with” because the worker would have asked to be excused for a few moments to take the drugs. The interview findings suggested that supervisors must be informed that the company has a policy of accommodating clinic visits or time to take pills. Moreover, supervisors must be given the space by their managers to relax production briefly to support workers on ART. The interviewees spoke of the importance of workplace support in the form of being given time off to go to the clinic and providing transportation if they had to travel off-site. Providing transportation to clinics or onsite care can increase efficiency by reducing the time, money and energy workers must expend on HIV management. In addition, several interviewees noted that disruptions in routine can lead to taking pills late; workplaces should seek to maintain predictable hours for HIV-positive workers (Scott, *et al.* 2013).

Another case study in Zambia found that in spite of the widespread awareness (83.3%) of the existence of HIV programs, 63% of respondents had never even participated in the programs and mainly got involved during World AIDS day. Policy decisions are usually reflected in the resources allocated for program implementation. Dedicating human, time, financial, infrastructure, and material resources affect implementation based on the quantities and quality allocated (Scott, *et al.* 2013).



In summary, this chapter reviewed empirical literature with regard to workplace HIV programs. The reviewed literature revealed that some studies had been conducted to assess or evaluate the workplace HIV programs but majority have focused mainly on HIV and AIDS as a disease and staff productivity or aspects of knowledge and attitude. Therefore, there is a gap on the knowledge available about the state of workplace HIV programs based on their assessment following implementation and this necessitated the current study.

## **CHAPTER THREE:**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

This chapter presents the research methods that were adopted in this study. The chapter describes the study design, setting and population; sampling method, selection and size; and data collection instruments, procedures and analysis and ethical considerations of the study.

#### **3.1 Study Setting**

The study was conducted at the Raiply Factory in Eldoret, Uasin Gishu County (Appendix III – site location map of Raiply). This is because the Factory is the only site where AMPATH has initiated and implemented a workplace HIV program within its catchment area and therefore the only setting that would enable the researcher achieve the study objectives.

#### **3.2 Study Design**

This study used a descriptive cross-sectional design that entailed quantitative data collection and analysis to assess the Raiply workplace HIV program. According to Owens (2002), this design is useful in collecting data at one point in time from a sample selected to represent a larger population. This design was considered appropriate for this type of study because it would allow collection of information sought from a large population over a short period. In addition, the resources at the researcher's disposal were limited and hence minimal inputs could be committed to this work.

### 3.3 Study Population

The study population comprised all the employees of the Raiply Factory in Eldoret estimated to be 2,500. Study subjects were recruited from among the employees in various departments and sections of the Raiply Factory.

### 3.4 Sample Size Calculation

The study sampling method was stratified sampling where the target population was selected based on the employee departments/sections and gender and these were treated as the sampling strata. Since the sampling frame was finite (2,500), the sample size calculation formula for finite population (Fisher, *et al.* 1991)  $n = \frac{z_{1-\alpha}^2 p(1-p)}{\delta^2}$  was used where:  $n$  is the sample size of adjusted population;  $z_{1-\alpha}$  is the statistical constant (normal deviate) = 1.96;  $p$  is proportion in the target population estimated to have a particular characteristic (50% or 0.50 was used as there was no known estimate) and  $\delta$  is accepted level of error taking alpha as 0.05.

$$\text{Thus: } n = \frac{1.96^2 0.5(0.5)}{0.05^2} = 384$$

Since the target population was finite ( $N = 2,500$ ) and less than 10,000, the sample size was adjusted using the adjustment factor.

$$n_1 = \frac{n}{1 + \frac{n}{N}} = \frac{384}{1 + \frac{384}{2500}} = 333 \text{ employees}$$

The sample size was therefore 333 employees.

### **3.5 Sampling Method**

The Raiply Factory in Eldoret was purposively sampled because it is the only workplace where AMPATH has implemented a workplace HIV program. Stratified sampling was used to select the employees that would take part in the study. Stratification was preferred because it would ensure inclusion of respondents from each department/section as well as gender representation. There were two stratifying variables; the first stratum was department/section while gender was the second stratum.

A list of all employees indicating personal/employment numbers, department/section and gender was obtained from the Human Resource office and this comprised the sampling frame. The employees were first stratified by their department/section and thereafter by gender to ensure a representative sample of females. The sample size was assigned proportionately to the gender strata. Using Statistical Package for Social Sciences version 17 (SPSS V.17), 296 males and 37 females meeting the inclusion criteria were randomly selected to participate in the study as shown in table 1.

**Table 1: Sampling Plan for Raiply Factory Employees**

| <b>Department/Section</b> | <b>Population</b> | <b>Sample Size</b> | <b>Male</b> | <b>Female</b> |
|---------------------------|-------------------|--------------------|-------------|---------------|
| Production                | 1855              | 249                | 218         | 31            |
| Service                   | 185               | 24                 | 22          | 2             |
| Finance                   | 31                | 4                  | 4           | 0             |
| Sales                     | 84                | 11                 | 9           | 2             |
| Stores                    | 76                | 10                 | 10          | 0             |
| Garage/Transport          | 201               | 26                 | 24          | 2             |
| Information Technology    | 53                | 7                  | 7           | 0             |
| Human Resource            | 15                | 2                  | 2           | 0             |
| <b>Total</b>              | <b>2500</b>       | <b>333</b>         | <b>296</b>  | <b>37</b>     |

### **3.6 Eligibility Criteria**

The inclusion criteria for the study were adult male and female employees at the Raiply Eldoret Factory who had worked for more than 2 years. Casual employees at the Factory were excluded from the study.

### **3.7 Measurement of Variables**

The quantitative approach enabled the researcher collect data on the key variables of the study and measure the frequency of responses.

- 1. Independent Variables:* Variables to describe respondent's demographic profile were: gender, age, marital status and education level. These demographic variables are used to give an overview of the profile of the respondents and to compare and contrast those with the actual profiles of the employees at Raiply. In order to obtain

the employment characteristics, the following variables were measured: current employment status, duration of work in the Factory, section/department, current level of employment, working shift, skills level and where skills were acquired. The demographic profile and employment characteristics were used as independent variables for the study.

2. *Dependent Variables:* Perception towards the workplace HIV program, utilization of services and implementation challenges were assessed in various question items and were regarded as the dependent variables in the study. In addition, it was assumed that there was a link between perception towards the workplace program and utilization of its services.

Using a Likert scale, the specific items intended to explore respondents' perception towards the workplace HIV program included:

- Whether the respondent has utilized any of the services provided as part of the Raiply workplace HIV program e.g. counseling, HIV testing, condom provision, HIV care and treatment, learning resource center among others
- Whether respondents were able to seek services provided under the workplace HIV program within the Factory without fear of stigma
- Whether respondents found the services provided as part of the Raiply workplace HIV program useful to employees in the Factory
- Whether the workplace HIV program led to increased knowledge of HIV status among employees
- Whether respondents think HIV and AIDS contribute to absenteeism due to sick leave among those affected

- Whether respondents think there had been a reduction in the number of employees missing work due to illness since establishment of the workplace HIV program
- Whether respondents think the workplace HIV program is responsible for the reduction in number of employees missing work due to illness
- Whether employees who are infected with HIV and AIDS miss more days of work
- Whether employees who have HIV infection are able to do normal duties like those who are not infected
- Whether the respondent had had to cover duties for an employee who had missed work due to illness

The specific items intended to measure the utilization of workplace HIV program services were:

- Awareness of the existence of a workplace HIV program in the Factory
- Whether tested for HIV, where the test was done and HIV status based on last test
- Whether respondent had any other chronic condition for which they have been seeking treatment and the specific condition
- Whether respondent missed work in the last year due to an illness, which illness/condition and the number of days they missed work
- How the respondent pays for their medical expenses

To assess the challenges faced in the workplace program's implementation, the following were considered:

- What the respondent saw as the biggest challenges in implementing the workplace HIV program among the employees at the Raiply Factory
- Suggestions on ways to improve the Raiply Workplace HIV program

### **3.8 Data Collection Instruments and Procedures**

Data was collected using a structured interviewer-administered questionnaire which is attached as appendix II. A structured questionnaire was preferred because it permitted open collection of data from all study respondents. The questionnaire was designed by the researcher and validated by the Study Supervisors who were considered experts and experienced in the area of study. The tool utilized a mixture of open and closed-ended questions and rating type questions using five-point Likert scale.

Before commencement of data collection, the questionnaire was piloted on 15 employees (5% of the sample size) from Rivatex Limited, Eldoret. Rivatex was considered to have similar settings and working environment as the main study setting, Raiply. Split half method was used whereby the developed questionnaire was administered once and the items divided into two (odd and even numbered items). The responses to the items were summed for each participant and the final scores on odd and even numbered items were correlated using the Pearson Product-Moment Correlation. A correlation coefficient of 0.73 was achieved and the tool was considered reliable (based on the threshold of  $\geq 0.7$ ).

Data collection commenced immediately after obtaining approval from the relevant authorities. The data collection exercise was undertaken between June and July 2017. Two research assistants were recruited to assist the principal investigator. They were given a detailed background on the Raiply workplace HIV program and thereafter



trained on the data collection tool. Eligible employees were interviewed only once and the information obtained filled in the questionnaire. Study subjects were accessed after seeking permission from the Factory management through the Human Resource office. Eligible employees were contacted by making a visit to their station to establish availability and accessibility for purposes of this study. The visits were only made between 8.00 am and 4.00 p.m. working-hours period and this was in line with security restrictions at the Raiply Factory.

Questionnaire administration after consenting was done at the Factory premises within these working hours and each interview session took approximately 15 - 20 minutes per participant to complete. Respondents were surveyed based on their availability and accessibility. Working with the Human Resource office, the research assistants were deployed and stationed in one section/department at a time. Once all eligible respondents in that section had been interviewed, the assistants would be introduced to the next section until the entire sample size was covered. This approach ensured 100% response rate as the research assistants individually administered all questionnaires and no respondent was allowed to go and fill the questionnaire on their own. The principal investigator had the overall responsibility of ensuring that the data collected was of high quality.

### **3.9 Validity and Reliability of Research Instruments**

#### **3.9.1 Validity**

According to Patton (2002), validity is the degree to which a test or an instrument measures the phenomenon under study. In this study, validity was taken to mean the extent to which the instrument covered the research questions. To determine the content validity of the instrument, it was reviewed by the Research Study Supervisors who are

considered experts and experienced in the area of study and their input was factored in the final tool.

### **3.9.2 Reliability**

A research instrument is reliable if it provides consistent results upon repeated application (Mugenda & Mugenda, 2003). In order to ascertain the reliability of the questionnaire, it was piloted on 15 employees from Rivatex Limited, Eldoret. Split half method was used whereby the developed questionnaire was administered once and the items divided into odd and even numbered items. The responses to the items were summed for each participant and the final scores were correlated using the Pearson Product-Moment Correlation. A correlation coefficient of 0.73 was achieved and the tool was considered reliable based on the threshold of  $\geq 0.7$ . Following the pilot, the order of some questions was adjusted to provide better sequence and those that were eliciting common responses converted from open-ended for ease of analysis.

### **3.10 Data Management and Statistical Analysis**

Completed questionnaires were coded, classified, summarized into categories and transformed into electronic format by entering the data into a computerized database designed in Microsoft Access. It was later exported to SPSS V.17 for analysis. Descriptive data analysis techniques (frequencies, percentages, means and standard deviation) were used to summarize the data. The chi-square test of independence was used to check for significance of the relationship between other chronic conditions and absenteeism. Simple binary logistic regression was used to quantify the effect of other chronic conditions on absenteeism at 95% confidence interval. Narrative interpretation and description were done to present the quantitative results. Frequency tables, pie charts and bar graphs were used to present the data.

### **3.11 Ethical Considerations**

The study proposal was submitted to the Institutional Research and Ethics Committee (IREC) for approval which was granted on 16<sup>th</sup> May 2017 via Approval Number 0001867 (Appendix IV). The researcher was granted formal permission to conduct the research by Moi University through an introduction letter from the School of Public Health (Appendix V). Thereafter the researcher sought permission from the Raiply Factory Management to commence the study as well as access relevant personnel information (Appendix VI). Participation in the study by the employees was on voluntary basis. Informed consent to participate in the study was obtained from the employees using a Consent Form (Appendix I). Respect and dignity of the respondents were upheld throughout the data collection. Privacy and confidentiality of the information collected was guaranteed. There were no names used in the questionnaires and instead, serialization was done to identify study participants. Identifiable data was not accessible to any other parties other than the principal investigator. Consent forms and questionnaires were kept separate and accessed only by the researcher and key stakeholders for research purposes only.

In brief, this chapter focused on the study setting, study population, sample and sampling techniques, giving details on how the study sample was obtained. The research instruments were also described in detail, outlining the procedures for their administration. The data collection process, piloting of instrument, validity and reliability of the instrument and data analysis were discussed. Lastly, the ethical issues considered in the study were also addressed.

## CHAPTER FOUR:

### RESULTS

#### 4.0 Introduction

In this chapter, the findings of the study are presented based on the data gathered from respondents involved in the study. Study data was collected from a total of 333 (100%) respondents whose questionnaires were completed by the interviewers. The results are presented in the demographic profile and employment characteristics section, employee perceptions regarding the program, utilization of the workplace HIV program services, and challenges in implementation of the Raiply workplace HIV program. In the results, the percentages stated relate to the responses to individual questions. Where appropriate, cross-tabulation was used to establish degrees of association between variables; using the Pearson's Chi-Square test (or the Fisher's Exact Test where appropriate) at 5% ( $p=0.050$ ) level of significance.

#### 4.1 Demographic Profile

The demographic data showed that the median age of the respondents was 37 years (interquartile range (IQR) 31, 53.5). Of the 333 respondents, 296 (88.9%) were male and 295 (89.9%) were married while 223 (67.9%) had attained secondary level of education as indicated in table 2.

**Table 2: Demographic data for the respondent**

| <b>Characteristic</b>   | <b>Frequency</b> | <b>%</b> |
|-------------------------|------------------|----------|
| Gender (n=333)          |                  |          |
| Male                    | 296              | 88.9     |
| Female                  | 37               | 11.1     |
| Marital status (n=328)  |                  |          |
| Single                  | 21               | 6.4      |
| Married                 | 295              | 88.6     |
| Separated               | 8                | 2.4      |
| Widowed                 | 4                | 1.2      |
| Education level (n=328) |                  |          |
| None                    | 1                | 0.3      |
| Primary                 | 52               | 15.9     |
| Secondary               | 223              | 67.9     |
| Tertiary                | 52               | 15.9     |

The respondents were characterized based on their employment data from which it was found that majority 327 (98.5%) were employed on permanent basis and of those who reported the section they worked in, nearly two-thirds 164 (66.7%) worked in the production/technical section. Majority of those interviewed 287 (88.6%) worked as regular employees without any added responsibility while 242 (74%) respondents worked an average of 48 hours per week. Nearly all respondents 323 (99.4%) were either skilled or semi-skilled and 240 (73.4%) had acquired their skills through on-job-training as shown in table 3.

**Table 3: employment characteristics of the respondents**

| <b>Characteristic</b>              | <b>Frequency</b> | <b>%</b> |
|------------------------------------|------------------|----------|
| Current employment status (n=332)  |                  |          |
| Permanent                          | 327              | 98.5     |
| Contract                           | 5                | 1.5      |
| Department/Section working (n=246) |                  |          |
| Production (Technical)             | 164              | 66.7     |
| Service                            | 24               | 9.8      |
| Finance                            | 4                | 1.6      |
| Sales                              | 11               | 4.5      |
| Stores                             | 10               | 4.1      |
| Garage/transport                   | 26               | 10.6     |
| HR                                 | 7                | 2.8      |
| Current employment level (n=324)   |                  |          |
| Manager                            | 8                | 2.5      |
| Head of Department                 | 7                | 2.2      |
| Supervisor                         | 22               | 6.8      |
| Ordinary Employee                  | 287              | 88.6     |
| Current work shift (n=327)         |                  |          |
| 44 hrs/week                        | 69               | 21.1     |
| 48 hrs/week                        | 242              | 74       |
| 60 hrs/week                        | 16               | 4.9      |
| Skills level (n=325)               |                  |          |
| Skilled                            | 146              | 44.9     |
| Semi-skilled                       | 177              | 54.5     |
| Unskilled                          | 2                | 0.6      |
| Where acquired skills (n=327)      |                  |          |
| Training school                    | 87               | 26.6     |
| On-job training                    | 240              | 73.4     |

#### **4.2 Employee Perceptions regarding the Workplace HIV Program**

Using a five-point Likert scale, the researcher sought to find out the respondents' perceptions of the workplace HIV program at Raiply. A total of ten (10) statements were generated on: program services utilization; ability to seek program services without fear of stigma; perceived usefulness of the services; whether the program had led to increase in knowledge of HIV status; whether HIV contributes to sick leave; reduction in employees missing work due to illness; whether reduction in employees missing work is attributable to the workplace program; if HIV infected employees miss

more work days; HIV infected employees being able to perform normal duties; and if employee had to cover duties for colleague absent due to illness. For each individual statement given, respondents were asked to state the extent to which it was applicable to the Raiply program by selecting the most appropriate option on the scale provided as 1 – Not at all; 2 – To a less extent; 3 – To a moderate extent; 4 – To a great extent; 5 – To a very great extent.

From the findings, more than two-thirds 231 (70.2%) of the respondents had utilized one or more of the services provided as part of the Raiply workplace HIV program to some extent. Majority 306 (94.2%) of the respondents were of the view that employees were able to seek services provided under the workplace program within the Factory without fear of stigma and only 15 (4.7%) did not find the workplace program's services useful at all to the Factory employees. On whether the workplace HIV program had led to increased knowledge of HIV status among employees, all respondents agreed in varied degrees except 9 (2.8%) who felt the program had not at all led to any increase in the knowledge of HIV status among employees.

Regarding absenteeism, 298 (93.1%) of those interviewed thought that HIV and AIDS contributed to absenteeism due to sick leave among the affected. Majority 304 (94.7%) of the respondents thought there had been a reduction in the number of employees missing work due to illness since establishment of the workplace HIV program and a further 291 (89.8%) attributed this reduction to the workplace program as they felt the number of employees missing work due to illness had reduced. Those who believed to some extent that employees infected with HIV miss more days of work were 278 (86.6%). However, 308 (93.9%) were of the opinion that HIV infected employees are able to do normal duties like those who are not infected. The proportion of those who

had ever had to cover duties for an employee who had missed work due to illness varied and those who reported never covering for an absent employee were 103 (31.6%). The detailed findings are shown in table 4.

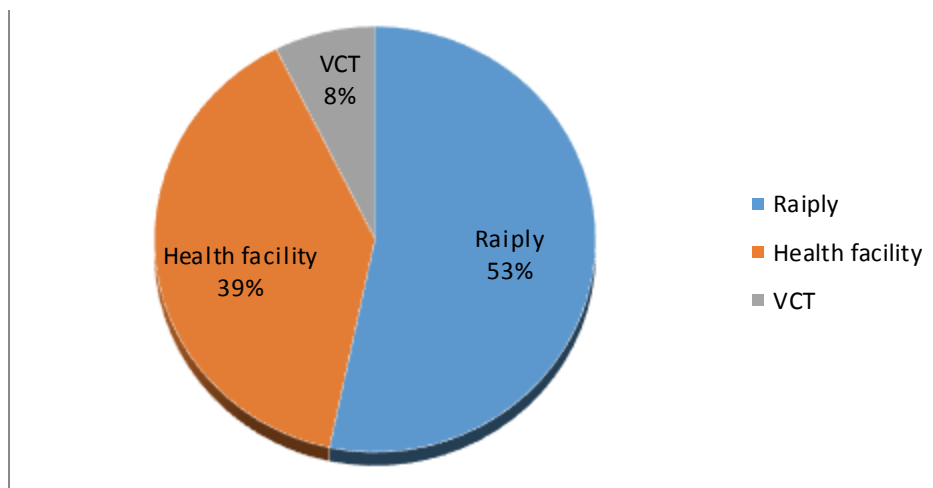
**Table 4: Employee Perceptions regarding the workplace HIV Program**

| Question  | Not at all (%) | Less extent (%) | Moderate extent (%) | Great extent (%) | Very great extent (%) |
|---|----------------|-----------------|---------------------|------------------|-----------------------|
| 1. Have you utilized any of the services provided as part of the Raiply HIV and AIDS workplace program e.g. counseling, HIV testing, condom provision, HIV care and treatment, learning resource center among others? (n=327) | 96<br>(29.4)   | 100<br>(30.6)   | 76<br>(23.2)        | 40<br>(12.2)     | 15<br>(4.6)           |
| 2. Are employees able to seek services provided under the HIV and AIDS workplace program within the Factory without fear of stigma? (n=325)   | 19<br>(5.8)    | 74<br>(22.8)    | 109<br>(33.5)       | 102<br>(31.4)    | 21<br>(6.5)           |
| 3. Do you find the services provided as part of the Raiply HIV and AIDS Workplace program useful to employees in the Factory? (n=327)   | 15<br>(4.7)    | 27<br>(8.5)     | 85<br>(26.8)        | 137<br>(43.2)    | 53<br>(16.7)          |
| 4. Has the workplace HIV and AIDS program led to increased knowledge of HIV status among employees? (n=317)   | 9<br>(2.8)     | 38<br>(11.8)    | 81<br>(25.1)        | 143<br>(44.3)    | 52<br>(16.1)          |
| 5. Do you think HIV and AIDS contribute to absenteeism due to sick leave among those affected? (n=320)  | 22<br>(6.9)    | 110<br>(34.4)   | 70<br>(21.9)        | 82<br>(25.6)     | 36<br>(11.3)          |
| 6. Since the establishment of the workplace HIV and AIDS program, has there been a reduction in the number of employees missing work due to illness? (n=323)  | 19<br>(5.9)    | 39<br>(12.1)    | 86<br>(26.6)        | 149<br>(46.1)    | 30<br>(9.3)           |
| 7. Do you think the workplace HIV and AIDS program is responsible for the reduction in number of employees missing work due to illness? (n=324)   | 33<br>(10.2)   | 35<br>(10.8)    | 79<br>(24.4)        | 147<br>(45.4)    | 30<br>(9.3)           |
| 8. Do employees who are infected with HIV and AIDS miss more days of work? (n=321)  | 43<br>(13.4)   | 120<br>(37.4)   | 65<br>(20.2)        | 75<br>(23.4)     | 18<br>(5.6)           |
| 9. Are employees who have HIV infection able to do normal duties like those who are not infected? (n=328)   | 20<br>(6.1)    | 59<br>(18)      | 99<br>(30.2)        | 117<br>(35.7)    | 33<br>(10.1)          |
| 10. Have you had to cover duties for an employee who had missed work due to illness? (n=326)  | 103<br>(31.6)  | 65<br>(19.9)    | 72<br>(22.1)        | 57<br>(17.5)     | 29<br>(8.9)           |



### 4.3 Utilization of the Raiply Workplace HIV Program Services

Majority of the respondents 320 (98.5%) were aware of the existence of the workplace HIV program at Raiply. On HIV testing, 321 (96.7%) had ever been tested and of these, 171 (53.3%) were tested at Raiply (figure 2).



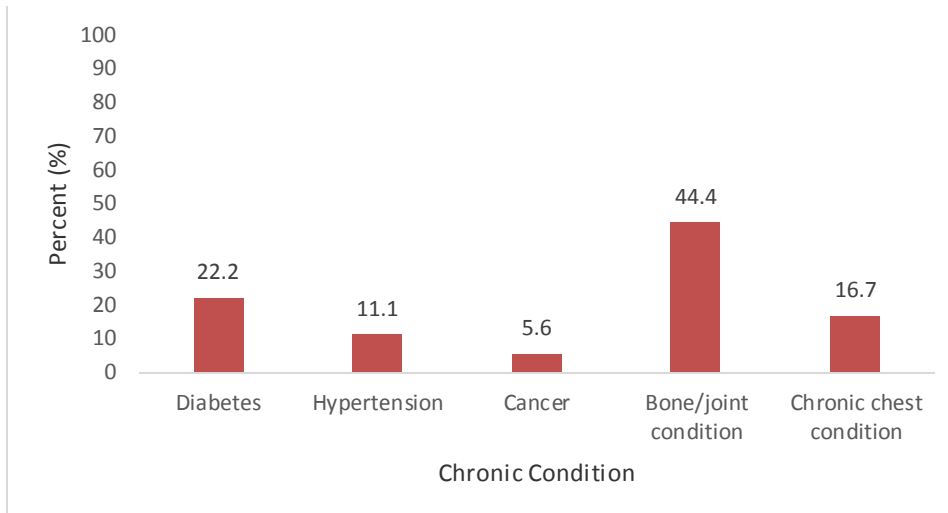
**Figure 2: Where Respondents were tested for HIV**

Among those tested, 316 (98.4%) reported their HIV status of whom 4 (1.3%) respondents reported to be HIV positive based on the last test. A further analysis of the four HIV positive respondents was done and the findings summarized. The mean age was 33 years (standard deviation (SD) 7.4) and the mean duration of working at Raiply was 6 years (SD 5.0) (min 2, max 13). Two (50%) respondents had missed work and none reported having any other chronic condition. On average, they missed work for 2.5 (SD 2.1) days (min 1, max 4). The illness causing absenteeism was reported as malaria. Other characteristics are as shown in table 5.

**Table 5: Profile of Respondents reporting HIV Positive Status**

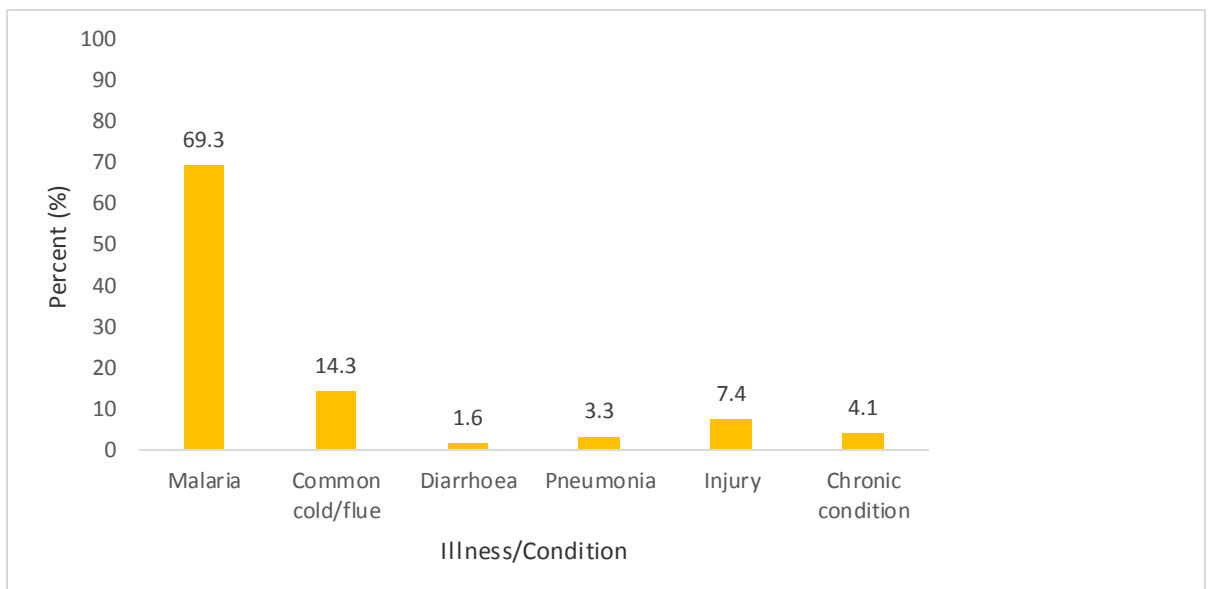
| <b>Characteristic</b>                     | <b>Frequency</b> | <b>%</b> |
|---|------------------|----------|
| Gender (n=4)                              |                  |          |
| Male                                      | 3                | 75       |
| Female                                    | 1                | 25       |
| Marital status (married) (n=4)            | 4                | 100      |
| Education level (n=4)                     |                  |          |
| Primary                                   | 1                | 25       |
| Secondary                                 | 1                | 25       |
| Tertiary                                  | 2                | 50       |
| Current employment status (n=4)           |                  |          |
| Permanent                                 | 3                | 75       |
| Contract                                  | 1                | 25       |
| Section working (n=4)                     |                  |          |
| Production (Tech)                         | 2                | 50       |
| Stores                                    | 1                | 25       |
| Human resource                            | 1                | 25       |
| Current employment level (ordinary) (n=4) | 4                | 100      |
| Working shift (n=4)                       |                  |          |
| 44 hrs/week                               | 1                | 25       |
| 48 hrs/week                               | 2                | 50       |
| 60 hrs/week                               | 1                | 25       |
| Skills level (n=4)                        |                  |          |
| Skilled                                   | 3                | 75       |
| Semi-skilled                              | 1                | 25       |

Of the respondents interviewed, 40 (12%) reported to have other chronic conditions. Of these, 18 (45%) specified the chronic conditions with 8 (44.4%) reporting to have borne/joint conditions as shown in figure 3.



**Figure 3: Other Chronic Conditions reported by Respondents**

In the last one year prior to the study, 264 (81.5%) respondents had ever missed work due to an illness and of these, majority 169 (69.3%) missed due to malaria, 35 (14.3%) common cold/flu and 18 (6.8%) due to injury as shown in figure 4.



**Figure 4: Illness that led to Absence from Work by Respondents**

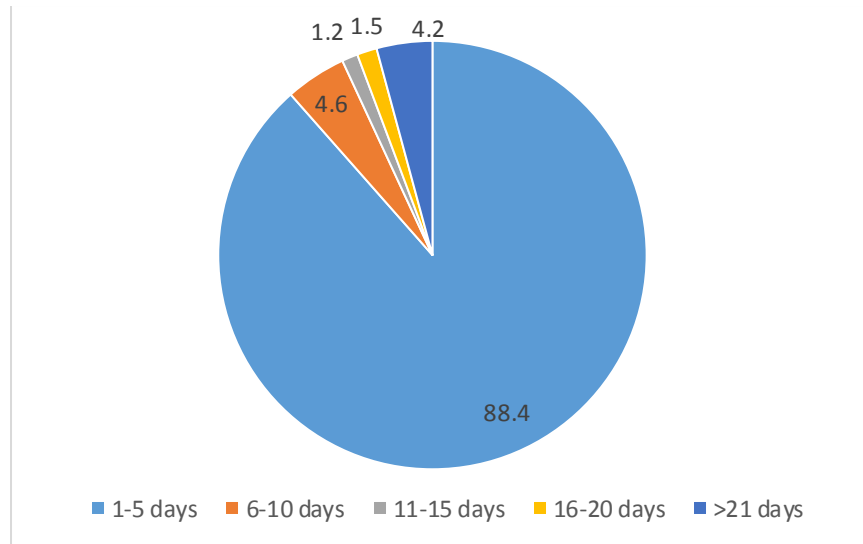
Other illnesses reported as cause for absence from work included typhoid 9 (3.4%), ulcers 2 (0.8%) and arthritis 2 (0.8%).

**Table 6: Relationship between having other Chronic Condition and Absenteeism**

| Have chronic condition | Ever absent from work |            | Chi square | P-value |
|------------------------|-----------------------|------------|------------|---------|
|                        | Yes                   | No         |            |         |
| Yes                    | 38 (95%)              | 2 (5%)     | 5.563      | 0.018   |
| No                     | 225 (79.5%)           | 58 (20.5%) |            |         |

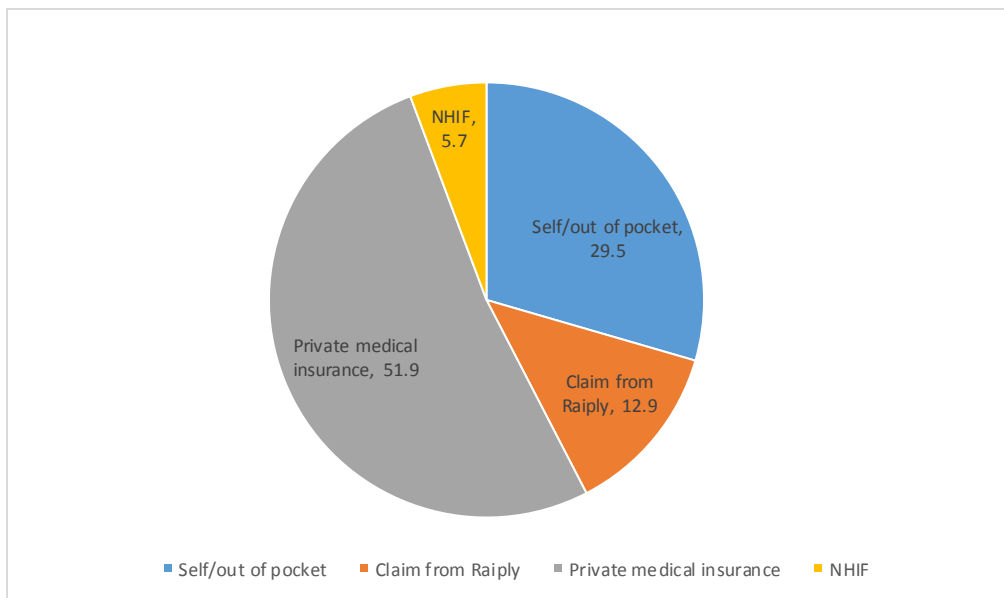
As shown in table 6 above, Pearson's Chi-square test showed there was a significant association between having a chronic condition and absenteeism (chi=5.563, p=0.018). Majority (95%) of those with other chronic conditions had ever been absent from work compared to 79.5% who did not report having a chronic condition. Simple regression analysis indicated that those with an illness were almost 5 times more likely to be absent from work compared to those without (Odd's ratio (OR): 95% confidence interval (CI): 4.898; 1.148-20.899).

Majority 229 (88.4%) reported absence from work for between 1-5 days while 11 (4.2%) had missed work for more than 21 days as indicated in figure 5.



**Figure 5: Number of Days Reported Absent from Work due to Illness by Respondents**

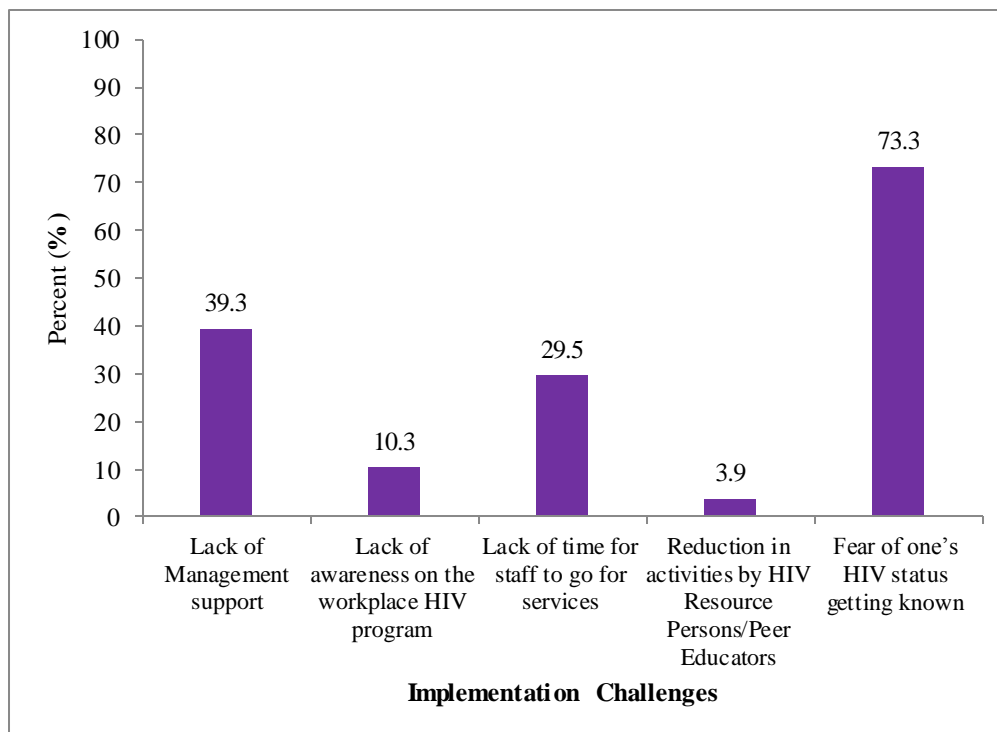
More than half 137 (51.9%) paid for their medical expenses through private medical insurance, while 78 (29.5%) paid from self/out of pocket as shown in figure 6.



**Figure 6: Respondents' Means of paying for Medical Expenses**

#### 4.4 Challenges in implementing the Raiply Workplace HIV Program

In order to understand the challenges faced in implementation of the workplace program, respondents were asked to state what they saw as the biggest challenges experienced. Of the 285 (85.6%) employees that responded, 209 (73.3%) reported fear of one's HIV status getting known while 112 (39.3%) cited lack of management support as shown in figure 7.



**Figure 7: Challenges in implementing the Workplace Program**

The most common suggestions to improve the Raiply workplace HIV program as cited by respondents were creating awareness 33 (9.9%) and creation of time to seek services 27 (8.1%).

In summary, this chapter presented data collected from the study respondents including demographic and employment characteristics, their perceptions of the program and utilization of its services, and implementation challenges as well as respondents' recommendations for improvement.

## **CHAPTER FIVE: DISCUSSION**

### **5.0 Introduction**

This chapter presents a discussion of the major findings of the study in relation to the objectives and in comparison, to similar studies that have been conducted. The study sought to assess the workplace HIV program implemented at the Raiply Factory in Eldoret. The purpose of the study was to determine the employees' perceptions of the Raiply workplace HIV program and utilization of its services, its implementation challenges as well as recommendations for improvement.

### **5.1 Demographic and Employment Profile**

On the demographic profile, results of this study showed the median age of the respondents was 37 years. This means that majority of the Factory's workforce constitute adults within their prime years of working. Regarding employment characteristics, the bulk of employees in Raiply are regular employees involved in technical production for the Factory and therefore their well-being is critical for its productivity. This is further compounded by their level of skills (either skilled or semi-skilled) and the finding that majority acquired their skills through on-job training. This profile of employees requires more investment by the employer in order to retain them. Losing such an employee means that the company will incur more costs to recruit a replacement that requires further on-job-training to attain the expected level of performance.



## 5.2 Employee Perceptions of the Workplace HIV program

In this study, the employees' perception towards the workplace HIV program was positive as majority were able to seek and utilize the services and generally felt the workplace program had made a positive contribution. More than two-thirds (70.2%) had utilized the services provided and majority (94.2%) were of the view that employees were able to seek services within the Factory without fear of stigma. Nearly all the respondents found the workplace program's services useful to the Factory employees. On whether the workplace HIV program had led to increased knowledge of HIV status among employees, all respondents agreed in varied degrees except 9 (2.8%) who felt the program had not at all led to any increase in the knowledge of HIV status among employees. These perceptions indicate that the respondents believed the program was meeting its intended purpose.

It was perceived that majority of the respondents were able to seek services provided under the workplace program without fear of stigma. Almost 93% (n=298) of the respondents thought that HIV and AIDS contributed to absenteeism due to sick leave among those affected. This is far much higher than Mbaeh, *et al.*'s (2015) survey conducted for selected hotels in the North Coast, Kenya where 77% (n=23) of the respondents agreed HIV illness caused absenteeism. Despite this, a significant majority thought there had been a reduction in the number of employees missing work due to illness since establishment of the workplace HIV program. This could be attributed to the perception by respondents that the program had made a positive contribution at Raiply.

A significant proportion of the study respondents were of the opinion that employees who have HIV infection are able to do normal duties like those who are not infected. These findings point to a positive perception that the workplace HIV program had made contributions in helping reduce absenteeism due to illness and the quality of life for those infected with HIV. This finding informs both Raiply and AMPATH management on the importance of continued support of the workplace HIV program.

### **5.3 Utilization of the Raiply Workplace HIV Program Services**

The results of this study show that majority of the respondents were aware of the existence of the Raiply HIV workplace program, a state that is likely to positively influence the employees' perception towards supporting and utilizing the services provided. The awareness level of 98.5% was much higher compared to Scott, *et al.* (2013) finding that awareness of the existence of HIV programs was at 83.3%. This level of awareness of the program's existence could be attributed to the duration of more than 10 years that the program had been in place since its establishment in 2007. This duration is much longer compared to the findings by Nzuve and Chelangat (2014) that of the factories that had a HIV policy, only 11.11% had had the policy for more than 5 years. The utilization of services can be attributed to the finding that employees were able to seek services provided under the workplace program within the Factory without fear of stigma and they found the services useful to them.

The Raiply workplace HIV program's services target all employees since they are aimed at both prevention for those uninfected and care and treatment for the infected. HIV testing and counseling is the entry point to HIV care and treatment services and one of the key services provided as part of the workplace HIV program. Knowledge of HIV status was very high among employees at 96.7% and this was much higher

compared to Corbett, *et al.* (2006) who, their study of a workplace in Zimbabwe, found that uptake of VCT was higher at 51% uptake versus 19% if the services are offered on-site rather than through vouchers for off-site testing.

The proportion tested at Raiply was 53% and this was comparable to Corbett, *et al.*'s finding of 51% uptake for on-site VCT services. The proportion of employees tested at Raiply is a confirmation that employees were utilizing the workplace program services. It can be assumed that following HIV testing, employees found HIV-infected proceed to initiate lifelong care and treatment for HIV including ART. According to Connelly and Rosen (2005), how high the uptake for HIV/AIDS services will be among employees is a key factor that companies must consider when establishing workplace HIV programs, especially if companies are considering offering services at on-site health facilities. Based on these study findings, there is need for continued support of the Raiply workplace HIV program services and sustaining the awareness levels for the benefit of the Factory employees.

Among those tested for HIV, 1.3% reported to be HIV positive. A further analysis of the HIV positive subset did not reveal any characteristics different from those who reported to be HIV negative. While the proportion of employees who reported to be HIV-positive could be relatively small, the sub-analysis findings are consistent with Habyarimana, *et al* (2007) who analyzed information from the Debswana Diamond Company, Botswana on worker absenteeism and the effect of HIV/AIDS and ARV treatment. They found evidence that compared to other workers, individuals who started treatment continued to have patterns of absenteeism that were similar to those of healthy workers. Although the current study did not establish if or when those reporting to be HIV-infected started ART, the similarity in the characteristics analyzed to those of

healthy workers is an indication that their health and productivity was improved. The researcher acknowledges that the Habyarimana, *et al* analysis was conducted nearly ten years ago and that HIV knowledge has been fast-evolving. However, fundamentals such as benefits of ART have been proven and given the slow-acting nature of the HIV virus, these findings are still relevant and applicable. This demonstration serves as a strong motivation for employers to invest in workplace HIV programs that cater for and help infected employees lead a near-normal productive life.

Episodes of absenteeism due to illness were reported by a significant proportion of the respondents and from this, one can conclude that absenteeism was a major problem in the Factory. It is not lost on the researcher that at the time of conducting this study, the Raiply HR office was performing a rapid assessment to ascertain the causes for high rates of employee absenteeism at the Factory. The findings of this study on issues related to worker absenteeism will therefore be of great benefit to the Raiply management. The study design however did not allow detailed collection and analysis of worker absence episodes pre- and post-establishment of the workplace HIV program. In addition, it was not possible to directly link the illnesses cited by respondents as having caused their absence from work to HIV/AIDS. Using the existing system of sick-sheets to document employee absenteeism due to illness, the Raiply HR office can be able to track and monitor the trends in illness-related absenteeism and design appropriate interventions to curb this challenge. Based on the study findings, the number of days of absence from work due to an illness was diverse. When an employee is absent, their work either remains unperformed or fellow employees are re-assigned to cover their duties. This trend has a direct effect on the productivity of the Factory and impacts negatively on the performance of the employees as well.

Considering the presence of other chronic conditions for which treatment was being sought at the time of study helped reveal a significant association between having a chronic condition and absenteeism. Further analysis indicated that those with an illness were almost five times more likely to be absent from work compared to those without. Establishing the existence of other chronic conditions was important in this study since these conditions were likely to cause the employee to be absent from work. As Ngeno and Muathe (2014) pointed out, the concept of workplace programs in Kenya has mainly been on prevention and control of HIV/AIDS and related illness which limits their ability to take into account other influences on the health of employees. It would be important for Raiply to consider introducing a wellness program that goes beyond the workplace HIV program to address other diseases such as chronic conditions and workplace related factors that put employees at risk of becoming ill.

#### **5.4 Challenges in Implementing the Raiply Workplace HIV Program**

Many companies are responding to the HIV and AIDS crisis through investment in prevention programs (Zellner & Ron, 2008). A company's decision to initiate and support a workplace HIV program is informed by many considerations and the implementation is not without challenges. In this study, majority of the respondents cited fear of one's status getting known and lack of management support. As Scott, *et al.* (2013) found in their literature review and interviews with HIV positive workers in Zimbabwe, most interviewees stated that the primary reason they delayed being tested for HIV was because they feared that being found HIV-positive would lead to losing their jobs or being demoted or transferred to a different department. Workers who know there is an official policy of non-discrimination and support are more likely to be willing to engage in workplace HIV programs. Emphasizing that management cannot access

the results instills worker trust in the program's confidentiality and leads to higher uptake of HIV testing services; having an independent organization conduct the testing is one way to increase worker trust (Stevens, *et al.* 2006). This suggestion supports the current collaboration between Raiply and AMPATH where the latter independently provides HIV-related services to Raiply employees. Thus, as recommended in the Kenya Demographic and Health Survey (2014), there is still need for more anti-stigma messages at Raiply in order to encourage all employees to know their HIV status and improve adherence to treatment among HIV-infected persons.

Scott, *et al.* (2013) also noted that support from management is important not only in influencing VCT uptake but also in terms of supporting HIV-positive workers. Some respondents cited lack of time for staff to go for services as another challenge. Involving supervisors and managers in the workplace HIV program will help them understand the needs of HIV infected employees and support them better. Another form of support is being given time off to go to the clinic and ensuring predictable hours for HIV-positive workers are maintained.

## **CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS**

### **6.1 Conclusion**

This study served as one of the first formal assessments of the Raiply workplace HIV program that was established in 2007. Its findings can help workplace organizations that have initiated workplace HIV programs carry out assessments of their programs to determine if they are meeting the intended purpose. In general, the study established a positive perception towards the workplace HIV program; employees were able to seek and utilize the HIV services. Both awareness about existence of the workplace HIV program and knowledge of HIV status were high among the employees. Therefore, the workplace HIV program had led to increased awareness and utilization of HIV and AIDS services.

The study also found that absenteeism was prevalent among the employees and there was a significant association between having a chronic condition and being absent from work. Despite perception among employees that absenteeism had reduced since establishment of the workplace HIV program at Raiply, employee absence episodes were high and this requires specific interventions to address the problem. Fear among employees of their status being known and lack of management support were the main challenges facing implementation of the workplace HIV Program. The emerging issues from the study therefore inform both Raiply and AMPATH on the state of the workplace HIV program and provide a baseline for future action.

## **6.2 Recommendations**

Based on the study findings, recommendations are made to three major players namely Raiply management, AMPATH management, and Ministry of Health and policy makers. The specific recommendations by the researcher are as outlined below.

### **1. To Raiply Management:**

- a) Continue supporting the workplace HIV program and sustain the high levels of awareness and service utilization in order to cater for the uninfected and help infected employees lead a near-normal productive life.
- b) Consider introducing a wellness program that goes beyond the workplace HIV program to address other diseases such as chronic conditions and workplace related factors that put employees at risk of becoming ill.
- c) The HR office should track and monitor causes and trends in absenteeism and institute measures to mitigate this challenge.

### **2. To AMPATH Management:**

- a) Continue partnering with Raiply to independently provide HIV-related services to Raiply employees.

### **3. To Ministry of Health and Policy Makers:**

- a) Provide framework to facilitate workplaces that have initiated and implemented workplace HIV programs assess or evaluate the state of their programs.

## **6.3 Implications for Further Research**

The findings of this study can help workplace organizations that have initiated workplace HIV programs carry out assessments of their programs to determine if they are meeting the intended purpose. Future research may target more organizations with workplace HIV programs in order to show benefits better and give results that are more



definitive from the employees' perspective. The research can also aim to specifically explore designing a methodology that can directly link employee absenteeism and HIV/AIDS.

## REFERENCES

- Bergström, F., & Liljeqvist, N. (2010). Effective or not? Case Study Evaluation of a HIV/AIDS Workplace Program Policy at a Swedish Owned Company in Botswana. *Study Programme in Health Education/Public Health*
- Chatora, B., Chibanda, H., Kampata, L., & Wilbroad, M. (2018). HIV/AIDS workplace policy addressing epidemic drivers through workplace programs. *BMC public health, 18*(1), 180
- Colvin, M., Connolly, C., & Madurai, L. (2007). The epidemiology of HIV in South African workplaces. *Aids, 21*, S13-S19
- Connelly, P. & Rosen, S. (2005). Will small and medium enterprises provide HIV/AIDS services to employees? An analysis of market demand. *South African Journal of Economics 73*:613–26.
- Corbett, E. L., Dauya, E., Matambo, R., Cheung, Y. B., Makamure, B., Bassett, M. T., ... & Godfrey-Faussett, P. (2006). Uptake of workplace HIV counselling and testing: a cluster-randomised trial in Zimbabwe. *PLoS medicine, 3*(7), e238
- Dondo, C.F. (2012). *HIV/AIDS responses in the Western Cape: the implementation of treatment programmes in construction companies* (Doctoral dissertation, University of Cape Town)
- Fisher, A.A., Laing, J. E., Stoeckel, J.E., & Townsend J.W (1991). Handbook for Family Planning Operations Research Design. 2<sup>nd</sup> Ed. p43. Population Council. New York, USA
- Fox, M.P., Rosen S., MacLeod W.B., Wasunna M., Bü, M., Foglia, G., & Simon J.L. (2004). The Impact of HIV/AIDS on Labor Productivity in Kenya. *Tropical Medicine and International Health, 9*(3), 318-324
- George, G. (2006). Workplace ART programmes: Why do companies invest in them and are they working? *African Journal of AIDS Research 5*(2):179–88
- Habyarimana, J., Mbakile, B., & Pop-Eleches, C. (2007). HIV/AIDS, ARV treatment and worker absenteeism: evidence from a large African firm. *Draft April, 2007*
- Joint United Nations Programme on HIV/AIDS (UNAIDS). Global Report: UNAIDS Report on the Global AIDS Epidemic 2013. Geneva, Switzerland: UNAIDS; 2013
- Kenya Ministry of Health, National AIDS and STI Control Programme. (2013). *Kenya AIDS Indicator Survey 2012 Preliminary Report*. Nairobi, NACC

- Kenya Ministry of Health, National AIDS Control Council. (2016). *Kenya HIV County Profiles 2016*. Nairobi, NACC
- Kenya Ministry of Public Service, Youth and Gender Affairs, State Department of Public Service and Youth, Directorate of Public Service Management. (2017). *Public Sector Workplace Policy on HIV and AIDS*. Nairobi, Government Printer
- Kenya National Bureau of Statistics (KNBS), ICF Macro. (2014). *Kenya Demographic and Health Survey 2014: Key Indicators*. Nairobi, KNBS and ICF Macro
- Kipkalom R. J. (2008). *The Impact of HIV/AIDS on Labor Productivity in Tea Estates of Nandi South District, Kenya*. (Doctoral dissertation, Moi University)
- Larson, B.A., Fox, M.P., Rosen, S., Bii, M., Sigei, C., Shaffer D., & Simon, J.L. (2008). Early Effects of Antiretroviral Therapy on Work Performance: Preliminary Results from a Cohort Study of Kenyan Agricultural Workers. *Aids*, 22(3), 421-425
- Lee, S., Blake, H., & Lloyd, S. (2010). The price is right: making workplace wellness financially sustainable. *International journal of workplace health management*, 3(1), 58-69
- Mabuza, C.M. (2011). *Evaluation of the Management of the HIV and AIDS Workplace Policy at Statistics South Africa*. (Doctoral dissertation, University of South Africa)
- Mahajan, A.P., Colvin, M, Rudatsikira J.B. & Ettl D. (2007). An overview of HIV/AIDS workplace policies and programmes in southern Africa. *Aids*, 21, S31-S39
- Mauno, S., Kinnunen, U., & Rukolainen, M. (2007). Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of vocational behavior*, 70(1), 149-171
- Mbaeh, E.K., Wafula, F.K., Munyi, C.M., & Njoroge J.M. (2015). Impact of HIV/AIDS on Hotel Staff Productivity in Kenya: A Survey of Selected Hotels in North Coast. *Journal of Tourism, Hospitality and Sports*, 3(1), 7-12
- Mugenda, O.M., & Mugenda, A.G. (2003). *Research Methods*. Quantitative and Qualitative approaches, Nairobi: Acts Press
- Nachibanga, G.H. (2010). *Impact of HIV/Aids on the workplace. A case study on selected organisations in Ndola, Copperbelt Province*. GRIN Verlag. Available at <https://www.grin.com/document/283307>

- Naude, A. (2008). *An evaluation of the HIV/AIDS workplace programme of the South African Police Service (SAPS)* (Doctoral dissertation, North-West University)
- Ncama, B. P. (2007). Acceptance and disclosure of HIV status through an integrated community/home- based care program in South Africa. *International nursing review*, 54(4), 391-397
- Ngeno, W.K., & Muathe, S.M.A. (2014). Critical review of literature on employee wellness programs in Kenya. *International Journal of Research in Social Sciences*, 4(8), 32-41
- Nzuve, S. N., & Chelangat, N.E. (2014). Perceived Effects of HIV/Aids on Performance in the Tea Factories of Bomet County-Kenya. *International Journal of Business, Humanities and Technology*, 4(4)
- Owens L. K. (2002). Introduction to survey research design. Survey Research Laboratory. (SRL). Available at: <http://www.srl.uic.edu>
- Patton, M.Q. (2002). *Qualitative Research and Evaluation Methods*. 3<sup>rd</sup> Ed. Thousand Oaks, CA
- Rajak, D. (2010). 'HIV/AIDS is our business': the moral economy of treatment in a transnational mining company. *Journal of the Royal Anthropological Institute*, 16(3), 551-571.
- Scott, K., Campbell, C., Skovdal, M., Madanhire, C., Nyamukapa, C. & Gregson, S. (2013). What can companies do to support HIV-positive workers? Recommendations for medium- and large-sized African workplaces. *International Journal of Workplace Health Management*, 6(3), 174-188
- Stevens, W., Apostolellis, A., Napier, G., Scott, L. and Gresak, G. (2006). HIV/AIDS prevalence testing – merits, methodology and outcomes of a survey conducted at a large mining organization in South Africa. *South African Medical Journal*, 96(2), 134-139
- Stine, G.J. (2010). *An annual overview of acquired immune deficiency syndrome*. New York: McGraw-Hill
- Wynn, B. O., Dutta, A., & Nelson, M. I. (2006). *Challenges in program evaluation of health interventions in developing countries*. Rand Corporation
- Zellner, S., & Ron, I. (2008). HIV/AIDS services through the workplace: a survey in four sub-Saharan African countries. Abt Associates Inc.

## APPENDICES

### Appendix I: Consent Form

Dear Respondent,

**Study Title:** **Assessment of a Workplace HIV Program at the Raiply Factory: Eldoret, Kenya**

**Investigator:** Rose Kioko (MPH Student)  
Moi University, School of Public Health  
P.O. Box 4606, Eldoret  
Mobile: 0722 928651  
Email: [kiokorose@yahoo.com](mailto:kiokorose@yahoo.com)

**Background:** HIV/AIDS has profound social and economic effects which impact severely on enterprises, workers and their families. The main objective of this study is to carry out an assessment of the workplace HIV program at Raiply Factory in Eldoret.

**Benefits/Risks:** There will be no direct benefits from participating in the study. However, the findings of the study shall be used to inform the Raiply Factory management on how to improve the company's workplace HIV Program. There are no specific risks involved in choosing to participate in the study.

**Confidentiality:** All the information provided shall be considered confidential and shall be used for research purposes only.

**Right to refuse or withdraw:** Your participation in the study is entirely voluntary and you are free to decline to take part or withdraw at any time.

**Consent:** If you have read the above information/have been explained to in details about the study, please indicate your willingness to participate by signing this form.

**For Participant:**

I agree to participate in this study: ..... Date

.....

*Sign*

Thank you.

*In case you have any queries, you are free to ask for clarification from the Investigator or contact the following:*

Dr. Joice Baliddawa  
Study Supervisor  
P.O. Box 4606 – 30100  
Eldoret

Dr. Samson Ndege  
Study Supervisor  
P.O. Box 4606 – 30100  
Eldoret

IREC Secretariat  
P.O. Box 3 - 30100 Eldoret,  
Kenya  
Telephone: 053 33471 Ext.3008  
Mobile: 0787 723 677  
Email: [irec@mtrh.or.ke](mailto:irec@mtrh.or.ke)

## Appendix II: Questionnaire for Raiply Employees

### ASSESSMENT OF A WORKPLACE HIV PROGRAM AT THE RAIPLY

#### FACTORY: ELDORET, KENYA

*I am a graduate student at Moi University, School of Public Health pursuing a Master's degree in Public Health. As part of the course requirements, I am carrying out a research to whose aim is to assess the Workplace HIV Program at Raiply Factory in Eldoret, Kenya. It is for this purpose that I am requesting you to provide information to be filled in this questionnaire as accurately as possible. All information provided will be strictly for the purpose of this research and be will treated with utmost confidentiality. Your name will not appear anywhere in the questionnaire. Thank you for your participation in the study.*

*The Raiply Eldoret Factory in collaboration with the Academic Model Providing Access to Healthcare (AMPATH) initiated and has been implementing the Raiply HIV Workplace Program. This questionnaire is targeting employees who have worked at Raiply for more than 2 years to provide insightful information on the workplace program.*

**Respondent No:** \_\_\_\_\_ **[DO NOT WRITE YOUR NAME ON THE QUESTIONNAIRE]**

#### **Section I: Personal and Employment information**

Please indicate the correct option by ticking (√) on one of the options given below each question. Be honest and truthful. Kindly respond to all the questions.

1. Gender: Male [ ] Female [ ]
2. What is your age (in years) \_\_\_\_\_?
3. What is your marital status?  
 Single [ ] Married [ ] Separated [ ] Divorced [ ]  
 Widowed [ ] Other (please specify) \_\_\_\_\_
4. Highest education level attained  
 None [ ] Primary [ ] Secondary [ ] Tertiary [ ]  
 Other (please specify) \_\_\_\_\_
5. Specify your current employment status: Permanent [ ] Contract [ ]  
 Other (please specify) \_\_\_\_\_
6. How long have you been working in this Factory? \_\_\_\_\_ years

7. In which section within the Factory do you work?

Production (Technical) [ ]

Service (Technical) [ ]

Finance [ ]

Sales [ ]

Stores [ ]

Garage/Transport [ ]

Information Technology [ ]

Human Resource [ ]

Other (please specify) \_\_\_\_\_

8. Which of the following best describes your current level of employment?

Manager [ ]

Head of Department [ ]

Supervisor [ ]

Ordinary employee [ ]

Other (please specify) \_\_\_\_\_

9. Specify your current working shift:

44 Hours/Week [ ]

48 Hours/Week [ ]

60 Hours/Week [ ]

10. How would you categorize your skills level:

Skilled [ ]

Semi-skilled [ ]

Unskilled [ ]

Other (please specify) \_\_\_\_\_

11. Where did you acquire your skills?

Training school [ ]

On-job-training [ ]

Other (please specify) \_\_\_\_\_

## Section II: Employee perceptions of the Workplace HIV program

12. On the scale provided below, please indicate the extent to which each of the questions given in the matrix below reflect the situation in the Raiply Factory. Use 1 – Not at all; 2 – To a less extent; 3 – To a moderate extent; 4 – To a great extent; 5 – To a very great extent.

| Question   | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| 1. Have you utilized any of the services provided as part of the Raiply HIV and AIDS workplace program e.g. counseling, HIV testing, condom provision, HIV care and treatment, learning resource center among others |   |   |   |   |   |
| 2. Are employees able to seek services provided under the HIV and AIDS workplace program within the Factory without fear of stigma?  |   |   |   |   |   |

|  |          |          |          |          |          |
|--|----------|----------|----------|----------|----------|
| 3. Do you find the services provided as part of the Raiply HIV and AIDS Workplace program useful to employees in the Factory?                        |          |          |          |          |          |
| 4. Has the workplace HIV and AIDS program led to increased knowledge of HIV status among employees?  |          |          |          |          |          |
| 5. Do you think HIV and AIDS contributes to absenteeism due to sick leave among those affected?  |          |          |          |          |          |
| 6. Since the establishment of the workplace HIV and AIDS program, has there been a reduction in the number of employees missing work due to illness? |          |          |          |          |          |
| <b>Question</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 7. Do you think the workplace HIV and AIDS program is responsible for the reduction in number of employees missing work due to illness?              |          |          |          |          |          |
| 8. Do employees who are infected with HIV and AIDS miss more days of work?   |          |          |          |          |          |
| 9. Are employees who have HIV infection able to do normal duties like those who are not infected?  |          |          |          |          |          |
| 10. Have you had to cover duties for an employee who had missed work due to illness?   |          |          |          |          |          |

### Section III: Utilization of the Raiply Workplace HIV Program Services

13. Are you aware of the existence of a workplace HIV/AIDS program in the Factory? Yes [ ] No [ ]

14. (a) Have you ever been tested for HIV? Yes [ ] No [ ]

(b) If yes to question 13 (a) above, where were you tested?

At Raiply [ ] In a Health Facility [ ] At a VCT Centre [ ]

Other (please specify) \_\_\_\_\_

(c) If yes to question 13 (a) above, what is your HIV status based on the last HIV test? HIV Negative [ ] HIV Positive [ ]



15. (a) Do you have any other chronic condition for which you have been seeking treatment?

Yes [ ] No [ ]

(b) If yes in question 14 (a) above, please select the chronic condition(s) from the list below:

Diabetes [ ] Hypertension [ ] Cancer [ ]  
Heart Disease [ ] Bone/Joint conditions [ ] Chronic chest conditions [ ]

Other (please specify) \_\_\_\_\_

16. (a) In the last one (1) year, did you ever miss work due to an illness? Yes [ ]

No [ ]

(b) If yes in question 15 (a) what illness/condition caused you to miss work?

Please tick from the list below:

Malaria [ ] Common Cold/Flu [ ] Diarrhoea [ ]  
Pneumonia [ ] Injury [ ] Chronic condition (Qn 14.b) [ ]

Other (please specify) \_\_\_\_\_

(c) If yes in question 15 (a) above, please indicate the number of days you missed work due to illness:

1 – 5 days [ ] 6 – 10 days [ ] 11 – 15 days [ ]  
16 – 20 days [ ] >21 days [ ]

17. How do you pay for your medical expenses?

Self/Out-of-pocket [ ] Claim from Raiply [ ] Private Medical Insurance [ ]

Other (please specify) \_\_\_\_\_

#### **Section IV: Challenges in Implementing the Raiply HIV Workplace Program**

18. What do you see as the biggest challenges in implementing the HIV workplace program among the employees at the Raiply Factory? Please tick all that apply from the list below:

Lack of management support [ ]  
Lack of awareness on the workplace HIV program [ ]  
Lack of time for staff to go for services [ ]  
Reduction in activities by HIV Resource Persons/Peer Educators [ ]  
Fear of one's HIV status getting known [ ]

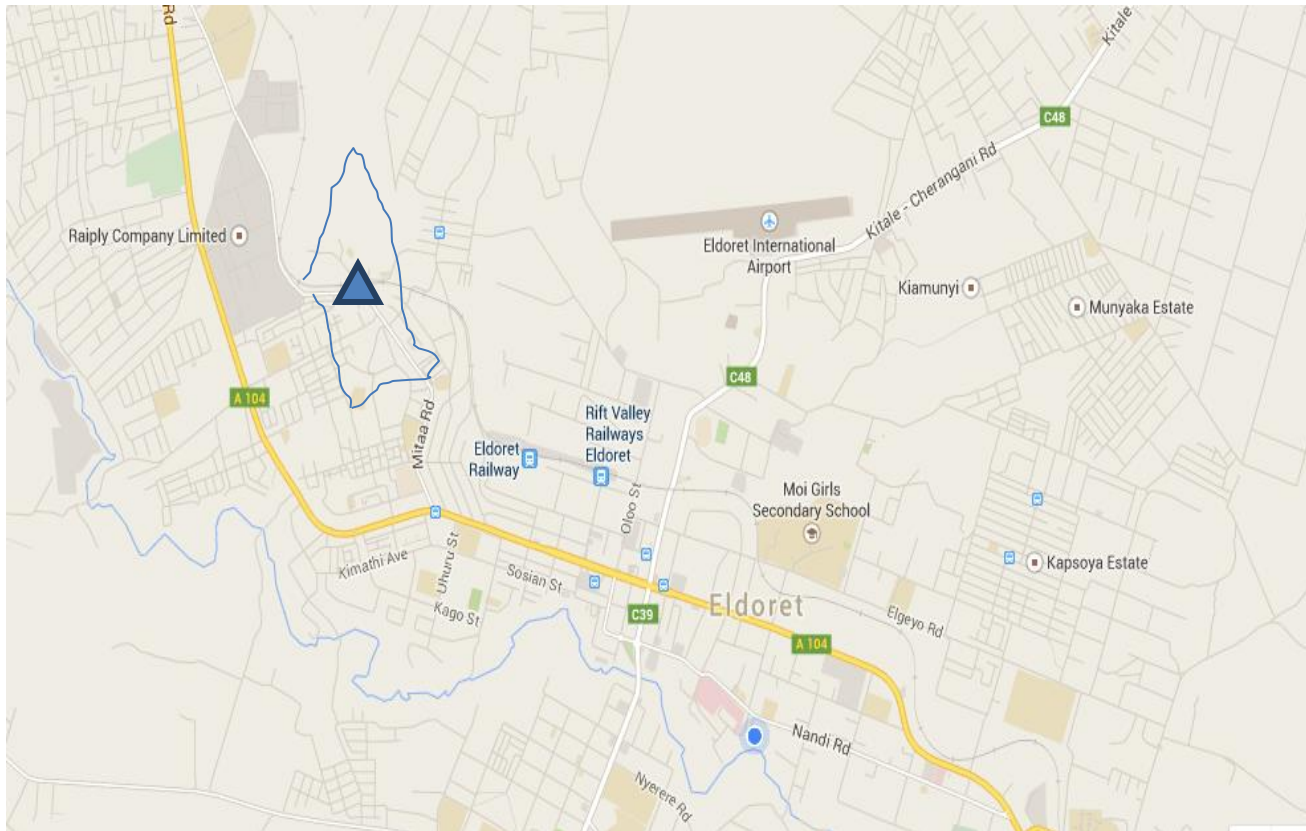
Other (please specify) \_\_\_\_\_

19. Please suggest ways in which the Raiply Workplace HIV program can be improved \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

*Thank you for your responses and participation in this study.*

### Appendix III: Site Location Map of Raiply Factory (Kenya) Limited in Eldoret Town



Source: <https://www.google.com/maps/@0.5610658,35.3235769,12z>

## Appendix IV: Approval Letter to Conduct Study



MOI TEACHING AND REFERRAL HOSPITAL  
P.O. BOX 3  
ELDORET  
Tel: 33471123



MOI UNIVERSITY  
SCHOOL OF MEDICINE  
P.O. BOX 4605  
ELDORET

### INSTITUTIONAL RESEARCH AND ETHICS COMMITTEE (IREC)

Reference: IREC/2016/42  
**Approval Number: 0001867**

16<sup>th</sup> May, 2017

Ms. Rose Kikoo,  
Moi University,  
School of Public Health,  
P.O. Box 4603-30100,  
**ELDORET-KENYA.**



Dear Ms. Kikoo,

#### **RE: FORMAL APPROVAL**

The Institutional Research and Ethics Committee has reviewed your research proposal titled:-

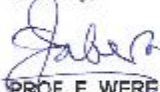
***"Effect of the Rapidly HIV and AIDS Workplace Program on Illness-Related Absenteeism among Employees at the Eldoret Factory, Uasin Gishu County, Kenya"***

Your proposal has been granted a Formal Approval Number: **FAN: IREC 1867** on 16<sup>th</sup> May, 2017. You are therefore permitted to begin your investigations.

Note that this approval is for 1 year; it will thus expire on 16<sup>th</sup> May, 2018. If it is necessary to continue with this research beyond the expiry date, a request for continuation should be made in writing to IREC Secretariat two months prior to the expiry date.

You are required to submit progress report(s) regularly as dictated by your proposal. Furthermore, you must notify the Committee of any proposal change (s) or amendment (s) serious or unexpected outcomes related to the conduct of the study, or study termination for any reason. The Committee expects to receive a final report at the end of the study.

Sincerely,

  
**PROF. E. WERE**  
**CHAIRMAN**  
**INSTITUTIONAL RESEARCH AND ETHICS COMMITTEE**

cc    CEO    -    VTRH            Dean    -    SOP            Dean    -    SOM  
      Principal -    CHS            Dean    -    SON            Dean    -    SOD

## Appendix V: Introduction Letter from Moi University

P. O. Box 4606  
 ELDORET, 30100  
 Kenya,  
 Email: [deansphmu@gmail.com](mailto:deansphmu@gmail.com)



Office Tel: -254 0770071740  
 -254 0726292203  
 Website: [www.miu.ac.ke](http://www.miu.ac.ke)

**MOI UNIVERSITY**  
**COLLEGE OF HEALTH SCIENCES**  
 SCHOOL OF PUBLIC HEALTH  
 Office of the Dean

Ref: SPH/PGH/06/09

Date: 26<sup>th</sup> May, 2017

TO WHOM IT MAY CONCERN

**RE: KIOKO ROSE NDUNGE**

This is to confirm that the above named is a bonafide student of Moi University, College of Health Sciences, School of Public Health. She is pursuing a master's degree leading to a Master of Public Health. She is currently in her final year of study.

Ms. Kioko is currently collecting data for her thesis and has chosen your organization as one of the data collection sites.

In case you need more information regarding the same; please do not hesitate to contact the undersigned.

Kindly accord her the necessary assistance that she deserves.

Thank you

**SAMSON SANG**  
**ADMINISTRATOR**  
**SCHOOL OF PUBLIC HEALTH**

*Jeb*

**Appendix VI: Introduction Letter from Raiply**

**RAI PLYWOODS (K) LTD  
P.O.BOX 241 – 30100  
ELDORET**

**MEMO**

**TO : HODs**  
**FROM : PERSONNEL MANAGER**  
**DATE : 29<sup>TH</sup> JUNE ,2017**

**RE : AMPATH RESEARCH ON ILLNESS RELATED ABSENTEEISM  
AMONG EMPLOYEES.**

Representatives from Moi Teaching and Referral Hospital – AMPATH are doing research on Workplace Programme on illness related Absenteelism among our Employees w.e.f Friday 30/6/2017 to 8/07/2017.

Kindly accord them the necessary support.

Yours faithfully,  
**RAI PLYWOODS (K) LTD**

  
**JOACHIM KIMOJA**  
**PERSONNEL MANAGER**