

**HIV AND AIDS-RELATED STIGMA AND DISCRIMINATION
REDUCTION-INTERVENTION STRATEGY IN HEALTH CARE SETTINGS
OF AMAHARA REGION, ETHIOPIA**

by

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DECLARATION

I declare that this thesis entitled **HIV AND AIDS-RELATED STIGMA AND DISCRIMINATION REDUCTION-INTERVENTION STRATEGY IN HEALTH CARE SETTINGS OF AMAHARA REGION, ETHIOPIA** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.



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REDUCTION-INTERVENTION STRATEGY IN HEALTH CARE SETTINGS
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ABSTRACT

Stigma and discrimination (SAD) attached to Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) has been recognised as a major obstacle to HIV prevention, treatment, care and support throughout the world. SAD is more devastating when it occurs in health care settings where it is least expected. Health care providers (HCPs) are supposed to provide physical, social and psychological support to people living with HIV (PLWHA) but HIV and AIDS-related SAD has been extensively documented among the HCPs. Different studies have pointed out that there are three major actionable causes of HIV-related SAD in health care settings. These are lack of awareness among HCPs, fear of casual contacts and associating the SAD to immoral behaviour. The main objective of the current study is to determine the magnitude of HIV and AIDS-related SAD and its associated factors in hospitals and then to propose appropriate SAD reduction-intervention strategy in the health care settings. The study employed pre-test-post-test design with non-equivalent control group. Two paradigms were used in this study including quantitative and qualitative approaches. The sampling method for the quantitative part of the study was probability sampling in which the respondents were randomly selected using stratified sampling technique. The study was able to determine the magnitude of HIV and AIDS-related SAD among the HCPs. Moreover, the study has identified the factors that are attributed to the prevalence of SAD in the hospitals. The major factors identified for causing the SAD in the hospitals were sex, age, work experience, low level of knowledge, negative attitudes and perceived risk of HIV infection of some HCPs toward the PLWHA. The intervention made on the respondents in the treatment group was able to reduce the overall prevalence of the SAD among the HCPs. The study suggests that to reduce the SAD, HIV and AIDS-related trainings before and after graduation is critical to improve

the knowledge, attitudes and practices of the HCPs. Besides, ensuring the availability of the protective supplies in hospitals is crucial in reducing the fear of HIV infection among the HCPs while providing care for HIV positive patients. Effective implementation of the hospital policies, strategies, guidelines and protocols along with good institutional support is also vital in creating safe and user-friendly hospitals for PLWHA.

Key words

AIDS; discrimination, health care settings; health care provides HIV positive patients; hospital policies; people living with HIV; protocols; stigma.

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Dedication

*This thesis is dedicated to my late brother,
Kumera Sedeta Wodajo.*

May his souls rest in peace!

TABLE OF CONTENTS

CHAPTER 1

ORIENTAION OF THE STUDY

1.1	INTRODUCTION	1
1.2	BACKGROUND TO THE RESEARCH PROBLEM	2
1.3	STATEMENT OF THE PROBLEM	5
1.4	THE THEORETICAL FRAMEWORK.....	6
1.4.1	Conceptualisation of stigma.....	6
1.4.2	Importance of theories in behavioural interventions	7
1.5	DEFINITIONS OF KEY CONCEPTS	9
1.5.1	Definitions of key terms	9
1.5.2	Definitions of key variables	9
1.6	AIM OBJECTIVES AND RESEARCH QUESTIONS.....	10
1.6.1	Aim.....	11
1.6.2	Objectives.....	11
1.6.3	Research questions	11
1.7	METHODOLOGY	11
1.8	SIGNIFICANCE OF THE STUDY	12
1.9	ETHICAL CONSIDERATIONS	12
1.9.1	Protecting the rights of the participants.....	12
1.9.2	Informed consent.....	13
1.9.3	Confidentiality and anonymity	13
1.9.4	Protecting the rights of the setting	14
1.10	SCOPE THE STUDY	14
1.11	STRUCTURE OF THE THESIS.....	14
1.12	CONCLUSION.....	15

CHAPTER 2

LITERATURE REVIEW

2.1	INTRODUCTION	16
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2.2	THEORETICAL FRAMEWORK.....	16
2.2.1	Conceptualisation of stigma.....	16
2.2.2	Importance of theories in behavioural interventions	17
2.2.2.1	The Health Belief Model	18
2.2.2.2	The Theory of Reasoned Action	18
2.2.2.3	The Social Cognitive Theory.....	18
2.2.2.4	The Integrated Theoretical Model.....	19
2.2.3	Application of the Integrated Model to behavioural change interventions.....	19
2.2.4	Conceptual framework.....	20
2.2.4.1	Lack of awareness about HIV and AIDS.....	20
2.2.4.2	Fear of transmission of HIV infection	21
2.2.4.3	Association of the HIV infection with immoral behaviour	21
2.3	HIV AND AIDS.....	22
2.3.1	Global magnitude of HIV and AIDS	22
2.3.2	National magnitude of HIV and AIDS.....	23
2.4	STIGMA AND DISCRIMANTION.....	24
2.4.1	Stigma as a concept	24
2.4.2	Origin of stigma.....	26
2.4.3	Types of stigma	27
2.4.4	Discrimination	28
2.4.5	HIV and AIDS-related stigma and discrimination.....	28
2.5	FACTORS ASSOCIATED WITH HIV AND AIDS-RELATED SAD IN HEALTH CARE SETTINGS	30
2.5.1	Factors associated with knowledge, attitudes and practices	31
2.5.2	Factors associated with socio-economic and demographics	33
2.5.3	Factors associated with beliefs, culture and fear of casual contacts	35
2.5.4	Factors related to institutional policies, strategies and working environment	37
2.6	EXPERIENCES OF HIV AND AIDS-RELATED SAD IN THE HEALTH CARE SETTINGS.....	38
2.7	IMPACT OF HIV AND AIDS-RELATED SAD IN THE HEALTH CARE SETTINGS.....	41
2.8	HIV AND AIDS-RELATED SAD-REDUCTION INTERVENTIONS	43
2.9	EFFECTIVE STRATEGIES TO REDUCE HIV AND AIDS-RELATED STIGMA AND DISCRIMINATION	49
2.9.1	Improving knowledge of health care professionals	49
2.9.2	Designing hospital strategies and reforms.....	49
2.9.3	Individual face-to-face discussion	50
2.10	THE ETHIOPIAN HEALTH CARE SYSTEM	51
2.10.1	The Ethiopian HIV and AIDS policy and strategy	51
2.10.2	HIV and AIDS-related stigma and discrimination in Ethiopia	52
2.11	CONCLUSION.....	53

CHAPTER 3

RESEARCH DESIGN AND METHODS

3.1	INTRODUCTION	54
3.2	RESEARCH DESIGN	54
3.3	APPROACHES USED IN THE STUDY	55
3.3.1	Quantitative approach.....	55
3.3.2	Qualitative approach.....	55
3.4	RESEARCH METHODS	56
3.4.1	Study settings	56
3.4.2	Population and sample selection	56
3.4.2.1	Target and study population	56
3.4.2.2	Inclusion criteria	57
3.4.2.3	Exclusion criteria.....	57
3.4.2.4	Sampling method and technique for the quantitative approach	57
3.4.2.5	Sampling method and technique of the qualitative approach	58
3.4.3	Data collection	58
3.4.3.1	Quantitative data collection.....	58
3.4.3.2	Procedure of the quantitative data collection	59
3.4.3.3	Pre-testing of the questionnaire	59
3.4.3.4	Qualitative data collection	60
3.4.4	Data analysis	60
3.4.4.1	Data processing.....	62
3.4.4.2	Quantitative data analysis.....	62
3.4.4.3	Qualitative data analysis	63
3.5	BRIEF INTERVENTION	63
3.5.1	Development the training manual	63
3.5.2	Training of the health care providers	64
3.6	DATA QUALITY	64
3.6.1	Quantitative data.....	64
3.6.1.1	Validity	65
3.6.1.2	Reliability	66
3.6.2	Qualitative data.....	66
3.6.2.1	Credibility.....	66
3.6.2.2	Transferability	67
3.6.2.3	Dependability	67

3.6.2.4	Confirmability	68
3.7	ETHICAL CONSIDERATIONS	68
3.7.1	Beneficence	68
3.7.2	Respect of human dignity	68
3.7.3	Justice.....	69
3.8	DISSEMINATION OF THE RESULTS.....	70
3.9	CONCLUSION.....	70

CHAPTER 4

FINDINGS OF THE STUDY

4.1	INTRODUCTION	71
4.1.1	Pre-test findings.....	71
4.1.1.1	Socio-demographic characteristics of the respondents	71
4.1.1.2	Job profile of the respondents	72
4.1.1.3	Knowledge related to HIV and AIDS.....	73
4.1.1.4	Attitudes and beliefs toward PLWHA admitted to the hospitals	78
4.1.1.5	Perceived risks toward care of PLWHA in the hospitals	82
4.1.1.6	Discriminatory practices.....	83
4.1.1.7	Hospital policies, guidelines and protocols	87
4.1.1.8	Respondents' views regarding discrimination and availability of supplies	87
4.1.2	Post-test findings	88
4.1.2.1	Knowledge related to HIV and AIDS.....	88
4.1.2.2	Attitudes and beliefs toward PLWHA	92
4.1.2.3	Perceived risk toward care of PLWHA in the hospitals	95
4.1.2.4	Discriminatory practices toward PLWHA	96
4.1.3	Comparative findings of the post-tests.....	99
4.1.3.1	Knowledge of the respondents	100
4.1.3.2	Attitudes and beliefs of the respondents.....	100
4.1.3.3	Discriminatory practices of the respondents.....	100
4.1.4	Summaries of the descriptive findings	101
4.1.4.1	Pre-post test summary of FHRH.....	101
4.1.4.2	Pre-post test summary of DMRH	103
4.1.4.3	Post-test of FHRH and DMRH.....	104
4.1.5	Summary of the inferential findings.....	105
4.1.5.1	Stigma: Regression result of pre-test for FHRH and DMRH.....	105
4.1.5.2	Stigma: Regression result of post-test for FHRH and DMRH	106
4.1.5.3	Discrimination: Regression result of pre-test for FHRH and DMRH	107

4.1.5.4	Discrimination: Regression result of post-test for FHRH and DMRH.....	109
4.2	FINDINGS OF THE QUALITATIVE PARADIGM	110
4.2.1	Introduction	110
4.2.2	Result of the in-depth interview.....	111
4.2.2.1	Factors related to the stigma and discrimination in the hospitals.....	111
4.2.2.2	Recommended solutions to eliminate the identified gaps.....	115
4.3	CONCLUSION.....	116

CHAPTER 5

BRIEF INTREVENTION

5.1	INTRODUCTION	117
5.1.1	Brief intervention.....	117
5.1.2	Contents of the training.....	117
5.1.3	Methodology of the training	118
5.1.4	Outcome of the training intervention on the respondents	120
5.1.4.1	Changes on the knowledge of the respondents.....	120
5.1.4.2	Changes in attitude and beliefs of the respondents.....	121
5.1.4.3	Changes on discriminatory practices	122
5.2	CONCLUSION.....	124

CHAPTER 6

DISCUSSION

6.1	INTRODCTION.....	125
6.2	MAGNITUDE OF THE HIV AND AIDS-RELATED SAD IN THE HOSPITALS	125
6.2.1	Factors associated with HIV and AIDS-related to SAD in the hospitals.....	125
6.2.2.1	Socio-demographic characteristics	126
6.2.2.2	HIV and AIDS-related knowledge	126
6.2.2.3	Attitudes and beliefs toward HIV positive patients	128
6.2.2.4	Perceived risk of infection.....	129
6.2.2.5	Discriminatory practices toward the PLWHA in the hospitals	130
6.2.2.6	HIV and AIDS policies, guidelines and protocols.....	131
6.2.2.7	Lack of protective supplies for universal precautions	132
6.3	EFFECTS OF THE INTERVENTION ON THE RESPONDENTS.....	133
6.3.1	Effects of the intervention on knowledge of the respondents	133
6.3.2	Effects of the intervention on attitudes and beliefs of the respondents.....	133
6.3.3	Effects of the intervention on the behaviour of the respondents.....	134

6.4	DESIGNING HIV AND AIDS-RELATED SAD REDUCTION-INTERVENTION STRATEGY	134
6.4.1	Provision of training to health care providers.....	135
6.4.2	Availing protective supplies for universal precautions.....	136
6.4.3	Applying institutional policies, strategies, guidelines and protocols	136
6.4.4	Providing institutional support.....	137
6.5	CONCLUSION.....	137

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1	INTRODUCTION	138
7.2	SUMMARY AND INTERPRETATION OF THE STUDY FINDINGS	138
7.3	CONCLUSIONS	140
7.4	RECOMMEDATIONS.....	141
7.5	CONTRIBUTION OF THE STUDY	141
7.6	LIMITATIONS OF THE STUDY	142
7.7	CONCLUSION.....	142
	LIST OF REFERENCES	144

LIST OF TABLES

Table 4.1	Socio-demographic characteristics of the respondents, May 2014	72
Table 4.2	Job profile of the study respondents, May 2014.....	73
Table 4.3	Knowledge of the respondents at FHRH and DMRH, May 2014	77
Table 4.4	Stigma points by response and type of statement	78
Table 4.5	Attitudes and beliefs toward PLWHA, May 2014.....	81
Table 4.6	Discriminatory practices in the two hospitals	85
Table 4.7	Hospital policies, guidelines and protocols, May 2014	87
Table 4.8	HIV knowledge of respondents at FHRH and DMRH, July 2014	91
Table 4.9	Attitudes and beliefs toward PLWHA, July 2014	94
Table 4.10	Discriminatory practices toward PLWHA, July 2014	98
Table 4.11	Stigma: Regression result of the pre-test for FHRH and DMRH	106
Table 4.12	Stigma: Regression result of the post-test for FHRH and DMRH.....	107
Table 4.13	Discrimination: Regression result of the pre-test for FHRH and DMRH	108
Table 4.14	Discrimination: Regression result of the post-test for FHRH and DMRH	108
Table 5.1	Training schedule, June 2014	120
Table 5.2	Changes of attitudes and beliefs toward PLWHA in FHRH, July 2014	121
Table 5.3	Changes of discrimination practices in FHRH, July 2014	123

LIST OF FIGURES

Figure 1.1	Conceptual framework for reducing HIV and AIDS-related stigma and discrimination in health care settings.....	8
Figure 4.1	Attitudes and beliefs of toward PLWHA, May 2014.....	82
Figure 4.2	Perceived risk toward care of PLWHA, May 2014	83
Figure 4.3	Discriminatory practices toward PLWHA, May 2014.....	86
Figure 4.4	Respondents' views regarding discrimination and availability of supplies, May 2014.....	88
Figure 4.5	Attitudes and beliefs toward PLWHA, July 2014	95
Figure 4.6	Perceived risk toward care of PLWHA, July 2014	96
Figure 4.7	Discriminatory practices toward PLWHA, July 2014	99
Figure 4.8	Pre-post-test summary of FHRH, December 2014	102
Figure 4.9	Pre-post-test summary DMRH, December 2014.....	104
Figure 4.10	Post-test comparison of FHRH and DMRH, December 2014	105

LIST OF ACRONYMS

ABC	Abstinence, Being Faithful, Condom Use
AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Treatment
DMRH	Debre Markos Referral Hospital
EDHS	Ethiopia Demographic and Health Survey
FMOH	Federal Ministry of Health
FHRH	Felege Hiwot Referral Hospital
GNP+	Global Network of People Living with HIV
HBM	Health Belief Model
HCP	Health Care Provider
HCT	HIV Counselling and Testing
HIV	Human Immunodeficiency Syndrome
ICRW	International Centre for Research on Women
IDI	In-Depth Interview
IDU	Injection Drug Use
IP	Infection Prevention
IHA	International HIV/AIDS Alliance
IPPF	International Planned Parenthood Federation
ISDS	Institute for Social Development Studies
MTCT	Mother-to-Child Transmission
NAM	North West Assistance Ministries
USAID	Network of Networks of HIV Positives in Ethiopia
NIH	National Institute of Health
OR	Odds Ratio
PEP	Post Exposure Prophylaxis
PHCU	Primary Health Care Unit
PLWHA	People Living with HIV and AIDS
PMTCT	Prevention of Mother-to-Child Transmission
RTI	Research Triangle Institute
SAD	Stigma and Discrimination
SD	Standard Deviation
SCT	Social Cognitive Theory
SOP	Standard Operating Procedure
SPSS	Statistical Package for Social Sciences
UK	United Kingdom

UNAIDS	Joint United Nation Program on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNISA	University of South Africa
USAID	United States Agency for International Development
UP	Universal Precaution
WHO	World Health Organization

LIST OF ANNEXURES

- Annexure A Request letter from UNISA Regional Learning Office
- Annexure B Ethical Clearance from the Department of Health Studies Higher Degrees Committee, UNISA
- Annexure C1 Letter requesting permission to do the study
- Annexure C2 Ethical Clearance from Amhara Regional Health Bureau
- Annexure D Informed consent form for self-administered questionnaire
English and Amharic versions
- Annexure E Consent form for in-depth interview
English and Amharic versions
- Annexure F Questionnaire
English and Amharic versions
- Annexure G Guiding questions for in-depth interview
English and Amharic versions

CHAPTER 1

ORIENTATION OF THE STUDY

1.1 INTRODUCTION

HIV and AIDS-related stigma and discrimination (SAD) is the critical problem all over the world. It is a complex social **issue** that affects and reinforces the pre-existing SAD associated with sexuality, sex, race, ethnicity and poverty. In Ethiopia where the prevalence of HIV is believed to be higher than some of the sub-Saharan African countries, the HIV and AIDS-related SAD is a pervasive phenomenon in different contexts including families, work places, schools and health care settings. HIV and AIDS-related SAD is more devastating when it occurs in health care settings where it is least expected. It jeopardises the preventive and control efforts against the HIV epidemic by keeping people including health care providers (HCPs) from accessing HIV counselling and testing (HCT), treatment, care and support services (Bekele 2007:1; Li, Wu, Wu, Zhao, Jia & Yan 2007b:753; Andrewin & Chein 2008:898; Mazengera 2008:1; Tebeje & Hailu 2010:55; MacQuarrie, Eckhaus & Nyblade 2009:1; USAID 2010a:1; Guma 2010-2012; Feyissa, Abede, Girma & Woldie 2012:2; Odimegwu, Adedini & Ononokpono 2013:13; Stangl, Liyod, Brady, Holland & Baral 2013:1).

Different studies have demonstrated that there are three major actionable causes of HIV and AIDS-related stigma and discrimination in health care settings. These are lack of awareness among HCPs, fear of causal contacts as the result of lack of adequate information about HIV transmission and the association between immoral behaviour (USAID 2007a:1; Mahajan, Sahyels, Patel, Remien, Ortiz, Szekeres, Coates 2008; Sears 2008:87; Nyblade, Stangl, Wiess & Ashburn 2009; Ajibade, Adeleke, Olagunju & Kolade 2013:44).

To reduce HIV and AIDS-related SAD in health care settings, interventions must focus on improving the knowledge, attitudes and practices of HCPs as well as overcoming the environmental constraints existing in the health care settings through staff training, data sharing, participatory hospital policy development and improvements in structural

environment (Pulerwitz, Michaelis, Ellen, Weis, Brow & Mahendra 2010; Nyblade et al 2009).

Thus, the primary objective of the proposed study is to design an appropriate HIV and AIDS SAD reduction-intervention strategy in the health care settings after assessing the magnitude of the HIV and AIDS-related SAD and associated factors. Understanding the prevalence and the underlying causes of HIV and AIDS-related SAD among HCPs is crucial for the successful development of the SAD reduction-intervention strategy in the health care settings. Reducing HIV and AIDS-related SAD amongst HCPs will benefit not only the PLWHA and their families, but also the HCPs themselves (Feyissa et al 2012:3).

1.2 BACKGROUND TO THE RESEARCH PROBLEM

The HIV and AIDS epidemic has been a major public health problem throughout the world for more than three decades. The epidemic has been accompanied by stigma and discrimination since its inception creating detrimental impacts on social relationships, access to health and resources and psychological well beings of PLWHA (USAID 2007a:1; Solomon, Hailemalak & Girma 2008:25-31; Mahajan et al 2008; Arjan, Heman & John 2008:450; Engender Health 2009:2; Nyblade et al 2009; USAID 2010a:1; Monger 2011:3; Thupayagale-Tshweneagae & Mokomane 2012:27).

HIV and AIDS-related SAD have been recognised as a major obstacle to prevention, treatment, care and support through the world (Holzemer, Uys, Makoe, Stewart, Phetlhu, Dlamini, Greeff, Kohi, Chirwa, Cuca, Naidoo 2008:541). It occurs in different contexts including families, workplaces, schools and health care settings. Stigma and discrimination is more devastating when it occurs in health care settings where it is least expected. HCPs are supposed to provide physical, social and psychological supports to PLWHA but HIV and AIDS-related SAD has been extensively documented among the HCPs (Mahendra, Gibborn, Bharat, Mudoi, Gupta, Gerge, Samson, Daly & Pulerwitz 2007:617; Cianelli, Ferrer, Norr, McCreary, Irrazabal, Bernales & Miner 2011:1-9; Palanisamy & Subramanian 2011:100-103; Feyissa et al 2012:2; Baumgartner 2012:1; Ebied 2014:35).

Different studies have demonstrated that there are three major immediately actionable causes of HIV-related stigma and discrimination in health care settings. These are lack of awareness among HCPs of the devastating effects of SAD, fear of casual contacts as the result of incomplete information about HIV transmission and the association between immoral behaviour (USAID 2007a:1; Nyblade et al 2009;).

There are various ways in which HIV/AIDS-related SAD is manifested in health care settings. A study conducted in Tanzania on HCPs has shown that neglect, differential treatment, denial of care and HIV testing and disclosure without consent of the clients are some of the stigmatising and discriminatory practices in health care settings (Nyblade et al 2009).

The global AIDS report (2010) indicated that in the United Kingdom 17% and in China 12% of PLWHA reported as having been denied health care services. Furthermore, in Rwanda, 88% of PLWHA were denied access to family planning due to their HIV status (UNAIDS 2010a:124).

Perceptions of occupational risks have also been documented as contributing factors for the discriminatory practices in health care settings. Moreover, health care providers themselves may not be willing to get tested and treated due to fear of stigma in the health care settings and in the communities they live. A study in South Africa and Botswana has revealed that HCPs struggle with self-stigma; fear the potential diagnosis of HIV and stigmatisations from their colleagues (Li et al 2007b:754; Nyblade et al 2009). The same studies have demonstrated that there are structural and institutional factors in health care settings that influence HIV and AIDS-related SAD. These factors may include the work environment, policies and standard operational procedures. Studies have shown that poor work environment, low knowledge about universal precautions and lack of protective supplies were determining factors for the existence of stigma and discrimination in health care settings. A similar study has shown that nurses with good work environment were found to show less discriminatory practices towards PLHWA. Moreover, when HCPs are unfamiliar with standard procedures like universal precautions, it was documented that the incidences of unintentional discriminations are more likely to appear (Li et al 2007:754; USAID & I-TECH 2007:208).

One study indicated that to reduce HIV and AIDS-related SAD in health care settings, interventions must focus on the individual, environmental and policy levels. The studies also emphasised the need of strong commitment and resource allocation to design, implement and scale-up the SAD reduction intervention strategy in health care settings (Nyblade et al 2009).

Other studies have indicated that the most promising approaches in reducing HIV/AIDS-related SAD in health care settings are the combination of the different strategies. These address the problems related to knowledge, attitudes and practices of HCPs and meeting their needs of supplies for universal precautions to prevent occupational exposure to HIV. The other promising mechanism of promoting SAD reduction-intervention strategy in health care setting is to conduct training workshops for the HCPs. The workshops deal with small groups emphasising on learning via role-plays, group discussions and other interactive activities. This kind of strategy has proven effective in USA and China in promoting desired behavioural change in various contexts (UNAIDS 2007:15; Wu, Li, Wu, Liang, Cao, Yan & Li 2008).

It was documented that there are three major steps that can facilitate HIV and AIDS-related SAD reduction-interventions in health care settings. The first step is building an understanding and commitments to HIV and AIDS-related SAD reduction-interventions. This includes raising awareness among HCPs and addresses any stigmatising attitudes and discriminatory practices within the health care settings. The second step is good leadership to reduce HIV and AIDS-related SAD in the health care settings. In most national responses to HIV, HIV and AIDS-related SAD has been the neglected issue. This is mainly attributable to the lack of awareness of how harmful these are to effective responses to HIV and AIDS and lack of experience regarding how to address it. To alleviate these problems, there is a need for sustained leadership and achieve an effective response against HIV and AIDS. The third step is promoting the inclusion of HIV and AIDS-related SAD in hospital strategic planning, funding and programming efforts. Not only these efforts help the hospital to achieve its objectives and MDGs, but also help to protect the human rights of PLWH and those with AIDS and other affected groups, and enable people to utilise information and services. This results in reduction of the transmission of the epidemic and eventually eliminates the impact of HIV on PLWH and those with AIDS, their families and health staff (UNAIDS 2007:17).

The hospital-based HIV and AIDS-related SAD reduction- interventions in India and Vietnam are examples of successful collaboration with PLWHA. In these interventions HCPs heard for the first time from HIV-positive trainer about living with HIV, and began to relate to them as people, not just as patient. In the study conducted in the Indian hospitals, managers were first unwilling to believe that SAD was problem in the hospital. But, after discussing key findings of the survey with hospital managers and staff, the mangers and HCPs were convinced about the existence of SAD in the hospitals after which they set a plan of action and implement it. Finally, the SAD reduction-interventions were evaluated and problems related to the SAD were found to be addressed. The study demonstrated that the proportion of HCPs categorised as having least stigmatising attitudes became more than doubled (12% to 27%) and the proportion of HCPs with most stigmatising attitudes declined from 24% to 7%. HIV counselling and testing practices, patient confidentiality and use of universal precautions with all patients improved. Similarly, in Vietnam, based on the Indian hospital findings, training of hospital staff and PLWHA was conducted after which the hospital practice became significantly improved. After the intervention, the data indicated that about 48% of hospital staff reported that fear of HIV transmission and stigmatising attitudes led them to treat PLWHA differently (Pulerwitz et al 2010).

1.3 STATEMENT OF THE PROBLEM

In spite of the medical advances in the prevention and control of HIV and AIDS, the SAD attached to HIV and AIDS is still widespread in many countries hampering prevention, treatment, care and support endeavours (Molero, Maria, Jetten & Juan, 2011:610). But, despite the pervasiveness of HIV and AIDS-related SAD in many countries and its detrimental effects on public health and human rights, it still remains undressed in most national responses to HIV and AIDS especially in resource-constrained countries. The low level of attention is ascribed to the limited recognition of association between HIV and AIDS-related SAD and health outcomes, and inadequate capacity of health managers and planners on how to address HIV and AIDS-related SAD and associated misconceptions (USAID 2007a:1; UNAIDS 2007:5; Singer 2007:190; Nyblade et al 2009:189; Mbatha 2013:517).

Widespread of HIV and AIDS-related SAD towards PLWHA and those with AIDS can negatively affect the people's willingness to be tested for HIV and their adherence to

antiretroviral therapy (ART). Thus, the HIV and AIDS-related SAD reduction is an indicator for the success of HIV and AIDS prevention and control (CSA 2011:196).

One of the three targets of UNAIDS and WHO by 2015 is zero HIV and AIDS-related SAD all over the world. As the health care setting is one of the contexts where HIV and AIDS-related SAD is pervasive, there is a need to assess and determine the magnitude of HIV/AIDS-related SAD in health care setting and design appropriate strategy that will contribute to its eradication (WHO, UNAIDS & UNICEF 2011:5).

Empirical evidence in Ethiopia has indicated that HIV and AIDS-related SAD is prevalent in the health care settings. Some health professionals and medical staff working at different levels of the health care settings who are supposed to deliver the best care for PLWHA and their families, do not often perform according to the codes of professional ethics and guidelines. The existence of such problems in the health care settings obviously jeopardise the prevention efforts, comprehensive treatment, care and support rendered to PLWHA and their families including the HCPs living with the virus (Bekele 2007:1-25; FHI- Ethiopia/AA HAPCO 2009).

Few studies regarding HIV and AIDS-related SAD have been conducted in the region mainly focusing on the community perspectives. The magnitude of the HIV and AIDS-related SAD and associated factors among the HCPs working in the health care settings is unknown. Moreover, no study has been conducted regarding HIV and AIDS-related SAD reduction-interventions in the region or elsewhere in the country.

1.4 THE THEORETICAL FRAMEWORK

1.4.1 Conceptualisation of stigma

The term stigma was first coined by Greeks to refer to bodily signs that show the poor moral standards of a person. Goffman (1963) was the first person to conceptualise stigma (Andrewin & Chein 2008:897). He described it as an attribute that is deeply discrediting within a particular social interaction. He also indicated the associations between stigmatisations and discriminations, with the latter emanating from the former (Armando 2010:20; Andrewin & Chein 2008:897).

Stigma associated with illness has been a persistent problem among the societies for years. Later on, the term has acquired another definition, referring to physical disorders given to a person who was assumed to be bad or deeply discredited (Luis 2008:30). The stigma and discrimination associated with HIV and AIDS has come to appear with the emergence of HIV epidemic and found to be more devastating than the other types of illnesses (Luis 2008:30; Armando 2010:20).

PLWHA and those diagnosed with AIDS with HIV differ from other stigmatised groups in four ways; (1) in addition to the fact that HIV is an illness, it is an infection that is contagious, the fear of contagiousness leads to the avoidance of contacts with the PLWHA and those with AIDS; (2) HIV is stereotypically associated with marginalised and stigmatised groups in society like sex workers and injection drug users; (3) people with HIV are mostly perceived as responsible for contracting the disease and (4) PLWHA and those with AIDS consider themselves that they belong to the stigmatised group (Molero et al 2011:610).

Parker and Aggleton (2002) indicate that HIV and AIDS-related SAD is complex social processes that are related to pre-existing stigma and discrimination associated with , sexuality, gender, ethnicity and poverty. They also underlined the need to understand these phenomena across different settings and cultural contexts (Andrewin & Chein 2008:898).

1.4.2 Importance of theories in behavioural interventions

HIV and AIDS-related SAD reduction-interventions are most likely effective if they are based upon thorough needs assessments, theory and evidence-based intervention strategies and collaborative planning. Studies have indicated that social-psychological theories can be used as a guideline for development HIV and AIDS-related SAD reduction-interventions at various contexts (Bos, Schaalma & Pryor 2008:452).

Though many theories have been applied to health-related behavioural research and designing of behavioural interventions, some argue that there is a limited number of variables that need to be considered in understanding and predicting any given behaviour. These variables are contained in three theories that have been used in health behaviour research and interventions (Fishbein & Marco 2003:165).

These are: (1) the Health Belief Model; (2) the Theory of Reasoned Action (3) the Social Cognitive Theory and (4) The Integrated Theoretical Model. The integrated model has been adopted for this study and is explained in detail in chapter 2 and depicted in figure 1.1.

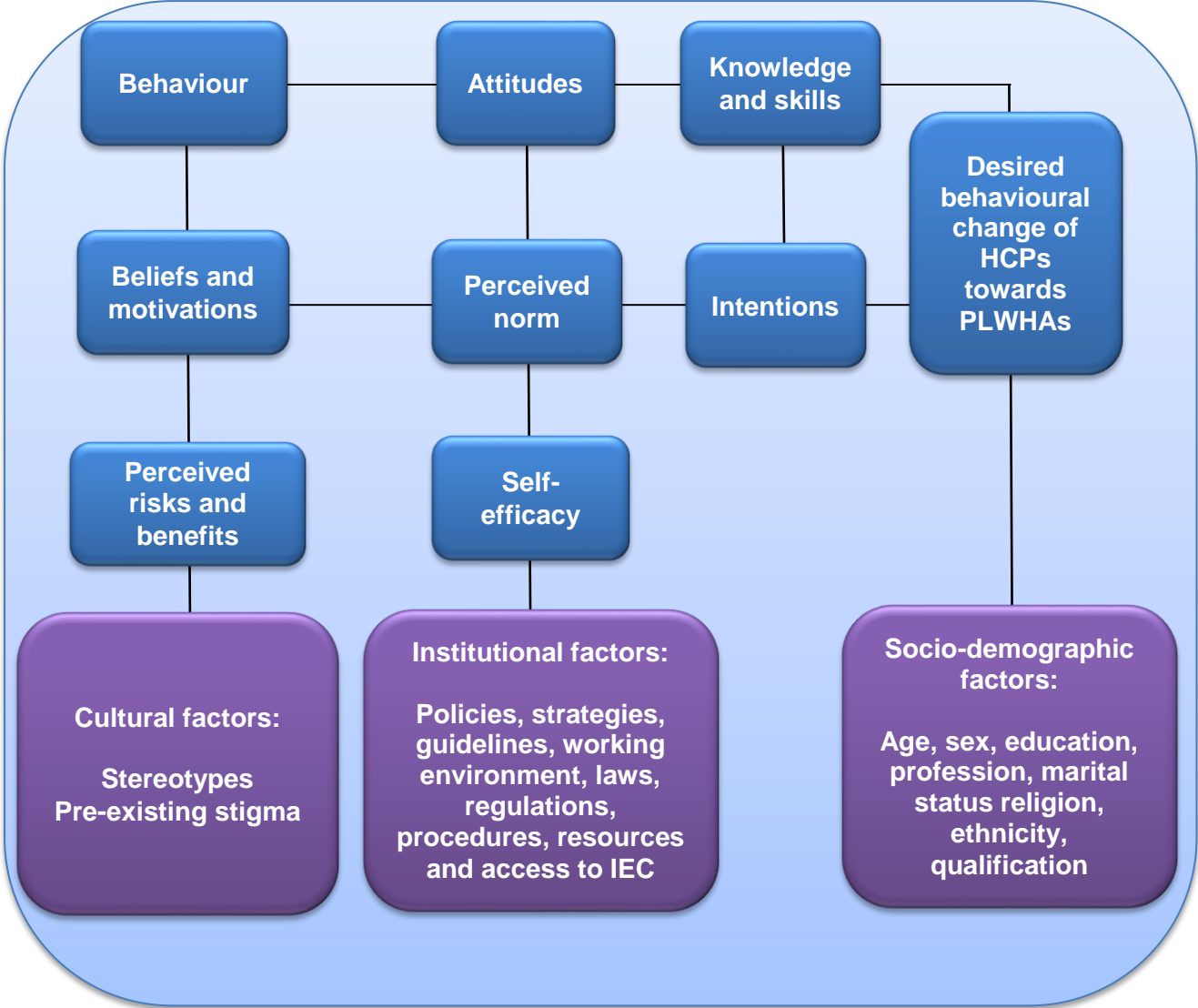


Figure 1.1 Conceptual framework for reducing HIV and AIDS-related stigma and discrimination in health care settings
 Adapted from (Fishbein & Marco 2003:164)

1.5 DEFINITONS OF KEY CONCEPTS

Key terms and and variables used in the study are defined.

1.5.1 Definitions of key terms

Two key terms used in the study are defined as follows:

Health care providers – are health workers including physicians, nurses, midwives, health officers and laboratory professionals working in the health care settings (USAID 2007a:4).

Health care setting – is referred to as health institution (USAID 2007a:2). For the purpose of this study it refers to hospitals found in Amhara region.

1.5.2 Definitions of key variables

Attitudes – are beliefs and feelings that performing the intended behaviour will lead to certain outcomes (Fishbein & Marco 2003:165).

Awareness – refers to perception about HIV and AIDS (Shapiro & Carlson 2009:346).

Behaviour – refers to an action having target and context (Fishbein & Marco 2003:169).

Cultural factors – refer traditional factors negatively affecting the performance of an intended behaviour in health care settings (Fishbein & Marco 2003:167).

Discrimination – is unfair treatments and/or services for PLWHA by HCPs a result of a stigma (USAID 2007a:1; UNAIDS 2007:9).

Environmental constraints – refer to barriers that prevent performance of behaviours in health care settings (Fishbein & Marco 2003:166).

Institutional factors – refer to resources, policies, strategies, guidelines and protocols within health care settings (Li et al 2007:754).

Intention – refers to having motivation and/or goals to perform a specific behaviour (Fishbein & Marco 2003:181).

Perceived norm – refers perception that those with whom an individual interacts most closely support the person’s adoption of the intended behaviour (Fishbein & Marco 2003:166).

Perceived risk of infection – refers to the fear of transmission of HIV infection (USAID 2007a:3; Fishbein & Marco 2003:166).

Self-efficacy – refers person’s perception that she/he can perform the behaviour under a variety of challenging circumstances (Fishbein & Marco 2003:166).

Skill – refers to the capacity to perform an intended behaviour (Fishbein & Marco 2003:181).

Socio-demographic variables – refer to background information including sex, age, education, profession, religion and marital status (USAID 2007a:2; Mukhopadhyay 2007:216).

Stereotypes – dominant cultural beliefs that may lead to HIV and AIDS-related SAD in health care settings (Molero et al 2011:610).

Stigma – is an attribute that is deeply discrediting within a particular interaction (USAID 2007a:1; Armando 2010:20; Andrewin & Chein 2008:897).

Working environment – refers to clean rooms with good ventilation and adequate light, furnished with necessary materials and supplies in health care settings (Li et al 2007:754).

1.6 AIM OBJECTIVES AND RESEARCH QUESTIONS

The aim, objectives and research questions are given in this section.

1.6.1 Aim

The aim of the study was to design appropriate HIV and AIDS-related SAD reduction-intervention strategy within health care settings in Amhara region

1.6.2 Objectives

The objectives of the study are to

- assess the magnitude of HIV and AIDS-related SAD in the health care settings in AMHARA region of Ethiopia
- identify factors associated with HIV and AIDS-related SAD in the health care settings
- develop an appropriate strategy that may contribute to the eradication of HIV and AIDS-related SAD in health care settings

1.6.3 Research questions

The current study aimed to answer the following questions:

- What is the magnitude of HIV and AIDS-related SAD in the health care setting in Amhara region of Ethiopia?
- What are the factors associated with HIV and AIDS related SAD in the health care settings in Amhara region of Ethiopia?
- What appropriate strategies can be developed that would contribute to the eradication of HIV and AIDS-related SAD in health care settings?

1.7 METHODOLOGY

A concurrent mixed method using both quantitative and qualitative approaches will be used in the study. Details of methodology are discussed in chapter 3.

1.8 SIGNIFICANCE OF THE STUDY

The study came up with new strategy of reducing HIV and AIDS-related SAD in health care settings. This will enable the policymakers, health managers, planners and the HCPs to plan implement and evaluate HIV and AIDS-related SAD reduction-interventions for their own health care settings.

1.9 ETHICAL CONSIDERATIONS

First of all, ethical clearance was obtained from the Department of Health Studies Higher Degrees Committee, UNISA (Annexure B). A formal letter was written to all concerned authorities and permission was secured at all levels (Annexures C1 and C2). The followings were major ethical considerations for the study.

1.9.1 Protecting the rights of the participants

- **Beneficence**

The training of the HCPs regarding HIV and AIDS, and SAD can benefit themselves and the patients by improving the quality of the health service at the health care settings. Moreover, the study designed proper strategy that may contribute to the eradication of the HIV and AIDS-related SAD in the health care settings.

- **Non-maleficence**

Each study respondent has the right of not to be harmed. Generally, the study did not create any physical trauma or social problem but there might be very minimal psychological discomforts or uneasiness to the participants of the qualitative part of the study.

- **Fair treatment**

All participants in the treatment groups were treated in an equitable manner. Similarly, those in the control group were also treated fairly without discrimination.

- **Self-determination**

All the respondents who gave voluntary consent were free from constraints and coercion of any kind, and they could abstain any time from filling the questionnaire or responding to the questions.

- **Management of discomfort**

Any discomfort to the respondents was managed by explaining any confusion or misunderstanding before or during the data collection.

In protecting the rights of the study participants of the current study, the following were taken into consideration.

1.9.2 Informed consent

Informed consent is an important feature of all studies. Accordingly, the study subjects were provided with full description of the purposes and objectives of the study and procedures used to be in research. Moreover, the subjects had the right to refuse to participate in the study but can have full access to services even after the refusal. Informed consent form was employed to explain the basic nature of the study and obtain the agreement of the respondent. Any information was not used or released outside the terms of the agreement. The informed consent was written in simple and understandable language to each respondent (Annexure D). Generally, the respondents were provided with a clear description of the study protocol and they had given their informed consents (Basavanthappa 2006:147-152; Fisher & Foreit 2002:83; Rao & Richard 2006:187; Wu et al 2008).

1.9.3 Confidentiality and anonymity

To maintain confidentiality and anonymity, all information was handled carefully during the data collection and then after. To protect the confidentiality, the researcher kept all data sources protected. To maintain the anonymity, the name of the respondents was not used during data collection and then after, but rather they were coded. The privacy

of each study subject was also maintained during the data collection (Basavanthappa 2006:147-152).

1.9.4 Protecting the rights of the setting

The selected hospitals had an obligation to give valid and reliable information to the investigator. The researcher has also the responsibility to provide adequate and clear information to hospital managers and the hospital staff involved in or affected by the study (Basavanthappa 2006:147-152). Accordingly, the researcher contacted the hospital managers and provided them with full information regarding the study. Eventually, the managers gave permission to conduct the study.

1.10 SCOPE THE STUDY

This study focused only on HIV and AIDS-related SAD but did not deal with other types of SAD. The study also did not include general and district hospitals as well as the health centres and private health facilities found in the region.

1.11 STRUCTURE OF THE THESIS

The current thesis is divided into seven parts as follows:

Chapter 1: Orientation of the study

This chapter presents an overview of the study. The study introduces the context followed by the problem statement. The purpose of the study as well as objectives is presented in this chapter. Questions that are to be answered by this study are also presented in this chapter. The ethical principles guiding this study are given in this chapter.

Chapter 2: Literature review

Chapter 2 presents the literature accessed from books, journals, previous studies as well as monographs and policy manuals. The purpose of this review was to situate the current study and to realise gaps that this study needed to fill.

Chapter 3: Methodology

This chapter will take the reader through the design and approach used. The setting; population and sampling methods as well as the data collection and analysis are described in detail.

Chapter 4: Findings

The research findings are presented and graphs and tables are also used to illustrate the results and give the reader more clarity.

Chapter 5: Brief Intervention

This chapter provides an evidence-based intervention made in the form of training workshops.

Chapter 6: Discussion of the findings

This chapter will discuss the findings of the study and connect them with what is available or not available in literature.

Chapter 7: General conclusions, limitations and recommendations

General conclusions deduced from the findings of the study will be given. Limitations and recommendations are also given in this chapter.

1.12 CONCLUSION

The foundation of the study has been presented in this chapter. Chapter 2 will review literature sources including books, journals and other scholarly work-related to the study.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter focuses on the following major thematic areas: selected theories related to the study; global, national and regional status of HIV and AIDS; origin of stigma, SAD, HIV and AIDS-related SAD, factors associated with HIV and AIDS-related SAD, experiences of HIV and AIDS-related SAD; impacts of HIV and AIDS-related SAD and HIV and AIDS-related SAD reduction-interventions in the health care settings. Besides, the Ethiopian health care system and HIV and AIDS policy and strategy were included in the chapter. The theoretical framework of the study will be presented in the first part of the chapter.

2.2 THEORETICAL FRAMEWORK

2.2.1 Conceptualisation of stigma

The term stigma was first coined by Greeks to refer to bodily signs that show the poor moral standards of a person. Goffman (1963) was the first person to conceptualise the concept of stigma (Andrewin & Chein 2008:897). He described it as an attribute that is deeply discrediting within a particular social interaction. He also indicated the associations between stigmatisations and discriminations, with the latter emanating from the former (Andrewin & Chein 2008:897; Armando 2010:20).

Stigma associated with illness has been a persistent problem among the societies for several years. According to Luis (2008:30), the term stigma has evolved and it now refers to physical disorders given to a person who was assumed to be bad or deeply discredited. The SAD associated with HIV and AIDS has come to appear with the emergence of HIV epidemic and found to be more devastating than the other types of illnesses (Armando 2010:20; Luis 2008:30).

PLWHA differ from other stigmatised groups in four ways (Molero et al 2011:610).

- In addition to the fact that HIV is an illness, it is an infection that is contagious, the fear of contagiousness leads to the avoidance of contacts with the PLWHA.
- HIV is stereotypically associated with marginalised and stigmatised groups in society like sex workers and injection drug users.
- People with HIV are mostly perceived as responsible for contracting the disease.
- PLWHA and those with AIDS consider themselves that they belong to the stigmatised group.

Parker and Aggleton (2002:898) indicated that HIV and AIDS-related SAD is complex social processes that are related to pre-existing SAD associated with, sexuality, gender, ethnicity and poverty. They also underline the need to understand these phenomena across different settings and cultural contexts (Andrewin & Chein 2008:898).

2.2.2 Importance of theories in behavioural interventions

HIV and AIDS-related SAD reduction-interventions are most likely effective if they are based upon thorough needs assessments, theory and evidence-based intervention strategies and collaborative planning. Studies have indicated that socio-psychological theories can be used as a guideline for development of HIV and AIDS-related SAD reduction-interventions at various contexts (Arjan, Herman & John 2008:452).

Though many theories have been applied to health-related behavioural research and designing of behavioural interventions, some argue that there is a limited number of variables that need to be considered in understanding and predicting any given behaviour. These variables are contained in three theories that have been used in health behaviour research and interventions (Fishbein & Marco 2003:165).

These are:

- The Health Belief Model
- The Theory of Reasoned Action
- The Social Cognitive Theory

- The Integrated Theoretical Model

2.2.2.1 The Health Belief Model

The Health Belief Model (HBM), states that for a person to perform the desired health behaviour, the person should first believe that she/he is at risk of contracting a severe negative health effect (e.g. HIV and AIDS). At the same time, the person must believe that the benefit of performing a recommended protective behaviour exceeds the cost of performing the behaviour (e.g. using condom to protect HIV and AIDS) (Fishbein & Marco 2003:165).

2.2.2.2 The Theory of Reasoned Action

This theory asserts that performance of a given behaviour is mainly determined by the strengths of a person's intention to carry out that behaviour. The intention to perform a given behaviour is a function of two factors. These factors are the persons' attitudes towards performing the behaviour and/or the person's subjective norm regarding the behaviour (Fishbein & Marco 2003:165).

2.2.2.3 The Social Cognitive Theory

According to the Social Cognitive Theory (SCT) (Bandura 1989), there are two primary factors that determine the adoption of health-protective behaviour. First, the person must believe that the positive outcomes or benefits of performing the behaviour must surpass the negative outcomes. Second, the person must believe that she/he can perform the desired behaviour even in the time of various conditions or barriers that hinder that performance of that behaviour (Fishbein & Marco 2003:165).

The social cognitive theory provides a conceptual framework for elucidating the psychological mechanisms through which socio-structural factors are associated with organisational performance. Moreover, the theory of cognitive theory provides correct guidelines about how to equip people with competencies, the self-regulatory capabilities and the sense of efficacy (Wood & Bandura 1989:380).

Altogether, the above-mentioned three theories identify a limited number of variables that serve as determinants of any given behaviour. Though there is empirical evidence for the role of attitudes, perceived norms and self-efficacy as determinants of intention and behaviour, the support for the role of perceived risk is inconsistent. While the methodological and conceptual drawbacks in research of perceived risk may be attributable for this inconsistency, current evidence suggests that perceived risk is the best predictor of intention and behaviour. Hence, most behavioural theories recommend three major determinants of a person's intentions and behaviours (Wood & Bandura 1989:166). These are: (a) the person's attitudes towards performing the behaviour, which depends on one's beliefs about the positive and negative effects of performing the behaviour; (b) perceived norms, which comprise the perception that those with whom the individual interacts most closely support the person's adoption of the behaviour and that others in the community are accomplishing the behaviour; and (c) self-efficacy, involving the person's perception that she/he can perform the behaviour under a variety of challenging conditions. These all variables have been incorporated in an integrative model of behavioural prediction (Fishbein & Marco 2003:166).

2.2.2.4 *The Integrated Theoretical Model*

According to this model, any given behaviour is most likely to occur if one has strong intentions to perform the behaviour, required skills and abilities necessary to perform the behaviour and if there are no environmental constraints that prevent the behavioural performance (Fishbein & Marco 2003:166). If people have got the desired intention but are not performing it, the best intervention will be directed to either at skills building or at removing environmental barriers. On the contrary, if strong intentions to perform a given behaviour have not been created, the model suggests that there are three major determinants of the intentions. These are attitudes toward performing the behaviour, perceived norms regarding performing the behaviour and one's self-efficacy with regard to performing that behaviour (Fishbein & Marco 2003:167).

2.2.3 Application of the Integrated Model to behavioural change interventions

The primary implication in using the integrated model is identifying the target for change (Fishbein & Marco 2003:168). Once the target is identified the model can be used to elucidate why some members of the target population are performing the

behaviour and others are not (Fishbein & Marco 2003:169). It is recognised that the integrative model of behavioural prediction is especially important for interventions that aim at developing and strengthening the intentions to perform a desired behaviour. An appropriate application of the integrative model can identify the major determinants of a given behaviour and beliefs underlying these determinants (Fishbein & Marco 2003:180).

The integrative model of behavioural prediction states that people do not act upon their intentions either because they lack the skills to accomplish the behaviour or there are environmental constraints that hamper performance of the behaviour, or both. Thus, an intervention must aim at improving people's skills or addressing barriers to performing the behaviour, or both. If the problems are related to skills, it is vital to train people to improve skills that will enable them to perform the intended behaviour. If the problems are related to environment, remove the barriers (Fishbein & Marco 2003:181).

In designing HIV and AIDS-related SAD reduction-intervention strategy in health care settings, the integrative model of behavioural prediction is considered as an appropriate theoretical framework because in designing the intervention strategy, the independent variables affecting the outcome variable are all contained in the selected theoretical model. Based on the theoretical model, the conceptual framework is developed, explicated as follows.

2.2.4 Conceptual framework

The root causes of HIV and AIDS-related SAD among HCPs are lack of awareness about HIV and AIDS, fear of transmission of HIV infection and associating HIV and AIDS with improper behaviour.

2.2.4.1 *Lack of awareness about HIV and AIDS*

Awareness about HIV and AIDS can be associated with lack of knowledge and/or skills regarding HIV and AIDS. Knowledge about and skills of dealing with HIV and AIDS can be considered as predisposing factors to attitudinal and behavioural change of individuals. The HCPs with different levels of qualifications need to have specialised knowledge and skills in areas of some specific health programmes like HIV and AIDS-

related services. When they have adequate knowledge and skills they are more likely to have better attitudes and the desired behaviour towards the PLWHA and those with AIDS coming to health care settings. In the contrary, if the HCPs have low level of knowledge and skills, they are less likely to develop positive attitudes and practices towards the clients. To improve the knowledge and skills of the HCPs, there is a need to create awareness related to HIV and AIDS.

2.2.4.2 *Fear of transmission of HIV infection*

The fear of infection is due to perceived risk of HIV transmission. This may result from a low level of knowledge and skills regarding the modes of transmission of HIV. The fear of the infection may also be affected by beliefs and motivations as well as perceived risks and benefits of individuals to perform an intended behaviour. An individual performs a desired behaviour when the benefits of performing the protective behaviour exceed the cost of performing that behaviour. Attitudes, perceived norms and self-efficacy are the major determinants of intention and behaviour. When there is no gap of knowledge and/or skills and intentions to perform an intended behaviour among the HCPs, the SAD may be ascribed to either poor working environment, lack of standard operational procedures or proper strategy. These all lead to HIV and AIDS-related SAD in health care settings.

2.2.4.3 *Association of the HIV infection with immoral behaviour*

HIV and AIDS-related SAD has been stereotypically attached to marginalised and stigmatised groups like sex workers (SWs), injection drug users (IDUs) and men making sex with men (MSM). This improper association leads to poor intentions, attitudes and practices towards PLWHA resulting in differential treatment, denial of care and neglect of services.

Generally, the underlying factors for the existence of HIV and AIDS-related SAD in the health care settings may be cultural, institutional and socio demographic. Moreover, there may be cognitive, attitudinal and behavioural or motivational factors that may prohibit the performance the intended behaviour by the HCPs. To achieve the desired behavioural change towards the PLWHA in health care settings, there is a need to

assess and determine these factors in health care settings and then design an appropriate HIV and AIDS-related SAD reduction-interventions strategy.

2.3 HIV AND AIDS

HIV and AIDS has been a major public health challenge worldwide for more than three decades. It has been the most devastating and stigmatised disease humankind has ever faced. HIV spreads making no distinction by sex, age, ethnicity, language, religion, or country base (Ganczk 2007:57; ISDS 2008:9; Kasiime 2010:2; Molero et al 2011:610). Letamo (2003) showed that the HIV epidemic is having a fundamental impact, bringing the best and the worst out the people throughout the world. It brings the best when all work together to combat it and give care and support to PLWHA. It brings out the worst when individuals are stigmatised and ostracised by their loved ones, families and communities including the HCPs (Ragimana 2006:28). The HIV and AIDS create a challenge not only from the biological standpoint but also on a social, economic and cultural perspective (Wichman 2006:40).

Human immunodeficiency virus (HIV) is a retrovirus that weakens the immune system by exposing the body to various opportunistic infections (O.Is). Globally, the major mode of HIV transmission are sexual transmissions including heterosexual and homosexual, and through unsafe injections and blood transfusions as well as from mother- to- child transmission (MTCT). In Ethiopia, the principal mode of transmission is through heterosexual contact. The other modes of the transmission are through mother-to-child transmission (MTCT) during pregnancy, delivery and after birth via breast feedings. Unsafe blood transfusions and contaminated injections are also the other means of the transmission of the virus. HIV can be prevented through abstinence, being faithful to one partner and condom use (ABC) approaches. The end stage of HIV infection is known as acquired immunodeficiency syndrome (AIDS), manifested by different clinical signs and symptoms. There is no cure for HIV but its progress to AIDS stage can be hindered by use of anti-retroviral therapy (ART) (EDHS 2011:189).

2.3.1 Global magnitude of HIV and AIDS

At the end of 2010, there were about 34 million PLWHA. In 2010, the number of new HIV case was 2.7 million and its mortality rate was 1.8 million. Globally, the incidence of

the disease continues to decline although there are regional variations. Moreover, there is a sharp decline in the prevalence of the diseases in most of the countries. The number of people dying from AIDS-related causes is also steadily decreasing across the world mainly as the result of the emergence of ART (Molero et al 2011:610; WHO, UNAIDS & UNICEF 2011:10)).

The sub-Saharan Africa (SSA) has been highly affected by the AIDS pandemic, with more than two thirds (68%) of all infected people living in it. Studies indicated that one in every five adults in the region is infected with HIV and HIV-infected patients occupy about 70% of hospital beds (Thupayagale-Tshweneagae & Mokomane 2012:27; Sinyangwe 2012:1).

2.3.2 National magnitude of HIV and AIDS

In Ethiopia, the first HIV case was reported in 1984. Since then, HIV and AIDS has been a formidable public health challenge. According to the EDHS (2011), the adult HIV prevalence in Ethiopia is 1.5% with an incidence rate of 0.03%. Approximately 1.2 million people in Ethiopia are living with HIV and AIDS in 2010 (USAID 2011:2; USAID: 2012:1). Women have a higher HIV prevalence (1.9%) than men (1.0%). Its burden in Amhara region was estimated to be 1.6%, about 0.1% greater the national estimate (EDHS 2011:231)

The HIV in Ethiopia is generalised type with significant heterogeneity between regional states and population groups. Currently, the prevalence of HIV and AIDS in Ethiopia is lower than many SSA countries, but the burden of the epidemic in the country is more pronounced (FMOH 2010:3).

National models of HIV prevalence indicated that the incidence of HIV infection declined by 25% between 2001 and 2009. Though the epidemic has stabilised in the past decade, it continues to be a major development challenge in Ethiopia (USAID: 2012:1).

The EDHS (2011) indicated that only 19 % of women and 32% of men had the comprehensive knowledge of HIV and AIDS transmission and prevention methods. Men (28%) and women (17%) were more likely to express positive attitudes towards PLWHA (EDHS 2011:189).

The determining factors that drive the HIV epidemic in Ethiopia are low level of comprehensive knowledge of HIV and AIDS, low level of perceived risk and threat of HIV, increased population migration, high prevalence of unprotected sex, high prevalence of sexually transmitted infections (STIs), alcohol and substances abuse and gender inequality. The underlying factors for the transmission of HIV in Ethiopia are attributed to biological, behavioural, socio-economic and cultural factors. There is also evidence that SAD associated with HIV and AIDS can contribute to an increase in HIV risk behaviours (Elford, Ibrahim, Bukutu & Anderson 2007:255; USAID2011:3).

2.4 STIGMA AND DISCRIMINATION

SAD is a pervasive phenomenon around the world negatively affecting the human rights and livelihood of the PLWHA. This is especially pernicious in the health care settings where it hampers individual's rights to attain the highest standard of health and deter the efforts to combat the disease and social injustice worldwide. Health care settings supposed to provide quality health services to their customers instead impose additional psychological pain and trauma on most of the most disadvantaged groups. In fact, SAD is the two sides of a coin; the front side being the stigma whereas the reverse side the discrimination (Geiselhart 2010:34). They two sides are part of complex systems of beliefs about illnesses that often deep-rooted in social inequalities (Castro & Farmer 2005:53). Goffman described the link between SAD with often the former leading to the latter (Andrewin & Chein 2008:897). Currently, SAD has continued to accompany the HIV and AIDS around the world (Mazengera 2008:1-4; Sadoh, Fawoe, Oladimeji, Sotiloye 2009:18).

2.4.1 Stigma as a concept

The definition of stigma has been a challenging task because there is no consensus on its definition across the world. Most studies on HIV and AIDS-related stigma refers to the US sociologist Goffman's definition (James 2010:3). It is more than four decades ago that Goffman (1963) defined stigma as "an attribute that is deeply discrediting", and proposed that the stigmatised person is reduced "from a whole and usual person to a tainted, discounted one". Though this construct has created a wide theoretical and empirical research, there is still no common theoretical perspective on stigma

(Najakolaei, Niknami, Aminshokravi, Bazargan, Ahmadi, Hadjizadeh & Tavafian 2010:1; Ogasawara 2009:8; Brown, BeLue, Airhenbuwa 2010:442; WHO 2009b:19; Ragimana 2006:12; Monjok, Smesny & Essien 2009:16).

The definition of stigma currently used in association with HIV and AIDS originated from Goffman (1963) definitions on stigma related to mental illness, physical deformities and “socially deviant” behaviours. The definition indicates stigma as societal labelling of individual or group as deviant because of a ‘discrediting attribute’ (Castro & Farmer 2005:54). Stigma is indeed the tip of ice berg since it is visible and generally accepted in public health dialogue without further qualification (Castro & Farmer 2005:53; Mazengera 2008:1; Thomas 2009:12).

Social psychologists recognise stigma as an attitude including emotional, cognitive and behavioural components (Ragimana 2006:12). It can be considered as both the determinant of health and the outcome in itself (WHO 2009a:20).

Stigma is also a dynamic process arising from the perception in which there is breach of shared beliefs, values and attitudes leading to prejudicial thoughts and behaviours against PLWHA by families, communities, work places and health care settings (USAID/FHI/ICRW 2009:4-10; Ekeji 2010:3).

The famous sociologist, Erving Goffman conceptualised a stigma framework and defined it as attribute that is deeply discrediting within a particular social interaction. The biggest point of Goffman’s criticism regarding stigma is that his notion of stigma is too narrow and individual-based and thus it is not suitable for designing stigma-reduction intervention strategy. Nowadays, most views on stigma are characterised as “social approaches” as it is the product of social processes (Geiselhart 2010:34; Magwaza 2009:17).

Recently, stigma has been described as a process associated with competition for power and attached to existing social network of exclusion and dominance (Link & Phelan 2001). Parker and Aggelton (2002:346) defined stigma as a social process that uses “differences” between groups of people to form and legitimise social hierarchies and inequalities (Brown et al 2010:442; Population Council 2006:6).

Modern social scientists used the word stigma to refer to socially undesirable characteristics (Fonseca 2009:8; Ogasawara 2009:8; Ragimana 2006:12). Thornicroft et al (2008) defined stigma as a term that is characterised by problems of knowledge (ignorance), problems of attitudes (prejudices) and problems of behaviour (discrimination) (Cross, Heijnders & Dalal 2011:71). The Royal Tropical Institute also defined stigma as existing where any two of the following three conditions intersect, namely, low value, exclusion and disadvantage (Jame 2010: 3; Holzmer, Uys, Chirwa, Greef, Makoe, Kohi, Dlamini, Stewart, Mullan, Phetlhu, Wetland & Durrheim 2009:1002).

Stigma process is perceived to occur within three contextual factors, namely, environment, the health care system and the agent (William et al 2007:545). Castro and Parker (2005) indicated that environment including cultural, economic, political, legal and policy environment affect the existence of stigma. The health care system consisting of the health care settings (hospitals, health centres and clinics) is the context where stigma can be triggered and manifested. It is also the potential site for stigma reduction-interventions. The agent comprises the individuals who are affected by stigma (William et al 2007:545).

2.4.2 Origin of stigma

Stigma is as old as history. The word “stigma” originated from ancient Greece. In ancient Greece, citizens pricked marks on their slaves using pointed instruments, to indicate ownership and signify that such individuals are unfit for citizenship. The ancient Greek word for prick is ‘stig’ and the resulting mark, a ‘stigma’. Thus, the ‘stigma’ referred to branding of slaves using a tattoo mark. This mark is used to differentiate the slaves from other people linking the labelled persons to undesirable characteristics. Today, the physical marks have gone but stigma remains. Modern social scientists used the word to refer to socially undesirable characteristics (Fonseca 2009:8; Ogasawara 2009:8; Ragimana 2006:12).

Stigma is a complex phenomenon often originated from subjective ideas, perceptions and values but it has no scientific background. It is a broad and multidimensional concept dealing with issue of deviance. Though stigma is a worldwide experience, its origin is often difficult to explain. History shows that many illnesses have carried

considerable stigma around the world. Stigma research had been focusing on studying people with abnormal conditions including mental illnesses, disfigurement, short stature, tuberculosis, leprosy, cancer, HIV and AIDS (Jame 2010:3).

Some studies indicate that stigma usually springs from personal values associated with prejudices, ostracisms and discriminations (Ekeji 2010:18). While Goffman (1963) focused on individual aspects of stigma, Links and Phelan (2001), indicated that stigma is a social disease by which a society imposes a negative attitude on a person or a group of person. Similarly, Parker and Aggeleton (2002:346) emphasised stigma as a social process that produces and reproduces relations of power and control (Ragimana 2006:18).

2.4.3 Types of stigma

Stigma has been classified by a number of authors (Monjok et al 2009:23). Based on the functional aspects of stigma, Herek and Capitano (1998) classified stigma as instrumental and symbolic (moral) stigma. Instrumental stigma refers stigma arising from concern for self-preservation while the symbolic stigma springs from value-based ideology. The instrumental stigma links HIV and AIDS to disease-related factors whereas the symbolic stigma links HIV and AIDS to promiscuity. The instrumental-symbolic-instrumental framework is crucial for HIV and AIDS because the joint effects of symbolic and instrumental stigma have made HIV and AIDS even more stigmatising than other diseases like cancer and hepatitis. Herek (2002) suggested that since the instrumental stigma is based on seriousness of risk or resource constraints, it can be more easily shifted than the symbolic stigma which is more entrenched and thus more difficult to change (James 2010:16; Ogasawara 2009:8).

Asiedu (1998) described three kinds of stigma that an individual encounter. This includes stigma associated with physical deformities, defects in individual's character and ill health, and stigma related to a social group, religion and race (Ekeji 2010:1).

On the other hand, Scrambler (1998) identified two types of stigma. These are felt or perceived (internal) and enacted (external) stigma. Perceived stigma refers to fears of the discrimination while enacted stigma refers to actual discrimination. A Stigma Index

Report indicated that the most commonly experienced stigma among PLWHA was perceived stigma when compared to stigma by others (UNFPA & UNAIDS 2011:58). Stigma can also be classified as compound or layered stigma and internalised stigma. The compound (layered) stigma refers to HIV-related stigma that reinforces the pre-existing SAD against marginalised groups like sex workers and IDUs while the internalised stigma is stigma experienced by PLWHA (Ekeji 2010:3; Kasiime 2010:2; Mlobeli 2007:14; WHO 2009a:20).

2.4.4 Discrimination

Nyblade (2006) defined discrimination as the “actual stigma experienced” or “enacted stigma”. Others define it as any negative thought, feeling or action towards ill health. Link and Phelan (2001) refers discrimination as structural forms of oppression emanating from unfair institutional policies, practices and socio-cultural processes (James 2010:15). According to UNAIDS definition “discrimination is a behaviour or an action in which a distinction is made against people that results in the person being treated unfairly or unjustly on the basis belonging, or being perceived to belong to a particular group” (USAID 2006:6; Ragimana 2006:1; USAID 2008a:1; Ogasawara 2009:8; Monjok et al 2009:23; Thomas 2009:13).

2.4.5 HIV and AIDS-related stigma and discrimination

Despite the decline in the number of HIV and AIDS cases across the world, there is still HIV and AIDS-related SAD in both developed and undeveloped world. Studies have demonstrated that HIV and AIDS-related SAD is pervasive in many areas of life including health care settings, education, housing, financial services, social welfare, reproductive and family life (Molero et al 2011:610).

In 1987, the Late Jonathan Mann, former Director of WHO Global Program on AIDS, identified three phases of HIV/AIDS epidemic, namely, the epidemic of HIV, the epidemic of AIDS and the epidemic of SAD. He noted that the third phase is ‘central to the global AIDS challenge as the disease itself’ (Sinyangwe 2012:7).

HIV and AIDS-related SAD are probably as old as the disease itself (Kasiime 2010:2). It is a phenomenon that is universal, but it differs from one country to another and specific

target groups for HIV and AIDS vary significantly among the population (Ragimana 2006:21).

UNAIDS (2007) defines HIV and AIDS-related stigmatisation as a process of devaluation of the PLWHA whereas discrimination refers to action as the result of the stigmatisation (Thupayagale-Tshweneagae & Mokomane 2012:63). UNAIDS also stated that HIV and AIDS-related SAD as "... a process of devaluation of people either living with or associated with HIV and AIDS ...". Discrimination usually follows stigma and is the unfair treatment of an individual based on his or her real or perceived HIV status" (Nyblade et al 2009:2).

In developing countries, HIV and AIDS-related SAD is a complex phenomenon that is associated with culturally specific values and beliefs of individuals (Arja, Herman & John 2008:457). It is also a major challenge to the welfare of the adolescents orphaned by AIDS (Thupayagale-Tshweneagae & Mokomane 2012:27).

Herek and Glunt (1988) indicated that AIDS-related stigma includes all stigma directed at individuals perceived to be infected by HIV regardless of clinical manifestations. They also suggested that AIDS-related stigma is seen as socially constructed view to lethal illnesses mostly prevalent among groups that were already targets of prejudice (Wichman 2006:30).

Herek et al (1998) indicated that HIV and AIDS shares many characteristics with other diseases that are extremely stigmatised due to its perception to be contagious, unalterable, lethal, immoral and upsetting appearance of the afflicted at later stage of the disease. They stated that this reaction is intensified by a tendency among public to blame the PLWHA for their illness (Andrewin & Ghein 2008:897).

Parker and Aggleton (2002:346) have acknowledged HIV and AIDS-related SAD as a complex social process that is intermingled and reinforce pre-existing SAD associated with sexuality, gender, race, and poverty. They have also highlighted the need to recognise these phenomena across various contexts since HIV and AIDS-related SAD varies in different settings (Andrewin & Ghein 2008:898; Mahendra, Gilborn, Bharat, Mudoj, Gupta, Gearge, Daly & Pulrewitz 2007; WHO 2009b:19).

2.5 FACTORS ASSOCIATED WITH HIV AND AIDS-RELATED SAD IN HEALTH CARE SETTINGS

Studies carried out in different countries have indicated that there are three actionable causes of HIV-related SAD in the health care settings. These includes lack of awareness among HCPs of what stigma seems and why it is harming; fear of casual contact emanating from inadequate knowledge about HIV transmission; and the association of HIV with immoral behaviour (Najakolaei, Niknami, Aminshokravi, Bazargan, Ahmadi, Hadjizadeh & Tavafian 2010:2; Nyblade et al 2009:4).

Other studies have revealed that the root causes of SAD may be related to a lack of education and misunderstanding of the disease. The underlying cause of HIV and AIDS-related SAD is that the disease is perceived as an incurable and sexually transmitted disease (Guerard 2011:13).

Many researches in China (Li et al 2007b:754) focus on HIV prevention and control but there is inadequate emphasis towards barriers affecting PLWHA in accessing health care settings. An in-depth interview in China on 21 PLWHA suggested that the health care is highly affected by social discriminations and limitations of resources (Zhou 2009:202).

Castro and Farmer (2005) argue that stigma may not be a major barrier to service users as commonly believed since it is the perception of the lack of services that keep PLWHA from attending rather than the stigma. They suggested that when the quality of HIV care was improved in Haiti, stigma reduced and HIV testing increased. On the other hand, despite the antiretroviral drugs (ARVs) availability in the Caribbean, many PLWHA left the local health care settings and travelled to other health facilities found in other cities or even other countries. Some withheld the treatment completely rather than risk being stigmatised (Rutledge, Abell, Padmore & McCann 2009:19).

The precise nature of HIV and AIDS-related SAD differs depending on the context. But studies have pointed out that SAD has some similar manifestations across cultural, environmental and socio-demographic settings (WHO 2009b:19). It has also been clearly indicated that HIV and AIDS-related SAD in health care settings has multiple sources and can assume different forms (Li et al 2007b:754).

Literature indicated that there are many factors that affect HIV and AIDS-related SAD among HCPs including knowledge and attitudes, socioeconomic and demographics, belief, culture and fear of casual contacts, institutional policies and strategies as well as working environment (Deacon & Boulle 2006:185).

2.5.1 Factors associated with knowledge, attitudes and practices

Bos, Schaalma & Pryor (2008:450) have found that cognitive factors determine HIV and AIDS-related SAD but their manifestations and relative importance may differ contextually. HIV and AIDS-related SAD in North America and Western countries is associated with norm violating behaviour like homosexuality and IDU whereas in developing countries it is related to value-violating behaviour like prostitutions and adultery (Cross et al 2011:73). Some studies have shown that the causes attributed to discriminatory practices in the health care settings were lack of adequate knowledge and trainings in the basics of HIV transmission, infection control and clinical management of HIV and AIDS (Population Council 2006:51). This study is inconsistent with one study that revealed higher knowledge of medical knowledge about HIV among HCPs was correlated with higher levels of stigmatising attitudes and discriminatory behaviours (WHO 2009a:21).

Other evidence suggests that knowledge about HIV is a significant predictor of HIV and AIDS-related SAD showing the need for the educational interventions in HIV and AIDS-related programmes (Searle & Antonio 2007:20). Shadow, Ryder and Webster (2002) indicated that medical education may increase stigmatising attitudes of nursing students as it usually enhances the notion that there is a status difference between nurses and PLWHA. Li et al (2007) indicated that higher medical professionals with more medical education showed more prejudicial attitudes towards PLWHA and less willingness to have social interactions with the patients. Similarly, HCPs with more years of education were more likely to discriminate against PLWHA. Shadow et al (2006) indicated that this might be ascribed to increased status differentials between HCPs and the PLWHA or increased ability to exploit status differentials among HCPs, as for instance, senior doctors delegate junior doctors when they face PLWHA (Deacon & Boulle 2006:185; Maduiké 2010:23-26).

Other literature (Ogasawara 2009:7; Willium et al 2007:542) indicated that knowledge of HCPs about HIV and AIDS did not show positive correlation with HCPs attitudes towards PLWHA. However, some studies have demonstrated that HCPs with higher HIV and AIDS knowledge have more positive attitudes towards the PLWHA (Andrewin & Chein 2008:902; Li et al 2007b:754; Ogasawara 2009:7; Willium et al 2007:542).

Investigations in many countries that evaluated the attitudes of HCPs (doctors, nurses, and midwives) towards treating PLWHA revealed that a substantial proportion of them would avoid treating HIV and AIDS patients if they had choice (USAID 2008a:1). The study in Belize had demonstrated that there are stigmatising attitudes and discriminatory practices in Belize public hospitals (Andrewin & Chein 2008:902). Petty (1995) defined attitudes as an overall evaluation of oneself, other people, objects and issues. It is difficult to change attitude because it often function as cognitive framework that holds and organises information about specific concepts, situations and events. Baro and Byrne (2003) indicated that attitudes have been a focus of research since researchers believe that attitudes affect behaviour. Petty (1995) revealed that beliefs, emotions, and behaviours can contribute separately to attitudes of people including the attitudes of the HCPs (Ragimana 2006:12). HIV and AIDS-related SAD represent not only the breach of human right violations, but also violations of ethical principles upon which the health system is based (Andrewin & Chein 2008:902).

Despite the present anti-discrimination policies in China, studies have shown that judgemental attitudes, avoiding interaction, refusal to provide treatment and involuntary disclosure, against PLWHA were reported. **One hospital-based study** on HCPs has pointed out that 23% of the study participants did not want to give care for PLWHA. Though HCPs have mastery of correct HIV and AIDS-related knowledge, it was pointed out that the HCPs' attitudes and practices were not consistent with their knowledge as they have internalised the AIDS-related stigma that is existing in the larger society (Zhou 2009:203).

A study carried out in China has indicated that HCPs in city hospitals showed the biggest differences in attitudes towards PLWHA. Similarly, HCPs with higher level of education showed the greatest discriminatory practices towards PLWHA. The knowledge of HCPs was not found to be associated with their willingness to interact with PLWHA. This is consistent with the review of 22 stigma reduction- intervention studies

that pointed out information alone is not adequate to change attitudes or behaviour (Wu et al 2006:182).

Several studies have documented attitudes of HCPs towards PLWHA. Many of them have revealed that poor communications between the PLWHA and the HCPs is the major barrier in providing proper care for these patients (Najakolaei et al 2010:2).

Studies carried out in Rwanda showed strong association between HCPs' attitudes and fears and their awareness of discriminatory practices in the health care settings (USAID 2008b:23). Other studies indicated that the factors contributing to stigmatisations and discriminatory practices include lack of knowledge, moral attitudes and perceptions that caring for PLWHA is meaningless because HIV is incurable disease (Ogasawara 2009:7; Ragimana 2006:27; USAID 2007b:20). On other hand, studies have shown that prior exposure to PLWHA usually decreases SAD committed by HCPs (Deacon & Boulle 2006:185).

2.5.2 Factors associated with socio-economic and demographics

Studies have demonstrated that HIV and AIDS-related SAD is interacted with pre-existing SAD including class, sexuality, race, ethnicity, poverty and legal context as elucidated below (Ragimana 2006:23):

- **Class:** The HIV/AIDS epidemic has appeared during the globalisation and growing polarisation between the rich and the poor. These global changes reinforced the pre-existing social inequalities and stigmatisation of the poor. As the result, poverty increased vulnerability to HIV and AIDS and HIV and AIDS aggravates poverty.
- **Sexuality:** HIV and AIDS-related SAD reinforce the pre-existing sexual stigma associated with STIs, prostitution, promiscuity and sexual deviances.
- **Gender:** Huidrom (2004) indicates that HIV and AIDS-related SAD reinforces the pre-existing economic, educational, cultural and social drawbacks and unequal access to information and services related to women living with HIV and AIDS.
- **Ethnicity:** Ethnic-based SAD contributes to the marginalisation of minority of population groups, enhancing their vulnerability to HIV and AIDS, which in turn intensify the SAD.

Parker and Aggleton (2002:350) indicated that gender, ethnicity, class, profession and group affect the stigma. In several contexts, poverty appears to exacerbate the vulnerability of women to discrimination after their sero-positivity. In health care settings, the access and availability of testing and treatment may influence the prevalence of HIV and AIDS-related SAD. Other factors influencing stigma can be age, colour, ethnicity and religion (Ekeji 2010:3; Ragimana 2006:16; WHO 2009a:21).

Deacon and Boule (2006) argues that stigma happens in a social process in which illness is perceived as preventable but caused by identifiable "immoral" behaviours. The internalisation of these negative behaviours by the stigmatised persons combined with objective assessment of the victims' daily experiences with structural discrimination may create in the stigmatised persons' view, a perception of the health care system as intolerant and inaccessible (Najakolaei et al 2010:2).

In an international research, some significant associations were observed between demographic characteristics of research samples and the level of HIV-related SAD as follows (Lee 2011:32; Ragimana 2006:31):

- Females reported less stigmatising attitudes towards PLWHA.
- People older than 25 years were found to be more stigmatising.
- Less educated people had less knowledge about HIV and more restrictive attitudes.
- Significant difference observed in personal stigma levels between respondents who knew someone with HIV and those who did not know.
- HIV and AIDS-related SAD affect women and girls living with HIV more or less differently than men and boys.

The literature has also shown that there is negative association between age and HIV and AIDS-related SAD. On a study among general practitioners in New South Wales, it was found that the younger ones have shown low level of stigmatising attitudes towards the PLWHA. Many other studies have detected similar trends. On the other hand, a study carried out in China has demonstrated that though older HCPs shows more prejudicial attitudes than younger ones, they reported less discriminatory intent. This may attribute to their being more experienced and strict adherence to professional code

of conduct. Regarding the sex, the Chinese study found out that female HCPs had more prejudicial attitudes towards PLWHA than males. Similar study conducted in the country has indicated that male doctors were more supportive to PLWHA than females. In study carried out in Belize, nationality was found to be statistically significant with HIV and AIDS-related SAD in health care settings indicating that Cuban HCPs had more stigmatising attitudes towards PLWHA. In this study, there was no statistical difference between the number of cases seen in the previous six months and HCPs stigmatising attitudes and acts of discriminations. The finding regarding client case load is inconsistent with the studies that has shown HCPs with higher case loads had more positive attitudes towards PLWHA (Andrewin & Chein 2008:902; Li et al 2007b:754; Ogasawara 2009:7; Willium et al 2007:542).

Religious barriers on sexuality may have consequences for the transmission of HIV infections. A study conducted on Iranian health settings has indicated that the magnitude of HIV prevalence in Muslim countries is lower than that of non-Muslim countries. On the contrary, the HIV-related stigma is more intense in the Muslim countries. In this study, almost all participants reported experiencing SAD by their HCPs in different contexts. This may imply that Muslim HCPs might have more restrictive attitudes towards PLWHAs in the health care settings (Najakolaei et al 2010:2).

2.5.3 Factors associated with beliefs, culture and fear of casual contacts

HIV and AIDS-related SAD is the result of interaction between various pre-existing SAD. USAID (2002) has pointed out that the pre-existing stigma including sexual behaviours, taboos and social status often overlap and reinforce each other causing the deep-rooted nature of HIV and AIDS-related SAD (Ogasawara 2009:9).

Bos, Schaalma and Pryor (2008:453) underlined that it is crucial to scrutinise various cultural meanings of HIV and AIDS and examine the necessity of different determinants of HIV and AIDS-related SAD for each setting (Cross, Heijnders & Dalal 2011:73).

HCPs' fears of HIV infection and their related discriminatory practices were identified as a persistent problem in many countries mainly affecting the labour and delivery services. A qualitative study conducted in Kenya demonstrated that discrimination against HIV-positive pregnant women was reported in maternity services. The study

indicated that women of unknown HIV status during labour and delivery were more likely to be stigmatised and discriminated against, and these women were not receiving the required counselling services from the health care settings (Turan, Miller, Bukusi, Sande & Cohen 2008:938).

Li et al (2007) indicated that it is fear of infection rather than HIV-related knowledge that was associated with HCPs' willingness to interact with PLWHA. Fear of infection had a positive relationship with prejudicial attitudes among nurses but not in case of doctors and laboratory technicians. Fear of infection among HCPs may also be more likely to be associated with knowledge of managing the medical procedures than the general knowledge about transmission of HIV (Deacon & Boulle 2006:185).

Fear of HIV and AIDS-related SAD may be the major barrier to access to HIV testing and counselling among the HCPs. Being HIV positive can be source of professional shame for HCPs and may create fear of losing one's job and damaging future career prospects. It has been also documented that having an HIV test can be stigmatising and HCPs sometimes assumed to be HIV positive if they are known to have been tested (WHO 2011:8).

Similarly, SAD usually occurs among hospital workers mainly due to fear of casual contacts. The baseline study in Vietnam has revealed that some hospital workers think that HIV is highly contagious through casual contacts, when in fact it does not easily transmissible and is unable to exist outside the body fluids (ISDS 2008:9).

A study conducted in Iran has shown that most HCPs hold positive attitudes towards PLWHA but in practice they prefer not to care for these patients as the result of fear of not becoming infected by HIV virus (Najakolaei et al 2010:3).

Studies (Wu et al 2006:182) identified two types of HIV-related fears, namely fear of casual contacts and fear of occupational exposure. It was found that perceived risk of infection by HCPs was negatively associated with willingness to interact with PLWHA but the relations vary with type of profession. Nurses' and doctors' willingness to interact with PLWHA were found to be associated with perceived risk of infection, but this was not true for laboratory technicians (Wu et al 2006:182). Perceptions of occupational risk have been mentioned as a factor associated with HIV and AIDS-related SAD in health

care settings. This was indicated in Green study (1997) that the major source of negative attitudes towards PLWHA was fear of contagion. Other studies attributed the fear to fear of death (Li et al 2007b:754).

In a study conducted in Vietnam, relatively high levels of fear-based stigma were evident among hospital staff. The HCPs have also expressed high level of value-based stigma in hospitals. The hospital workers understood that their discriminatory practices could negatively affect their patients, and the HCPs often express regrets about their discriminatory practices they have already committed (Population Council 2008:40).

Different literature discloses that a lot of HCPs still hesitate to provide care to individuals at high risk of HIV as the result of fear of contracting HIV. Because of this, some doctors refer PLWHA to other health facilities. Such fears are reported to be higher among the HCPs dealing with invasive medical and surgical procedures. The study also indicated that the HCPs appear suspicious and even unaware of up-to date biomedical science. Moreover, lack of knowledge and entrenched cultural attitudes of HCPs have increased their fears towards the PLWHA (Jha & Madison 2009:1).

Another study showed that fear of HIV and AIDS-related SAD is a major barrier to HIV counselling and testing (HCT) in countries like, South Africa, Botswana, Ethiopia, Ghana, India, Indonesia, Thailand, Uganda, Tanzania, USA and Zimbabwe. This negatively affects the decision to disclose HIV status. It was reported that HCPs may discriminate against PLWHA by treating them differently, using excessive precautions or withholding appropriate care and support (WHO 2009b:21).

2.5.4 Factors related to institutional policies, strategies and working environment

The study conducted in Vietnam showed that the lack of clear hospital policies, strategies and practices to provide patient care has led to discriminatory practices in the hospitals (Population Council 2008:40). A study has also revealed that those HCPs who have awareness about HIV and AIDS-related policy and strategy showed a lower score of stigmatisation towards PLWHA (Andrewin & Chein 2008:902; Li et al 2007b:754; Ogasawara 2009:7; Willium et al 2007:542).

Many HCPs in Southern Africa believe that unless HIV and AIDS programmes address SAD, HIV will never be overcome (William et al 2007:1002). A study conducted in Kenya has disclosed that despite 65% of the health care settings have policies to protect PLWHA, only 27% reported implementing the policies. Moreover, only 75% of all HCPs are aware of the existence of HIV and AIDS policies; 25% reported to discriminate PLWHA, 12% reported blaming PLWHA for their HIV status and 17.5% expressed fear of casual contact with PLWHA (USAID 2007b:59).

Institutional factors are also attributable to HIV and AIDS-related SAD in health care settings. These factors include policies, strategies and standard operational procedures (SOPs). Some studies have investigated the relation between SAD and work environment in health care settings. Li et al (2007:54) pointed out that a higher level of nurses' satisfactions towards the working environment was found to be correlated with fewer negative verbal mannerisms towards PLWHA (Li et al 2007b:754). In another study carried out on hospital staff in India has shown that HIV and AIDS-related SAD in health care settings is fuelled by both individual and institutional factors (Population Council 2010a:6). For instance, when HCPs are unfamiliar with appropriate procedures like UP, the incidence of unintentional discriminations are more likely to occur. Lack of protective materials was also considered as the cause for reluctance to care for PLWHA (Li et al 2007b:754).

Institutional policies and strategies can also affect the levels of SAD against PLWHA. These include policies related to travel restriction, opt out of HIV testing and partner notification. An analysis of HIV and AIDS-related SAD in Latin America health settings indicated that institutional policies and strategies have discriminated against PLWHA by failing to ensure that HCPs are adequately trained. A study from Beijing has also found out that hospital policies are one of the major sources of discriminatory practices in the health care settings (WHO 2009b:21).

2.6 EXPERIENCES OF HIV AND AIDS-RELATED SAD IN THE HEALTH CARE SETTINGS

HIV and AIDS-related SAD can occur in different settings. People can discriminate both in their personal and professional capacities whereas systems and institutions can discriminate through their policies, strategies and practices (Ragimana 2006:27).The

health care settings have been identified as major areas where the HIV and AIDS-related SAD is pervasive. Accordingly, the SAD has been extensively documented in the health care settings among the HCPs across the world (Diaz & Neilands 2009:259; Sadoh et al 2009:17).

HIV and AIDS remains the most extremely stigmatised disease in the United States, profoundly affecting the lives of the PLWHA (Zukuski & Thornburn 2009:267). A study conducted in the country has revealed that 26% of adults living with HIV and AIDS experienced discrimination and 8% completely refused the treatment by the HCPs (Ekeje 2010:30). Another study carried out in the country has demonstrated that people conceal their desire to test for HIV because of fear of SAD, leading to substandard service delivery (Young & Bendavid 2010:379). A study undertaken in the country has also revealed that out of 16 PLWHA interviewed 11 (68.8%) of them reported feeling stigmatised and discriminated against when interacting with HCPs working in the health care settings (Zukuski & Thornburn 2009:271). Similarly, the epidemic of HIV and AIDS-related SAD appears at various levels in the Sweden, one of the countries providing top quality health service (Kasiime 2010:54).

In a study carried out in the United Kingdom (UK), out of those who experienced HIV-related discrimination, almost a half was committed by HCPs including the dentist, doctors and other hospital staff outside the HIV clinics (Elford et al 2007:262).

The Stigma Index research in UK has revealed that nearly one in five (20%) of the participants indicated that it was obvious to them that their medical records were not being kept confidential and about 42% participants felt doubtful that their medical records are being kept confidential due to SAD attached to HIV and AIDS. Moreover, 17% of the participants reported being denied health services because of their HIV status at least once in the previous 12 months (IPPF 2009).

HCPs are not only responsible for showing negative attitudes and stigmatising behaviours but also face stigmatisation by themselves as the result of their contacts with PLWHA (Wichman 2006:40). It was shown that 70% of HCPs who involved in one study believed that AIDS is “punishment for bad behaviour” and that PLWHA “deserve” illness. Nearly 85% of the HCPs said that they would be ashamed if they got HIV. Moreover, it was indicated that 70% of HCPs avoid treating PLWHA due to fear of

infection. This is attributed to their own fears of being stigmatised. This fear of “stigma by association” creates dilemma. They want to serve the PLWHA but do not want to be perceived as “HIV doctors” for fear of losing business from other clients. Thus, they either reject PLWHA absolutely or treat them in secret (Kidd, Prasas, Tajuddin, Ginni & Duvvury 2007:7).

Although the HIV epidemic has progressed from a death sentence to disease level where treatment is currently available, reports continue to underline denial of health care by HCPs against PLWHA as the result of SAD attached to the illness (USAID 2008a:1). In a study carried out by WHO, in India (29%), Indonesia (38%) and Thailand (40%) of PLWHA experienced that their HIV test results were disclosed to their friends, relatives and others without their consents (Ekeje 2010:30).

Discriminatory practices in health settings include delivering poor quality counselling and treatment, early referral from hospitals or discharge of real or suspected cases of HIV, segregation of hospital wards, isolation of PLWHA, labelling of patients’ beds, files and wards, excessive use of universal precautions and lack of confidentiality (Monjok et al 2009:24).???

A study carried out in Indian hospitals revealed that though HCPs generally denied that their hospitals refused admission and treatment of PLWHA because of their known HIV or suspected HIV status, patients indicated that the access to and quality of in-patient care in New Delhi hospitals depends on patients HIV status (Population Council 2006:50).

The study undertaken in Iran found that there are at least four forms of discrimination in health care settings. These are denial of care, suboptimal care, excessive precautions and physical distancing; and blaming (Najakolaei et al 2010:5).

Stigma in the hospitals is manifested in form of not counselling before and after the HIV test, keeping the client waiting a long time and breaking the confidentiality (USAID, ICRW & PACT 2007:30).

A study conducted on doctors, nurses and midwives in Nigeria has indicated that 10% of doctors refused to provide care or PLWHA or had denied to admit PLWHA to the

hospital due to lack of protective supplies (Ekeje 2010:30). Another study undertaken in Ethiopia which explored the attitudes and behaviours of physicians and nurses towards PLWHA has shown that 85% of physicians and 83% of nurses reported fear of occupational HIV infection. Moreover, 50% of physicians and nurses participated in the study reported fearing HIV infection in spite of their use of universal precautions. This indicates that use of universal precaution alone cannot change HCPs' stigmatising attitudes towards PLWHA (Ekeje 2010:22).

2.7 IMPACT OF HIV AND AIDS-RELATED SAD IN THE HEALTH CARE SETTINGS

SAD attached to HIV and AIDS have been major hindrance to preventing the spread of HIV all over the world (Guerard 2011:13). The most vulnerable group around the world often encounters SAD from the HCPs (doctors, nurses, lab technicians, etc) whose job is intended to provide quality health service. This results in poor health seeking behaviour and inadequate provision of health services leaving the stigmatised and vulnerable groups to ill-health and reinforcing the trauma of the pre-existing stigma (PHR 2011:5).

HIV and AIDS-related SAD in health care settings keep PLWHA from seeking health service if they have already faced unwelcoming treatment or their confidentiality was not respected. Several studies have revealed that HCPs' discriminatory attitudes and behaviours toward PLWHA have direct negative impacts on the quality of the life of the PLWHA. As members of the general population, HCPs can also hold the same stigmatising attitudes against PLWHA as general society holds (Li et al 2007b:753; Parker 2013:7-9).

Taylor (2001:792) indicated that SAD worsens the HIV and AIDS epidemic by creating a culture of silence, secrecy, blame, ignorance, shame and victimisation (Ganczak 2007:57). In addition, Fife and Wright (2000) have shown that stigma had statistically significant influence on self-esteem; regardless of the type of life-threatening illness the persons had (Holzmer et al 2007:542).

The impact of HIV and AIDS-related SAD in the health care system and on the HCPs are massive. Understanding the different aspects of HIV and AIDS-related SAD in

health care settings is first step in surmounting the challenge (Li et al 2007b:760). SAD attached to HIV and AIDS has been challenging the public health efforts to combat HIV and AIDS in many ways. It inhibits preventive behaviours, delays diagnosis, prevents the health-seeking behaviours, and reduces quality of care received by PLWHA (James 2010:3; Sinyangwe 2012:10).

The UN secretary General Ban Ki Moon has stated that “Stigma remains the single most important barrier to public action. It is the main reason why too many people are afraid to see a doctor to determine whether they have the disease, or seek treatment. It helps make AIDS the silent killer, because people fear the social disgrace of speaking about it, or taking easily available precautions. Stigma is the major reason why the AIDS epidemic continues to devastate societies around the world” (Ekeje 2010:33).

The effects of stigma cover individuals, families and communities including HCPs working with PLWHA. SAD is associated with problems related to job, accommodation, families, relationships, social status, access to health services, happiness and social freedom (Ekeje 2010:33).

HIV and AIDS-related SAD have a lot of detrimental physical effects but the most profound consequences are psychological, social and economic aspects of PLWHAs (Sadoh et al 2009:18). It also undermines countries’ investments in the HIV-related services and hinders the universal access to prevention, care and treatment (Nyblade, Hong, Ann, Ogden, Jain, Stangyl, Douglas, Tao & Ashburn 2008:4; Herrmann, Mckinnon, Hyland, Lalanne, Mallal, Nolan, Chassany & Duracinsky 2013:4).

Studies investigating the psychological experience of PLWHA show that the patients do not suffer solely from the physical ailment. They face emotional agony not only because it is incurable but also due to the public frenzy that results in blaming the victims. Ganczak (2007:56) indicated that diseases of unknown aetiology and ineffective treatments create fears and aversions, and in North American culture, cancer was once the disease of fear and shame. Currently, HIV and AIDS have replaced cancer and the experience of PLWHA is similar to the patients attacked by cancer (Ganczak 2007:57).

HIV and AIDS-related SAD is a major challenge to achieving universal access to HIV prevention, treatment and support. It is devastating as the disease itself in many

countries and communities resulting in family breakdown, social ostracism, job and property loss, violence, denial of health services, lack of care and support (UNAIDS 2007:9).

A study in Iran indicated that there are six major impacts of stigma on the PLWHA. These are avoidance or delay to seek health care for testing, refusal to disclose HIV status, low self-esteem, feeling revengeful, using unconventional medicine and experiencing emotional stress (Najakolaei et al 2010:6). Another study has shown that the impacts of HIV and AIDS-related SAD in the health care settings are poor HIV counselling and testing coverage, poor adherence to ART, delay in disclosure, low level of using condoms and economic burden (Ogasawara 2009:9).

2.8 HIV AND AIDS-RELATED SAD-REDUCTION INTERVENTIONS

The health care settings have been recognised as conspicuous contexts where HIV and AIDS-related SAD need to be addressed urgently by health care managers and providers (Andrewin & Ghein 2008:898; Mahendra, Gilborn, Bharat, Mudoi, Gupta, Gerge, Daly & Pulrewitz 2007:617; Sinyangwe 2012:8). HIV and AIDS-related SAD jeopardises the fight against the epidemic. Thus, it is imperative that health care policy-makers and administrators give due emphasis to HIV and AIDS-related SAD reduction-interventions in health care settings to address HCPs' negative attitudes and potential biases (Wu et al 2006:183).

Though much work has been carried out in most countries to address SAD, since HIV infection first emerged, much work still remains to achieve the zero discrimination by 2015 (UNAIDS 2012:78). UNAIDS and WHO have released five-year strategies (2011-2015), targeted at building on the progress so far made and establishing ambitious new targets for 2015: zero new infections, zero discriminations and zero AIDS-related death (UNAIDS 2010b:7; WHO, UNAIDS & UNICEF 2011:5). Accordingly, in 2010, 92% of countries reported that they have targeted programmes in place to reduce SAD. These improvements connote increased recognition of the significance of SAD reduction-interventions in many countries (UNIADS 2010:10).

In spite of the magnitude of the HIV and AIDS-related SAD, it is in recent years that responses are moving beyond the negative experiences towards interventions that

definitively address HIV and AIDS-related. Specifically, to reduce SAD in health care settings, studies have recommended that training of HCPs is very crucial. Besides, greater management support is pivotal to ensure that the staff practice UPs and deliver quality service since every individual has the right to obtain “the highest attainable standard of physical and mental health”. Based on this principle, an HIV positive patient has the right of getting non-discriminatory services, informed consent, confidentiality, privacy and adequate information related to HIV and AIDS (Population Council 2006:7; PHR 2011:23; UNFPA & UNAIDS 2011:58).

Several successful SAD reductions-intervention strategies have been developed and discussed across the world and they should be integral components of HIV and AIDS prevention and control in the health sector (Monjok et al 2009:31; Ogasawara 2009:19). Interventions needed at multiple levels to fully address and eliminate HIV and AIDS-related SAD in the health care settings. Interventions targeting and empowering HCPs and PLWHA should be coupled with institutional policies and strategies that uphold the rights of PLWHA (PHR 2011:23).

The SAD reduction-intervention strategy should focus on addressing its root causes among HCPs. Interventions to reduce fear of infections include dialogue regarding the HIV and AIDS-related SAD among HCPs. Moreover, improving working environment and availing infection prevention materials that support efforts of HCPs in delivering care for PLWHA is indispensable in alleviating problems associated with fear of infection in health care settings. Trainings about UP and giving positive reinforcement to healthy attitudes towards PLWHA are also crucial in addressing the SAD. A study undertaken elsewhere has pointed out that there is a need to conduct HIV and AIDS-related SAD reduction-interventions in health care settings so as to render quality health care for PLWHA (USAID 2008b:23).

Effective interventions to reduce HIV and AIDS-related SAD in health care settings should address the overall environment of the hospital and reach all hospital workers. Furthermore, the SAD reduction-intervention in hospitals is possible using participatory approaches and addressing the SAD at multiple levels. The full intervention package should address both fear and value-based stigma. Programmes to provide HIV and AIDS-related SAD trainings to hospital workers in hospitals will have positive impacts on the quality of care. Additionally, incorporating the SAD trainings into the medical schools

training curricula will provide a sound basis for reducing HIV and AIDS-related SAD in health care settings (Population Council 2008:41).

Recent studies and field experiences suggest that to reduce HIV and AIDS-related SAD in health care settings, SAD reduction-interventions should focus on the individual, environmental and policy levels. At individual level, the focus should target on raising awareness about SAD and allowing reflection on negative consequences of the SAD for the patients. In the physical environment, the HCPs should have adequate information, supplies and equipment required to practice UP and prevents occupational transmission of HIV. The health care settings also need to enact hospital policies and strategies that protect the safety of the patients and HCPs. The policies and strategies need to be developed in participatory approaches, clearly communicated and regularly monitored after the implementation. Likewise, health care settings should address issues related to HIV positive HCPs by setting appropriate hospital strategies and standard procedures. Nowadays, there is existence of SAD reduction tools and approaches at different levels. The critical issues are leadership commitment and resources to support and sustain the SAD reduction-interventions in the health care settings (Nyblade et al 2009:4).

A study undertaken in India has shown that hospital managers who used checklists to assess their facilities' policies, strategies and practices took actions to improve HCPs' safety and reduce HIV and AIDS-related SAD. The findings also indicated that education, training, policy formulation and involvement of development partners contributed to the improved knowledge, attitudes and practices among the HCPs (Population Council 2008:1). In a study conducted in three hospitals in New Delhi, India, hospital managers were not at first willing to believe that SAD were problems in their hospitals. After sharing the findings of the baseline assessment, the hospital managers and the staff set a plan of action to address the problem related to the SAD. The plan included an HIV and AIDS care and management policy, training the HCPs and developing and disseminating information related to infection prevention and control. The action plan finally alleviated the problems associated with supplies for UP and HCPs' needs for information and sensitisation and lack of management support before the intervention. After the intervention, the attitudes of the HCPs towards PLWHA and quality of care improved. For instance, the proportion of HCPs as having the least stigmatising attitudes increased from 12% to 27%. Efforts to reduce HIV and AIDS-

related SAD in health care settings should be a higher priority of health managers and planners (Mahajan et al 2008).

There are studies that have been carried out that focus on psychological factors which recommend education interventions to reduce HIV and AIDS-related SAD. There are also studies focusing on environmental factors which suggest increase in provision of care and availability of supplies. The findings indicate that HIV and AIDS-related education and prevention programmes are integral parts HIV and AIDS-related SAD reduction-interventions among the general population including the HCPs (Luis 2008:46).

HCPs working in health care settings are expected to provide a holistic care to PLWHA so as to help them cope with stress and reduce the SAD attached to HIV and AIDS. The reduction of HIV and AIDS-related SAD among HCPs will benefit not only the PLWHA but also the HCPs themselves (Feyissa et al 2012).

A study carried out in Pakistan demonstrated that HIV and AIDS-related trainings for HCPs and designing intervention strategies are critical to reduce HIV and AIDS-related SAD in the health care settings. The study conducted in Belize has revealed that HCPs who got formal HIV and AIDS-related trainings have shown lower level of stigmatisation (Andrewin & Chein 2008:902).

On the other hand, in a review of 22 interventions to reduce HIV and AIDS-related SAD, it was found out that information alone is not adequate to change attitudes or behaviour toward PLWHA since it has minimal impact on the deep-seated fears (Li et al 2007b:754).The interventions to reduce HIV and AIDS-related SAD advocated that provision of information along with skills building is more effective. Personal contact with PLWHA is one of the most promising approaches to reduce the SAD in the health care settings. Besides, programmes to reduce HIV and AIDS-related SAD are more likely to be effective if these programmes are based upon careful needs assessment theory and evidence-based hospital strategies including collaborative planning with PLWHA (Bos, Schaalma & Pryor 2008:456).

Several studies have revealed that education leads to improvements in knowledge, resulting in reduction of SAD attached to HIV and AIDS. The studies have demonstrated

that education leads to improvements in knowledge and rectification of false beliefs and misconceptions. Cross et al (2011:73) demonstrated that training programmes including a combination of education and interpersonal contacts with PLWHA were the most implemented and evaluated approaches to address HIV and AIDS-related SAD in health care settings. But, there are observations which advocate that though education improves knowledge, an increase in knowledge does not necessarily imply changes in attitudes (Cross et al 2011:73).

Brown et al (2003) suggested that if education programmes are to be effective part of HIV and AIDS-related SAD reduction-interventions, they should consist of personal information, a direct attack on false beliefs, promotion of empathy via simulations and opportunities for discussion (Cross et al 2011:74).

A study carried out in Indian hospitals in 2009 has pointed out that reducing HIV and AIDS-related SAD in health care settings require not only addressing attitudes and practices of HCPs but also their needs for information, training and supplies (Population Council 2010a:6).

Studies conducted in the United States, Tanzania, Jamaica and Israel which tested information-based approach to reduce HIV-related SAD have demonstrated increased tolerance of PLWHA and positively changed attitudes of HCPs towards PLWHA (Ekje 2010:40).

A study conducted in China indicated that there were no statistical differences between the HIV and AIDS-related SAD intervention and control groups in terms of their age, gender, education or previous HIV training (Wu et al 2008).

Medical education in general and education about HIV and AIDS in particular will not necessarily reduce SAD unless the specific fears are reduced among the HCPs. This has to be integrated with access to necessary equipment and supplies to ensure that the HCPs can manage the risk of infection in the health care settings (Deacon & Boulle 2006:186). Besides, to address problems related to fear of casual contacts and training of HCPs, ensuring availability of protective materials and designing and implementing non-discriminatory hospital policies and strategies at the level of the health care setting are crucial (USAID 2007b:20).

The study in Iran has indicated that health authorities must show support and allocate adequate resources for SAD reduction- interventions. Moreover, an integrated approach based on a human rights framework and delivered in partnership with PLWHA offers best approach in overcoming the HIV and AIDS-related SAD in health care settings (Najakolaei et al 2010:10).

In China, a SAD reduction-intervention that combined three strategies including sharing of information, frequent contacts with PLWHA and improving coping through empowerments has taken place. The result indicated that PLWHA involved in the intervention teams reported less SAD and increased self-esteem (Uys et al 2009:1059).

Another study carried out in a developing country has demonstrated that HIV and AIDS-related SAD reduction- interventions in the hospital settings should consist of activities at the individual and institutional levels. These include participatory self-assessment, sensitisation training and development of posters that can reinforce a better strategy and procedure of infection control. To be successful in resource constrained settings, the SAD reduction-interventions should consider the socio-cultural and economic perspective within which it occurs (Mahendra, Gilborn, Bharat, Mudoi, Gupta, Gerge, Daly & Pulrewitz 2007:625).

It is difficult, if not possible, to develop generic SAD reduction- interventions that would apply to all health conditions since the specificity of these conditions and complexity of the factors are related to each person's experience of SAD. However, it is possible to propose actionable strategies that can be adapted to special circumstances. As a comprehensive approach to the issue of HIV and AIDS-related SAD, studies suggest that a social marketing approach of using various media will be appropriate since it requires engagement with people in multiple domains; and it is culture sensitive, adaptable and pragmatic (Cross, Heijnders & Dalal 2011:78).

Designing HIV and AIDS-related SAD strategy is critical to effectively prevent HIV and AIDS-related SAD in health care settings mainly in the hospitals where PLWHA are admitted and take care for some days. The SAD reduction-intervention should focus on training HCPs and designing appropriate hospital strategies for the HCPs. Moreover, institutional policies should be in place to protect PLWHA from SAD and hold the HCPs

accountable for respecting patients' rights (Rutledge et al 2009:31). To improve the environment for PLWHA in health care settings, it is vital for facility management bodies and HCPs to recognise that SAD exists in their health facilities. It was found that a participatory approach including sharing of information about types and levels of SAD helped to build HCPs and management support for SAD reduction-interventions in health care settings (Population Council 2010a:4). To ensure that health care settings are appropriate and accessible for PLWHA, hospital management, HCPs, public health experts and PLWHA should also work hand in hand. Furthermore, curricula related to HIV and AIDS-related to SAD should be developed and incorporated into the training of all HCPs (Jha & Madison 2009:8).

2.9 EFFECTIVE STRATEGIES TO REDUCE HIV AND AIDS-RELATED STIGMA AND DISCRIMINATION

Studies have indicated that there are strategies that have proven effective in the reduction of HIV and AIDS-related SAD in health care settings (Ekeje 2010:36). The major ones are:

2.9.1 Improving knowledge of health care professionals

Through training of HCPs can be equipped with adequate knowledge that will help them in dealing with PLWHA without discrimination. Studies in Nigeria, Uganda, India and other developing countries have indicated that HCPs need broad education about HIV and AIDS prevention and management (Ekeje 2010:37; WHO 2009a:22).

2.9.4 Designing hospital strategies and reforms

The UNAIDS/WHO (2004) advocate that HIV testing must be confidential and accompanied by counselling. Moreover, the testing must be conducted after obtaining informed consent from the clients. Interventions at hospital settings must comprise activities at individual and institutional levels that lead to designing of HIV and AIDS-related SAD reduction-intervention strategy and reforms (Ekeje 2010:38; WHO 2009a:22; UNAIDS 2010a:126).

2.9.5 Individual face-to-face discussion

Face-to-face discussion is an intervention strategy which aims at bringing the HCPs together with the PLWHA. This can take place face-to-face or through media. This strategy creates a conducive environment for personal relationship with PLWHA. The relationship lead to conversations and testimonies from PLWHA and affected families thereby reducing the SAD attached to HIV and AIDS (Ekeje 2010:38; WHO 2009a:22)

Horizon research pointed out that researchers can design HIV and AIDS-related SAD reduction-intervention strategies to address specific determinants of SAD among HCPs at health care settings thereby contributing to the improved quality care of PLWHA. Efforts in reducing the SAD should be the priority among hospital managers, health planners and policy makers (Population Council 2010a:5). But, in order to develop effective anti-SAD strategies; programme managers need a better understanding of the phenomena (Holzmer et al 2007:1002).

The study carried out in Indian hospitals pointed out that reducing HIV and AIDS-related SAD in health care settings requires addressing not only attitudes and practices of HCPs but also their needs for information, training, policy reforms and supplies (Population Council 2006:50). The study conducted in Ethiopia has revealed that inclusion of HIV and AIDS-related SAD reduction- interventions in national HIV strategic planning and programming is imperative. Moreover, the active participation of PLWHA is crucial in the development of the SAD reduction- interventions strategies (Holzmer et al 2007:1006).

HCPs at hospitals should be trained through workshops or seminars on the topics of HIV and AIDS, SAD attached to HIV and AIDS, confidentiality, hospital policies and strategies as well as infection prevention (IP) procedures. A study by Ejeki (2010:41) carried out in Lesotho indicated that improvement of working conditions of HCPs, like salaries, provision of precautionary measures, accommodation and other incentives ameliorate their motivation resulting in reduction of SAD experienced by PLWHA in health care settings (Ekeji 2010: 41). Understanding and removing the obstacles due to HIV and AIDS-related SAD is a critical public health agenda for HIV prevention and control in health care settings (Monjok et al 2009:15).

2.10 THE ETHIOPIAN HEALTH CARE SYSTEM

The health care system can be described as a context in which HIV and AIDS-related SAD is both triggered and manifested (Uys et al 2009:1060). Reports have indicated that the health care system is a major source of HIV and AIDS-related SAD despite the system is supposed to counsel, diagnose and link the HIV positive clients to treatment, care and support facilities (Ekje 2010:34).

The Ethiopian health care system is composed of three levels. Level one is a primary health care unit (PHCU) composed of a primary hospital covering population of 60-100,000, rural health centres with catchment population of 15-25,000 and their satellite health posts with catchment population of 3,000-5,000. The primary hospital, the health centres and the health posts forms the primary health care unit (PHCU). The PHCU delivers mainly promotive and preventive services. Level two is general hospital covering a population of 1-1.5 million people and level three a specialised hospital with a catchment population of 3.5-5 million people (FMOH 2010:4). These hospitals render mainly curative and rehabilitative services having four major departments, namely, medical, surgical, gynaecology and obstetrics and paediatrics departments. The health centres and hospitals give comprehensive HIV and AIDS-related services including HCT, ART and care. The three levels of the care system are linked to each other by a referral system.

The management health care system is decentralised type, the top being the Ministry of Health (MOH) and the grass root the PHCU. The Woreda health offices monitor and support the PHCU found in the Woreda whereas the zonal health departments support the Woreda health offices in their respective zone. The Regional Health Bureau manages and leads the entire health infrastructure in the region. The MOH support the region mainly in areas of policy, strategy and guideline developments as well as capacity buildings.

2.10.1 The Ethiopian HIV and AIDS policy and strategy

Over the past years, the leadership and commitment to combat the HIV and AIDS epidemic in Ethiopia has increased with enactment and implementation of existing legislations and national policies. Accordingly, the Government of Ethiopia is making

great effort to prevent and control the HIV epidemic based on the national HIV and AIDS policy adopted in 1998. The general objective of the policy is to create an enabling environment for prevention and control of HIV and AIDS. Based upon the policy framework, there are strategies, guidelines and procedures that ensure standardised practices in the health care settings at all levels. The policies, strategies and guidelines serve as important tools to promote the rights of the PLWHAs and mitigate the challenges that spring from HIV and AIDS-related SAD in the health care settings (USAID 2012:2).

2.10.2 HIV and AIDS-related stigma and discrimination in Ethiopia

There is anecdotal and fragmented evidence that indicates HIV-related SAD is a critical barrier to achieve the universal access to HIV prevention, treatment, care and support in Ethiopia (USAID 2011:2). The EDHS (2005) study focusing on the attitudes of respondents towards PLWHA has demonstrated that stigma against PLWHA is a wide spread phenomenon in Ethiopia (USAID 2011:2). The study conducted by USAID (2011) has indicated that some female participants of the study felt stigmatized and discriminated when they see doctors who use unnecessary precautionary measures during examinations. Others indicated mistreatment, refusal to admit PLWHA and not getting priority as major discriminatory practices at health care settings, as mentioned by a participant of the study (USAID 2011:94).

“We took our sick friend to hospital but they refused to admit him. We took him again by the next day; they kept on resistance and warned us to protect ourselves. Finally, the military hospital admitted him but later on he died.”

The study also indicated that some HCPs in some health care settings challenge HIV positive pregnant women in two ways. First, some of them criticise them for becoming pregnant while they are living with the virus. Second, if the women want to give birth by means of caesarean section, the HCPs would not allow them (USAID 2011:94).

2.11 CONCLUSION

In this chapter, different sources of literature were reviewed including journal articles, books, web documents, relevant dissertations and theses. The literature reviewed different sources that may possibly explain the existing gaps in knowledge, attitudes and practices associated with SAD attached to HIV and AIDS in health care settings. Furthermore, various studies regarding HIV and AIDS-related SAD were investigated and different HIV and AIDS-related SAD reduction-interventions at health care settings were explored across the world. The research methods and design of the study are described in the next chapter.

CHAPTER 3

RESEARCH DESIGN AND METHODS

3.1 INTRODUCTION

The purpose of this chapter is to provide a description of the research design and the methods that are used to attain the objectives of the study and answer the research questions. The researcher also describes the research design and methods, sampling techniques, data collection procedures, data analysis, and validity and reliability of the research data.

3.2 RESEARCH DESIGN

The research design is a plan used as the basis for decision-making that spells out the basic strategies to develop information that is accurate and interpretable. It is a logical model that links research to inquiry and methods for collecting and analysing empirical data (Thupayagale-Tshweneagae 2008:88). The research design also guides the investigators on how to collect, analyse and interpret observations. The main purpose of selecting an appropriate study design is to reduce possible errors and bias by maximising the reliability and validity of data (Mukhopadhyay 2007:283-284; Christian, Daniel & Jens 2009:3-8).

There are several study designs in research. For this study, a pre-test-post-test design with non- equivalent control group, known as quasi-experimental design was used. In this design, the groups of study participants are naturally assembled into two groups, one being the experimental group that receives treatment, and the other the control group.

For this study, both groups took the same pre-test in order to establish initial equivalence, thus obtain the baseline data and identify gaps associated with HIV and AIDS-related SAD. After indentifying the gaps, the treatment group took a short course training related to HIV, AIDS, and SAD whereas the control group did not take the

training. The control group helps to determine whether or not the intervention actually made a difference in the treatment group. Finally, the two groups took the same post-test four weeks after the training. Then after, the relative effectiveness of the intervention was assessed by comparing the observed difference between the post-tests of the treatment and control groups.

The advantage of this type of design is that it controls for history, maturation, testing, and instrumentation as sources of invalidity. The design has also the advantage of convenience, feasibility and practicability. Its disadvantage is that since the units are not randomly assigned to treatment and control groups, selection bias can never be excluded completely resulting in reduced internal validity. In order to substantially reduce the bias, the characteristics of the respondents in both groups were determined before the intervention (Jonassen 2008:1023-1026; Reichardt 2009; Chris 2012:79-83.).

3.3 APPROACHES USED IN THE STUDY

There two approaches used in this study are quantitative and qualitative.

3.3.1 Quantitative approach

The quantitative approach uses various strategies of inquiry and methods for data collection and analysis (Thupayagale-Tshweneagae 2008:89). The emphasis of quantitative paradigm is on collecting and analysing numerical data using descriptive and/or inferential statistics. This type of paradigm, although harder to design in the beginning, is usually very much detailed and structured, and its findings can be easily collated and presented statistically (Colin 2007:3; Robin 2009:4-8).

3.3.2 Qualitative approach

This paradigm is more subjective in nature than the quantitative one and it mainly deals with exploring and reflecting intangible naturalistic phenomena such as values, beliefs, perceptions and attitudes. When used in conjunction with the quantitative paradigm, it can help to interpret and understand the complex reality of a given situation. In spite of the fact that this paradigm is easier to start, it is more difficult to interpret and present the findings (Colin 2007:3; Thupayagale-Tshweneagae 2008:88; Robin 2009:4-8).

Polit and Beck (2010:246) found that qualitative research is considered pragmatic, interpretive but it should be sensitive to the social context in which the data are collected. Symond and Gorard (2010:4) pointed out that the two approaches complement each other when merged, the quantitative one being objective compared to the subjectivity of the qualitative approach.

The present study has employed both quantitative and qualitative approaches. The use of multiple sources enables the triangulation and validation of information for robust and reliable conclusions.

3.4 RESEARCH METHODS

3.4.1 Study settings

The study was conducted in two referral hospitals found in two cities in Amhara Region. The Amhara region is one of the regions in Ethiopia, located in the northwest part of the country, with currently estimated population of 20,398,999. The capital city of the region is Bahir Dar, 563 kilo meters far away from Addis Ababa, The capital city of Ethiopia, just near to the Lake Tana. In the region, there are 19 public hospitals out of which five are referral hospitals. The referral hospitals provide outpatient, in-patient and emergency services including all HIV and AIDS-related services, like HCT and comprehensive HIV and AIDS treatment, care and support.

3.4.2 Population and sample selection

3.4.2.1 *Target and study population*

The target population for the proposed study were all HCPs working in the referral hospitals and the study population were HCPs working in the two randomly selected referral hospitals. The accessible population were physicians, health officers, midwives, nurses and laboratory professionals selected from the two hospitals. For the qualitative part of the study, PLWHA admitted as in-patients during the study period were the study respondednts.

3.4.2.2 Inclusion criteria

Participants and respondents included in the study had to meet this criteria:

- Permanently employed physicians, health officers, midwives, nurses and laboratory technicians.

3.4.2.3 Exclusion criteria

- HCPs who had served less than six months in the referral hospitals.

3.4.2.4 Sampling method and technique for the quantitative approach

The sampling method for the quantitative approach was probability sampling. In this type of sampling, a particular sample from a specified population has a known (non-zero) probability of being selected. This method of sampling is more likely to result in a representative sample. In this sampling method, each element of the study population has equal chance of being included in the sample. The sampling technique chosen for this study was stratified random sampling in which the sampling fraction was the same for each stratum. In this technique, the study population is subdivided into subpopulation called strata having similarity within them, but with distinctive differences between the strata. Then, the respondents were selected using stratified random sampling technique from each stratum. Finally, estimates of each stratum are combined to produce an estimate for total sample size (Patrick 2008:3-8; Mukhopadhyay 2007:98-113; Bowling 2009:203-212).

The advantage of stratified random sampling technique is that it is more representative and the sample can be kept in small size without losing its accuracy. In addition, the characteristics of each stratum can be easily estimated and compared. The drawbacks of this technique are that it is costly to prepare stratified lists of all members and there may be problems of faulty classification that will result in increase in variability (Mukhopadhyay 2007:102-103).

The main reason for selecting the two referral hospitals was that the number of HCPs and the HIV case load is relatively higher than that of the general and district hospitals.

This has enabled the investigator to obtain adequate sample size and valid information. From the selected hospitals, HCPs mostly dealing with PLWHA by virtue of their profession were divided into strata and then using stratified random sampling technique, the study participants were selected from each stratum. Accordingly, 110 HCPs were randomly selected with 95% confidence level and 5% margin of error (Mukhopadhyay 2007:106-113; Patrick 2008:3-68; Caldwell 2011:1-4).

3.4.2.5 *Sampling method and technique of the qualitative approach*

The sampling method for this study was non-probability sampling. In this method, sample elements are chosen by non-random technique as proposed by Mukhopadhyay (2007:98-113); Bowling (2009:203-212) and Rao and Richard (2006:58-65).

Purposive sampling technique was used to collect qualitative data. The advantages of purposive sampling are that it is simple to draw, less costly and involves less field workers. Its disadvantages are that it does not yield representative sample as it is not randomly selected. Moreover, it requires a considerable knowledge about the study population (Bowling 2009:206-208).

3.4.3 Data collection

3.4.3.1 *Quantitative data collection*

Purposive sampling was also used for the quantitative aspect of the study. The data collection method was structured self-administered questionnaires. The structured questionnaires were adapted from different literature sources and contextualised to Ethiopian health care settings. The HCPs from the two hospitals were given the same questionnaire both in the pre-test and post-test phases. After getting their informed consent, the study participants were allowed to complete the questionnaire in private settings. The questionnaires were designed to collect data, including knowledge about HIV, AIDS, HIV and AIDS-related to SAD, perceived risks, attitudes, beliefs and practices towards PLWHA. The questionnaire also included hospital policies, guidelines and protocols related to HIV and AIDS-related SAD in the health care settings.

3.4.3.2 Procedure of the quantitative data collection

After getting permissions from concerned authorities, two data collectors were assigned to each hospital to facilitate the data collection processes both for the pre-tests and post-tests. Two supervisors were also assigned to monitor and oversee all data collection processes. Each day, the collected data were checked by the supervisors and the investigator for consistency and completeness. The data collectors and the supervisors were recruited based on their educational background and previous experiences. The data collectors were those HCPs with Bsc. Degree in health sciences while the supervisors were health professionals with Master Degree in public health. In order to ensure, the data collectors and the supervisors have attended two-day training sessions regarding on how to scrutinise and manage the data collection processes.

3.4.3.3 Pre-testing of the questionnaire

Polit and Beck (2009:336) indicated that pre-testing of the questionnaire is used to identify and detect any gaps inherent in the instruments and to determine the effectiveness of the tools prior to the data collection.

For this study, the structured questionnaire was pre-tested on 20 HCPs having similar characteristics with the intended respondents. The respondents of the pre-testing were from other referral hospital which was not part of the main study. The pre-testing was used to determine whether or not the questions are relevant to study objectives and the respondents have clearly understood the questions. Moreover, the pre-testing was aimed at ensuring whether or not the wordings and sequences of the questions are correct and consistent. The pre-testing of the tool also enabled the investigator to ensure the completeness and consistencies of the research instruments. The main flaws identified during the pre-testing were inappropriate wording and sequence of the questionnaire. Based up on the gaps indentified through the pre-testing, the questionnaires were revised and prepared for the actual data collection (Mukhopadhyay 2007:287).

3.4.3.4 Qualitative data collection

In-depth interview (IDI) was used to obtain the qualitative data. The IDI is one of the qualitative data collection methods that involve conducting individual interview with a small number of clients to explore their beliefs, feelings, attitudes and practices on a particular programme and situations. Its main advantage is that it provides much more detailed information. Information through the use of this method can also be used to augment the validity and reliability of the quantitative data. Some of the limitations the IDI are that it is prone to bias, time intensive and not generalisable to target population (Mukhopadhyay 2007:287-289; Jonassen 2008:1059; USAID 2008b:11; Hancock, Ockleford & Windridge 2009:16-17; Bowling 2009:407-415).

The qualitative data were obtained through in-depth interview with HIV-positive patients admitted to each referral hospital. The IDI was carried out using guiding questions translated into local language (Amharic). Accordingly, PLWHA who were admitted to the two selected hospitals were interviewed in private settings until the data saturation point occurs (Hancock et al 2009:22).

To conduct the IDI at each hospital, two qualified and experienced health care professionals were recruited and assigned after getting one-day training on how to conduct the IDIs. Patients, whose condition is not improved, were excluded from the IDI. The responses of the patients were noted and audio-taped after obtaining informed consents from each interviewee. After the IDI, the data collectors thanked the respondents for taking their time.

3.4.4 Data analysis

Statistical analysis enables the investigator to reduce, compile, organise, analyse, evaluate and interpret the data. The primary purpose of data analysis is to provide appropriate answers to research questions that will enable the investigator to attain the intended objectives of the study. Prior to the data analysis, there is a need to process the collected data using appropriate statistical package (Wu et al 2008).

3.4.4.1 Data processing

The data processing should preferably begin as early as possible. It mainly includes the data entry, cleaning and editing. The processing of the data is intended to check for consistency, errors and incompleteness. Prior to the data processing, the data should be scrutinised properly. The data processing is a crucial stage and if it is well-planned, it can result in a rapid statistical analysis. It is also critical to keep track of the data collected in a condition which would facilitate a quick review of the progress and quality of the data management (Mukhopadhyay 2007:5).

For this study, the data processing started at the time of the data collection. Prior to the data collection, the questionnaire was categorised and coded in order to enhance the process of the data collection and analysis. Accordingly, a template for data entry was carefully developed in consultation with the data analyst. After the data entry, data cleaning and editing was carried out by the investigator.

3.4.4.2 Quantitative data analysis

For this study, the data analysis was carried out by using Statistical Packages for Social Sciences (SPSS) version 20.0 and Microsoft Excel to generate tables and figures. The statistical data analysis involves descriptive and inferential statistics.

- **Descriptive data analysis**

Descriptive data analysis enables the researcher to synthesise and describe quantitative data obtained from empirical observations and measurements. This analysis includes univariate and bi-variate analyses, The univariate analysis is intended to describe data for one variable while the bi-variate data analysis is concerned with describing the magnitude and existence of relationships between two variables using tabular and diagrammatic presentations (Mukhopadhyay 2007:2-54; Dakhale, Hiware, Shinde & Mahatme 2012:435-442).

For this study, descriptive data analysis of the pre-tests of both treatment and control groups was executed for socio-demographic variables, knowledge about HIV and AIDS, attitudes and beliefs of HCPs towards PLWHA, fears and perceived risk of infection,

health facility environment and practices as well as hospital policies, guidelines and protocols.

- **Inferential data analysis**

Inferential statistics is used to draw conclusions about a characteristics of a population based upon the data obtained from the sample. With inferential statistics, the investigator estimates the population parameters from the sample statistics. A statistical inference deals with estimation of parameters. The estimation procedures are used to estimate a single population parameter. The chi-square (X^2) is used for categorical variables to test difference in proportions in two or more groups. There are also advanced type of inferential procedures that include multivariate analysis, linear, multiple and logistic regressions. Multivariate analysis is a statistical procedure that enables the investigator to understand the effects of two or more independent variables on a dependent variable that is continuous in nature. Regression analysis is mostly performed to make predictions about phenomena. In linear regression, one independent variable is used to predict a dependent variable. Multiple regression is used when there are more than two or more independent variables. Logistic regression is procedure that is employed to analyse the relationships between multiple independent and dependent variables that are categorical in nature (Mukhopadhyay 2007:116-145; Christian, Daniel & Jens 2009:1-12; Dakhale et al 2012:435-442).

For this study, different methods of statistical analyses were used including X^2 , t-tests multivariate analysis, linear and logistic regressions. The observed differences between factors associated with HIV and AIDS-related SAD was compared using X^2 test for categorical variables and t-tests for continuous variables. The multivariate data analysis was carried out to investigate effect of each independent variable on dependent variable. To measure the score of the attitudinal items, Likert scale was used. In addition, to evaluate the effect of the intervention on the treatment group, linear and logistic regressions analyses were performed. For all analyses, p-value ≤ 0.05 was considered as statistically significant.

3.4.4.3 Qualitative data analysis

The first step in analysing the qualitative data was transcription and organisation of the collected data. This was followed by thematic analysis of the data that involves not only the discovery of commonality across the subjects but also search for natural variation in the qualitative data. The next step generally deals with the validation of the thematic analysis. In this stage, the concern is whether or not the themes inferred are the true representation of the perspectives of the people participated in the study (Burnard, Gill, Stewart, Treasure & Chadwick 2008:429-432; Beverley et al 2009:24-25; Bowling 2009:415; Thupayagale-Tshweneagae & Mokomane 2012:28).

In this study, the data obtained from the IDIs were transcribed and organised thematically and then triangulated with the quantitative data.

3.5 BRIEF INTERVENTION

Research and field experiences have demonstrated that there are promising approaches to reduce HIV-related SAD mainly based on its underlying causes. SAD reduction efforts based upon the causes and recommended practices have been very effective in health care settings. Using training programme as opportunities to improve knowledge, attitude and practices of HCPs is one way of addressing SAD attached to HIV and AIDS (ICRW 2010:4-16; IHA 2011:1-43; Gutierrez 2014:90-96).

The brief intervention was conducting short training for the study participants in the treatment group after identifying the gaps from the pre-test. Based on the identified gaps from both quantitative and qualitative data, the adapted manual was again revised and then presented to the respondents. The training was mainly intended to explore whether or not it would bring about improvement of knowledge, attitudes and practices of HCPs towards PLWHA admitted to the hospitals resulting in reduction of the magnitude of SAD attached to HIV and AIDS (Wu et al 2008).

3.5.1 Development the training manual

The training manual was adapted from various literatures and contextualised to Ethiopian health care settings. This was followed by reviewing the adapted document by

different experts already trained in the areas of comprehensive HIV and AIDS treatments, care and support. The training was provided to HCPs in the treatment group after identifying the gaps from the pre-test and incorporating them into the manual. The major identified gaps obtained from the baseline assessment were related to knowledge, attitudes and practices associated with HIV and AIDS-related SAD.

3.5.2 Training of the health care providers

The training was given to the study participants in the treatment group after the analysis of the pre-test. Fifty respondents (91%) were involved in the training. The training was facilitated by experts including physicians, public health professionals, nurses and expert patients trained in HIV and AIDS treatments, care and support programmes. The training was interactive and included brief presentations, group work, discussions, presentations of case scenarios, and testimonials by PLWHA working in the hospitals known as expert patients. In order to assess the immediate outcome of the training, the same post-test was given six weeks after the training intervention.

3.6 DATA QUALITY

3.6.1 Quantitative data

Researchers place little confidence in their research findings if the data collection tools and procedures yield data that are of poor quality. Data quality is equally critical to quantitative and qualitative research. The findings obtained from both quantitative and qualitative data should reflect the truth as much as possible. The data quality of quantitative research is evaluated by assessing the validity and reliability of the tools (Kimberlin & Winterstein 2008:2276-2284).

To improve the validity and reliability, pre-testing the tools is crucial to determine if they are prompting the type of response expected by the investigator. In addition, it is critical to give adequate training to data collectors. Supervision of the data collection process and proper data management also enhance the validity and reliability of data in research (Mukhopadhyay 2007:302-306; Drost 2011:105-121).

3.6.1.1 Validity

Validity is extent to which a tool measures what it is supposed to measure in order to address the objectives of an intended research. Validity requires that an instrument is reliable, but an instrument can be reliable without being valid. Validity is not a property of the test itself but it is the extent to which the interpretations of the results of a test are warranted. Validity is broadly measured in two dimensions, namely, internal and external validity (Kimberlin & Winterstein 2008:2278-2279; Robin 2009:15-32; Drost 2011:114-121; Mukhopadhyay 2007:302-306).

- **Internal validity**

Internal validity refers to situation in which one can find the measurements are true and accurate. It deals with whether or not the study has taken into consideration all the factors that may affect the changes among the study participants (Kimberlin & Winterstein 2008:2278-2279; Drost 2011:115-120). Internal validity is the approximate truth about inferences regarding the cause-effect relationships. It occurs when the researcher tries to control all the variables that could affect the findings of the study (Polit & Beck 2009).

In order to ensure the internal validity of this study, the questionnaire was carefully constructed and pre-tested on HCPs with similar characteristics. Before pre-test, the objectives of the study were made transparent to all the study participants with clear instructions. Besides, the original English version of the questionnaire was translated into local language and then translated back to the original English version. Efforts to maintain the internal validity were also made through the use of the two different data sources, namely, quantitative data from HCPs and qualitative data from PLWHA admitted to the selected hospitals.

- **External validity**

External validity of a study refers to generalising the study results to other persons, settings or times. It is the generalisation of study findings obtained from smaller sample size, thought to be extended to the rest of the population. Reducing the threats to the

external validity can be done by making sure that there is a random sampling of the respondents (Drost 2011:120-121; Wikipedia 2011).

For this study, the external validity is maintained by using random sampling technique of the respondents from the target population.

3.6.1.2 Reliability

Reliability is concerned with the consistency of measures administered at different times to the same individuals. Burns and Grove (2009:335) indicate that reliability involves the ability to produce similar results when used repeatedly regardless of the time and place. Internal consistency gives an estimate of the equivalence of sets of items aimed at assessing the stability the measures (Kimberlin & Winterstein 2008:2277-2278; Robin 2009:15; Drost 2011:106-114).

For this study, the reliability of the data was maintained by evaluating the data collection tools more than twice during development and once after the pilot testing. The reliability of the measures is also achieved through adequate training of the data collectors and supervisors. In addition, the reliability was maintained by writing the items clearly and making questionnaire instructions easily understood to the respondents.

3.6.2 Qualitative data

To maintain the data in quality qualitative research, trustworthiness is crucial. This includes credibility, transferability, dependability and confirmability.

3.6.2.1 Credibility

Credibility of data refers to the confidence in the truthfulness of the data. Researchers indicated that the credibility of an inquiry involves two aspects. The first one is conducting investigation that enhances the believability of the findings; and the second one taking steps that demonstrate credibility. There are varieties of techniques to improve the credibility of qualitative data. This includes prolonged engagement and triangulation. Prolonged engagement is the investment of adequate time during the data collection to learn the culture of group under study, to test misinformation, and to build

trust with the respondents. Triangulation is used to improve credibility of qualitative findings. Its main purpose is to provide a basis for convergence of the truth. The other two techniques used to establish the credibility of data are debriefing with peers to provide an external check on the inquiry process and debriefing with informants called member checks. Member checking can be carried out informally during data collection and formally after the data have been collected and analysed (Thupayagale-Tshweneagae 2008:110-113).

For this study, the credibility of the qualitative data was maintained by having adequate time to build trust among the interviewees during the data collection. Field notes and audio-tapes were used to enable the researcher to understand in-depth the communications between the interviewer and the patients. Besides, triangulation of the qualitative and quantitative was carried out after the quantitative data analysis.

3.6.2.2 *Transferability*

Transferability is the extent to which the findings from qualitative data are transferred to other settings or groups. The investigator cannot specify the transferability but he/she provide only the thick description of data that enable someone interested in evaluating and making transfer to other settings or groups (Thupayagale-Tshweneagae 2008:113-114).

For this study, a complete research report is produced that enables the customers to evaluate the applicability of the data to other study settings.

3.6.2.3 *Dependability*

The dependability of qualitative data refers to the stability of data over time and conditions It is an inquiry audit which consists of scrutiny of data and supporting documents by an external reviewer (Polit & Beck 2008:540). For this study, the researcher use the produced document reviewed by supervisor.

3.6.2.4 Confirmability

Confirmability refers to the objectivity of the data in which there is an agreement between two or more people about the relevance of the data. It is the type of an inquiry audit, in which investigator develops an audit trail indicating a systematic collection of data that allows an independent auditor to come up with conclusions about the qualitative data (Polit & Beck 2008:544).

For this study, the confirmability can be addressed through the audio-tapes and thematic records.

3.7 ETHICAL CONSIDERATIONS

The three major ethical principles that need to be considered in research are beneficence, respect for human dignity and justice (Thupayagale-Tshweneagae 2008:115).

3.7.1 Beneficence

This principle involves the protection of study subjects from physical and psychological harm. In deciding to conduct a study, the researcher should cautiously weigh the cost and benefits of the participation of study participants. The investigator must also consider the risks to the study subjects against the potential benefits to society (Thupayagale-Tshweneagae 2008:117).

This study did not cause any physical impairment but might have caused very minimal psychological inconvenience to those interviewees who participated in the IDI due to the sensitivity of the subject matter.

3.7.2 Respect of human dignity

Respect for human dignity encompasses the right to self-determination in which the study subjects have freedom to control their own activities including the voluntary participation in the study. The principle also includes the subjects' right to full disclosure that indicates the researcher has fully described to study subjects the nature of the

study and subjects' rights (Thupayagale-Tshweneagae 2008:115; Thupayagale-Tshweneagae & Mokomane 2012:28).

In this study, respondents were provided with a detailed description of the purposes and objectives of the study. The respondents had the right to refuse to participate in the study but could have full access to services even after the refusal.

3.7.3 Justice

Justice includes the right to fair treatment and privacy. Fair treatment refers to judicious treatments and care for the customers while privacy refers to maintaining anonymity and protecting confidentiality (Thupayagale-Tshweneagae 2008:117; Thupayagale-Tshweneagae & Mokomane 2012:28).

In this study, in order to ensure confidentiality and anonymity, all information was handled carefully during the data collection and then after. The investigator has kept all data sources protected. Neither the participants' name nor any other means of identifying the individuals was used by the investigator. The privacy of study subjects who participated in the in-depth interview was also secured and fully maintained during the data collection.

In addition to the above ethical principles, a research should involve informed consent procedures. The consent is designed to provide the study subjects with adequate information that enables them to make logical decision. In general, the informed consent involves having the study subjects sign the consent form which shows their voluntary decision to participate in the study after obtaining detailed explanation of the research (Thupayagale-Tshweneagae 2008:117; Wu et al 2008; Thupayagale-Tshweneagae & Mokomane 2012:28).

For this study, informed consent form was prepared and administered to explain the basic nature of the study and obtain the full agreement of the study participants. No information was used or released outside the terms of the agreement. The informed consent was written in local language and explained to each study participant. Generally, the study participants were provided with a clear description of study protocol and have given their informed consent.

Regarding the procedure of ethical clearance, the research proposal was approved by the Ethical Committee at UNISA. After obtaining the ethical clearance (Annexure B), a support letter was written from UNISA Regional Office located in Addis Ababa to Amhara Regional Health Bureau found in Bahir Dar (Annexure A). Thereafter, the proposal document was submitted to the Regional Ethical Review Committee. The committee has then reviewed the document and endorsed it. Finally, an official letter was written to the referral hospitals selected for the study (Annexure C1). The managers of the two hospitals have understood the purposes of the study and given full permission that enabled the investigator to conduct study (Annexure C2).

3.8 DISSEMINATION OF THE RESULTS

The study participants were made aware of that the findings of the study would be disseminated in scientific a research conference and in journals. Nevertheless, it was clearly explained that the report would not disclose the strengths or weaknesses of the study participants or the research settings where the study was carried out (Thupayagale-Tshweneagae 2008:118).

3.9 CONCLUSION

In chapter 3, the methodology was explained. Both quantitative and qualitative approaches were discussed with emphasis on how they were used to meet the objectives of the study. The chapter also looked at the sampling methods and techniques, measuring instruments, the data collection process and procedures used in the data analysis, and finally the ethical considerations. The following chapter will deal with the results of the study.

CHAPTER 4

FINDINGS OF THE STUDY

4.1 INTRODUCTION

This chapter describes the quantitative and qualitative findings of both the treatment and control groups. Comparative findings of the post-test results of the treatment and control groups are also presented. Summary of descriptive and inferential findings is also incorporated into the chapter.

4.1.1 Pre-test findings

From the two selected hospitals, a total of 108 respondents completed the self-administered questionnaire, the total response rate being 98.2%. The number of respondents involved in the treatment group and control group was equal. The treatment group included the health care providers (HCPs) who were selected randomly from Felege Hiwot Referral Hospital (FHRH) while the control group includes the HCPs from the Debre Markos Referral Hospital (DMRH). Accordingly, the socio-demographic characteristics of pre-test findings of the two groups are presented as follows.

4.1.1.1 Socio-demographic characteristics of the respondents

The socio-demographic characteristic of the respondents both in the treatment and control groups are summarised in table 4.1. Most of respondents (63%) in the treatment group were males. The proportion of the male and female respondents in the control group is the same. The median age of respondents in the treatment group is 32.2 with standard deviation (SD) of 7.74 while the median age of the respondents in the control group is 30.2 with SD of 8.87. A higher proportion of the respondents in the treatment group (51.9%) and in the control group (63%) are married. A considerable number of the respondents in the treatment group (92.6%) and in the control (96.3%) belong to the Orthodox church. Regarding the educational status, a greater proportion of the respondents in the treatment group (55.6%) and a lesser proportion of the respondents

in the control group (44.4%) have baccalaureate (first degree). More than sixty percent (61.1%) of the respondents in the treatment group and 64.8% in the control group were nurses by profession.

TABLE 4.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS, MAY 2014

Variable	Treatment group	Control group
Sex		
Female	20 (37%)	27 (50%)
Male	34 (63%)	27 (50%)
Age		
23-35	37 (68.5%)	44 (81.1%)
36-50	16 (29.6%)	7 (13.2%)
≥51	1 (1.9%)	3 (5.7%)
Average	32.2	30.2
SD	7.74	8.87
Marital status		
Single	25 (46.3%)	19 (35.2%)
Married	28 (51.9%)	34 (63%)
Divorced	1 (1.9%)	1 (1.9%)
Religion		
Orthodox	50 (92.6%)	52 (96.3%)
Muslim	2 (3.7%)	2 (3.7%)
Protestant	2 (3.7%)	0 (0%)
Educational status		
Diploma	17 (31.5%)	23 (42.6%)
Bsc	30 (55.6%)	24 (44.4%)
Master	1 (1.9%)	2 (3.7%)
Doctorate	6 (11.1%)	5 (9.3%)
Profession		
Nurse	33 (61.1%)	35 (64.8%)
Lab professional	9 (16.7%)	6 (11.1%)
Health Officer	2 (3.7%)	1 (1.9%)
Midwife	4 (7.4%)	7 (13%)
Physician	6 (11.1%)	5 (9.3%)

4.1.1.2 Job profile of the respondents

The job profile of the respondents both in the treatment and control groups is summarised in table 4.2. Nearly 39% (n=21) of the respondent in the treatment group had one to five years of work experience in the health care facility. Fifty percent (50%) of respondents in the control group have worked in the health care facilities for 1-5

years. Similarly, 75.9% (n=41) of the respondents in the treatment group and 74.1% (n=40) in the control group have worked in the current hospitals for 1-5 years. Only 33.3% (n=18%) of the respondents in both groups have worked in HIV clinic of the hospitals. In addition, 57.4% (n=34) of the respondents from the treatment group and 59.3% from the control group have received HIV and AIDS-related trainings in the previous years. On the other hand, 72.2% (n=34) of the respondents from the treatment group and 68.5% (n=37) from the control group have never received SAD-related training.

TABLE 4.2 JOB PROFILE OF THE RESPONDENTS MAY, 2014

Item	Treatment group	Control group
Work in the health care		
1-5 years	21 (38.9%)	27 (50%)
6-10 years	19 (35.2%)	16 (29.6%)
≥11 years	14 (25.9%)	11 (20.4%)
Mean	9.37	8.67
SD	8.2	8.88
Stay in the current hospital		
1-5 years	41 (75.9%)	40 (74.1%)
6-10 years	9 (16.7%)	10 (18.5%)
≥11 years	4 (7.4%)	4 (7.4%)
Mean	4.46	4.54
SD	4.3	4.7
Work in HIV clinic of the hospital		
No	36 (66.7%)	36 (66.7%)
Yes	18 (33.3%)	18 (33.3%)
HIV and AIDS-related training received		
No	23 (42.6%)	22 (40.7%)
Yes	31 (57.4%)	32 (59.3%)
Training related to SAD		
No	39 (72.2%)	37 (68.5%)
Yes	15 (27.8%)	17 (31.5%)

4.1.1.3 Knowledge related to HIV and AIDS

Table 4.3 gives a summary of the level of knowledge of the respondents both in the treatment and control groups in the pre-test. The knowledge related to HIV and AIDS was measured using a mix of 25 multiple choice and true/false questions. The questions are related to HIV virology, presenting symptoms, means of HIV transmission, HIV prevention strategies and risk assessment. The total knowledge scores were

categorised as poor (<70%), fair (70-79%) and good (\geq 80%). In addition, the respondents were categorised into 3 groups based on their results obtained out of the multiple and true/false questions. Accordingly, those who correctly answered one-third of the multiple and true/false questions have been classified as poor; those who correctly answered two-third of the questions as fair and those who correctly answered all of the multiple and true/false questions as good (USAID 2007a:3). The results of the knowledge questions in the pre-test are narrated as follows.

- **Virology of HIV**

The questions under the HIV virology comprise the link between HIV, the duration of antibodies production in persons infected with HIV and the survival of the HIV virus outside the body. The result indicated that 48% of the respondents from the treatment group and 52% from the control group had poor knowledge related to the link between HIV and AIDS. The pre-test findings also showed that 19% of the respondents from the treatment group and 13% of the respondents from the control group had good knowledge related to the link between the HIV and AIDS. In general, the result shows that the knowledge related to the virology of HIV is low both in the treatment and control groups.

- **Presenting symptoms**

The presenting symptoms of HIV is related to the way of identifying if a patient is HIV positive. The result indicated that 6% of the respondents from the treatment group and 19% from the control group said that a person with HIV can only be identified only through testing. On the other hand, 85% of respondents in the treatment group had poor knowledge score with regard to identify a person with HIV. Besides, 50% of respondents from the treatment group had poor knowledge score regarding patients with recurrent vaginal yeast infections or cervical cancer.

- **HIV transmission**

Regarding ways of HIV transmission, 7% of the respondents from the treatment group and 6% from the control group had poor knowledge related modes of HIV transmission. Besides, 83% of the respondents from both the treatment and the control groups had

good knowledge related to the modes of HIV transmission. Moreover, 39% of the respondents from the treatment group and 43% from the control group said that blood, semen and vaginal fluids are the only fluids that transmit HIV.

- **HIV prevention strategies in clinical settings**

The items under the prevention strategies mainly include ways of HIV prevention, clients testing before surgery, instruments used on HIV positive patients, post-exposure prophylaxis (PEP) and universal precautions. Accordingly, 83% of respondents from the treatment group and 87% from the control group had good knowledge regarding the ways of HIV prevention in the hospitals. In addition, 87% of the of the respondents from treatment group and 94% of the respondents from the control group had poor knowledge of identifying time to test clients for HIV to undergo surgery. Moreover, 39% of the respondents in the treatment group had poor knowledge regarding instruments used on HIV positive patients. Besides, 31% of the respondents in the treatment group had poor knowledge about prophylaxis for pregnant women who accidentally injured by a sharp instrument. Regarding the purpose of universal precautions in the hospital, 81% of respondents in the treatment group had poor level of knowledge.

- **Recommendations**

The recommendations include advice of the prevention of mother-to-child transmission (PMTCT), advices to mothers about infant feeding, consultation of PLWHA in private room and means of eliminating HIV and AIDS-related to SAD in the hospitals. Accordingly, 33.3% of the respondents from the treatment group had poor knowledge regarding the PMTCT. Besides, 59% of the respondents from the treatment group had poor knowledge regarding the settings where the HIV positive patients need to be consulted. In addition, 24% of the respondents in the treatment group had poor knowledge of identifying means of eliminating HIV and AIDS-related SAD in the hospital.

- **Risk associated with HIV**

The risk associated with HIV includes HIV transmission through needle stick injury and the risk of HIV transmission via splash of blood. Accordingly, 52% of the respondents both from treatment and control groups had poor knowledge regarding transmission of HIV via needle stick injury. Besides, 76% of the respondents from the treatment group and 69% from the control group had poor knowledge regarding the HIV transmission through splash of blood.

- **Other SAD events in the hospitals**

The SAD-related events include presence of SAD towards PLWHA in the hospitals. These comprise denial of care, breach of confidentiality, labelling of patients beds, extra precautions, delaying the services, referring HIV positive patients to junior health staff and substandard care. Besides, the events consist of factors enhancing HIV and AIDS-related SAD in the hospitals including low knowledge and skills, attitudinal problems, poor infra-structure, and inadequate equipment and supplies. The possibility of eliminating HIV and AIDS-related SAD in the hospitals are also incorporated. The result indicated that about 56% of the respondents from the treatment and control groups had poor knowledge score of identifying events of HIV AIDS-related SAD in the hospitals. Moreover, 31.5% of the respondents from the treatment group had poor knowledge regarding the factors that enhance HIV and AIDS-related SAD in the hospital.

Generally, the overall knowledge score of the pre-test findings indicated that 39% of the respondents from the treatment group got poor score, 6.6% fair score and 54% good score. Besides, 39% of the respondents from the control group obtained poor score, 8% fair score and 53% good score of knowledge of HIV, AIDS and SAD associated with HIV and AIDS.

TABLE 4.3 KNOWLEDGE OF RESPONDENTS AT FHRH AND DMRH, MAY 2014

Knowledge item	Poor	Fair	Good
a) HIV virology (3 items)(FHRH/DMRH)			
The link between HIV and AIDS	48% (52%)	33% (35%)	19% (13%)
Persons infected with HIV are most likely to develop antibodies within six months	46% (41%)	-	54% (59%)
Even outside the body, it is hard to kill the HIV virus	46% (56%)	-	54% (44%)
b) Presenting symptoms (3 items)			
How to know a patient is HIV positive	6% (19%)	-	94% (81%)
Identification of HIV positive person	85% (87%)	-	15% (13%)
Patients with recurrent vaginal yeast infections or cervical cancer	50% (39%)	-	50% (61%)
c) HIV transmission (2items)			
Ways of HIV transmission	7% (6%)	9% (11%)	83% (83%)
Blood, semen and vaginal fluids are the only bodily fluids that transmit HIV	39% (43%)	-	61% (57%)
d) HIV prevention strategies in clinical settings (7 items)			
Ways of HIV prevention	11% (4%)	6% (9%)	83% (87%)
It is appropriate to test clients for HIV before for surgery	87% (94%)	-	13% (6%)
Instruments used on HIV positive patients must be sterilised separately	39% (30%)	-	61% (70%)
A different instrument kit should be set aside for use on HIV+ patients	20% (24%)	-	80% (76%)
All pregnant women coming to the hospital should be tested and counselled for HIV	2% (2%)	-	98% (98%)
A pregnant staff member who accidentally injured by a sharp instrument cannot receive post-exposure prophylaxis	31% (28%)	-	69% (72%)
Universal precautions are designed to protect HCPs from HIV virus through different modes of transmission	81% (80%)	-	19% (20%)
e) Recommendations (4 items)			
Recommendation for the prevention of mother-to-child transmission of HIV	33.3% (30%)	46.3% (52%)	20.4% (18%)
Advices to HIV+ mothers about infant feeding	13% (7%)	39% (48%)	48% (45%)
Consultation of HIV positive clients should be in private setting	59% (57%)	-	41% (43%)
Means to eliminate the SAD in the hospitals	24% (21%)	13% (19%)	63% (60%)
f) Risks associated to HIV (3 items)			
HIV transmission via needle stick injury is very small	52% (52%)	-	48% (48%)
Highest risk for contracting HIV at work is	17% (9%)	-	83% (91%)

Knowledge item	Poor	Fair	Good
accidental needle prick			
HIV transmission via splash of blood and body fluids is too small	76% (69%)	-	24% (31%)
g) SAD-related issues in the hospitals (3 items)			
Events showing the presence of SAD against HIV+ people in the hospital	55.6% (56%)	3.7% (5%)	40.7% (39%)
Factors enhancing HIV and AIDS-related SAD in the hospitals	31.5% (39%)	20.4% (22%)	48.1% (39%)
Possibility of eliminating any form of HIV and AIDS-related SAD in the hospitals	6% (13%)	-	94% (87%)
Mean knowledge level	39% (39%)	6.6% (8%)	54% (53%)

4.1.1.4 Attitudes and beliefs toward PLWHA admitted to the hospitals

The attitudes and beliefs of the respondents towards the admitted patients both in the treatment and control groups are summarised in Table 4.5. The attitudes and beliefs of the respondents was measured using the Likert Scale with 4 options: "strongly agree", "agree", "disagree" and "strongly disagree". The stigma score for a particular scale was based on the degree of agreement or disagreement with a specific statement and whether or not it is positively or negatively worded. Accordingly, no point was given for the respondents who strongly agreed with positive statements towards HIV and AIDS patients or strongly disagreed with negative statements towards the HIV positive patients. A maximum of 3 points was given to respondents who strongly agreed with a negatively worded statement or strongly disagreed with a positively worded statement (USAID 2007a:3).The points for the response provided to statement is summarised in table 4.4.

TABLE 4.4 STIGMA POINTS BY RESPONSE AND TYPE OF STATEMENT

Type of statement	Strongly agree	Agree	Disagree	Strongly disagree
Positive statement toward PLWHA	0	1	2	3
Negative statement toward PLWHA	3	2	1	0

To measure the stigma, the questionnaires were grouped into 4 parts including blame for infection, desire for separation, fear of infection and quality of care. The major responses to the items under each category are presented below.

- **Blame for HIV infection**

The result pointed out that 48.1% (n=26) of the respondents from the treatment group and 41% (n=22) from the control group said that most PLWHA do not worry if they infect others. In addition, 75.9% (n=41) of the respondents from the treatment group and 26% (n=14) from the control group replied that most PLWHA should feel ashamed of themselves. Besides, 48.1% (n=26) respondents from the treatment group and 41% (n=22) from the control group believed that most PLWHA have many sexual partners. More than half of the respondents from the treatment group and 46.3% (n=25) of from control group responded that people get infected with HIV due to their irresponsible behaviours.

- **Desire for separation**

A small proportion of the respondents from both the treatment and control groups said that PLWHA should not be put in the same room with other patients. Similarly, 20.4% (n=11) of the respondents from treatment group and 30% (n=16) from the control group believed that they would not maintain the friendship if they found a friend known to have HIV.

- **Fear of infection**

The result indicated that 46.3% (n=25) of the respondents from the treatment group and 39% (n=21) from the control group answered that they would worry about getting HIV from one of their HIV positive patients in the hospital. Similarly, 46.3% (n=25) of the respondents from the treatment group and 56% (n=30) from the control group expressed that they would not feel safe while assisting or being assisted by a colleague who is HIV positive.

- **Quality of care**

The result showed that equal proportion of (24.1%) of respondents from the treatment and control groups said that women living with HIV should be allowed to have babies if they wish. Besides, 11.1% (n=6) of respondents from the treatment group and 26% (n=14) from the control group responded that patients with HIV and AIDS have no rights to obtain the same quality of care as any other patients. In addition, 29.6% (n=16) of the respondents from the treatment group and 28% (n=15) from the control group believed that they would not like to do something to make life easier for PLWHA. Moreover, 18.5% (n=10) from the treatment and control groups replied that they are unwilling to provide care to patients with HIV and AIDS. On the other hand, 1.8% (n=1) from the treatment group responded that patients with HIV and AIDS should not be treated with the same respect as any other patients. Furthermore, 9.3% (n=5) of the respondents in treatment group and 20% (n=11) in control groups indicated that they are not sympathetic towards the misery that PLWHA experience.

Generally, in the pre-test, the overall magnitude of stigma among the respondents in treatment and control groups is 35.9% and 30% respectively. Additional, information regarding the trend of the attitudes and beliefs of the respondents in both groups is indicated in figure 4.1.

TABLE 4.5 ATTITUDES AND BELIEFS TOWARD PLWHA, MAY 2014

Items	FHRH	DMRH
(a) Blame for infection (8 items)		
Most people living with HIV do not worry if they infect other people	26 (48.1%)	22 (41%)
Most people living HIV should feel ashamed of themselves	41 (75.9%)	14 (26%)
Most people living HIV have had many sexual partners	26 (48.1%)	22 (41%)
People get infected with HIV due to their irresponsible behaviours	31 (57.4%)	25 (46.3%)
Most people with HIV and AIDS have only themselves to blame	20 (37.0%)	14 (26%)
Pregnant women who refuse HIV testing are irresponsible	31 (57.4%)	9 (17%)
I am ashamed if I were HIV positive	19 (35.2%)	19 (35%)
If a pregnant woman is HIV-positive, her family has a right to know	31 (57.4%)	12 (22%)
(b) Desire for separation (2 items)		
Patients who are HIV infected should not be put in a room with other patients	12 (22.2%)	12 (22.2%)
If I found out a friend or colleague of mine had AIDS, I would not maintain the friendship	11 (20.4%)	16 (30%)
(c) Fear of infection (2 items)		
You worry about getting HIV from one of your HIV+ patients	25 (46.3%)	21 (39%)
I feel safe assisting or being assisted by a colleague who is HIV positive	25 (46.3%)	30 (56%)
(d) Quality of care (6 items)		
Women living with HIV should be allowed to have babies if they wish	13 (24.1%)	13 (24.1%)
Patients with AIDS have the right to obtain the same quality of care as any other patients	6 (11.1%)	14 (26%)
You would like to do something to make life easier for people with HIV	16 (29.6%)	15 (28%)
I am willing to provide care to patients with HIV and AIDS	10 (18.5%)	16 (30%)
Patients with HIV and AIDS should be treated with the same respect as any other patients	1 (1.8%)	6 (11%)
You are sympathetic towards the misery that clients with HIV and AIDS experience	5 (9.3%)	11 (20%)
Overall stigma prevalence	35.9%	30%

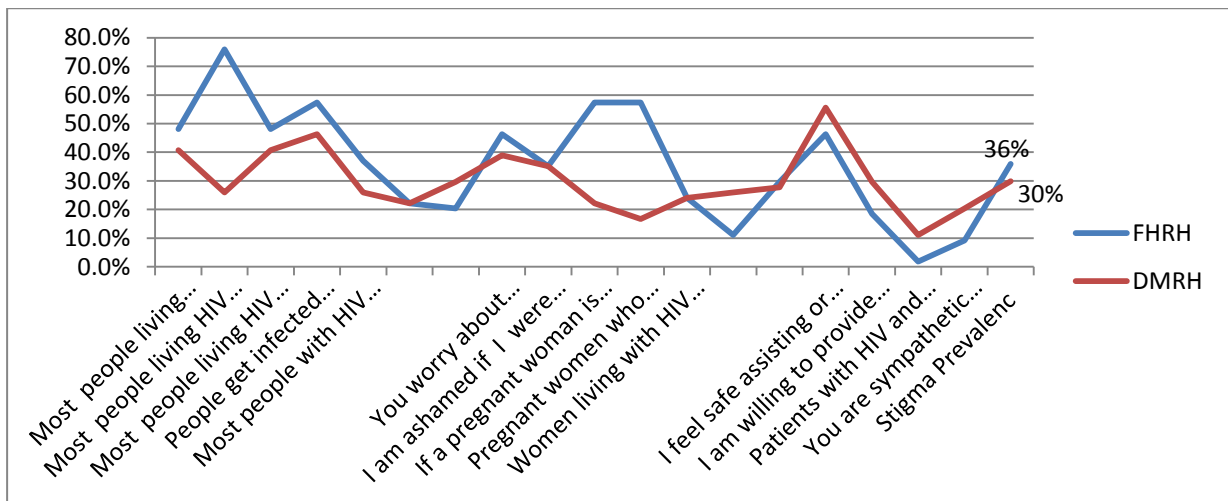


Figure 4.1 Attitudes and beliefs toward PLWHA, May 2014

4.1.1.5 Perceived risks toward care of PLWHA in the hospitals

The overall risk assessment findings both in the treatment and control groups are summarised on figure 4.2. The finding revealed that 59% of the respondents from the treatment group and 63% of the respondents from the control group had perceived risk of dressing wound or drawing blood from the admitted HIV positive patients. On the other hand, 91% of the respondents both in the treatment and control groups had perceived risk of recapping needles. In addition, 76% of the respondents in the treatment group and 78% of respondents from the control group have expressed their perceived risk of assisting HIV positive mother during delivery or labour. Furthermore, 76% of the HCPs in the treatment group and 74% of respondents from the control group had perceived risk of performing surgery to the admitted HIV positive patients.

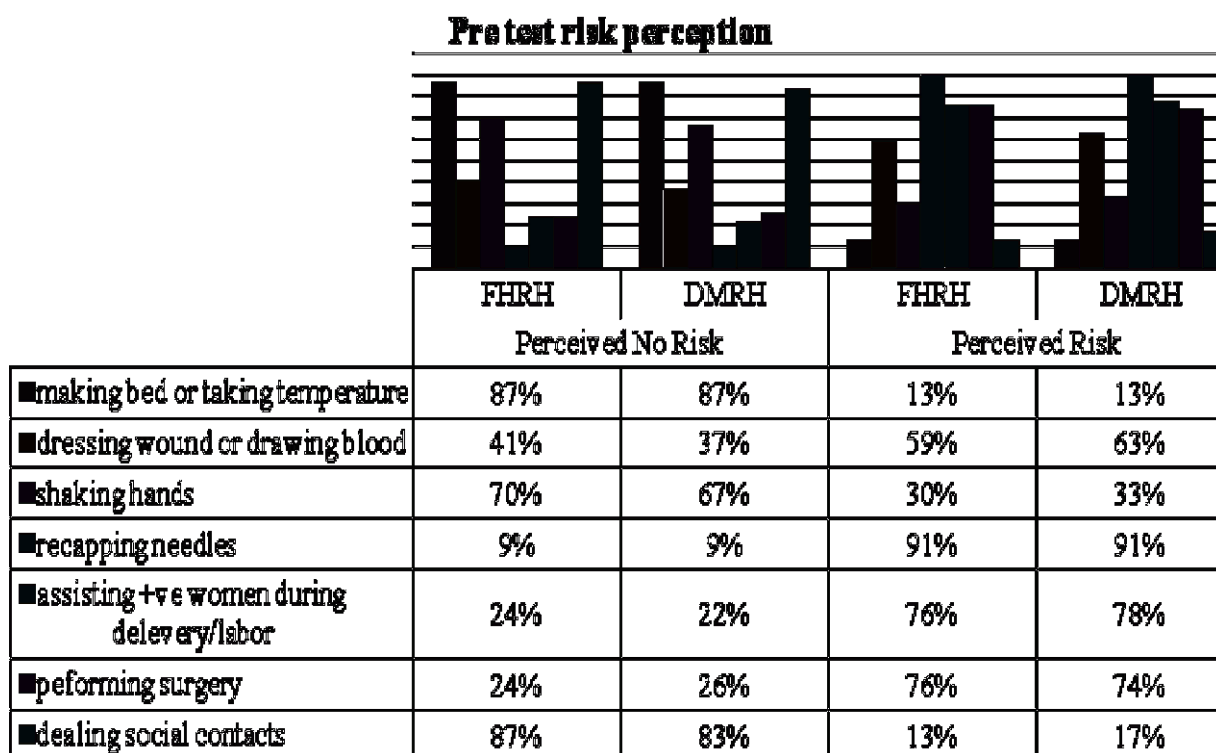


Figure 4.2 Perceived risk toward care of PLWHA, May 2014

4.1.1.6 Discriminatory practices

The pre-test result of discriminatory practices toward HIV and AIDS patients admitted to the two hospitals is summarised in the table 4.6. The summary includes denial of services, substandard care, institutional discrimination, selective use of universal precautions and financial discrimination. The overall magnitude of SAD is shown on figure 4.3.

- **Denial of services**

The result indicated that 29.6% (n=16) of the respondents from the treatment that they are unwilling to care for a patient with or thought to be living with HIV. Besides, 20.4% (n=11) of the respondents from the treatment group responded that they have observed that the hospital does not admit HIV+ patients if their health status is already very poor.

Similarly, 21.1% (n=13) of the respondents from the treatment group have observed HCPs denying admission of HIV positive patients by giving excuses. Likewise, 35.2%

(n=19) of the respondents from the treatment group observed HCPs neglects women with HIV during labour and delivery because of her HIV sero-positivity.

- **Substandard treatment**

The result showed that 14.8% (n=8) of the respondents from the treatment group observed HCPs providing poor quality care of patients with HIV or thought to be living with HIV. Moreover, 13% (n=7) of the respondents from the treatment group observed senior HCPs assigning an HIV positive client to junior HCPs. In addition, 29.6% (n=16) of respondents from the treatment group observed HCPs keeping HIV positive patients under observation without treatment plan for a few days.

- **Institutional discrimination observed by the HCPs**

The pre-test result signified that 22.2% (n=12) of the respondents in the treatment group observed that HCPs talking badly about people living or thought to be living with HIV. Besides, 25.9% (n=14) of respondents from the treatment group and 13% (n=7) from the control group experienced people talking badly about the HCP because his/her giving care to patients living with HIV. In addition, 14.8% (n=8) of the respondents from the treatment group observed HCPs hesitating to work along with an HIV positive co-worker. Moreover, 18.5% (n=10) of respondents from the treatment group and 14.8% (n=8) from the control group observed HIV positive patients isolated in special sections of the hospitals. On the other hand, 55.6% (n=32) of respondents from the treatment group observed that the HCPs do not maintain the confidentiality of HIV positive individuals admitted to the hospitals. Similarly, 59.3%(n=32) of the respondents both in the treatment and control groups observed HCPs performing an HIV test to a person without his/her informed consent.

- **Selective use of universal precautions**

The pre-test result pointed out that 75.7% (n=41) of respondents from the treatment group observed HCPs taking extra precautions while caring for patients with HIV and AIDS. Some of the respondents from the treatment group avoided physical contact while caring for HIV positive patients. Besides, about 63% (n=34) of the respondents from the treatment group wear double gloves during invasive procedures carried out on

PLWHA. Majority of respondents (61.1%) from the treatment group indicated that they use any special infection-control measures that they do not use with non-HIV positive patients. In addition, 75.9% (n=41) of respondents from treatment group observed HCPs using protective wear on non-bleeding HIV positive patients even if the patient does not have open sores. Additionally, 70.4% (n=38) of the respondents from the treatment group observed HCPs using additional infection prevention and control procedures during labour and delivery with a woman living with HIV. Furthermore, 29.6% (n=16) of the respondents from treatment group expressed that the hospital care is provided to HIV positive patients only if they can afford to pay.

The overall magnitude of HIV and AIDS-related discriminatory practices in the treatment and control groups is 35% and 34% respectively.

TABLE 4.6 DISCRIMINATORY PRACTICES IN THE TWO HOSPITALS

Items	FHRH	DMRH
(a) Denial of services (5 items)		
HCPs are unwilling to care for a patient with or thought to be living with HIV	16 (29.6%)	19 (35.2%)
The hospital does not perform surgeries or invasive procedures if the patient is known to be HIV+	8(14.8%)	12 (22.2%)
The hospital do not admit HIV+ patients if their health status is already very poor	7 (13%)	10 (18.5%)
HCPs try to cleverly deny admission of HIV+ patients by giving excuses but admission is not denied completely	11 (20.4%)	13 (24.1%)
Neglecting a woman living with HIV during labour and delivery because of her HIV status	19 (35.2%)	20 (37%)
(b) Sub-standard treatment (3 items)		
HCPs providing poor quality of care to patient with or thought to be living with HIV	8 (14.8%)	12 (22.2%)
A senior health care provider assigning a client to a junior health care provider	7 (13%)	11 (20%)
HCPs keep HIV+ patients under observation without treatment plan for a few days	16 (29.6%)	21 (38.9%)
(c) Institutional discrimination observed by the HCPs (8 items)		
HCPs talking badly about people living or thought to be living with HIV	12 (22.2%)	18 (33.3%)
Experienced people talking badly about you because you care for patients living with HIV	14 (25.9%)	7 (13%)
Been avoided by friends and/or family because you care for patients living with HIV	5 (9.3%)	7 (13%)

Items	FHRH	DMRH
Been avoided by colleagues because of your work caring for patients living with HIV	13 (24.1%)	5 (9.3%)
Hesitation level of HCPs to work along with an HIV+ co-worker	8 (14.8%)	11 (20%)
HIV+ patients are isolated in special sections of the hospital	10 (18.5%)	8 (14.8%)
The HCPs do not maintain the confidentiality of HIV+ individuals	30 (55.6%)	18 (33.3%)
Performing an HIV test a person without his/her informed consent	32 (59.3%)	32 (59.3%)
(d) Selective use of universal precautions (6 items)		
HCPs taking extra precaution while caring for patients with HIV and AIDS	41 (75.7%)	32 (59%)
HCPs avoid physical contact while caring for patients with HIV and AIDS	16 (29.6%)	37 (68.5%)
HCPs wear double gloves during invasive procedures to PLWHA	34 (63%)	41 (75.9%)
You use any special infection-control measures that you do not use with other patients	33 (61.1%)	28 (52%)
HCPs use protective wear on non-bleeding HIV+ patients even if the patient does not have open sores	41 (75.9%)	30 (56%)
Using additional infection prevention control procedures (e.g. double gloves) during labour and delivery with a woman living with HIV	38 (70.4%)	41 (76%)
(e) Financial discrimination (1 item)		
The hospital care is provided to HIV+ patients only if they can afford to pay	16 (29.6%)	18 (33.3%)
Overall prevalence of discrimination	35.0%	34.0%

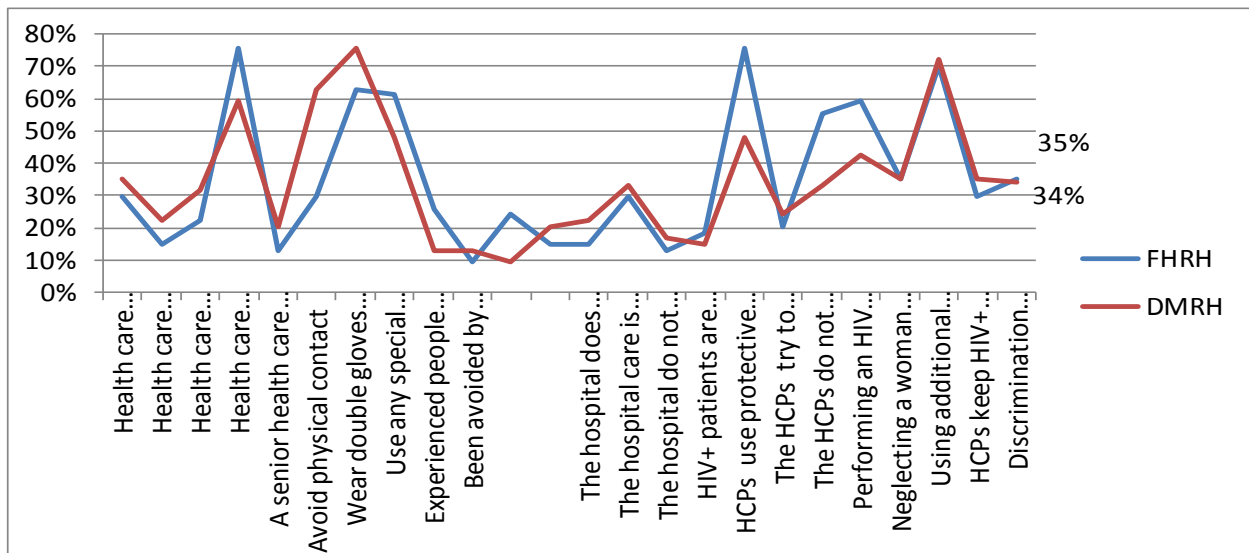


Figure 4.3 Discriminatory practices toward PLWHA, May 2014

4.1.1.7 Hospital policies, guidelines and protocols

The findings related to the hospital policies, guidelines and protocols are summarised in table 4.7. The findings showed that 37% of the respondents in the treatment group and 52% of the respondents in the control group had no orientation prior to graduation from colleges or universities. Besides, 65% of the respondents in the treatment group and 48% of the respondents in the control group pointed out that the policies, guidelines and protocols are not available in the hospitals. In addition, 23% of the respondents in the treatment group and 15% of the respondents in the control group indicated that the policies, guidelines and protocols are not implemented. Few (n=8) of the respondents in the treatment group attributed the lack of the implementation to *inadequate protective materials and trainings, low commitment of some HCPs, and poor institutional support*.

TABLE 4.7 HOSPITAL POLICIES, GUIDELINES AND PROTOCOLS, MAY 2014

Items	FHRH	DMRH
Having adequate orientations before or after graduation		
No	37%	52%
Yes	63%	48%
Availability of hospital policies, guidelines and protocols		
No	65%	48%
Yes	35%	52%
Are the policies, guidelines and protocols being implemented?		
No	23%	15%
Yes	77%	85%

4.1.1.8 Respondents' views regarding discrimination and availability of supplies

The findings obtained from the respondents both in the treatment and control groups toward discrimination and availability of supplies are summarized in figure 4.4. Accordingly, 35% of respondents in the treatment group and 26% in the control group expressed that they will not be in trouble if they discriminate an HIV positive patient in their hospitals. Besides, 50% of respondents both in the treatment and control groups indicated that the supplies are not adequate in the irrespective hospitals.

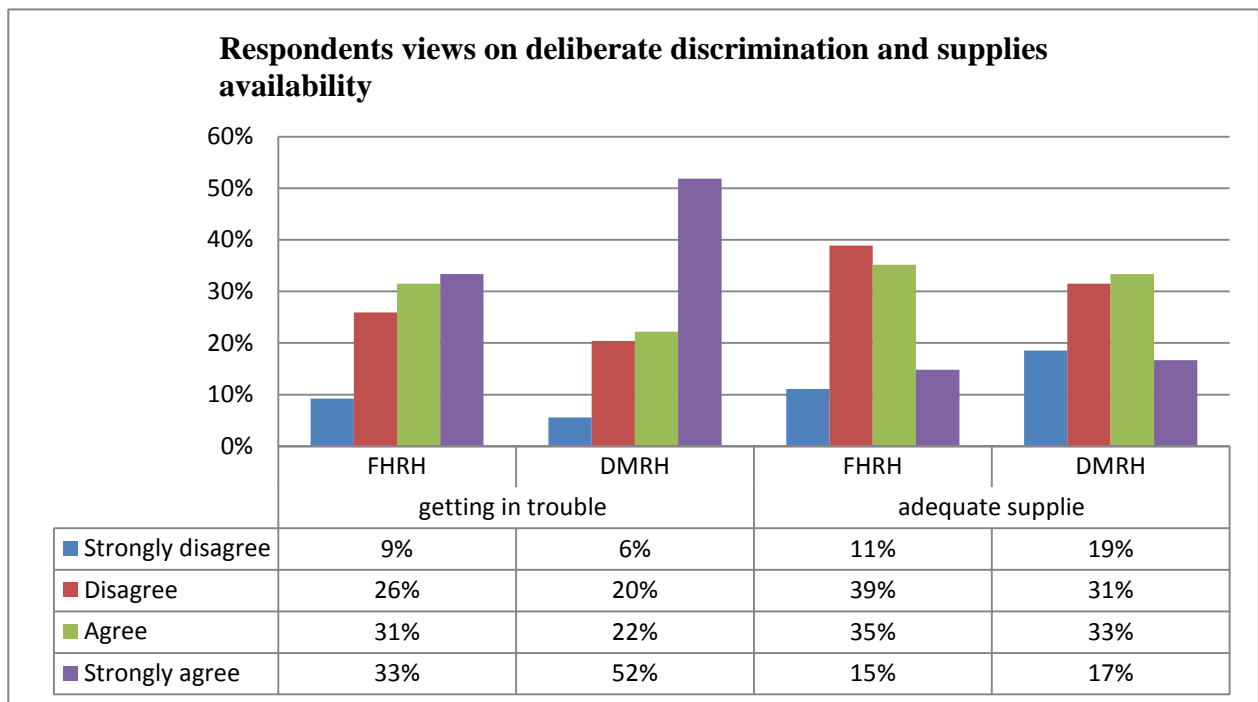


Figure 4.4 Respondents' views regarding discrimination and availability of supplies, May 2014

4.1.2 Post-test findings

4.1.2.1 Knowledge related to HIV and AIDS

The post-test result of the knowledge assessment of the respondents both in the treatment and control groups is summarised in table 4.8. The post-test result of the knowledge of respondents in both the treatment and control groups focuses on major items under each category.

- **Virology of HIV**

With regard to the virology of HIV, 74% of the respondents from the treatment group had good knowledge regarding the duration at which persons infected with HIV may develop antibodies. Similarly, 78% of the respondents in treatment group had good knowledge regarding the existence of HIV virus outside the body.

- **Presenting symptoms**

Regarding the presenting symptoms, all the respondents from the treatment group and 96% of the respondents from the control had good knowledge of how to identify someone who is HIV. On the other hand, 82% of respondents from the treatment group had poor knowledge of identifying HIV positive clients. Besides, 80% of the respondents from the treatment group had good knowledge of understanding that cervical cancer or recurrent vaginal yeast infections may indicate HIV infection in women.

- **HIV transmission**

Almost all of the respondents (96%) from the treatment group and most of respondents (78%) from the control group had good knowledge regarding the transmission of HIV. In addition, a considerable proportion of the respondents (82%) from the treatment group had good knowledge of body fluids that consist of HIV virus.

- **HIV prevention strategies in clinical settings**

Majority of the respondents (94%) from the treatment group had good knowledge of ways of transmission of HIV. Besides, 82% of the respondents from the treatment group had good knowledge regarding instruments used on HIV positive patients. Similarly, 74% of the respondents from treatment group said that it is appropriate to test clients for HIV preparing for surgery. Moreover, 82% of the respondents from the treatment group responded that all women coming to the hospital should be tested and counselled for HIV. Regarding the post-exposure prophylaxis (PEP) for pregnant women, 84% of the respondents from the treatment group had good knowledge. In addition, 68% of the respondents from treatment group had good knowledge regarding the purpose of the universal precautions.

- **Recommendations**

Regarding the recommendations, 98% of respondents from the treatment group had good knowledge of purposes of PMTCT. In addition, 74% of respondents from the treatment group had good knowledge of advising HIV positive mothers about infant feedings. Besides, 76% of respondents from the treatment group had good knowledge, believing in that consultations of HIV positive patients should be done at private settings. Moreover, 86% of respondents from the treatment group had good knowledge of how to eliminate HIV and AIDS-related SAD from the hospital.

- **Risks associated with HIV**

Most of the respondents (70%) from the treatment group had good knowledge regarding HIV transmission through needle injury. Likewise, 86% of respondents from the treatment group had good knowledge of the risk of contracting HIV at workplace. Besides, 74% of respondents from the treatment group had good knowledge regarding transmission of HIV via splash of blood and body fluids.

- **SAD-related events in the hospitals**

The result indicated that 86% of respondents from the treatment group had good knowledge of events showing presence of SAD in HIV positive people in the hospital. Moreover, 70% of respondents from the treatment group had good knowledge of identifying factors accelerating HIV and AIDS-related SAD in the hospitals. Besides, 94% of respondents from the treatment group had good knowledge of eliminating HIV and AIDS-related SAD in the hospital.

Generally, the overall knowledge score of the post-test findings indicated that 16% of the respondents from the treatment group had poor score, 4% fair score and 80% good score. This indicates that there is 50% improvement in scores of 'good' scores in the post-test when compared with the pre-test finding. Besides, 34% of the respondents from the control group had poor score, 8% fair score and 58% good score of knowledge related to HIV and AIDS.

TABLE 4.8 HIV KNOWLEDGE OF RESPONDENTS AT FHRH AND DMRH, JULY 2014

Knowledge items	Poor	Fair	Good
(a) HIV virology (3 items) (FHRH/DMRH)			
The link between HIV and AIDS	0% (62%)	38% (16%)	62% (22%)
Persons infected with HIV are most likely to develop antibodies within six months	26% (38%)	-	74% (62%)
Even outside the body, it is hard to kill the HIV virus	22% (48%)	-	78% (52%)
(b) Presenting symptoms (3 items)			
To know a patient is HIV positive	0% (2%)	0% (2%)	100% (96%)
Identification of HIV positive person	82% (6%)	0% (80%)	18% (14%)
Recurrent vaginal yeast infections or cervical cancer	20% (48%)	-	80% (52%)
(c) HIV transmission (2 items)			
Ways of HIV transmission	0% (10%)	4% (12%)	96% (78%)
Blood, semen and vaginal fluids are the only bodily fluids that transmit HIV	18% (34%)	-	82% (66%)
(d) HIV prevention strategies in clinical settings (7 items)			
Ways of HIV prevention	0% (8%)	6% (2%)	94% (90%)
It is appropriate to test clients for HIV preparing for surgery	26% (94%)	-	74% (6%)
Instruments used on HIV positive patients must be sterilised separately	18% (46%)	-	82% (54%)
A different instrument kit should be set aside for use on HIV+ patients	18% (42%)	-	82% (58%)
All pregnant women coming to the hospital should be tested and counselled for HIV	18% (0%)	-	82% (100%)
A pregnant staff member who accidentally injured by a sharp instrument cannot receive post-exposure prophylaxis	16% (40%)	-	84% (60%)
Universal precautions are designed to protect HCPs from HIV virus through different modes of transmission	32% (66%)	-	68% (34%)
(e) Recommendations (4 items)			
Recommendation for the prevention of mother-to-child transmission of HIV	0% (0%)	2% (38%)	98% (62%)
Advices to HIV+ mothers about infant feeding	0% (18%)	0% (18%)	100% (64%)
Consultation of HIV positive client should be in private settings	24% (46%)	-	76% (54%)
Means to eliminate the SAD in the hospitals	14% (22%)	0% (6%)	86% (72%)

Knowledge items	Poor	Fair	Good
(f) Risks associated with HIV (3 items)			
HIV transmission via needle stick injury is very small	30% (52%)	-	70% (48%)
Highest risk for contracting HIV at work is accidental needle prick	14% (30%)	-	86% (70%)
HIV transmission via splash of blood and body fluids is too small	26% (60%)	-	74% (40%)
(g) SAD-related issues in the hospitals (3 items)			
Events showing the presence of SAD in HIV+ people in the hospital	4% (40%)	10% (4%)	86% (56%)
Factors enhancing HIV and AIDS-related SAD in the hospitals	0% (26%)	30% (20%)	70% (54%)
Possibility of eliminating any form of HIV and AIDS-related SAD in the hospitals	6% (2%)	-	94% (98%)
Mean knowledge level	16% (34%)	4% (8%)	80% (58%)

4.1.2.2 Attitudes and beliefs toward PLWHA

The post-test result of attitudes and beliefs of the respondents both in the treatment and control groups is indicated in table 4.9. The table comprises blame for infection, desire for separation, fear of infection and quality of care. Additional information is shown in figure 4.5.

- **Blame for infection**

The questions and the responses related to the attitudes and beliefs of the respondents in the two hospitals are indicated under each category. The result indicated that 18% (n=9) of the respondents in the treatment group believed that most PLWHA do not worry if they infect other people. Moreover, 28% (n=14) of the respondents in the treatment group believed that most PLWHA had many sexual partners. Similarly, 34% (n=17) of the respondents in the treatment group responded that people get infected with HIV due to their irresponsible behaviours. In addition, 26% (n=13) of the respondents in the treatment group expressed that most PLWHA have only themselves to blame. Besides, 40% (n=20) of the respondents in the treatment group expressed that most of the pregnant women who refuse HIV testing are irresponsible. Furthermore, 22% (n=11) of the respondents both in the treatment and control groups believed that if a pregnant woman is HIV-positive, her family has the right to know.

Generally, there is reduction of blame of infection to the PLWHA when compared with the pre-test findings among the respondents in the treatment group.

- **Desire for separation**

As shown in the table, 14% (n=7) of the respondents in the treatment group and 24% (n=12) from the control group believed that patients who are HIV infected should not be put in a room with other patients. Additionally, 16% (n=8) of the respondents in the treatment group believed that if they found out a friend or colleague who had AIDS they would not maintain their friendship.

In sum, there is reduction of desire for separation when compared with the pre-test findings among the respondents in the treatment group.

- **Fear of infection**

The post-test result showed that 26% (n=13) of the respondents in the treatment group and 46% (n=23) from the control group believed that they worry about getting HIV from one of your HIV+ patient. Moreover, 34% (n=17) of the respondents in the treatment group said that they do not feel safe assisting or being assisted by a colleague who is HIV positive. Besides, 18% of respondents believed that women living with HIV should be allowed to have babies if they wish.

- **Quality of care**

About 18% (n=9) of the respondents in the treatment group believed that women living with HIV should be allowed to have babies if they wish. Similarly, 28% (n=14) of respondents from the treatment group replied that they would not like to do something to make life easier for people with HIV. From respondents in the treatment group, 8% (n=4) expressed that they unwilling to provide care to patients with HIV and AIDS. All of the respondents in the treatment group said patients with HIV and AIDS should be treated with the same respect as any other patients. Only 8% (n=4) of the respondents in the treatment group believed that they are not sympathetic toward the misery that clients with HIV and AIDS experience.

In general, in the post-test, the overall prevalence of stigma in the treatment and control groups is 19.6% and 29% respectively. This shows that there is notable reduction of the overall stigma among the respondents in the treatment group.

TABLE 4.9 ATTITUDES AND BELIEFS TOWARD PLWHA, JULY 2014

Items	FHRH	DMRH
(a) Blame for infection (8 items)		
Most people living with HIV do not worry if they infect other people	9 (18%)	16 (32%)
Most people living HIV should feel ashamed of themselves	3 (6%)	4 (8%)
Most people living HIV have had many sexual partners	14 (28%)	20 (40%)
People get infected with HIV due to their irresponsible behaviours	17 (34%)	19 (38%)
Most people with HIV & AIDS have only themselves to blame	13 (26%)	10 (20%)
Pregnant women who refuse HIV testing are irresponsible	20 (40%)	8 (16%)
I am ashamed if I were HIV positive	10 (20%)	18 (36%)
If a pregnant woman is HIV-positive, her family has a right to know	11 (22%)	11 (22%)
(b) Desire for separation (2 items)		
Patients who are HIV infected should not be put in a room with other patients	7 (14%)	12 (24%)
If I found out a friend or colleague of mine had AIDS, I would not maintain the friendship	8 (16%)	14 (28%)
(c) Fear of infection (3 items)		
You worry about getting HIV from one of your HIV+ patients	13 (26%)	23 (46%)
I feel safe assisting or being assisted by a colleague who is HIV positive	17 (34%)	35 (70%)
(d) Quality of care (6 items)		
Women living with HIV should be allowed to have babies if they wish	9 (18%)	12 (24%)
Patients with AIDS have the right to obtain the same quality of care as any other patients	3 (6%)	16 (32%)
You would like to do something to make life easier for people with HIV	14 (28%)	21 (42%)
I am willing to provide care to patients with HIV and AIDS	4 (8%)	15 (30%)
Patients with HIV and AIDS should be treated with the same respect as any other patients	0 (0%)	4 (8%)
You are sympathetic towards the misery that clients with HIV and AIDS experience	4 (8%)	4 (8%)
Overall stigma prevalence	19.6%	29%

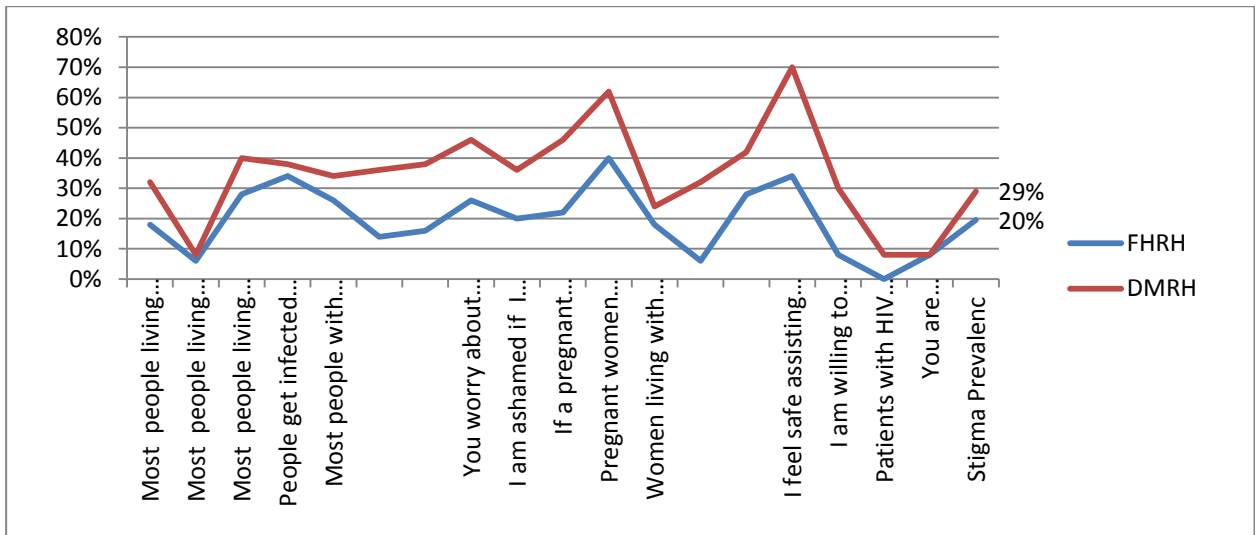


Figure 4.5 Attitudes and beliefs toward PLWHA, July 2014

4.1.2.3 Perceived risk toward care of PLWHA in the hospitals

The perceived risk towards the care of PLWHA in the hospitals is summarised in figure 4.6. The post-test result indicated that the risk of perception towards making beds or taking temperature among the respondents in the treatment group is 6%. Similarly, among the respondents in the treatment group, the risk of perception towards dressing wound or drawing blood from HIV positive patients is 46%. On the other hand, the risk perception towards recapping needles it is 94%. Besides, the risk of perception towards assisting HIV positive women in labour/delivery and the risk perception towards performing surgery of PLWHA is 74%.

Post test Risk perception

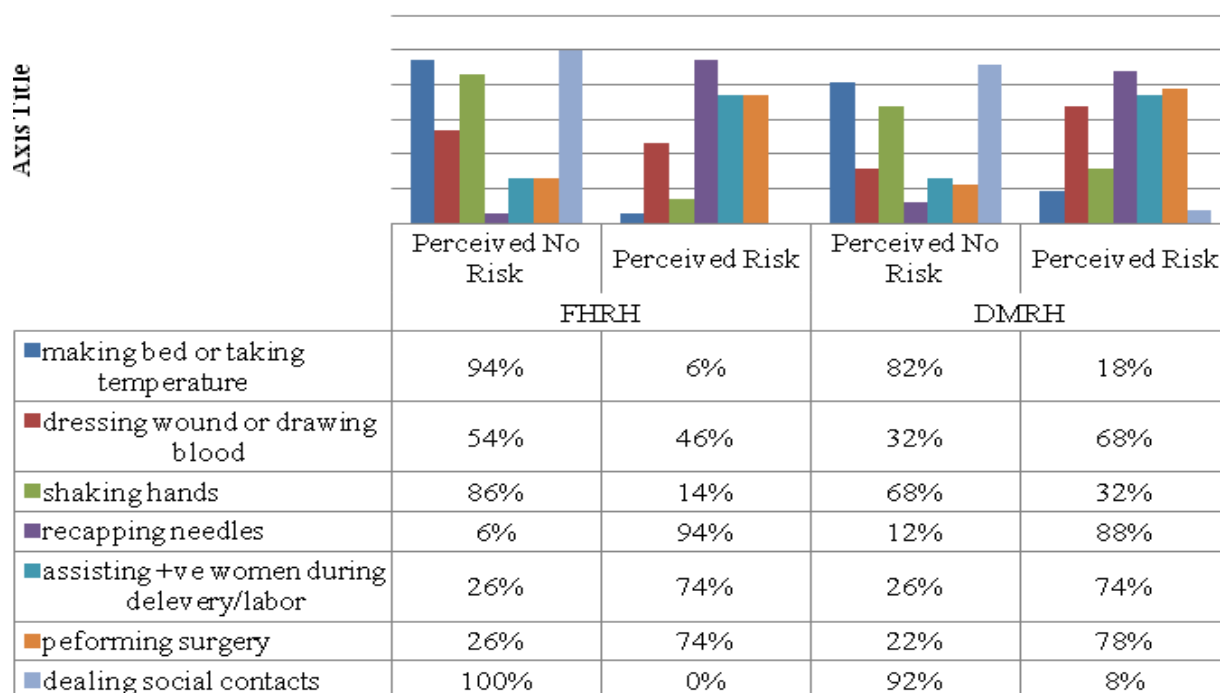


Figure 4.6 Perceived risk toward care of PLWHA, July 2014

4.1.2.4 Discriminatory practices toward PLWHA

The post-test result of discriminatory practices of the study both in the treatment and control groups is indicated in table 4.10. The table includes denial of services, substandard treatment, institutional discrimination, selective use of universal precaution, and financial discrimination. Figure 4.7 also shows the discriminatory practices towards PLWHA.

- **Denial of services**

A small proportion (16%) of the respondents from the treatment group said that HCPs in the hospitals are unwilling to care for a patient with or thought to be living with HIV. Likewise, 18% (n=9%) of the respondents from treatment group responded that the hospital does not perform surgeries or invasive procedures if the patient is known to be HIV positive. In addition, 24% (n=12) of the respondents from treatment group observed that HCPs try to deny admission of HIV+ patients by giving excuses but admission is not denied completely. None of the respondents from treatment group observed HCPs neglecting a woman living with HIV during labour and delivery because of her HIV status.

- **Substandard treatment**

The result indicated that 12% (n=6) of the respondents from treatment group observed that some HCPs providing poor quality of care to patient with or thought to be living with HIV. A little proportion (6%) (n=3) of the respondents from treatment group observed senior HCPs assigning clients to junior HCPs.

- **Institutional discrimination**

The result showed that 10% (n=5) of the respondents from treatment group observed HCPs talking badly about people living or thought to be living with HIV. None of the respondents from the treatment group indicated HCPs hesitating to work with co-worker who is HIV positive. Similarly, none of the respondents from the treatment group observed HIV positive patients isolated in special sections of the hospital. On the other hand, 72% (n=36) of the respondents from treatment group observed HCPs performing an HIV test for a person without his/her informed consent. The increase in the level the discrimination in the post-test may be attributed to increase in the ability to identify events related discriminatory practices.

- **Selective use of universal precaution**

Regarding the selective use of universal precaution, 60% (n=30) of the respondents from treatment group observed HCPs taking extra precaution while caring for patients with HIV and AIDS. In addition, 26% (n=13) of the respondents from treatment group observed HCPs avoiding physical contact while caring for patients with HIV and AIDS. Moreover, 62% (n=31) of the respondents from treatment group observed HCPs wearing double gloves during invasive procedures on HIV positive cases. Likewise, 32% (n=16) of the respondents from treatment group expressed that HCPs use any special infection-control measures that they do not use on non-HIV positive patients. Furthermore, 38% (n=19) of the respondents from treatment group indicated that HCPs use protective wear on non-bleeding HIV positive patients even if the patients do not have open sores. Similarly, 64% (n=32) of the respondents from treatment group observed HCPs using additional infection prevention control procedures while caring a woman living with HIV during labour and delivery.

- **Financial discrimination**

Small proportion (18%) of the respondents from the treatment group indicated that the hospital care is provided to HIV positive patients only if they can afford to pay.

Generally, in the post-test, the overall prevalence of the discrimination is 23% in the treatment group and 35% in the control group.

TABLE 4.10 DISCRIMINATORY PRACTICES TOWARD PLWHA, JULY 2014

Items	FHRH	DMRH
(a) Active denial of services (3 items)		
HCPs are unwilling to care for a patient with or thought to be living with HIV	8 (16%)	15 (30%)
The hospital does not perform surgeries or invasive procedures if the patient is known to be HIV+	9 (18%)	11 (22%)
The hospital do not admit HIV+ patients if their health status is already very poor	3 (6%)	4 (8%)
HCPs try to cleverly deny admission of HIV+ patients by giving excuses but admission is not denied completely	12 (24%)	8 (16%)
Neglecting a woman living with HIV during labour and delivery because of her HIV status	0 (0%)	32 (64%)
(b) Sub-standard treatment (3 items)		
HCPs providing poor quality of care to patient with or thought to be living with HIV	6 (12%)	12 (24%)
A senior health care provider assigning a client to a junior health care provider.	3 (6%)	11 (22%)
HCPs keep HIV+ patients under observation without treatment plan for a few days	1 (2%)	29 (58%)
(c) Institutional discrimination observed by the HCPs (8 items)		
HCPs talking badly about people living or thought to be living with HIV	5(10%)	12 (24%)
Experienced people talking badly about you because you care for patients living with HIV	11 (22%)	8 (16%)
Been avoided by friends and/or family because you care for patients living with HIV	4 (8%)	5 (10%)
Been avoided by colleagues because of your work caring for patients living with HIV	2 (4%)	7 (14%)
Hesitation level of HCPs to work along with an HIV+ co-worker	0 (0%)	8 (16%)
HIV+ patients are isolated in special sections of the hospital	0 (0%)	12 (24%)
The HCPs do not maintain the confidentiality of HIV+ individuals	37 (74%)	18 (36%)
Performing an HIV test for a person without his/her informed consent	36 (72%)	16 (32%)

Items	FHRH	DMRH
(d) Selective use of universal precautions (6 items)		
HCPs taking extra precaution while caring for patients with HIV & AIDS	30 (60%)	34 (68%)
HCPs avoid physical contact	13 (26%)	34 (68%)
HCPs wear double gloves during invasive procedures	31 (62%)	39 (78%)
You use any special infection-control measures that you do not use with other patients	16 (32%)	28 (56%)
HCPs use protective wear on non-bleeding HIV+ patients even if the patient does not have open sores	19 (38%)	32 (64%)
Using additional infection prevention control procedures (e.g. double gloves) during labour and delivery with a woman living with HIV	32 (64%)	29 (58%)
(e) Financial discrimination (1 item)		
The hospital care is provided to HIV+ patients only if they can afford to pay	9 (18%)	13 (26%)
Overall discrimination prevalence	23%	35%

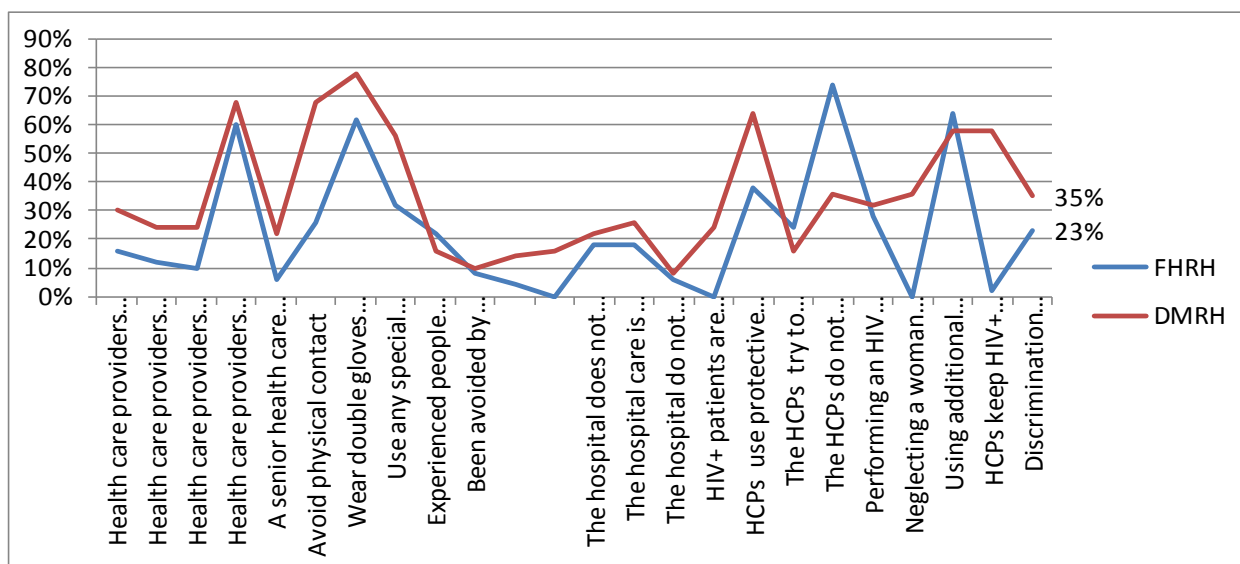


Figure 4.7 Discriminatory practices toward PLWHA, July 2014

4.1.3 Comparative findings of the post-tests

The findings of the post-tests indicate that there are differences between the post-test results of the treatment and control group after the training intervention. The differences were observed in the level of the knowledge, attitudes and belief as well as the practices.

4.1.3.1 Knowledge of the respondents

In the post-test, the overall scores of the knowledge among the respondents in the treatment group is 16% (poor), 4% (fair) and 80% (good). On other hand, the overall scores of the knowledge among the respondents in the control group is 34% (poor), 8% (fair) and 58% (good). The result shows that the post-test score of knowledge observed among the respondents in the treatment group are greater than that of the control group.

4.1.3.2 Attitudes and beliefs of the respondents

The training intervention has brought positive changes on the attitudinal score of the study participants respondents in the treatment group when compared to the control group. Accordingly, the overall magnitude of stigma in treatment group is 19.6% whereas that of the control group is 29%.

4.1.3.3 Discriminatory practices of the respondents

The post-test result of the respondents in the treatment group shows that the overall prevalence of the discriminatory practices among the respondents in the treatment group is 23% while that of the control group is 35%. In conclusion, the intervention carried on the respondents in the treatment group was able bring about positive changes on knowledge, attitudes and beliefs as well as the practices. The observed changes may be attributed to intervention made on the respondents in the treatment group unlike on the respondents in the control group.

In conclusion, the intervention carried on the respondents in the treatment group was able bring about positive changes on knowledge, attitudes and beliefs as well as the practices. The observed changes may be attributed to intervention made on the respondents in the treatment group unlike on the respondents in the control group.

4.1.4 Summaries of the descriptive findings

4.1.4.1 Pre-post test summary of FHRH

The summary of the of the pre- and post-test knowledge, stigma and discrimination of FHRH is shown in figure 1.9. The respondents' knowledge about SAD, here, was summarised by the number of questions correctly answered. The coding procedure made the maximum and the minimum standard to be 50 and 0 (maximum=2*25; minimum=0*25). Accordingly, in the pre-test the minimum and maximum score of a respondent of FHRH for responding correctly the questions were 13 and 34 respectively. The corresponding results for post-test were 32 and 48 respectively. In same hospital, the mean knowledge score of the correctly responded questions was 25.5 for the pre-test and 40.9 for the post-test. The results indicate that the minimum knowledge score was increased by 146%, the maximum increased by 41% and the mean score by 60% after the intervention. The standard deviation of knowledge was 4.66 in pre-test and 3.65 in post-test. This indicates that individual differences of respondents were reduced after intervention.

Another important finding was the changes in perceiving discriminating PLHWA clients would result in formal penalty or measures on work setting. In the pre-test, 25.9% of the study participants reported that they would not be in trouble by discriminating PLHIV clients. The same result in the post-test was 4% by reducing by 84%. This significant change implies that the sense of taking responsibility of patient care and respecting clients' right is improved after the intervention.

In the same graph, the minimum and maximum number of favourable responses to the stigma and discrimination-related questions both in the pre-test and post-test of FHRH were displayed. Based on this, the findings below or above the cut-off points of stigma is considered as 'below or above average stigma' while findings below or above the cut-off points of discrimination is considered as 'below or above average discrimination'.

Accordingly, in FHRH, the cut-off point for stigma is the average number of stigmatised responses, which were computed as 6.4 for the pre-test. This means that a respondent has replied about, on average, six stigma-related questions unfavourably. In other words, from 18 stigma-related questions, almost 12 questions were answered in the

way that respondents did not stigmatise HIV positive clients. Based on this, the stigma categorised below and above average for the pre-test in FHRH is 52% and 48% respectively. In same fashion, the cut-off point of stigma in the post-test was 3.5. Accordingly, the stigma categorised below and above average for the post-test in FHRH is 54 and 46% respectively.

Likewise, in same hospital, the cut-off point for discriminatory practices is the average number of discriminatory responses, which were computed as 8.1 for the pre-test. This means that a respondent has answered about, on average, 8 discriminatory questions unfavourably. In other words, from 23 discrimination-related questions, about 15 questions were answered in the way that respondents did not discriminate HIV positive clients. Then, the discrimination categorised below and above average for the pre-test in FHRH is 59% and 41% respectively. In same fashion, the cut-off point of discrimination in the post-test was 5.2. Accordingly, the discrimination categorised below and above average for the post-test in FHRH is 62% and 38% respectively.

The changes in the cut-off points of stigma and discrimination in the post-test have worth mentioning implications. When the stigmas' cut-off point decreased from 6.4 to 3.5, the discrimination's went from 8.1 to 5.2. Relatively the proportion of change in stigma is larger than change in discrimination. This could be justified by the intervention; as the intervention intended to improve KAP of providers on SAD issues.

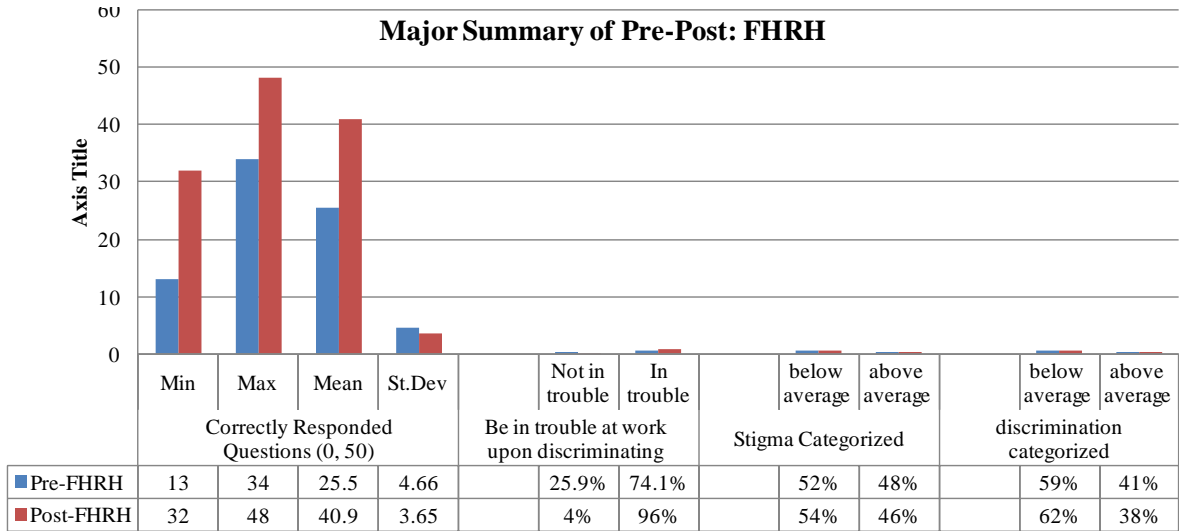


Figure 4.8 Pre-post test summary of FHRH, December 2014

4.1.4.2 Pre-post test summary of DMRH

The measurements of knowledge scores for DMRH respondents were computed using same method employed for FHRH and presented by figure 4.10. Accordingly, in the pre-test the minimum and maximum score of a respondent of DMRH for responding correctly the questions were 17 and 40 respectively. The corresponding results for post-test were 18 and 41 respectively. In same hospital, the mean knowledge score of the correctly responded questions was 27.8 for the pre-test and 31 for the post-test. The results indicate that there were no significant changes in the minimum and the maximum knowledge score; but, the mean score increased only by 60% in the post-test. Similarly, the standard deviation of knowledge score showed negligible change showing the status quo of individual differences of respondents.

There was some change in perceiving discriminating PLWHA clients would result in formal penalty or measures on work setting. In the pre-test, 35.2% of the study participants reported that they would not be in trouble by discriminating PLWHA clients. The corresponding result in the post-test was 28%.

The summary of SAD for DMRH respondent was done using same method employed for FHRH. In DMRH, the cut-off point for stigma is the average number of stigmatised responses, which were computed as 5.4 for the pre-test and 5.2 for the post-test. Based on this, the stigma categorised below and above average for the pre-test is 53.7% and 46.3% respectively; same result for post-test were 58% and 42%. Likewise, in same hospital, the cut-off point for discriminatory practices is the average number of discriminatory responses, which were computed as 7.8 for the pre-test and 8 for the post-test. Then, the discrimination categorised below and above average for the pre-test in DMRH is 57.4% and 42.6% respectively. In same fashion, the discrimination categorised below and above average for the post-test in FHRH is 64% and 36% respectively. The cut-off points for both SAD showed insignificant changes in post-test. This may be due to the fact that there was no intervention carried up on it.

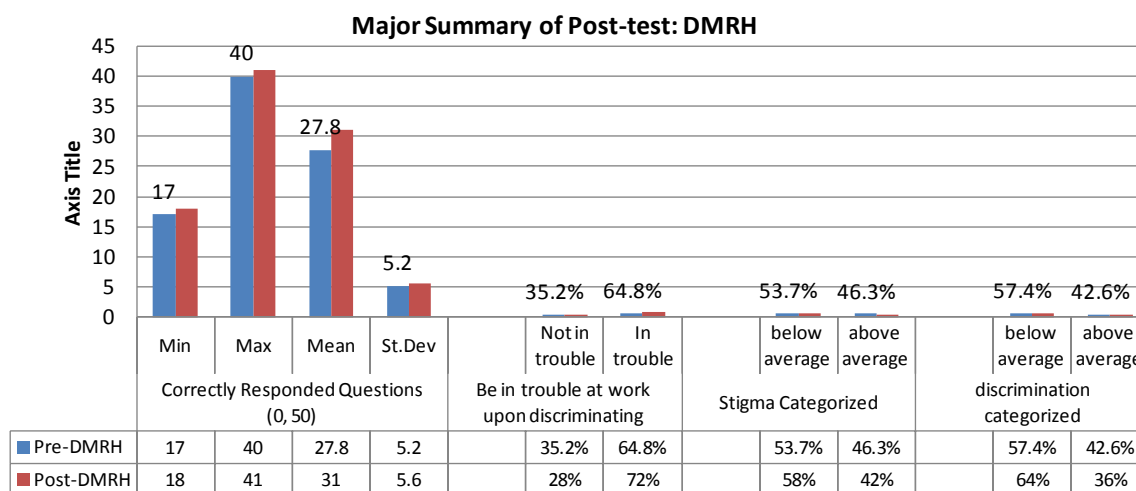


Figure 4.9 Pre-post test summary of DMRH, December 2014

4.1.4.3 Post-test of FHRH and DMRH

Comparative presentation of the post-test results of FHRH and DMRH is another way of appreciating the contribution of the intervention done on FHRH and presented by figure 4.10. Regarding knowledge score, the minimum score was 32 for FHRH and 18 for DMRH; the maximum score was 48 for FHRH and 41 for DMRH. The mean score was 40.9 and 31 for FHRH and DMRH respectively. These results show that aspects of knowledge measures are better for FHRH than DMRH respondents.

Besides, there was significant variation among post-test respondents of FHRH and DMRH in perceiving discrimination of PLWHA that would result in formal penalty or measures on work setting. The proportion of “not be in trouble” should be extremely smaller or preferably zero for appropriate treatment of PLWHA clients. In this case it was 4% for respondents in FHRH, but only 28% for the respondents in DMRH. This could be explained by the fact that the intervention carried out in FHRH has focused on KAP of respondents in which the respondents improved their sense of responsibility of the patient care and awareness on key aspects of clients’ rights.

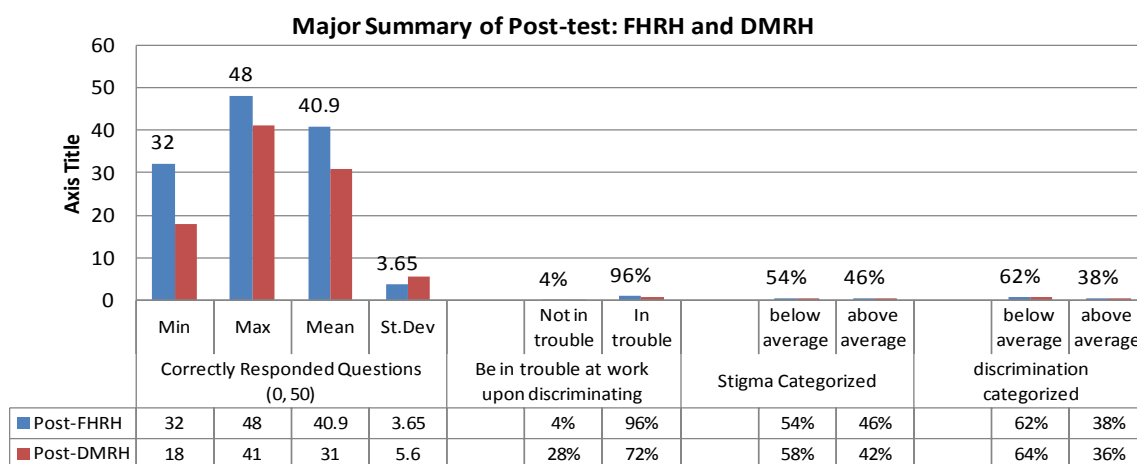


Figure 4.10 Post-test comparison of FHRH and DMRH, December 2014

4.1.5 Summary of the inferential findings

4.1.5.1 Stigma: Regression result of pre-test for FHRH and DMRH

The summary of regressions of stigma for the pre-tests of FHRH and DMRH is summarised in table 4.11. For pre-test, logistic regression was carried out to investigate how knowledge categorised by components and selected socio-demographic variables predict stigma towards HIV positive clients at hospital setting. Accordingly, knowledge about SAD-related issues and perceived risk of HIV infection were found to be significantly associated with stigma in FHRH. In the same hospital, HCPs who felt HIV risk of infection with different contact points of HIV positive patients were more than 13 times more likely to present stigmatising attitudes towards the patients (OR=13.46, $p=0.005$). In addition, having “poor” knowledge about SAD issues, i.e. about events showing the presence of SAD, factors fuelling SAD and possibility of its elimination, contributed to presentation of more negative attitude towards HIV and AIDS patients. Knowledge about HIV virology and age (≥ 51 years) have increased likelihood of presentation of negative attitudes towards HIV and AIDS patients, although they are not significant.

In DMRH, only perceived risk of infection was found significantly associated with stigma ($p=0.036$). Although insignificant, having relatively poor knowledge on HIV virology, presenting symptoms and prevention strategies in clinical setting had implications on presentation of negative attitude towards HIV positive patients.

TABLE 4.11 STIGMA: REGRESSION RESULT OF PRE-TEST FOR FHRH AND DMRH

Item	FHRH				DMRH			
	B	S.E.	OR	Sig.	B	S.E.	OR	Sig.
Knowledge by categories								
HIV virology	0.42	0.28	1.53	0.130	0.13	0.25	1.14	0.59
Presenting symptoms	-0.09	0.29	0.91	0.75	0.22	0.25	1.25	0.38
HIV transmission	-0.68	0.40	0.51	0.09	-0.05	0.34	0.95	0.89
HIV prevention strategies	-0.12	0.19	0.89	0.53	0.002	0.19	1.00	0.99
Risks associated to HIV	-0.18	0.25	0.84	0.48	-0.47	0.25	0.63	0.06
SAD- related issues	-0.59	0.30	0.56	0.05	-0.21	0.25	0.81	0.40
Recommendations	-0.33	0.37	0.72	0.37	-0.29	0.24	0.75	0.24
HIV risk perceived	2.60	0.93	13.46	0.005	-1.65	0.78	0.19	0.04
Socio-demographics								
Age (>=51)	0.86	1.29	2.36	0.51	-0.83	1.09	0.44	0.45
Work experience (>=11)	-0.19	0.75	0.83	0.80	-0.67	0.72	0.51	0.35
Work in current facility (>=11)	-0.31	0.93	0.73	0.74	1.70	1.05	5.45	0.11
Sex of respondent (M)	-0.10	0.84	0.90	0.90	-0.77	0.69	0.46	0.27

4.1.5.2 Stigma: Regression result of post-test for FHRH and DMRH

The summary of regressions of stigma for the pre-tests of FHRH and DMRH is summarised in table 4.12. After the intervention, it was important to investigate changes among the selected predictors. To do so, logistic regression was conducted. As shown in the table, the variables considered together were found statistically insignificant except year of experience in FHRH. This shows that some major changes are happened especially in FHRH. As the intervention intended to improve knowledge, attitude and practice of the HCPs on SAD issues, attitudes of the HCPs seem improved after the intervention. However, HCPs who served for 11 years and more in FHRH were five times more likely to report relatively “negative attitudes” towards HIV positive patients (OR=5, p=0.05).

TABLE 4.12 STIGMA: REGRESSION RESULT OF POST-TEST FOR FHRH AND DMRH

Item	FHRH				DMRH			
	B	S.E.	OR	Sig.	B	S.E.	OR	Sig.
Knowledge by categories								
HIV virology	-0.017	0.32	0.98	0.96	-0.13	0.25	0.881	0.61
Presenting symptoms	0.08	0.36	1.09	0.82	-0.13	0.33	0.882	0.70
HIV transmission	0.20	0.42	1.22	0.64	0.31	0.34	1.362	0.36
Prevention strategies	-0.16	0.18	0.86	0.39	-0.28	0.19	0.753	0.15
Risk associated to HIV	-0.17	0.28	0.84	0.54	-0.12	0.20	0.887	0.54
SAD-related issues	0.17	0.35	1.20	0.61	-0.01	0.21	0.987	0.95
Recommendations	-0.17	0.31	0.84	0.58	0.02	0.20	1.016	0.94
HIV risk perceived	0.22	0.74	1.2	0.77	1.27	0.95	3.541	0.19
Socio-demographics								
Age (>=51)	-0.21	0.80	0.81	0.79	-1.04	0.91	0.355	0.26
Work experience (>=11)	-0.34	0.67	0.71	0.62	1.38	0.73	3.962	0.06
Work in current facility (>=11)	1.64	0.84	5.17	0.05	-0.28	0.85	0.756	0.74
Sex of respondent (M)	-0.43	0.78	0.65	0.58	0.86	0.87	2.355	0.33

4.1.5.3 Discrimination: Regression result of pre-test for FHRH and DMRH

The summary of regressions of discrimination for pre-tests of FHRH and DMRH is summarised in table 4.13. For the pre-test data set, logistic regression was conducted to investigate how attitude, knowledge categorised by components, guideline implementation and selected socio-demographic variables predict discrimination towards HIV positive clients at hospital settings. In FHRH, attitude, knowledge about prevention strategies in clinical settings, perceived risk of HIV infection, experience in the health sector and current facility, sex and guideline implementation were found to be significantly associated with discrimination. HCPs with above-average stigma (more negative attitude) were 2.88 times more likely to report discriminatory practices with known or suspected HIV infection and/or with “high risk” patients (OR=2.88, p=0.03). HCPs who has served the sector for 11 years and more male HCPs were very high likely to report discriminatory practices. Not implementing facility policy, guideline and protocol that protect PLWHA against SAD was statistically significant for discriminatory practices in hospital settings. The researcher believes that it is one of the important findings of the research because appropriate implementation of policy, guideline and protocol enhance acceptable practices in health care settings. Knowledge about modes

of HIV transmission, risk associated with HIV and SAD issues had increased likelihood for discriminatory practices; although they were not statistically significant (OR=4.3, 4.8 and 3.3) respectively.

In DMRH, most of the predictor variables considered had not statistically significant association with discrimination except recommendations and implementation of guideline. Having poor and/or fair knowledge on recommendations about PMTCT, infant feeding, consultation of HIV positive client and means to eliminate SAD contribute to practice in discriminatory fashion ($p=0.027$). Although negative attitude was not statistically associated with discrimination, HCPs with negative attitudes were almost 3 times more likely to report discriminatory practices while they engaged with known or suspected HIV infection and/or with “high risk” patients. Similarly, HCPs who served 11 years and more were 6 times more likely to exercise discriminatory practices.

TABLE 4.13 DISCRIMINATION: REGRESSION RESULT OF PRE-TEST FOR FHRH AND DMRH

Item	FHRH				DMRH			
	B	S.E.	OR	Sig.	B	S.E.	OR	Sig.
Attitude	8.36	3.90	2.89	0.03	1.12	0.93	2.92	0.22
Knowledge by categories								
HIV virology	-1.01	0.79	.44	0.20	0.41	0.35	1.58	0.24
Presenting symptoms	0.39	0.61	1.30	0.52	0.33	0.35	1.53	0.36
HIV transmission	1.55	1.13	4.40	0.17	-0.23	0.48	0.73	0.63
Prevention strategies	-1.40	0.61	0.25	0.02	-0.21	0.25	0.78	0.39
Risk associated to HIV	1.61	0.83	4.83	0.05	-0.29	0.37	0.63	0.43
SAD-related issues	1.19	0.62	3.30	0.05	0.66	0.36	1.97	0.07
Recommendations	-1.82	0.93	0.17	0.05	-0.89	0.40	0.40	0.03
HIV risk perceived	-4.89	2.50	0.01	0.05	-0.46	1.10	0.54	0.67
Socio-demographics								
Age (≥ 51)	2.99	2.15	16.99	0.16	-1.08	1.51	0.25	0.47
Work experience (≥ 11)	5.68	2.51	25.45	0.02	0.43	0.95	1.14	0.65
Work in current facility (≥ 11)	-10.69	4.57	0.00	0.02	1.56	1.43	6.12	0.27
Sex of respondent (M)	-6.43	2.81	46.80	0.02	-0.94	0.88	0.40	0.28
Implemented (No)	12.45	5.36	1.23	0.02	2.77	1.39	20.20	0.05

4.1.5.4 Discrimination: Regression result of post-test for FHRH and DMRH

The summary of regressions of discrimination for pre-tests of FHRH and DMRH is summarised in table 4.14. After the intervention, the logistic regression was done to investigate predictor variables for discrimination. In FHRH, attitude, knowledge about virology, risks associated to HIV, SAD issues, perceived risk of infection, experience, sex and guideline implementation were found significantly associated with discrimination. HCPs with negative attitude were higher times likely to report discriminatory practices (OR=48, P=0.01). Similarly, HCPs with poor or fair knowledge about HIV virology, recommendations of services for HIV positive clients and perceived risk of infection were about 8, 3.5 and 15 times more likely to report discriminatory practices respectively while engaged with known or suspected HIV infection and/or with “high risk” patients (OR=7.9, p=0.035; OR=3.5, p=0.25; OR=15.45, p=0.036). Besides, HCPs who believed that guidelines/protocols protecting are not implemented were 3.6 times more likely to report discriminatory practices (OR=3.65, p=0.02).

In DMRH, knowledge about prevention strategies in clinical setting, perceived risk of infection and experience in the current facility were found associated with discrimination against PLWHA. Having poor/fair knowledge about approaches to prevent HIV infection in clinical setting had statistical significance association with discrimination (p=0.04). Similarly, HCPs with felt risks of infection at different contact points with HIV positive clients were 17 times more likely to report discriminatory practices. Moreover, HCPs who served for 11 years and those who were from DMRH were 12 times more likely to report discriminatory practices with known or suspected HIV infection and/or with “high risk” patients (OR=12.69, p=0.034). Although attitude was not significantly associated with discrimination, HCPs with more negative attitudes were 2.6 times more likely to commit discriminatory practices (OR=2.6, p=0.46).

TABLE 4.14 DISCRIMINATION: REGRESSION RESULT OF POST-TEST FOR FHRH AND DMRH

Item	FHRH				DMRH			
	B	S.E.	OR	Sig.	B	S.E.	OR	Sig.
Attitude	6.12	2.37	48.16	0.01	0.80	1.10	2.62	0.47
Knowledge by categories								
HIV virology	2.09	0.99	7.95	0.04	-0.00	0.35	0.99	0.99
Presenting symptoms	0.05	0.59	1.12	0.94	-0.85	0.59	0.66	0.15
HIV transmission	-0.27	1.30	0.84	0.83	0.37	0.40	1.26	0.35
Prevention strategies	0.30	0.51	1.34	0.55	-0.68	0.34	0.60	0.04
Risk associated to HIV	-1.96	0.85	0.14	0.02	0.31	0.27	1.25	0.24
SAD-related issues	-2.75	1.29	0.07	0.03	0.39	0.32	1.20	0.22
Recommendations	1.27	1.002	3.51	0.21	-0.11	0.25	0.85	0.67
HIV risk perceived	4.97	2.37	15.45	0.04	4.29	1.98	17.02	0.03
Socio-demographics								
Age (>=51)	-2.18	1.25	0.12	0.08	-1.09	1.12	0.53	0.33
Work experience (>=11)	-3.01	1.92	0.05	0.12	-0.86	0.93	0.52	0.35
Work in current facility (>=11)	5.64	2.54	29.4	0.03	3.34	1.58	12.70	0.03
Sex of respondent (M)	-4.47	2.36	0.01	0.06	-0.14	1.13	0.67	0.90
Implemented (No)	8.45	3.64	3.65	0.02	-1.63	1.12	0.24	0.15

4.2 FINDINGS OF THE QUALITATIVE PARADIGM

4.2.1 Introduction

The in-depth interview was carried out in Felege Hiwot Referral Hospital (FHRH) and Debre Markos Referral Hospital (DMRH) mainly in order to substantiate the quantitative data through triangulation. Ten respondents from each hospital were contacted and interviewed after getting permission from the hospitals and informed consents from the respondents. The total number of female respondents is nine while that of male is 11. The participants were HIV positive patients admitted to the two hospitals to obtain clinical care and treatments. Patients who were severely ill at the time of the data collection were excluded from the interview.

4.2.2 Result of the in-depth interview

4.2.2.1 Factors related to the stigma and discrimination in the hospitals

During the interview, the admitted patients in the two hospitals identified factors associated with the stigma and discrimination (SAD) in the hospitals under the following variables.

- **Fear of casual contacts**

Most of the of the HIV positive patients (n=8) in FHRH observed that some of health care providers (HCPs) in the hospital use extra precautions while providing them clinical care and treatments. The patients observed that there is selective use of universal precautions that shows the existence of HIV and AIDS-related SAD in the hospital.

One male patient from the hospital stated:

"I observed HCPs taking extra precautions while taking blood pressure of the admitted HIV positive patients."

Another person from the same hospital said:

"I observed HCPs showing fear of making bed of the admitted HIV positive patients."

- **Delay of services**

Majority of the HIV positive patients (n=7) admitted to FHRH indicated that the care and treatment are not timely provided by the HCPs as ordered. This results in the delay of services to the admitted patients. The extracts below attest to the participants' beliefs about the delays:

One male participant from the hospital said:

"I have not been getting any service for last 11 days after admission to this hospital."

"I have not been provided with the ordered treatments for the last three days."

- **Substandard care**

Most of the admitted HIV positive patients (n=16) in the two hospitals observed that the care provided them is of low standard when compared to other admitted HIV negative patients. A statement from one male participant in FHRH was:

"The bed linens of the HIV positive patients in this room are not changed daily."

Another male participant from FHRH stated that:

"The HCPs in this hospital seem not to have daily care plan for the HIV positive patients admitted to the ward."

- **Denial to of care**

Most of the respondents in FHRH (n=8) observed HIV patients who were not allowed to be admitted to the hospital, may be due to their HIV sero-status, as they have said. One male respondent from FHRH mentioned that during his stay in the hospital, he has observed that a HCP in the hospital refused to admit and give care to an HIV positive patient. This is what he said:

"There was a time where one HCP refused to admit a patient because of his HIV sero-positive result."

One day, later, another HCP in the hospital had admitted the patient to the hospital. A senior HCP who had refused to admit the patient before came to the ward and found the patient on bed saying that:

“I will discharge you because you were admitted to the ward without my knowledge.”

- **Financial discrimination**

Some of the admitted HIV positive patients in FHRH who were unable to pay for drugs indicated they are frequently requested to buy drugs of opportunistic infections. One of the HIV positive female patients admitted to hospital said:

“After my admission to the ward, a HCP from the ward informed me to buy the prescribed drugs as soon as possible, but I did not have money. That was a big challenge to me.”

The other HIV positive male patient in the hospital replied:

“Just after my admission to the ward, I was examined for sputum and I was found to be positive for tuberculosis. The HCP in my ward informed me to buy the anti-tuberculosis drug, but I was unable to buy. I did not know what to do at that time.”

- **Impoliteness of health care providers**

Most of the respondents (n=8) in FHRH observed that some of the HCPs in the hospital are impolite while providing care to HIV positive patients. One of the male patients in the hospital said:

“Some of the HCPs in the hospital are discourteous and thus they do not show respect to the admitted HIV positive patients.”

Another female patient stated:

“I was offended while being admitted to the hospital because the approach of some HCPs in the admission room was poor, may be due to my HIV sero-status.”

- **Breach of confidentiality**

Some of the respondents (n=5) in FHRH mentioned that some of the HCPs in the hospital do not protect the confidentiality of the admitted HIV positive patients. One male respondent in the hospital said:

“I always hear HCPs talking about sero-status of PLWHA admitted to the ward to other HCPs openly so that even those not aligned to the care of patients will hear.”

Another female patient from the same hospital, stated:

“I fear giving full information about my past history to the HCPs in my ward because I do not think the HCPs keep the secret.”

- **Poor follow-up of the patients**

Some of the patients in the two hospitals (n=12) observed that the HCPs working in the hospitals do not provide care and treatments as ordered by physicians. In addition, the patients have indicated that the HCPs in the hospitals do not regularly follow the condition of the admitted HIV positive patients.

An HIV positive male patient in the DMRH said:

“Some HCPs in this hospital do not provide care to the admitted HIV positive patients as prescribed by doctors.”

Another HIV patient in female patient with in FHRH responded:

“I observed that HCPs assigned to my ward are not critically following the status of the admitted HIV patients. They do not ask whether or not the condition of the patients is improved.”

4.2.2.2 Recommended solutions to eliminate the identified gaps

In order to address the aforementioned discriminatory practices in the hospitals, the participants made the following recommendations.

- **Providing training**

Most of the respondents (n=8) in FHRH indicated that training of the HCPs may help them provide appropriate treatments and care to HIV positive patients admitted to the hospital. The patients suggested that training for the HCPs should not only target improvement in knowledge but also focus on attitudes and behavioural change of the HCPs. They added that the change in attitudes and behaviour would enable the HCPs to approach the HIV positive patients in a welcoming manner and then to deliver standard treatments and care.

- **Availing drugs for opportunistic infections**

Most of the respondents (n=8) in the FHRH indicated that all HIV positive patients admitted to the hospitals who are unable to pay should get exempted services especially for drugs of opportunistic infections. They stressed that there should not be financial discrimination in the hospital as this is one form of the HIV and AIDS-related SAD in the health care settings.

- **Good standard of care**

Majority of the respondents (n=7) in FHRH recommended that the hospital should establish and implement standard care for all patients admitted to hospital regardless of their HIV sero-status. They suggested that good standard of care can highly reduce the delay of services, impoliteness of the HCPs and breach of confidentiality among the HCPs. They also added that the good standard of care improve patients' adherence to treatments and follow-up, inspire the HCPs and improve their commitments to deliver holistic care to all the admitted patients regardless of their HIV sero- status.

4.3 CONCLUSION

This chapter has illustrated the quantitative and qualitative findings of the study comprising the pre-test and post-test results of both the treatment and control groups. Comparative changes between the pre-test and post-test results of the treatment and control groups were incorporated into the chapter as well. Summary of descriptive and inferential findings are presented as well. The following chapter deals with the brief intervention.

CHAPTER 5

BRIEF INTREVENTION

5.1 INTRODUCTION

This chapter discusses the brief intervention made in the form of training. The chapter also includes the contents taught, the methodology, training schedule and the outcomes of the training.

5.1.1 Brief intervention

Training workshops were given after the pre-test using a training manual compiled from different literature sources. In the training, there were 50 participants from Felege Hiwot Hospital (FHRH) the response rate being 91% of the total study subjects in the treatment group. The respondents were physicians, nurses, midwives, laboratory professionals and health officers. The facilitators of the training were physicians, nurses (Bsc), senior public health specialists and expert patients living with HIV. The facilitators have participated in the training related HIV, AIDS and SAD prior to the ntervention. The purpose of the training was to assess whether training can reduce the HIV and AIDS-related SAD through improving their knowledge, attitudes and practices of the respondents in the treatment group.

5.1.2 Contents of the training

The summary of contents of the training is summarised in table 5.1. The training was divided into the following sessions:

- Introduction to the training
- Impacts of HIV and AIDS on personal and professional lives
- Exploring thoughts, beliefs, and attitudes about HIV and AIDS
- Clients' rights and needs of the health care providers
- HIV and AIDS-related SAD in the health care settings

- Understanding the perspectives of clients living with HIV and AIDS
- Understanding HCPs' stigmatising languages and discriminatory actions
- Testimonials by PLWHA
- Understanding personal and professional risk
- HIV counseling, testing and clients' rights
- Standard precautions in the health care settings
- Post-exposure care prophylaxis

5.1.3 Methodology of the training

The training was conducted using a combination of different approaches including presentations, interactive discussions, group work, presentations of case scenarios and testimonials by PLWH and those with AIDS.

- **Presentations**

There were 12 presentations regarding overview of HIV, AIDS and SAD-related to HIV and AIDS at global, continental, national, regional and local levels. This was followed by brief discussions including questions, suggestions and possible solutions.

- **Group work**

The respondents of the training were subdivided into different groups and made discussions based on identified discussion points. The discussion points were identified based on the presented topics for the discussions. This was followed by group presentations and discussions.

- **Presentation of case scenarios**

The case scenarios were taken from different sources and adapted to the current situation. Based on this, the scenarios were presented and discussed. The scenarios were mainly related to HIV and AIDS-related SAD in the health care settings.

- **Testimonials by PLWHA**

In the training, there were two expert patients living with HIV who have already exposed themselves to the hospital community. They participated in the training after obtaining their informed consent. They have already been trained in comprehensive HIV and AIDS care to patients admitted to hospitals. They have been working as permanent employees in the current hospital. Their major areas of service are case management and adherence counseling to PLWHA in collaboration with HCPs in the hospital. The expert patients gave their testimony including their background, experiences, challenges they have encountered in the hospital and how they have overcome the challenges. Besides, they presented the current status of HIV and AIDS-related SAD in the health care settings. They indicated that even though the magnitude of SAD attached to HIV and AIDS in the hospital has decreased when compared to the previous years, it is still manifested in different forms in the hospital they have been working now. They pointed out that the manifestations of the SAD in the hospital can be described in the form of using various stigmatising languages by some HCPs. For instance, when the HCPs discuss about HIV positive patients admitted to the hospital in which they are working, some HCPs say 'your patients' rather than saying 'our patients'. In addition, the expert patients observed that few HCPs in the hospital do not give appropriate care to the admitted HIV positive patients. They also mentioned that some HCPs working in the hospital are not in a position to identify the events that portray HIV and AIDS-related SAD when they provide care to the admitted patients.

TABLE 5.1 TRAINING SCHEDULE, JUNE 2014

Days	Duration	Topic	Methodology	Facilitator
Day 1	8:30–10:30 a.m	Introduction	Presentations and discussions	Investigator
	11:00–12:30 a.m	Impacts of HIV and AIDS	Group work and presentations	Public health specialist
	2:00–3:30 p.m	Exploring thoughts, beliefs and attitudes	Group work and presentations	Nurse (Bsc)
	4.00–5:30 p. m	Clients rights and needs of the HCPs	Group work and presentations	Physician
Day 2	8:30–10:30 a.m	HIV and AIDS-related SAD	Group work and presentations	Public health specialist
	11:00–12:30 a.m	Understanding the clients perspectives	Group work and presentations	Physician
	2:00–3:30 p.m	Stigmatising and discriminatory languages	Group work and presentations	Nurse (Bsc)
	4.00–5:30 p.m	Testimonials by PLWHA	Presentations of case scenarios	Expert patients
Day 3	8:30-10:30 a.m	Understanding personal and professional risks	Group work and presentations	Physician
	11:00–12:30 a.m	HCT and clients rights	Presentations and discussions	Public health specialist
	2:00–3:30 p.m	Standard precautions	Group work and presentations	Nurse (Bsc)
	4.00–5:30 p.m	Post-exposure care and prophylaxis	Presentations and discussions	Physician

5.1.4 Outcome of the training intervention on the respondents

The brief intervention carried out on the respondents in the treatment group has brought some positive changes on the knowledge, attitudes and practices of the HCPs towards the PLWHA admitted to the FHRH (Vida, Tarija, Maritta & Arturas 2010:159-168). This is described as follows.

5.1.4.1 Changes on the knowledge of the respondents

The post-test results showed that there are positive changes in the knowledge level the of respondents in the treatment group after the intervention. This might be ascribed to the training intervention given to the treatment group in FHRH. Accordingly, in the pre-test, 39% of the respondents in the treatment group obtained low score, categorised as 'poor'. But, in the post-test, 16% of the study in the treatment group got 'poor' result

showing improvement of knowledge by 59% after the intervention. Similarly, in the pre-test, 55% of the respondents in the treatment group obtained high result, classified as 'good'. But, in the post-test, 80% of the respondents in the treatment group got 'good' result indicating improvement in knowledge of the respondents by 45.5% after the intervention.

5.1.4.2 Changes in attitude and beliefs of the respondents

The observed changes in attitudes and beliefs of respondents in the treatment group are summarised in table 5.2. The pre-test result indicated that the overall stigma prevalence in the treatment group is 35.9% while that of the post-test result is 19.6% after the intervention. This shows 45.4% reduction in overall stigma prevalence in the treatment group after the intervention. The score of some of the attitudinal items in the pre-test is less than that of the post-test due to the fact that the respondents in the treatment group has got change in attitudes and beliefs toward the PLWHA after the intervention.

TABLE 5.2 CHANGES OF ATTITUDES AND BELIEFS TOWARD PLWHA IN FHRH, JULY 2014

Item	Pre-test sigma	Post-test sigma	Observed Change (%)
(a) Blame for infection (8 items)			
Most people living with HIV do not worry if they infect other people	48.1%	18%	63%
Most people living HIV should feel ashamed of themselves	75.9%	6%	92%
Most people living HIV have had many sexual partners	48.1%	28%	42%
People get infected with HIV due to their irresponsible behaviors	57.4%	34%	41%
Most people with HIV & AIDS have only themselves to blame	37.0%	26%	30%
Pregnant women who refuse HIV testing are irresponsible	57.4%	40%	30%
I am ashamed if I were HIV positive	35.2%	20%	43%
If a pregnant woman is HIV-positive, her family has a right to know	57.4%	22%	62%

Item	Pre-test stigma	Post-test stigma	Observed Change (%)
(b) Desire for separation (2 items)			
Patients who are HIV infected should not be put in a room with other patients	22.2%	14%	37%
If I found out a friend or colleague of mine had AIDS, I would not maintain the friendship	20.4%	16%	21%
(c) Fear of infection (3 items)			
You worry about getting HIV from one of your HIV+ patients	46.3%	26%	44%
I feel safe assisting or being assisted by a colleague who is HIV positive	46.3%	34%	27%
(d) Quality of care (6 items)			
Women living with HIV should be allowed to have babies if they wish	24.1%	18%	25%
Patients with AIDS have the right to obtain the same quality of care as any other patients	11.1%	6%	46%
You would like to do something to make life easier for people with HIV	29.6%	28%	5%
I am willing to provide care to patients with HIV and AIDS	18.5%	8%	57%
Patients with HIV and AIDS should be treated with the same respect as any other patients	1.9%	0%	100%
You are sympathetic towards the misery that clients with HIV and AIDS experience	9.3%	8%	14%
Overall stigma prevalence	35.9%	19.6%	45.4%

5.1.4.3 Changes on discriminatory practices

The result of the changes in the discriminatory practices after the intervention is summarised in table 5.3. The pre-test result of the discriminatory practices indicated that the overall discriminatory practices in the treatment group is 35 % while in the post-test it is 23%. This shows 34.2% reduction in the overall prevalence of discrimination in the treatment group after the intervention. The score of some of the discriminatory practices of the pre-test is less than that of the post-test because the respondents have improved their knowledge of identifying the events associated with discriminatory practices after getting the training.

TABLE 5.3 CHANGES OF DISCRIMINATORY PRACTICES IN FHRH, JULY 2014

Item	Pre-test	Post-test	Change %
(a) Active denial of services (5 items)			
HCPs are unwilling to care for a patient with or thought to be living with HIV	30%	16%	46%
The hospital does not perform surgeries or invasive procedures if the patient is known to be HIV+	15%	18%	-22%
The hospital do not admit HIV+ patients if their health status is already very poor	13%	6%	54%
HCPs try to cleverly deny admission of HIV+ patients by giving excuses but admission is not denied completely	20%	24%	-18%
Neglecting a woman living with HIV during labour and delivery because of her HIV status	35%	0%	100%
(b) Sub-standard treatment (3 items)			
HCPs providing poor quality of care to patient with or thought to be living with HIV	15%	12%	20%
A senior health care provider assigning a client to a junior health care provider	13%	6%	54%
HCPs keep HIV+ patients under observation without treatment plan for a few days	30%	2%	93%
(c) Institutional discrimination observed by the HCPs (8 items)			
HCPs talking badly about people living or thought to be living with HIV	22%	10%	55%
Experienced people talking badly about you because you care for patients living with HIV	26%	22%	15%
Been avoided by friends and/or family because you care for patients living with HIV	9%	8%	14%
Been avoided by colleagues because of your work caring for patients living with HIV	24%	4%	83%
Hesitation level of HCPs to work along with an HIV+ co-worker	15%	0%	100%
HIV+ patients are isolated in special sections of the hospital	19%	0%	100%
The HCPs do not maintain the confidentiality of HIV+ individuals	56%	74%	-33%
Performing an HIV test for a person without his/her informed consent	59%	28%	53%
(d) Selective use of universal precautions (6 items)			
HCPs taking extra precaution while caring for patients with HIV and AIDS	76%	60%	21%
HCPs avoid physical contact	29.6%	26%	13%
HCPs wear double gloves during invasive procedures	63%	62%	2%

Item	Pre-test	Post-test	Change %
You use any special infection-control measures that you do not use with other patients	61.1%	32%	48%
HCPs use protective wear on non-bleeding HIV+ patients even if the patient does not have open sores	76%	38%	50%
Using additional infection prevention control procedure during labour and delivery with a woman living with HIV	70%	64%	9%
(e) Financial discrimination (1 item)			
The hospital care is provided to HIV+ patients only if they can afford to pay	30%	18%	39%
Overall prevalence of discrimination	35%	23%	34.2%

5.2 CONCLUSION

The chapter described the contents, the methodology, training schedule and the outcome of the intervention conducted in the form of training. The next chapter deals with the discussions of the findings.

CHAPTER 6

DISCUSSION

6.1 INTRODUCTION

This chapter discusses the findings of the magnitude of HIV and AIDS-related stigma and discrimination (SAD) in the hospitals. The chapter also discusses the effects of the intervention on the knowledge, attitudes and beliefs as well as practices of the respondents in the treatment group. Besides, the chapter discusses the proposed design of HIV and AIDS-related SAD reduction-intervention strategy.

6.2 MAGNITUDE OF THE HIV AND AIDS-RELATED SAD IN THE HOSPITALS

The findings of the study showed that the overall prevalence of the HIV and AIDS stigma and discrimination among the respondents in the treatment group and control group is 35.9% and 35% respectively. On the other hand, the study demonstrated that the overall magnitude of the SAD among the control group is 34% and 25% respectively. The numbers are significantly high which demonstrate the presence of SAD among health workers. The findings of the study are supported by a study done in China (Zhou 2009:203), which showed that a significant number of health care workers did not want to provide care to PLWH and those with AIDS.

6.2.1 Factors associated with HIV and AIDS-related to SAD in the hospitals

This study was able to identify the factors associated with the HIV and AIDS-related to SAD in the hospitals. Few of the factors were found to have been significantly associated with the SAD attached to HIV and AIDS. The rest of the variables were not significantly associated with the HIV and AIDS-related to SAD. The following independent variables are factors that were found to affect HIV and AIDS-related SAD in the hospitals.

6.2.2.1 Socio-demographic characteristics

The findings of the current study revealed that there were few significant associations between the socio-demographic characteristics and HIV and AIDS-related SAD towards HIV positive patients admitted to the hospitals.

In the pre-test, the logistic regression indicated that though it is insignificant, age of the respondents (≥ 51 years) in FHRH showed increased likelihood of presentation of negative attitudes towards HIV and AIDS patients. The lack of the association may be attributed to low sample size of the respondents or other confounding effects.

Parker and Agglenton(2002:347) indicated that gender can affect the SAD attached to HIV and AIDS. Other studies also showed that age can influence the HIV and AIDS-related SAD in health care settings which is consistent with the findings of the current study. In addition, an international study has demonstrated that female individuals reported less stigmatising attitudes towards PLWHA than the male individuals though it was found to be insignificant in the current study PLWHA (Wu et al 2006:182).

Other studies conducted in China revealed that older health care providers (HCPs) show more prejudicial attitudes than younger ones although they had less discriminatory intention. The study also found that female HCPs had more prejudicial attitudes towards PLWHA than the male ones. In addition, the study pointed out that male doctors were found to be more supportive to PLWHA than females individuals (Andrewin & Chein 2008:902; Li et al 2007b:754; Ogasawara 2009:7; Holzmer et al 2007:542).

6.2.2.2 HIV and AIDS-related knowledge

The mean knowledge score of the pre-test study among the respondents in both the treatment and control groups was found to be comparable at the baseline. The pre-test findings demonstrated that there is low level of knowledge regarding HIV and AIDS-related to SAD among the respondents in both groups. For instance, the pre-test result indicated that less than half (48%) of the respondents from the treatment group had poor knowledge regarding the link between HIV and AIDS but about one-fifth of the respondents in the treatment group had good knowledge scores. In addition, 85% of

respondents in the treatment group had poor knowledge score regarding how to identify a person with HIV. Moreover, the pre-test result revealed that about 56% of the respondents in the treatment group had poor knowledge score of identifying events of HIV and AIDS-related SAD in the hospital. The qualitative findings also demonstrated that there are gaps in knowledge related to HIV and AIDS among the HCPs working in the same hospital.

The post-test findings revealed that the overall score of the HIV and AIDS-related knowledge score is generally increased among the respondents in the treatment group. The increment in the knowledge scores is also observed almost in all knowledge items under each category. For instance, the overall score of the HIV and AIDS-related knowledge score regarding the link between HIV and AIDS among the respondents in the treatment group was increased from 19% in the pre-test to 62% in the post-test. Besides, the ability to identify events that portray events related HIV and AIDS-related SAD in the same hospital is increased from 40.7% to 86%. The increment in the overall knowledge score is ascribed to intervention made on the treatment group in the form of training.

In the pre-test, the logistic regression indicated that the HIV and AIDS-related knowledge was significantly associated with SAD-related issue in FHRH. This finding is consistent with other studies (Wu et al 2006:182; USAID 2007b:17).

An evaluation study done on HCPs in Tanzania indicated that HCPs who had HIV and AIDS-related trainings have significantly obtained higher knowledge scores than those who lacked it (USAID 2007b:17). Evidence suggests that knowledge about HIV is a significant predictor of HIV and AIDS-related SAD. Bos et al (2008:250) have found that cognitive factors determine HIV and AIDS-related SAD. Other studies indicated that HCPs with low knowledge about HIV and AIDS are more likely to commit discriminatory practices in health care settings than those with lower level of knowledge. Similar studies indicated that the causes for discriminatory practices in health settings are lack of adequate knowledge as the result of inadequate trainings related to HIV and AIDS. On the other hand, literature disclosed that the level of knowledge of some of the HCPs regarding HIV and AIDS did not show positive correlation with their attitudes towards PLWHA but this finding was found to be inconsistent with other studies. A similar study has also indicated that though HCPs have mastery of correct HIV and AIDS-related

knowledge, it was pointed out that the HCP's attitudes and practices were not consistent with knowledge as they have internalised HIV and AIDS-related stigma that is existing in the larger society. Besides, in a study conducted in China, knowledge of the HCPs was not associated with their willingness to interact with PLWHA (Wu *et al* 2006:182; Ramaano 2011:27-30).

6.2.2.3 Attitudes and beliefs toward HIV positive patients

The baseline study indicated that the overall magnitude of the stigma among the respondents in the treatment group is 35.9%. The results obtained from the in-depth interview (IDI) of HIV positive patients admitted to Felege Hiwot Hospital (FHRH) show that there are some forms of HIV and AID-related stigmatisations in the current hospital. This signifies that stigma against the HIV positive patient is ubiquitous among the HCPs in the current hospital. This finding is consistent with studies carried out in Rwanda that show there is strong association between HCPs' negative attitudes and stigmatisations against PLWHA (USAID 2008b:23). In the post-test, the findings showed that the level of the stigma is reduced to 19.6%. The reduction in the stigma are observed almost in all stigma items under each category. For instance, the prevalence of all the negative attitudes under the item 'blame for infection' and 'desire for separation' is reduced in the post-test among the respondents in the treatment group. The reduction of the stigma is attributed to the training intervention made on the respondents in the treatment group.

In FHRH, low knowledge about HIV virology has showed increased likelihood of presentation of negative attitudes towards HIV and AIDS patients in the pre-test, although it was statistically insignificant. In addition, HCPs who served for ≥ 11 years in FHRH were five times more likely to report relatively “negative attitudes” towards HIV positive patients in the post-test.

The study done in India indicated that after an intervention, the proportion of HCPs with most stigmatising attitudes is declines from 24% to 7% (Pulerwitz *et al* 2010). Another study done in Nigeria indicated that HIV stigmatisation is frequently prevalent among the HCPs working in the tertiary hospitals (Amoran 2011:226). Other similar studies indicated that one of the contributing factors for stigmatisations in health care settings is lack of attitudes of HCPs that caring for PLWHA is meaningless because HIV is an incurable disease (Deacon & Boulle 2006:185; Ramaano 2011:27-30).

6.2.2.4 Perceived risk of infection

The baseline findings showed that there is perceived risk of infection among the respondents both in the treatment and control groups. Accordingly, 59% of the respondents from the treatment group had perceived risk of dressing wound or drawing blood from the admitted HIV positive patients. Similarly, most of respondents who participated in the in-depth interview observed that some of the HCPs in the FHRH use extra precautions while providing care for the admitted HIV positive patients. On the other hand, the post-test result pointed out that the magnitude of the perceived risk of infection is reduced in most of the identified variables. For instance, the perceived risk of infection towards making beds or taking temperature of HIV positive patients among the respondents in the treatment group is reduced from 13% in the pre-test to 6% in the post-test. The study conducted in Tanzania pointed out that 8% of the respondents assigned risk to assessing the conditions of the HIV positive patients (USAID 2007b:12; Ramaano 2011:27-30).

In this study, the perceived risk of infection towards social contacts with HIV positive patients among the respondents in the treatment group is reduced from 13% in the pre-test to 0% in the post-test.

Fear of occupational HIV transmission during medical procedures has been documented in many studies. In a study done in Zambia, 79% of the HCPs in hospitals reported being afraid of infection while providing care for PLWHA (USAID 2007b:18). Similarly, a study undertaken in Ethiopia on physicians and nurses demonstrated that 85% of physicians and 83% of nurses reported fear of occupational HIV infection while providing care for HIV positive patients (Ekeje 2010:22).

In the present study, 91% of respondents in both treatment and control groups assigned risk to recapping needles of patients thought to be living with HIV. The study conducted in Tanzania indicated that about 39% of the respondents selected not recapping needles as a means to prevent HIV transmission. In normal conditions, needles should not be recapped since doing so is associated with inadvertent needle stick injuries that may lead to transmission of infections (USAID 2007a:7).

In the pre-test, the logistic regression indicated that the perceived risk of HIV infection was found to be significantly associated with stigma in FHRH. In the same hospital, HCPs who felt HIV risk of infection with different contact points of HIV positive patients were more than 13 times more likely to manifest stigmatising attitudes towards the patients.

6.2.2.5 Discriminatory practices toward the PLWHA in the hospitals

The baseline study demonstrated that the level of the discriminatory practices is 35% among the respondents in the treatment group. The in- depth interview made with HIV positive patients in the same hospital also found out that they have observed few the HCPs in the hospital denying admission of the HIV positive patients. The global AIDS report (2010) indicated that in the United Kingdom (UK), 17% and in China 12% of PLWHA reported as having been denied health care services and 88% of PLWHS in Rwanda reported having been denied access to health care. In current study, the qualitative findings from the admitted HIV patients also demonstrated that there is financial discrimination in the hospitals in which the HIV positive patients are forced to buy the drugs by themselves. This is consistent with study findings from Tanzania that indicated the clinical care is only given for HIV positive only if they can afford to pay (2007:14). In the post-test, the magnitude of the discriminatory practices is declined to 23% among the respondents in the treatment group. For instance, when aggregated by forms of the discriminatory practices under each category, of 'denial of services' and 'substandard of care', the magnitude of the discrimination is reduced in the post-test of the respondents in the treatment group. This reduction of the discriminatory practices is as the result of the training interventions conducted on the respondents in the treatment group.

In the pre-test, the logistic regression pointed out that more male HCPs were very high likely to report discriminatory practices in FHRH. Similarly, in the post-test, sex was found to be significantly associated with discrimination in FHRH.

The logistic regression also showed that in the pre-test and post-tests, attitudes and perceived risk of HIV infection were found to be significantly associated with discriminatory practices in FHRH.

The pre-test findings of the current study also revealed that HCPs with above-average stigma (more negative attitude) were 2.88 times more likely to report discriminatory practices with known or suspected HIV positives in FHRH. Moreover, in FHRH, negative attitudes were found to be significantly associated with discriminatory practices in the pre-test.

Besides, in FHRH, the logistic regression pointed out that low level of knowledge about HIV prevention strategies in clinical settings was found to be significantly associated with the discrimination. Moreover, in same hospital, low-level knowledge about modes of HIV transmission showed increased likelihood for discriminatory practices in the pre-test although it was not statistically significant. These findings are consistent with other studies (USAID 2008b:23).

A study done elsewhere indicated that the attributing factors for discriminatory practices in the health care settings are lack of adequate trainings related to HIV and AIDS (Population Council 2006:51). Training related to HIV and AIDS results in increase of awareness and decrease misconceptions and unnecessary fear of casual contacts among the HCPs. The study carried out in Rwanda illustrated that there is strong association between awareness of the HCPs and their discriminatory practices against PLWHA (Sohler, Li & Cunningham 2007:347-354; USAID 2008b:23).

6.2.2.6 HIV and AIDS policies, guidelines and protocols

Interventions targeting HCPs need to have institutional policies and strategies that support the rights of the PLWHA (PHR 2011:23). In the present study 65% of the respondents in the treatment group indicated that there are no HIV and AIDS-related policies, guidelines and protocols in the hospital. In addition, 37% of the respondents in the same hospital did not get orientations related to HIV and AIDS policies, guidelines and protocols during their deployment to the hospital. The findings also revealed that 77% of the respondents in the treatment group said that the policies, guidelines and protocols are not well implemented in the hospital. Few of the respondents ascribed the problem of the implementation to the lack of adequate training, lack of protective supplies, poor institutional support, and low commitment of the HCPs.

In the pre-test, the logistic regression showed that guideline/protocol implementations were found to be significantly associated with discrimination in FHRH. Besides, the study indicated that HCPs who believed guidelines/protocols are not implemented in the hospital were about 3.6 times more likely to report discriminatory practices in FHRH. In the pre-test, not implementing hospital policy that protects PLWHA against SAD was also found to be statistically significant for discriminatory practices in FHRH. Other studies conducted elsewhere have disclosed similar findings (Population Council 2008:40).

An analysis of HIV and AIDS-related SAD in Latin America health settings indicated that institutional policies and strategies have discriminated against PLWHA by failing to ensure that HCPs are adequately trained (WHO 2009a:21). The study carried out in Beijing also pointed out that hospital policies are the major sources of discrimination in health care settings (WHO 2009a:21). Besides, the study conducted in Vietnam found that lack of clear hospital policies, strategies and practices to provide patient care was found to be attributable to discriminatory practices in the hospitals (Population Council 2008:40).

6.2.2.7 *Lack of protective supplies for universal precautions*

Several studies have demonstrated that shortage of protective medical supplies was the most commonly reported factor that made caring for HIV patients difficult (USAID 2007:b19). In the current study, the pre-test result revealed that 50% of the respondents in the treatment and control groups reported that there are inadequate supplies in their respective hospitals. A study done in Nigeria showed that 10% of doctors refused to provide care for PLWHA or had denied to admit PLWHA to hospital due to lack of protective supplies. But, 50% of the physicians and nurses participated in the same study reported fearing of HIV infection in spite of their use of universal precautions (UP) implying that UP alone cannot bring about change in the attitudes of HCPs towards PLWHA (Ekeje 2010:22). Another study carried out in the same country indicated that 65% of the HCPs in a tertiary public health care setting attributed the non-practice of universal precautions to lack of protective materials in the health care setting. Normally, UP is recommended to protect the HCPs against transmission of not only HIV but also other infections as well (USAID 2007b:19).

6.3 EFFECTS OF THE INTERVENTION ON THE RESPONDENTS

In the current study, the training provided to the respondents in the treatment group has brought positive changes on knowledge, attitudes and beliefs as well as practices of the HCPs toward providing care for HIV positive patients admitted to the hospital.

6.3.1 Effects of the intervention on knowledge of the respondents

In the pre-test study, 55% of the respondents in the treatment group achieved 'good' knowledge score ($\geq 80\%$) while responding to the knowledge questions. But, in the post-test, 80% of the respondents in the treatment group obtained 'good' score showing that 45.5% increase in the score. This change of the score of knowledge is due to the training intervention made on the respondents in the treatment group. On the other hand, since no intervention was made on the respondents in the control group, the overall of change observed on the overall knowledge score of the respondents was insignificant. The little change might be ascribed to the pre-testing effects or as the result of variations while filling the self-administered questionnaire during the post-test.

Studies carried out in different countries indicated that HIV and AIDS-related training using combined methodology bring about positive changes in improving knowledge of the HCPs towards the care for HIV positive patients admitted to health care settings. Such trainings help improve the attitudes and behaviour of the HCPs towards the PLWHA thereby reducing the magnitude of HIV and AIDS-related SAD in the health care settings (Population Council 2006:7; Nyblade et al 2009:1-7; PHR 2011:23; WHO UNFPA & UNAIDS 2011:58).

6.3.2 Effects of the intervention on attitudes and beliefs of the respondents

In the pre-test it was found that that the overall prevalence of the stigma among the respondents in the treatment group was reduced from 35.9% to 19.6%. This shows the reduction of the overall stigma by 45.4%. The reduction of the stigma is attributed to the effects of the intervention made on the respondents in the treatment group.

The study conducted in Tanzania demonstrated that HIV and AIDS-related training improve the attitudes of HCPs towards PLWHA admitted to the health care settings

(USAID 2007b:18). Other studies also demonstrated that HIV and AIDS-related trainings brought positive changes on attitudes and beliefs of HCPs (Population Council 2006:7; Nyblade et al 2009:1-7; PHR 2011:23; WHO, UNFPA & UNAIDS 2011:58).

A study carried out in Vietnam, showed that after training intervention to hospital staff, the hospital practice became significantly improved. After the intervention, the findings of the showed that about 48% of hospital staff reported that their stigmatising attitudes made them to treat PLWHA differently (Pulerwitz et al 2010).

6.3.3 Effects of the intervention on the behaviour of the respondents

The findings of the study pointed out that the overall prevalence of the discriminatory practices among the respondents in the treatment group is reduced from 35% in the pre-test and to 23% in the post-test. This implies that the reduction of the discriminatory practices among the respondents in the treatment group by 34.2%. The reduction in the discriminatory practices among the respondents is as the result of training intervention made on the respondents in the treatment group. But, the overall change of prevalence of discrimination among the respondents in the control group is insignificant since no intervention was made on the respondents. The small change might be due to the pre-testing effects or inconsistencies while filling the post-test questionnaire.

Other studies showed that HIV and AIDS-related trainings brought about reduction of discriminatory practices by improving the behaviour of HCPs towards the care for HIV positive patients admitted to health care settings (Population Council 2006:7; Nyblade et al 2009:1-7; PHR 2011:23; WHO, UNFPA & UNAIDS 2011:58).

6.4 DESIGNING HIV AND AIDS-RELATED SAD REDUCTION-INTERVENTION STRATEGY

Studies have revealed that there are effective strategies in reducing HIV and AIDS-related SAD in the health care settings. Reducing SAD attached to HIV and AIDS can dramatically improve quality of the lives of PLWHA. It also optimises investment in HIV prevention, treatment and care. Generally, it is imperative to intergrate the SAD reduction intervention strategy into the whole health care system. Tackling HIV and AIDS-related SAD requires addressing the three underlying causes including lack of

awareness among HCPs of what SAD means, fear of causal contacts as the result of incomplete information about HIV transmission and the association of the ailment with immoral behaviour. These three drivers of HIV and AIDS-related SAD in health care settings can be resolved by focusing on the following key areas of interventions

6.4.1 Provision of training to health care providers

Training as one means of improving knowledge, attitudes and behaviour of HCPs is indispensable in health care settings where HIV and AIDS-related SAD is rampant. A participatory approach of trainings tends to be more effective in reducing the HIV and AIDS-related SAD in health care settings. The training intervention provided to the HCPs results in creating SAD-free health care settings that results in good quality of services for the admitted HIV positive patients (Ogasawara 2009:19).

Studies showed that designing SAD reduction intervention strategy is crucial in reducing HIV and AIDS-related SAD in the health care settings (Andrewin & Chein 2008:902). Mak (2011) pointed out that training programmes comprising combination of educations were the most implemented and evaluated approaches to reduce HIV and AIDS-related SAD in health care settings (Cross et al 2011:71-80).

Based on the findings of the post-test, the study suggests that HIV and AIDS-related trainings as one of the best intervention strategies in addressing SAD attached to HIV and AIDS in hospitals. There are two types of trainings, namely, pre-service and in-service trainings.

- **Incorporating HIV and AIDS-related SAD into medical school curricula**

HIV and AIDS-related pre-service trainings curricula need to be developed and provided to the HCPs before their graduation from universities or colleges. This is vital to lay ground for enabling the HCPs to provide SAD-free care and treatments to HIV positive patients.

- **In-service training**

This is the type of training that is provided to HCPs after their deployment to service areas. The trainings are intended to bring about improvements in the knowledge, attitudes and behaviour of HCPs regarding the specific programmes or services like HIV and AIDS-related treatments and care (Daniel 2014:584).

Involving PLWHA in the trainings is also critical in improving the attitudes and behaviour of the HCPs. Communication forums in which PLWHA are actively participated are one of the promising approaches to reduce HIV and AIDS-related SAD in health care settings. In addition, all forms of the trainings need to be in combination forms including presentations, small group works, interactive discussions, role plays and case scenarios (Duvvury, Prasad & Kishore 2006:6).

6.4.2 Availing protective supplies for universal precautions

Protective supplies like gloves, goggles, masks, boots and plastic aprons should be made available in health care settings in order to reduce fear of the casual contacts during providing care to all patients regardless of their HIV sero-status (WHO 2009b:33-34).

A study carried out in Indian hospitals has pointed out that reducing HIV and AIDS-related SAD in health care settings requires not only addressing gaps in knowledge, attitudes and practices of the HCPs but also their needs for protective supplies. Availing adequate supplies and exercising appropriate use of universal precautions for all patients is another way of reducing fear of HIV transmission in health care settings (ICRW 2015:1-16; Population Council 2010a:6).

6.4.3 Applying institutional policies, strategies, guidelines and protocols

Availing HIV and AIDS-related institutional policies, strategies, guidelines and protocols is critical in reducing HIV and AIDS-related SAD in health care settings. Besides, all HCPs need to have the timely orientations regarding the hospital policies, strategies, guidelines and protocols prior to assignment to their jobs. The orientations help the HCPs to deliver care and treatments based on the policies, strategies, guidelines and

protocols. This reduces the discriminatory practices among the HCPs. But, having only the policies, strategies, guidelines and protocols in the health care settings is meaningless unless it is implemented accordingly (USAID 2008a:7).

6.4.4 Providing institutional support

Institutional support is imperative in creating a good working environment and improving the commitment of HCPs that enable them to provide holistic care for PLWHA without discrimination. In addition, good leadership and management skill of hospital managers is pivotal in inspiring the HCPs to provide good quality of care for the PLWHA (Holmes 2012:5-7).

6.5 CONCLUSION

This chapter presented the study discussions based on the study findings. The findings were discussed by comparing and contrasting with some of findings obtained from the literature review. In addition, the chapter discussed the proposed strategy of reducing SAD attached to HIV and AIDS in the health care settings. The next chapter will be the conclusions and recommendations of the study.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

This chapter discusses the summary and interpretations of the findings. Recommendations deduced from the findings are given and strategies for reducing SAD are given as major contribution of the study. The study limitations and general conclusion are also given.

7.2 SUMMARY AND INTERPRETATION OF THE STUDY FINDINGS

From the two selected public hospitals, a total of 108 respondents participated in the study with the total response rate of 98.2%. The ratio of the respondents involved in the treatment group and control group is the same (1:1). The respondents were physicians, nurses, midwives, health officers and laboratory professionals in both hospitals who directly or indirectly deal with the treatments and care of HIV positive patients admitted to the hospitals. Most of the socio-demographic characteristics of respondents both in the treatment and control groups were found to be comparable after the analysis of the baseline study.

The study had two phases, namely, pre-test and post-test. The pre-test was intended to obtain the baseline data from the two groups of the respondents and then determine the magnitude of the SAD attached to HIV and AIDS. After the intervention, the post-test was given to the respondents both in the treatment and control groups so as to investigate the outcome of the intervention on the respondents in the treatment group. The pre-test and post-test data obtained from the two phases were analysed using relevant descriptive and inferential statistics. Based on the objectives of the study, there were important independent variables that were analysed and discussed in both phases. These variables were knowledge, attitudes and beliefs, and practices of the respondents in the treatment and control groups. Moreover, issues associated with the

perceived risk of infection as well as hospital policies, guidelines and protocols were explored and discussed.

The study was able to reveal that knowledge of HIV and AIDS, sex, year of experiences, attitudes, perceived risk infection and implementation of hospital policies, guidelines and protocols affect HIV and AIDS-related SAD in health care settings.

The brief intervention done on the treatment group was aimed at determining whether or not training associated with HIV, AIDS and SAD can have effect on the knowledge, attitudes and beliefs as well as the practices of the respondents and ultimately reduce the overall prevalence of the SAD attached to HIV and AIDS. In the training intervention, 50 respondents from the treatment group have participated. The training was so interactive in which experienced physician, nurses, public health specialists and expert patients living with HIV were participated as trainers.

The findings of the baseline study showed that the overall magnitude of HIV and AIDS-related stigma and discrimination among the respondents in the treatment group was 35.9% and 35% respectively. In the post-test, the magnitude of the stigma and discrimination was reduced to 19.6% and 23% among the respondents in the treatment group respectively. In contrast, the overall prevalence of the HIV and AIDS-related stigma and discrimination among the respondents in the control group was found to be 30% and 34% respectively. In the post-test, there is 45.4% and 32.2% reduction in the overall prevalence of HIV and AIDS-related stigma and discrimination in the treatment group respectively. On the other hand, the change observed in the overall reduction of the prevalence of HIV and AIDS-related SAD in the control group was found to be insignificant.

The significant change observed on the respondents in the treatment group is attributed to the training intervention, but as the respondents in the control group did not take the intervention, there was no significant change observed on the level of the overall magnitude of the HIV and AIDS-related SAD.

Generally, the study was able to establish that there is still SAD attached to HIV and AIDS in the hospital settings. In addition, the study pointed out that there are still gaps in knowledge, attitudes and behaviour among the HCPs that hinder them from providing

the necessary treatments and care for PLWHA admitted to the hospitals. The study has also demonstrated that there are ways of bridging the identified gaps the first of which is delivering training associated with HIV, AIDS and SAD for the HCPs in order to improve their knowledge, attitudes and practices (KAPs) with ultimate reduction of the overall HIV and AIDS-related SAD in the health care settings. Besides to the training, the study was able to identify other ways of reducing the SAD in care settings.

7.3 CONCLUSIONS

HIV and AIDS-related SAD has been recognised as one of the biggest challenges to improving HIV/AIDS prevention, treatment, and care and support activities, both in developed and developing world. The SAD occurs in various contexts one of which is the health care settings. HIV and AIDS-related SAD in health care settings is more perturbing as it prevents individuals from accessing and getting quality health services.

Many studies in different parts of the world have demonstrated that the health care settings are the contexts where conspicuous forms of SAD can occur. The studies also revealed that there are various ways in which SAD are manifested in health care settings. These include neglect, differential treatment, denial and disclosure without the consent of the client. There are different factors attributable to the existence of HIV and AIDS-related SAD in health care settings. Some of the factors are gaps in knowledge about HIV and AIDS and universal precautions as well as negative attitudes toward PLWHA.

To reduce HIV and AIDS-related SAD in health care settings, interventions must focus on improving the knowledge, attitudes and practices of HCPs as well as overcoming the institutional barriers existing in the health care settings through staff training and hospital strategy development.

Therefore, the primary objective of the current study was to design appropriate HIV and AIDS-related SAD reduction-intervention strategy in the health care settings after assessing the magnitude of the HIV and AIDS-related SAD and associated factors. Understanding the prevalence and underlying causes of HIV and AIDS-related SAD in the health care settings is indispensable for the successful development of SAD reduction-intervention strategy in the health care settings. Moreover, reducing HIV and

AIDS-related SAD in the health care settings benefits not only PLWHA and their families, but also the HCPs themselves.

The designed strategy will eventually enable the policy makers, hospital managers, planners and HCPs to set plan of action, implement and evaluate appropriate HIV and AIDS-related SAD reduction-intervention strategy that could contribute to the elimination of HIV and AIDS-related SAD in all health care settings found in the region.

7.4 RECOMMEDATIONS

Based on the findings, the researcher suggests that hospital managers, planners, policy makers and leaders need to work aggressively in order to eliminate the HIV and AIDS-related SAD in the health care settings. Pre-service and in-service trainings are also critical in improving the knowledge, attitudes and behaviour of the HCPs to provide proper care and treatments for PLWHA. In addition, protective supplies for universal precautions should be made available in the hospitals in order to reduce fear associated with HIV infection while providing care for all patients admitted to the hospitals irrespective of their HIV sero-status. Moreover, orientations on hospital policies and strategies should be made prior to the deployment of the HCPs. Furthermore, sticking to good standard of care is essential in hospital settings so as to provide quality of care to the admitted HIV positive patients. Good institutional support is also indispensable to create conducive working environment and enhance the commitment of the HCPs toward the provision of good quality of care for PLWHA. Further studies with large sample size and long period of intervention, and follow-up need to be undertaken in order to corroborate the findings of this study.

7.5 CONTRIBUTION OF THE STUDY

The fight against HIV and AIDS will not be won until the SAD experienced by the PLWHA is drastically reduced and eventually eliminated in all contexts including the health care settings. Based on this premise, the current study offers the opportunity to determine the overall magnitude of HIV and AIDS-related SAD in the hospitals. The study also found factors that can impinge on the overall prevalence of the HIV and AIDS-related SAD in the hospitals. In addition, the identified gaps in this study enabled the researcher in designing appropriate HIV and AIDS-related SAD reduction-

intervention strategy in hospital settings. One of the means of reducing the SAD is intervention carried out in the form of training that can influence and guide the planners, hospital managers and the HCPs in designing appropriate HIV and AIDS-related SAD reduction-intervention strategy for their own hospitals. The intervention strategy in the form of training will further enable the hospitals to substantially reduce and eventually eliminate the SAD-attached to HIV and AIDS. The substantial reduction of HIV and AIDS-related SAD in the hospital settings would significantly improve the uptake and quality of the HIV and AIDS-related services and ultimately create safe and user-friendly hospitals for PLWHA.

In sum, the study reported a strategy that can play a role in reducing the SAD attached to HIV and AIDS in the health care settings. The findings of this study can go a long way in guiding the policy makers, planners and hospital managers in eliminating the SAD in the health care settings.

7.6 LIMITATIONS OF THE STUDY

Due to the nature of the design, the study was affected by selection bias as the respondents were not randomly assigned to treatment and control groups. In addition, the intervention made in the form of training was short in duration and thus the effect of the intervention may not be so strong enough to impact on knowledge, attitudes and beliefs as well as the practices of the respondents in the treatment group. Besides, since the study did not look into the private hospitals and sample size of the study is small, the study may have limited external validity to the entire health care settings in the region, which might have substantially higher or lower level of HIV and AIDS-related SAD.

Even though there were constraints as mentioned in the paragraph above, the research team acted in a professional manner and interviews focused on key issues. Triangulation of information also ensured validity of the information provided.

7.7 CONCLUSION

HIV and AIDS-related SAD is pernicious in the health care settings where it hampers individual's rights to attain the highest standard of care and deter the efforts to combat

the disease worldwide. In Ethiopia, where the prevalence of HIV is believed to be higher than some of the sub-Saharan African countries, HIV and AIDS-related SAD is prevalent in the health care settings jeopardising the preventive and control efforts against the disease. The SAD attached to HIV and AIDS keep PLWHA from accessing treatment, care and support services from health care settings. Thus, the current study was able to determine the magnitude of HIV and AIDS-related SAD and associated factors in the selected hospitals. The study also made an intervention that enabled the researcher in designing the SAD-reduction intervention strategy. This can help the government, policy makers, planners and hospital managers in reducing and eventually eliminating the HIV and AIDS-related SAD in the health care settings. The elimination of the HIV and AIDS-related SAD from the health care settings enables the PLWHA to attain safe and user-friendly health services.

LIST OF REFERENCES

- Ajibade, L, Adeleke, A, Olagunju, O & Kolade O. 2013. Patterns of discriminatory practices of health care providers towards people living with HIV/AIDS in Osun State, Nigeria. *Journal of Nursing and Health Sciences* 1(6):44-50.
- Andrewin, A. & Chein, L. 2008. Stigmatisation of patients with HIV/AIDS among doctors and nurses in Belize. *AIDS Patient Care and STDs* 22(11):897-906.
- Amoran, O. 2011. HIV-related stigmatising attitudes and practices among the health care providers in North Nigeria. *Journal of Infectious Diseases and Immunity* 3(13):226-232.
- Armando, T. 2010. Impact of HIV/AIDS stigma on sero-positive Latinos along the United States-Mexico Border. Unpublished Master's Dissertation. California State University, Long Beach.
- Arjan, B, Herman, S & John, P. 2008. Reducing HIV-related stigma in developing countries: The importance of theory-and evidence-based interventions. *Psychology, Health and Medicine* 13(4):450-460.
- Basavanthappa, B. 2006. *Nursing research*. Jaypee. New Delhi, India: Brothers Medical Publishers.
- Baumgartner, L. 2012. The perceived effects of the socio-cultural contexts on HIV/AIDS identity incorporation. *The Qualitative Report* 17(45):1-21.
- Bandura, A. 1989. *Social cognitive theory*. Greenwich: JAI Press.
- Bekele, A. 2007. Assessment of effectiveness of the different IEC intervention. Unpublished Doctoral Thesis. University of Addis Ababa, Addis Ababa:1-25.
- Bonate P 2009. *Within-subject comparison of changes in pretest-posttest design*. London: Chapman and Haucrc.

Bos, A, Schaalma, H & Pryor J. 2008. Reducing AIDs-related stigma in developing countries: The importance of theory-and evidence-based interventions. *Psychology, Health and Medicine*. 13(4):450-460.

Bowling, A. 2009. *Research methods in health*. 3rd edition. UK: McGraw Hill.

Brown, D, BeLue, R & Airhenbuwa, O. 2010. HIV and AIDS-related stigma in the context of family support and race in South Africa. *Ethnicity and Health* 15(5):441-458.

Burnard, P, Gill, P, Stewart, K, Treasure, E & Chadwick, B. 2008. Analysing and presenting qualitative data. *British Dental Journal*:429-432.

Caldwell, J. 2011. *Determination of sample size for analytical survey, using pretest-post test comparison group design*. Michigan: Brooks.

Castro, A & Farmer, P. 2005. Understanding and addressing AIDS-related stigma: from anthropological theory to clinical practice. *American Journal of Public Health* 95(1):53-59.

Central Statistical Agency. 2011. *Ethiopia demographic and health survey*. Addis Ababa, Ethiopia.

Cianelli, R, Ferrer, L, Norr, K, McCreary, L, Irrazabal, L, Bernales, M & Miner, S. 2011. Stigma-related to HIV among community health workers in Chile. *Stigma Research Action* 1(1): 3-10.

Colin, N. 2007. *Introduction to research and research methods*. London: Churchill Livingstone.

Cross, H, Heijnders, M & Dalal A. 2011. Interventions for stigma reduction. *Practical Applications* 22(3):71-80.

CSA see Central Statistical Agency.

Dakhale, G, Hiware, S, Shinde, A & Mahatme, M. 2012. Basic biostatistics for post-graduate students. *Indian Journal of Pharmacology* 44(4):435-442.

Daniel, E. 2014. Attitudes and practices of health care workers towards HIV positive patients at Federal Medical Centre Owo Ondo State, Nigeria. *South American Journal of Public Health* 2(4):561-604.

Deacon, H & Boulle, A. 2006. Factors affecting HIV/AIDS-related stigma and discrimination by medical professionals. *International Journal of Epidemiology* 36:185-186.

Diaz, N & Neilands, T. 2009. Development and validation of culturally appropriate HIV/AIDS stigma scale for Puerto Rican health professionals in training. *AIDS Care* 21(10):1259-1270.

Drost, E. 2011. Validity and reliability in social research. *Education Research and Perspectives* 38(1):105-121.

Duvvury, N, Prasad, N & Kishore, N. 2006. *HIV and AIDS stigma and violence reduction intervention manual*. Washington, DC International Center for Research on Women:3-19.

Ebied, E. 2014. Factors contributing to HIV/AIDS-related stigma and discrimination attitudes in Egypt: suggested stigma reduction guide for nurses in family health centres. *Journal of Education and Practice* 5(24):35-46.

Ekeje, N. 2010. An investigation into stigmatisation of HIV-positive clients at clinics in the Leribe District. Unpublished Master's Dissertation. Pretoria: UNISA.

Elford, J, Ibrahim, F, Bukutu, C & Anderson, J. 2007. HIV-related discrimination reported by people living with HIV in London, UK. *AIDS Behaviour* 12:255-264.

Engender Health. 2009. *A rapid appraisal of HIV-related stigma and discrimination reduction interventions in selected health facilities in Ghana*. New York, USA.

Ethiopia Demographic and Health Survey. 2011. *Central statistical agency*. Addis Ababa, Ethiopia.

FMO see Federal Ministry of Health.

Federal Ministry of Health. 2010a. *HIV/AIDS and the health-related Millennium Development Goals*. Addis Ababa, Ethiopia.

Federal Ministry of Health. 2010b. *Health Sector Development Program IV*. Addis Ababa, Ethiopia.

Feyissa, G, Abebe, L, Girma, E & Woldie, M. 2012. *Validation of an HIV-related stigma scale among HCPs in a resource-poor Ethiopian setting*.

From: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3333803/> (accessed 9 June 2012).

Fishbein, M & Marco, Y. 2003. Using theory to design effective health behaviour interventions. *International Communication Association*:164-183.

Fisher, A & Foreit, J. 2002. *Designing HIV/AIDS intervention studies*. Population Council. USA, New York.

Fonseca, A. 2009. *A descriptive review of health care providers' perspective on stigmatisation of HIV/AIDS patient: United States and South Africa*. Rhode Island College.

Future Group. 2011. *Stigma and discrimination*. Addis Ababa: Ethiopia.

Ganczak, M. 2007. Stigma and discrimination for HIV/AIDS in the health sector: A polish perspective. *American Journal of Psychology* 41(1):57-66.

Geiselhart, K. 2010. Stigma and discrimination: An integrative perspective. *ERdkunde* 64:(1):33-63.

Guerard, K. 2011. *An Investigation of HIV-related stigma to improve HIV prevention efforts in North Dakota*. Unpublished Master's Dissertation. Minnesota State University.

Guma, J. 2010-2012. *Health workers stigmatize and AIDS patients*. Makerere University, Uganda.

Gutierrez, J. 2014. Assessment of HIV/AIDS educational intervention on stigma reduction among nurses: a quasi-experimental study. *International Journal of Advanced Nursing Studies* 3(2):90-96.

Hanckok, B., Ockleford, E & Windridge K. 2009. *An Introduction to qualitative research*. The NIHR RDSEM: Yorkshire.

Herrmann, S, Mckinnon, E, Hyland, N., Lalanne, C, Mallal, S, Nolan, D, Chassany, O & Duracinsky, M. 2013. HIV-related stigma and physical symptoms have a persistent influence on health-related equality of Australians with HIV infection. *Health and Quality Outcomes*:1-13.

Holmes, J. 2012. *Human rights-based approach to HIV health care*. Cambridge:Cambridge University Press.

Holzmer, W. 2007. Validation of the HIV/AIDS stigma instrument. PLWHA (HASI P). *AIDS Care* 19(8):1002-1012.

Holzmer, Uys, L, Makoae, L, Stewart, A, Phetlhu, R, Priscilla, D, Greeff, M, Thecla, K, Chirwa, M, Cuca, Y & Naidoo, J. 2008. A conceptual model of HIV/AIDS stigma from five African countries. *Journal of Advanced Nursing*, 58(6):191, 541-551.

Holzemer, W, Uys, L, Chirwa, M, Greeff, M, Makonae, L, Kohi, T, Dlamini, P. Stewart, A, Mullan, J, Phetlhu, R, Wantland, D & Durrheim, K. 2007. Validation of the HIV/AIDS stigma instrument-PLWHA (HAS-P). *AIDS Care* 19(8):1002-1012.

ICRW. 2015. *Stigma and discrimination*.

From: <http://www.icrw.org/what-we-do/hiv-aids/stigma-discrimination> (accessed 26 April 2015).

IPPF. 2009. *HIV stigma and discrimination remains a significant challenge in the UK*. From: <http://www.ippf.org/news/press/press-releases/HIV-stigma-UKU> (accessed 27 December 2012).

James, M. 2010. An exploration of HIV-related stigma within the context of Kerala, India. Unpublished Master's dissertation. University of Manitoba.

Jha, C & Madison J. 2009. Disparity in health care: HIV, stigma and marginalization in Nepal. *Journal of International AIDS Society* 12:8-16.

Jonassen, J. 2008. *Handbook of research on educational communications and technology*. 2nd edition. Taylor & Francis: London.

Kansiime, P. 2012. *The obstacles of HIV/AIDS-related stigma and discrimination in HIV prevention, care and treatment in Sweden. A study of PLWHA and service providers*. Berlin: Lambert.

Kidd, R, Prasas, N, Tajuddin, M, Ginni, R & Duvvury, N. 2007. *Reducing HIV stigma and gender-based violence. Toolkit for health care providers in India*. International Center for Research on Women: London.

Kimberlin, L & Winterstein, G. 2008. Validity and reliability of measurement instruments used in research. *American Journal of Health Systems Pharmacology* 65(23):2276-2283.

Lee, S. 2011. *The gender dimensions of HIV/AIDS-related stigma. Evidence from Bangladesh, the Dominican Republic and Ethiopia*. UNESCO: Addis Ababa.

Li, L, Wu, Z, Wu, S, Zhaoc, Y, Jia, M & Yan, Z. 2007. HIV-related stigma in health care settings. A survey of service providers in China. *AIDS Patient Care and STDs* 21(10):753-762.

Li, L, Wu, Z, Liang, L, Lin, C, Guan, J, Jia, M., Rou, K & Yan, Z. 2013. Reducing HIV-related stigma in health care settings. A randomized controlled trail in China. *American Journal of Public Health* 103(2):286-292.

Luis, M. 2008. HIV/AIDS stigma in Washington heights community. Unpublished PHD *dissertation*. Yeshiva University, New York.

MacQuarrie, K, Eckhaus, T & Nyblade, L. 2009. *HIV-related stigma and discrimination. A summary of recent literature*. Geneva: UNAIDS.

Maduiké, F. 2010. *A study on stigma and discriminatory attitudes and practices towards people living with HIV/AIDS in the community*. Lagos: Lagos University:1-60.

Magwaza, B. 2009. Knowledge of and exposure of the HIV/AIDS workplace program and stigma and discrimination amongst the employees of the South African Police services. Unpublished Master's Dissertation. University of South Africa, Pretoria:1-84.

Mahajan, A, Sayles, J, Patel, V, Remien, R, Ortiz, D, Szekeres, G & Coates, T. 2008. *Review of literature in the HIV/AIDS epidemic*.

From: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2835402> (accessed 29 February 2012).

Mahendra, V, Gilborn, L, Bharat, S, Mudoi, R, Gupta, I, Gerge, B, Daly, C & Pulrewitz, J. 2007. Understanding and measuring AIDS-related stigma in health care setting: A developing county perspective . *SAHARA Journal* 4(2):616-625.

Mak, W, Cheng, S., Law, R, Cheng, W & Chan, F. 2015. Reducing HIV-related stigma among health-care professionals: a game-based experiential approach. From: <http://www.ncbi.nlm.nih.gov/pubmed/25671591> (accessed 26 April 2015).

Mazengera, R. 2008. HIV/AIDS-related stigma and discrimination at selected health facilities in Chiradzulu District. Unpublished Master s Dissertaion University of Malawi:1-35.

Mbatha, B. 2013. AIDS-related stigma as barriers to HIV and AIDS prevention, care and treatment in South African public universities. *Mediterranean Journal of Social Sciences* 4(14):517-527.

Mbonu, N, Borne, B & Vries, N. 2009. *Stigma of people with HIV/AIDS in Sub-Saharan Africa. Journal of Tropical Medicine*:1-14.

Mitike, G & Tamiru, M. 2008. *The drivers of HIV/AIDS epidemic and response in Ethiopia*. Addis Ababa: UNFPA.

Mlobeli, R. 2007. HIV/AIDS stigma: An investigation into the perspectives and experiences of people living with HIV/AIDS. Unpublished Master's Dissertation. University of Western Cape, Cape Town.

Molero, F, Maria, F, Jetten, J & Juan, M. 2011. Living with HIV/AIDS. *Journal of Applied Social Psychology* 41(3):609-626.

Monger, M. 2011. Stigma: barrier to quality of life and health care. *HIV Clinician* 23(2):3-5.

Monjok, E, Smesny, A & Essien, J. 2009. HIV/AIDS-related stigma and discrimination in Nigeria: Review of research studies and future directions for preventions strategies. *African Journal of Reproductive Health* 13(3):2-16.

Mukhopadhyay, B. 2007. *Statistics for medical students*. India: Jaypee Brothers Medical Publishers.

Najakolaei, F, Niknami, S, Aminshokravi, F, Bazargan, M, Ahmadi, F, Hadjizadeh, E & Tavafian, S. 2010. . Experiences of stigma in healthcare settings among adults living with HIV in the Islamic Republic of Iran. *Journal of International AIDS Society* 13:1-27.

Nyblade, L, Hong, K, Ann, N, Ogden, J, Jain, A, Stangyl, A, Douglas, Z, Tao, N & Ashburn, K. 2008. *Communities confront HIV stigma in Vietnam*. Pretoria: UNAIDS.

Nyblade, L, Stangl, A, Weiss, E & Ashburn, K. 2009. *Combating HIV stigma in health care settings: What works?* From: <http://www.biomedcentral.com/content//1758-2652-12-15> (accessed 3 March 2012).

Nyblade, L, Jain, A, Benkirane, M, Li, L, Lohiniva, A, McLean, R, Turan, J, Varas-Dí'az, N, Cintro'n-Bou, F, Guan, J, Kwena, Z & Thomas, W. 2013. A brief, standardized tool for measuring HIV-related stigma among health facility staff: results of field testing in China, Dominica, Egypt, Kenya, Puerto Rico and St. Christopher & Nevis. *Journal of International AIDS Society* 16(2):187-198.

Odimegwu, C, Adedini, S & Ononokpono, D. 2013. HIV/AIDS stigma and utilization of voluntary counselling and testing in Nigeria. *BMC Public Health* 13:465-470.

Ogasawara, T. 2009. HIV and AIDS-related stigma and discrimination in Botswana. Unpublished Master's dissertation. Gaborone, University of Botswana.

Palanisamy, J & Subramanian, S. 2011. Health care discrimination in HIV care. *World Journal of AIDS*:100-103.

Parker, D. 2013. Community-level HIV stigma is a public threat. *HIV Clinician* 25 (2):7-9.

Parker, R & Aggleton, A. 2002. *HIV and AIDS-related stigma and discrimination:A conceptual Framework and Implication for Action*:Lobdon: AIDS Association.

Parsons, D. 2010. *Working communication strategy to reduce HIV/AIDS-related stigma and women and children in Osh*. Kyrgyzstan: UNAIDS.

Patrick, D. 2008. *Determining sample size. Balancing power, precision and practicality*. Oxford: Oxford Press.

Population Council. 2006. *Reducing AIDS-related stigma and discrimination in Indian hospitals*. Tata: Horizons.

Population Council. 2008. *Improving Hospital Quality of Care in Vietnam by reducing HIV-related stigma and discrimination*. Vio: Horizons.

Population Council. 2010a. *Reducing HIV-related stigma*. Geneva: UNAIDS.

Population Council. 2010b. *Reducing stigma and discrimination in hospitals*. Geneva: UNAIDS.

Pulerwitz, J, Michaelis, A, Ellis, H, Weiss, E, Brown, L & Mahendra, V. 2010. *Reducing HIV-related stigma: Lessons learned from Horizons research and programs*. *Public Health Reports* 125(2):272-281.

Ragimana, M. 2006. Factors related to the stigma associated with HIV/AIDS in Atteridgeville and Mamelodi. Unpublished Master's Dissertation. University of Pretoria, Pretoria.

Ramaano, P. 2011. Evaluating attitudes and perception of HIV and AIDS-related stigma among health care professionals in Vhembe District of Limpopo Province. Unpublished Masters Thesis. University of Limpopo:1-31.

Rao, P & Richard, J. 2006. *Introduction to biostatistics and research methods*. 2nd edition. India: Prentice-Hall.

Reichardt, S. 2009. Quasi-experimental design. *The sage handbook of quantitative methods in psychology*.

From:

http://www.sageereference.com.oasis.unisa.ac.za/view/hdbk_quanpsych/n3.xml?rskey=genAHT&result=2&q=Research%20design (accessed 11 July 2012).

Robin, B. 2009. *Research methods and experimental design*. London: Oxford Press.

Rutledge, S, Abell, N, Padmore, J & McCann, T. 2009. AIDS stigma in health services in Eastern Caribbean. *Sociology of Health and Illness* 31(1):17-34.

Sadoh, A, Fawoe, E, Oladimeji, A & Sotiloye, O. 2009. Attitude of health care workers and colleagues infected with human immunodeficiency. *Journal of Social Aspects of HIV/AIDS* 6(1):18-23.

Searle, T & Antonio, T. 2007. *HIV stigma and knowledge: What is the connection?*
From: <http://www.researchgate.net> (accessed 29 May 2012).

Sears, B. 2008. HIV discrimination in health care services in Los Angeles County: The result of three testing studies. *Washington and Lee Journal of Civil Rights and Social Justice* 15:86-104.

Shapiro, SL & Carlson LE. 2009. *The art and Science of mindfulness*. American Psychological Association: Washington DC.

Singer, S. 2009. HIV, stigma, and rates of infection. *AIDS Behaviour* 4(1):190-197.

Sinyangwe, G. 2012. Descriptive study of HIV/AIDS-related stigma experienced by people living with HIV/AIDS in health care settings offering family planning and/or HIV services in Kapiri-Mposhi, Zambia. Unpublished Master's Dissertation. University of Stellenbosch, Stellenbosch.

Sohler, N, Li, X & Cunningham, C. 2007. Perceived discrimination among severely disadvantaged people with HIV infection. *Public health Reports* 122:347-354.

Solomon, T, Hailemalak, A & Girma, B. 2008. Effects of access to antiretroviral therapy on stigma, Jimma University hospital, South West Ethiopia. *Ethiopian Journal of Public Health*:25-31.

Stangl, A, Lloyd, J, Brady, L, Holland, C & Baral, S. 2013. A systematic review of interventions to reduce to reduce HIV-related stigma and discrimination from 2002-2013: how far have we come? *Journal of the International AIDS Society*:1-13.

Symonds J & Gorard S. 2010. The death of mixed methods or the rebirth of research as craft? *Evaluation and Research in Education* 23(2):121-136.

Taylor, B. 2001. HIV, stigma and health; intergration of theoretical concepts and the lived experiences of individuals. *Journal of Advanced Nursing* 35:792-798.

Tebeje, B & Hailu, C. 2010. Assessment of HIV post-exposure prophylaxis among health workers of governmental heath institutions in Jimma zone, Oromia Region, South West Ethiopia. *Ethiopia Journal of Health Sciences*:55-63.

Thomas, M. 2009. Stigma and discrimination: investigating final year student nurses attitudes and perceptions of people living with HIV in Guyana. Unpublished doctoral thesis. University of The West Indies:1-101.

Thupayagale-Tshweneagae, G & Mokomane, Z. 2012. Discrimination against South African adolescents orphaned by AIDS. *Journal of Psychological Nursing* 50(1):27-31.

Thupayagale-Tshweneagae, G. 2008. *Voices of adolescents orphaned by AIDS*. New Zealand: Lambert Publishers.

Tomaszewski, E. 2012. *Understanding HIV/AIDS stigma and discrimination*. Human Rights and International Affairs Division. Geneva: UNAIDS.

Turan, J, Miller, S, Bukusi, E, Sande, J & Cohen, C. 2008. HIV/AIDS and maternity care in Kenya: How fears of stigma and discrimination affect uptake and provision of labour and delivery services. *AIDS Care* 20(8):938-945.

Ugarte, WJ, Hogberg, U, Valladares, EC & Essen, B. 2013. *Measuring HIV- and AIDS-related stigma and discrimination in Nicaragua: results from a community-based study*. From: [http://www.ncbi.nlm.nih.gov/pubmed/23514083?log\\$=activity](http://www.ncbi.nlm.nih.gov/pubmed/23514083?log$=activity) (accessed 26 April 2015).

UNAIDS. 2007. *Reducing HIV stigma and discrimination*. Geneva: UNAIDS.

UNAIDS. 2010a. *Facilitator's guide for training on HIV and AIDS stigma and discrimination reduction*. Geneva: UNAIDS.

UNAIDS. 2010b. *Report on global AIDS epidemic*. Geneva: UNAIDS.

United Nations Human Rights. 2011. *Reaching zero discrimination in the AIDS response*.

From: <http://www.ohchr.org/EN/NewsEvents/Pages/GlobalAIDSResponse.aspx>
(accessed on 27 April 2015).

USAID. 2006. *Can we measure HIV/AIDS-related stigma and discrimination?* Washington DC: USAID.

USAID. 2007a. *Evaluation of knowledge, attitudes, and practices of health care providers towards HIV-positive patients in Tanzania*. Washington DC: USAID.

USAID. 2007b. *Measuring the degree of stigma and discrimination in Kenya: An index for HIV/AIDS facilities and providers*. Washington DC: USAID.

USAID. 2008a. *HIV/AIDS-related stigma, fears and discriminatory practices among health care professionals in Rwanda*. Washington DC: USAID:1-32.

USAID. 2008b. *Improving hospital-based quality care in Vietnam by reducing HIV-related stigma and discrimination*. Washington, DC: USAID:1-136.

USAID. 2010a. *HIV principles and stigma reduction training curriculum. Addressing HIV and stigma in the health care settings in the Middle East and North Africa Region*. USAID.

USAID. 2010b. *Measuring the degree of HIV-related stigma and discrimination in health facilities and providers*. Health Policy Initiative, Washington, DC: USAID.

USAID. 2010c. *HIV stigma. A health policy approach*. Washington DC: USAID:1-4.

USAID. 2012. *Programmatic guidance for reducing HIV and key population stigma and discrimination*. Washington DC: USAID.

USAID & I-TECH. 2007. *HIV/AIDS stigma and discrimination in Caribbean health care settings. Facilitator Guide*. Washington DC: USAID.

USAID/FHI/ICRW. 2009. *National guide on integration of stigma and discrimination reduction in HIV programs*. USAID:4-10.

USAID/Ethiopia. 2012. *HIV/AIDS health profile*. Ethiopia: USAID.

Uys, L, Chirwa, M, KohinT, Greef, M, Naidoo, J & Makoae, L. 2009. Evaluation of a health setting-based stigma intervention in five African countries. *AIDS patient care and STDs* 23(12):1059-1066.

Vance, R & Denham, S. 2008. *HIV-related stigma: Delivering appropriate nursing care*.

Vida, M, Tarija, S, Maritta, V & Arturas, R. 2010. Impacts of intervention programs on nurse knowledge, attitudes, and willingness to take care of patients with human immunodeficiency syndrome: Descriptive review. *Medicina (Kaunas)* 46(3):159-168.

Wanger, A, Hart, T, McShane, K, Margolese, S & Girard, T. 2014. Health care provider attitudes and beliefs about people living with HIV. *AIDS and Behaviour* 18(12):14-25.

WHO. 2009a. *HIV testing, treatment and prevention*. Geneva: WHO.

WHO. 2009b. *Priority interventions. HIV/AIDS prevention, treatment and care in the health sector*. Geneva: WHO.

WHO. 2011. *HIV self-testing among health workers*. Geneva: WHO.

WHO, UNAIDS & UNICEF. 2011. *Global HIV/AIDS response. Progress report*. Geneva: WHO, UNAIDS & UNICEF.

Wichman, H. 2006. *Stigma within health care settings: An exploration of the experiences of people living with HIV and AIDS*. Unpublished doctoral thesis. University of Western Cape, Cape Town.

Wood, R & Bandura, A. 1989. Social cognitive theory of organizational management. *Academy of Management Review* 14(3):361-384.

Wu, S, Li, L. Wu, Z. Liang, L. Cao, H, Yan, Z & Li, J. 2008. A brief stigma reduction intervention for service providers in China.

From:

<file:///C:/Documents%20and%20Settings/T/Desktop/A%20Brief%20HIV%20Stigma%20Reduction%20Intervention%20for%20Service%20Providers%20in%20China.htm>

(accessed 2 May 2012).

Wu, Z, Zhao, Z, Lin, C, Detels, R & Wu, S. 2006. Using case vignettes to measure HIV-related stigma among health professionals in China. *International Journal of Epidemiology* 36:178-184.

Young, S & Bendavid, E. 2011. The relationship between HIV testing, stigma and service usage. *AIDS Care* 22(3):373-380.

Zhou, Y. 2009. Help-seeking in a context of AIDS stigma: Understanding the health care needs of people with HIV/AIDS in China. *Health and Social Care in the Community* 17(2):202-208.

Zukuski, A & Thornburn, S. 2009. Experience of stigma and discrimination among adults living with HIV in a low HIV-prevalence context. A qualitative analysis, AIDS patient care and STDS. *AIDS Patient Care and Sexually Transmitted Diseases* 23(4):267-276.

Annexure A: Request letter from UNISA Regional Learning Office



16 OCTOBER, 2013

UNISA-ET/KA/ST/29/16-10-13

NATIONAL ETHICS REVIEW COMMITTEE
MINISTRY OF SCIENCE AND TECHNOLOGY
ADDIS ABABA

Dear Madam/Sir,

This is to confirm that Mr. Befekadu Sedeta Wodajo (student number 49128264) is a PhD student in the Department of Health Studies at the University of South Africa (UNISA). Currently, he is at the stage of data collection on his Doctoral research entitled ***"HIV and AIDS-related Stigma and Discrimination Reduction/Intervention Strategy in the Health Care Settings of Amhara Region, Ethiopia."***

This is therefore to kindly ask you to please assist the student by granting him ethical clearance from your Ministry so that he will be able to collect data for his research. Attached, please find the copy of the Ethical Clearance he secured from the Department of Health Studies, UNISA.

Sincerely,

Tsigie GebreMeskel Aberra

DD – Academic and ICT Support

UNISA REGIONAL LEARNING CENTRE	
PO BOX 13836 ADDIS ABABA ETHIOPIA	
TEL	+251-114-350141
	+251-114-350078
FAX	+251-114-351243
MOBILE	+251-912-191483



Annexure B: Ethical Clearance from the Department of Health Studies Higher Degrees Committee, UNISA



**UNIVERSITY OF SOUTH AFRICA
Health Studies Higher Degrees Committee
College of Human Sciences
ETHICAL CLEARANCE CERTIFICATE**

HSHDC/88/2012

Date: 29 October 2012 Student No: 4912 826 4
Project Title: HIV/AIDS related stigma and discrimination reduction Intervention strategy in health care settings of Amaha, Ethiopia.
Researcher: BS Wadajo
Degree: D Litt et Phil Code: DPCH504
Supervisor: Prof GB Thupayagale-Tshweneagae
Qualification: D. Tech
Joint Supervisor: -

DECISION OF COMMITTEE

Approved



Conditionally Approved



**Prof L Roets
CHAIRPERSON: HEALTH STUDIES HIGHER DEGREES COMMITTEE**

ppp

**OF MM Moleka
ACTING ACADEMIC CHAIRPERSON: DEPARTMENT OF HEALTH STUDIES**

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRIES

Annexure C1: Letter requesting permission to do the study

Date- 1/3/2013

To: Amhara Regional Health Bureau

Bahir Dar, Ethiopia

Subject- Request for permission

I am 2012 UNISA student in health studies (PHD). Currently, I have completed the research proposal entitled "HIV and AIDS-related Stigma and Discrimination in Health Care Settings of Amhara Region, Ethiopia". I have also obtained the Ethical Clearance from the University. Therefore, I am kindly requesting your good office to review the approved proposal and give me permission to conduct the study in Felege Hiwot and Debre Markos Referral hospitals found in the region.

With kind regards,



Befekadu Sedeta Wodajo

Annexure C2: Ethical Clearance from Amhara Regional Health Bureau



በአማራ ብሔራዊ ክልላዊ መንግስት
Amhara National Regional State
ጤና ጥበቃ ቢሮ
Health Bureau

ቁጥር HRTT/1/69/06
Ref.no.....
ቀን 14/4/06
Date.....

To:- Mr Befekadu Sedeta

Bahir Dar

Subject: Health Ethical Clearance

You have submitted a project proposal entitled with “HIV and AIDS-RELATED STIGMA AND DISCRIMINATION REDUCTION-INTERVENTION STRATEGY IN HEALTH CARE SETTINGS OF AMHARA REGION, ETHIOPIA” to Regional Health Bureau Review Board for ethical approval. The Regional Health Bureau Research Ethics Review Committee /RERC/ has reviewed the submitted project proposal critically. We are writing to advise you that the RERC has granted **Full approval**.

The project indicated above for a period of **One year(2014)**. All your more recently submitted documents have been approved for use in this study. The study should comply with the standard international and national scientific and ethical guideline. Any change to the approved protocol or consent material must be reviewed and approved through the amendment process prior to its implementation. In addition, any adverse or unanticipated events should be reported within 24-48 hours to RERC. Please insure that you submit progressive report prior the expiry date of project.

We, therefore, request your esteemed organization to ensure the commencement and conduct of the study accordingly and wish for the successful completion of the project.



With regards,

ወንድማሳኒ ለሙሉ
Wondimu Gebeyehu Alemu

የጤና ምርምርና ቴክኖሎጂ
ሽግግር ዋና ከሬ-ሂደት ሙሉ
Health Research and
Technology Transfer
Core Process Owner

C.C:-

➤ ARHB Health programs deputy head

☒ 495

Tell. 0582201698
0582220191

Fax. 0582266701 : 0582262396
⌘ Take care from AIDS

Annexure D: Informed consent form for self-administered questionnaire

English version

You are invited to volunteer for a research study. Please read the paragraph below and if you accept the invitation to partake in the study, you will be required to sign a consent form.

I am the student from the University of South Africa, Department of Health Study. I am conducting a thesis for my Doctor of Philosophy (PHD) entitled *“HIV and AIDS-related Stigma and Discrimination (SAD) Reduction-Intervention Strategy in Health Care Settings of Amhara Region”*. This study is mainly for academic purpose. The questionnaire is not a test or an examination and it does not have ‘right’ or ‘wrong’ answer. Your participation in this study would help me in assessing your knowledge, attitudes and practices regarding HIV and AIDS-related SAD in the health care settings. Please answer the questions to the best of your ability and understanding. Your participation in this study will go a long way to help in the fight against the stigma and discrimination of people living with HIV and those with AIDS at the level of health care settings. No names will be used and the codes used will not be easily traced to any participant. You are free to abstain from filling the questionnaire if you feel discomforts or uneasiness. You may access the findings of the study during dissemination workshop or through the internet.

CONSENT

I _____ consent to participate in the research initiative conducted by Befekadu Sedeta Wodajo, a student from University of South Africa, Department of Health study. As a participant, I freely understand my legal rights in participating in such a research project. I am part and parcel of this study project voluntarily and without coercion.

Signature of the study participant

Date

Amharic version

በጥናት ላይ ለመሳተፍ የሚያስችል የፈቃደኝነት ማረጋገጫ

እርስዎ በዚህ ጥናት አንዲሳተፉ ተጋብዘዋል። እባክዎ ከዚህ ቀጥሎ የተመለከተውን አንቀጽ አንብቦ በጥናቱ ለመሳተፍ ፈቃደኛ መሆንዎን ያረጋግጡ።

የዚህ ጥናት ርዕስ “HIV and AIDS-related Stigma and Discrimination Reduction-Intervention Strategy in Health Care Settings of Amhara Region” የሚል ነው።

ይህ ጥናት በዋነኝነት ለትምህርት ማሟያ ነው። መጠይቁ ቴስት ወይም ፈተና አይደለም። በመሆኑም ትክክል ወይም ስህተት የሚባል መልስ የለም። የርስዎ በዚህ ጥናት መሳተፍ ከኤች ኤ ቪ/ኤድስ ጋር የተያያዘ መድሎና ማግለልን አስመልክቶ የእውቀት፣ የአመለካከትና የተግባር ዳሰሳ ለማካሄድ ከማስቻሉም በሻገር በኤች ኤ ቪ ና ኤድስ ዙሪያ ያለውን የህክምናና ክብካቤ የጥራት ደረጃ ከፍ ያደርጋል ተብሎ ይገመታል። በአጠቃላይ በዚህ ጥናት መሳተፍዎ በጤና ተቋማት ያለውን መድሎና ማግለልን በማስቀረት ረገድ ትልቅ እስተዋጽኦ ይኖረዋል። ስለሆነም ጥያቄዎቹን በጥሞና አንብቦ በተረዱት አግባብ መሰረት ተገቢውን ምላሽ እንዲሰጡባቸው በአክብሮት እጠይቃለሁ። በመልስ መስጫው ላይ የርስዎ ስም አይጻፍም፤ ማንኛውም መረጃም በሚሰጥር ይያዛል። ጥያቄዎቹን ሲሞሉ ምቹት ወይም ጥሩ ስሜት ካልተሰማዎት በማንኛውም ጊዜ ጥያቄውን መሙላት ማቋረጥ ይችላሉ። የጥናቱን ውጤት ወደፊት ከሆስፒታሉ፣ ከአወደ ጥናት ወይም ከድህረ ገጽ ላይ ሊያገኙ ይችላሉ።

የፈቃደኝነት ማረጋገጫ

እኔ _____ የተባልኩ የደቡብ አፍሪካ ዩኒቨርሲቲ ተማሪ የሆኑት አቶ በፈቃዱ ሰዴታ በሚያካሄዱት ጥናት ላይ ለመሳተፍ ያለኝን ህጋዊ መብት ተጠቅሜ ያለማንም አስገዳጅነት በጥናቱ ላይ ለመሳተፍ ሙሉ ፈቃደኛ መሆኔን አረጋግጣለሁ።

የጥናቱ ተሳታፊ ፊርማ _____ ቀን _____

Annexure E: Consent form for in-depth interview

English version

After hearing the statement below please sign on the blank space indicated below the statement in order to participate in the in-depth interview.

My name is Befekadu Sedeta Wodajo. Currently, I am online student of South African University in Health studies (PHD). Accordingly, I am going to conduct a study entitled "*HIV and AIDS-related Stigma and Discrimination in the Health Settings of Amhara Region, Ethiopia*" The main objective of the study is for academic purpose but its finding is believed to improve the quality of treatment and care related to HIV and AIDS at hospital level.

Based on this, you are invited to participate in this interview. Your participation in the interview is believed to have significant impact in improving the quality of HIV and AIDS treatment and care at the hospital. Your information will be kept confidential and anonymous. I assure you that you are free to opt out any time when you feel uneasiness during the interview.

Consent

I am _____, from _____ hospital, heard the above statement and I confirm that I am willing to fully participate in the interview without any coercion.

Signature _____ Date _____

Amharic version

KnK SÖÄp ðnÅ— KSJ” ¾¾²ÒË ¾¾ðnÅ~f T[ÒÑÝ pé

እባክዎ ሂ²=I ሁታሩ ሳK~” êG<ð ሁ”vw "ዳSÖ< ሁ%EL ሁnK SÖÄI KSD}ð ðnÅ— SJ”-” ሂታሩ ሁ}SKÿ}ጉ ሳታ LÃ ሁò`T- ሳ[ÒÓጠ::

• እ’@ ሁðnÆ cËታ• ወዳጆ • እvLKG<:: ሁ>G<’< Ñ>²? ሁÅu<w >ð]” ኒ’>y`c+ ሁÖ?” ²`ð ብርቀት ትምህርት ¾¾— ድÓ] }T] ማ:: ሁ²=G< Sc[f ሁJeúታM ሳ[í ሂ?< ሳÃ y=“ ሳ?Ée Ò` ¾¾}Á¾² SÉKA“ TÓKM” KTek[f ¾T>eÁe<M Ø“f ሁT”H@É LÃ እÑ—KG<::¾SÖÄI ሽLT ሁ፳ኛf KØ“f c=J” ሁ}ÚT]U ¾Ø“~ Ó~f ሁJeúታM ሳ[í ¾T>cÖ~” ¾?< ሳÃ y=“ ሳ?Ée Iገም“ና ገw”u? ¾Ø^f ሳ[í ሂð ሳÄ`ÒM }wKA ሳታS“M::

ሳI” Sc[f ሁTÉ[Ó እ`e- ሁ²=I nK SÖÄp እ”Ç=d]ñ }Òwዘዋል::¾`e- ሁ²=I nK SÖÄp Sd}ð ሁJeúታM ሳ[í ¾T>cÖ~” ¾?< ሳÃ y=“ ሳ?Ée IገU“ና ገw”u? Ø^f ሁThhM [ÑÉ fMገ ሳe]፳ê* ሳ•[፳M }wKA ሳታS“M:: KSÖÄI ¾T>cÖ<f ULi ሁጫeØ` ¾T>Á’ c=J” eU- ሳÄÖkeU:: ሁSÖÄI Ñ>²? ሁÇEፍ ካM}cT-f ሁT”——ጉ ሳ?Ée SÖÄI” Ts[Ø የጫፋሉ መሆኑን አረጋግጣለሁ::

¾¾ðnÅ~f T[ÒÑÝ

እ’@ _____ የ _____ • ታ”T> ¾¾J”ÿ< ሂLÃ ሳK~” êG<ð ሁ”vw "ÄSØÿ< ሁ%EL ሳKT”U ሳeÑÇi’f ሁnK SÖÄI KSD}ð S<K< ðnÅ— SJ’@” ሁ}KSÄጉ ስ`TÄ ሳ[ÒÓ×KG<::

ò`T_____ k” _____

Annexure F: Questionnaire

English version

Instruction. Read and the following questions carefully respond accordingly.

Section 1. Background information

Q101. Age _____years

Q102. Sex: Male Female

Q103. Marital status: Single Married Divorced Widowed

Q104. Religion: Orthodox Muslim Protestant Catholic Others

(specify)_____

Q105. Educational status: Certificate Diploma BSC. Master Doctorate

Others

(Specify)_____

Q106. Profession: Nurse Laboratory professional Health Officer. Midwife

Physician

Others (Specify)_____

Q107. How many years have you been working in health care? _____years

Q108. How many years have you been in your current facility? _____years

Q109. Have you ever worked in clinic or hospital giving HIV treatment and care?

Yes No

Q110. Have you received any training related to HIV and AIDS 1.Yes 2. No (Q 201)

Q111. Have you received any training regarding stigma and discrimination attached to HIV and

AIDS? 1. Yes 2. No

Section 2: Knowledge about HIV and AIDS

No	Questions	Alternative responses	Skip to
Q201	<p>What is the link between HIV and AIDS?</p> <p>(Encircle all that apply)</p>	<ol style="list-style-type: none"> 1. HIV is a different disease than AIDS 2. HIV is the virus that causes AIDS 3. The later stages of HIV are seen as AIDS 4. All of the above are true 5. Other (Specify)_____ 6. I do not know 	
Q202	<p>How do you know if a patient is HIV positive?/</p> <p>(Encircle all that apply)</p>	<ol style="list-style-type: none"> 1. He/she is known to be sexual promiscuous 2. He/she has tested positive for HIV 3. He/she has recently lost a lot of weight 4. He/she has many open sores on the body 5. Other (Specify)_____ 6. I do not know 	
Q203	<p>In what ways can HIV be transmitted?</p> <p>(Encircle all that apply)</p>	<ol style="list-style-type: none"> 1. Sexual intercourse 2. Occupational exposure 3. Unsafe blood transfusion 4. From HIV positive mother to child 5. Through breast feeding 6. Other (Specify)_____ 7. I do not know 	
Q204	<p>In what ways can HIV be prevented?</p> <p>(Encircle all that apply)</p>	<ol style="list-style-type: none"> 1. Use of condom correctly and consistently 2. Abstinence 3. Proper disinfection/sterilization of instruments 4. Using appropriate protective materials while caring for HIV+ 5. Other (Specify)_____ 6. I do not know 	
Q205	<p>What do HIV+ people look like?</p>	<ol style="list-style-type: none"> 1. Very thin 2. Have multiple skin infections 3. Sick- looking 	

	(Encircle all that apply)	4. Healthy-looking 5. You can't know by looking 6. Other (Specify)_____	
Q206	All pregnant women coming to the hospital should be tested and counselled for HIV	1.True 2. False	
Q207	What do you recommend for the prevention of mother-to-child transmission of HIV (Encircle all that apply)	1. Proper nutrition 2. ARV prophylaxis 3. Transmission is unpreventable 4. Institutional delivery 5. Other (Specify _____) 6. I do not know 7. Not applicable	
Q208	What kind of advice do you give to HIV+ mothers about infant feeding? (Encircle all that apply)	1. Formula feeding 2. Exclusive breast feeding for the first 6 months 3. Mixed feeding for the first 6 months 4. Supplementary feedings after 6 months 5. Other (Specify)_____ 6. I do not know	
Q209	It is appropriate to test clients preparing for surgery to ensure that the staff take appropriate universal precautions	1. True 2. False 3. I do not know	

Please read the following questions and respond accordingly

Q 210	The highest risk for health care providers (HCPs) of contracting HIV at work is by pricking themselves inadvertently	1.True 2. False 3. I don't know	
Q 211	Blood, semen and vaginal fluids are the only bodily fluids that transmit HIV	1.True 2. False 3. I don't know	
Q 212	Instruments used on HIV+ patients must be sterilized separately	1.True 2. False	

		3. I do not know	
Q 213	A different instrument kit should be set aside for use on HIV+ patients	1.True 2. False 3. I don't know	
Q 214	Persons infected with HIV are most likely to develop antibodies within six months	1.True 2. False 3. I don't know	
Q215	Recurrent vaginal yeast infections or cervical cancer may indicate HIV infection in women	1.True 2. False 3. I don't know	
Q216	The risk of HIV transmission following needle stick injuries is very small.	1.Yes 2. No 3. I do not know	
Q217	The risk of HIV transmission following splash of blood or body fluids to non-intact skin or mucous membrane is too small.	1.Yes 2. No 3. I do not know	
Q218	Universal precautions are designed to protect HCPs from HIV virus through different modes of transmission	1.Yes 2. No 3. I do not know	
Q219	A pregnant staff member who accidentally injured by a needle or sharp instrument cannot receive post-exposure prophylaxis due to the risk of damage to the foetus	1.Yes 2. No 3. I do not know 4. Not applicable	
Q220	Even outside the body, it is hard to kill the HIV virus	1.Yes 2. No 3. I do not know	
Q221	Which events show the presence of stigma and discrimination against HIV+ people in the hospital? (Encircle all that apply)	1. Denial of care 2. Breach of confidentiality 3. Labelling the patients' beds 4. Extra precautions 5. Delaying the services 6. Referring to junior HCPs 7. Substandard care 8.Others(Specify):_____	
Q222	What do you think are the contributing factors for the existence of the HIV and AIDS-related	1 .Low knowledge & skills 2. Attitudinal problems	

	SAD in the hospital? (Encircle all that apply)	3. Poor infrastructure (rooms, furniture, light, etc) 4. Inadequate equipment and supplies 5. Others (Specify) _____
Q223	Do you think we can eliminate any form of HIV and AIDS-related SAD in the hospital?	1. Yes 2. No (→Q301)
Q224	If your answer to Q223 is 'Yes', how can we eliminate the SAD in the hospital? (Encircle all that apply)	1. Availing adequate equipment and supplies 2. Pre-service or in-service trainings 3. Collaborative planning & rigorous M&E 4. Good infrastructure 5. Others (specify) _____

Section 3: Attitudes and beliefs about HIV+ People

Rate the degree to which you agree with each statement (put √)

No.	Questions	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't know
Q301	Most people living with HIV do not worry if they infect other people					
Q302	Most people living HIV should feel ashamed of themselves					
Q303	Most people living HIV have had many sexual partners					
Q304	People get infected with HIV due to their irresponsible behaviours					
Q305	Women living with HIV should be allowed to have babies if they wish					
Q306	Most people with HIV & AIDS have only themselves to blame					
Q307	Patients who are HIV infected should not be put in a room with other patients					
Q308	Patients with AIDS have the right to obtain the same					

	quality of care as any other patients					
Q309	If I found out a friend or colleague of mine had AIDS, I would not maintain the friendship					
Q310	You worry about getting HIV from one of your HIV+ patients					
Q311	You would like to do something to make life easier for people with HIV					
Q312	I feel safe assisting or being assisted by a colleague who is HIV positive.					
Q313	I am ashamed if I were HIV positive					
Q314	I am willing to provide care to patients with HIV and AIDS.					
Q315	If a pregnant woman is HIV-positive, her family has a right to know					
Q316	Pregnant women who refuse HIV testing are irresponsible					
Q317	Patients with HIV and AIDS should be treated with the same respect as any other patients					
Q318	You are sympathetic towards the misery that clients with HIV and AIDS experience					

Section 4: Fears and perceived risks

Rate the degree of risk you believe is associated with each statement (put √)

No	Questions	No risk	Low risk	Moderate risk	High risk	Not applicable
Q401	Making beds or taking temperature of a patient living with HIV					
Q402	Dressing wounds or drawing blood from a patient living with HIV					
Q403	Shaking hands with AIDS patients having generalized body skin rash					
Q404	Recapping needles after injecting patients (Risky)					
Q405	Assisting HIV positive woman during labour and delivery					

Q406	Performing surgery for PLWHA					
Q407	Dealing with social contacts (e.g. Sharing food).					

Section 5: Health facility environment and practices

No	Questions	Alternative responses		
		At least once	Never	
Q501	How often have you observed the following at your hospital? (put √)	At least once	Never	
	Q501a. Health care providers are unwilling to care for a patient with or thought to be living with HIV			
	Q501b. Health care providers providing poor quality of care to patient with or thought to be living with HIV			
	Q501c. Health care providers talking badly about people living or thought to be living with HIV			
	Q501d. Health care providers taking extra precaution while caring for patients with HIV & AIDS			
	Q501e. A senior HCP assigning a client to a junior health care provider.			
Q502	You typically use any of the following measures when providing care for a patient living with HIV & AIDS	Yes	No	Not applicable
	Q502a. Avoid any physical contact without wearing latex gloves			
	Q502b. Wear double gloves during invasive procedures			
	Q502c. Use any special infection-control measures that you do not use with other patients			
Q503	If you suspect one of your patients to be HIV+ based on clinical signs and symptoms, do you advise him/her to be tested for HIV? Yes	1. Always 2. Frequently 3. Sometimes 4. Rarely 5. Never 6. Not applicable		
Q504	In your hospital, how often you have:	At least once	Never	

	Q504a. Experienced people talking badly about you because you care for patients living with HIV					
	Q504a. Been avoided by friends and/or family because you care for patients living with HIV					
	Q504b. Been avoided by colleagues because of your work caring for patients living with HIV					
Q505	How hesitant are HCPs in this facility to work along with a co-worker living with HIV regardless of their duties?	1. Not hesitant 2. A little hesitant 3. Somewhat hesitant 4. Very hesitant				
	At your hospital, how frequently do these happen?					
	Items	Never	Rarely	Some-times	Frequently	Always
Q506	The hospital does not perform surgeries or invasive procedures if the patient is					
Q507	The hospital care is provided to HIV+ patients only if they can afford to pay					
Q508	The hospital do not admit HIV+ patients if their health status is already very poor					
Q509	HIV+ patients are isolated in special sections of the hospital					
Q510	HCPs use protective wears (e.g. gloves, gowns, mask, etc) to do non-					
Q511	The HCPs try to cleverly deny admission of HIV+ patients by giving excuses (e.g. "no enough beds" "the					
Q512	Consultations of HIV positive clients are done in a private setting					
Q513	The HCPs do not maintain the confidentiality of HIV+ individuals					
Q514	Performing an HIV test for person without his/her informed consent					
Q515	Neglecting a woman living with HIV during labour and delivery because of					
Q516	Using additional infection prevention control procedures (e.g. double gloves) during labour and delivery with a woman living with HIV					

Q517	HCPs keep HIV-positive patients under observation without treatment plan for a few days					
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Section 6: Hospital policies, guidelines and protocols

No	Questions	Alternative responses			
Q601	Have you got adequate orientations on HIV&AIDS-related policy, guidelines and protocols before or after your graduation?	1. Yes 2. No			
Q602	In your hospital, there are facility policies, guidelines and protocols that protect the PLWHA against SAD?	1. Yes 2. No (→Q 604)			
Q603	If your answer to Q602 is 'Yes' are they currently being implemented in your hospital?	1. Yes 2. No			
Q604	If your answer to Q 603 is 'No' what are the underlying causes? (Encircle all that apply)	1. Inadequate protective materials 2. Inadequate trainings 3. Low commitment of health care providers 4. Poor institutional support 6. Others (Specify)_____			
Q605	Rate the degree to which you agree with each statement (put √)	Strongly agree	Agree	Disagree	Strongly disagree
	Q605a. I will get in trouble at work if I discriminate against patients living with HIV				
	Q605b. There are adequate supplies in my health facility that reduces my risk of becoming affected by HIV virus (e.g. gloves goggle, mask, etc)				

Many thanks for taking your precious time!!!

Questionnaire

Amharic version

መመሪያ- እባክዎን የሚከተሉትን ጥያቄዎች በጥምና አንብበው ያመኑበትን መልስ ይስጡባቸው፡፡

ክፍል 1. ዳራ

- 101. ዕድሜ _____ ዓመት
- 102. ጾታ: ወንድ O ሴት O
- 103. የትዳር ሁኔታ: ያላገባ O ያገባ O የፈታ O የሞተበት O
- 104. ሀይማኖት: ኦርቶዶክስ O ሙስሊም O ፕሮቴስታንት O ካቶሊክ O ሌላ (ይግለጹ) _____
- 105. የትምህርት ለኃላፊ: ስርቴሬኬት O ዲፕሎማ O ቢ ኤስ ሲ O ማስተር O ዶክትሬት O ሌላ (ይግለጹ) _____
- 106. ሙያዎ ምንድን ነው; ነርስ O ላቦራቶሪ ባለሙያ O ጤና መኮንን O አዋጅ ነርስ O ሀኪም O ሌላ (ይግለጹ) _____
- 107. በጤናዎ ዘርፍ ምን ያህል ዓመት ሰርተዋል? _____ ዓመት
- 108. በዚህ ሆስፒታል ምን ያህል ጊዜ ሰርተዋል? _____ ዓመት
- 109. በስራ ላይ ቆይታዎ ኤች አይ ቪ ህክምናና ክብካቤ በሚሰጥ ክሊኒክ ወይም ሆስፒታል ሰርተዋል? አዎ O የለም O
- 110. ከኤች አይ ቪ/ኤድስ ጋር የተያያዘ ስልጠና ወስደዉ ያዉቃሉ? 1. አዎ 2. የለም (Q 20ታ)
- 111. ከኤች አይ ቪና ኤድስ መድሎና ማግለል ጋር በተያያዘ ስልጠና ወስደዉ ያዉቃሉ?
1. አዎ 2. የለም

ክፍል 2 . የኤች አይ ቪና ኤድስ አስመልኮቶ ያለዉ እዉቀት

ተ.ቁ	ጥያቄዎች	ምርጫዎች	አስተያየት
201	የኤች አይ ቪና ኤድስ ግንኙነት ምንድን ነው? (የሚሰማሙበትን ሁሉ ያክብቡ)	1. ኤች አይ ቪ ከኤድስ የተለየ በሽታ ነው 2. ኤች አይ ቪ የኤድስ አምጪ ህዋስ ነው 3. የኤች አይ ቪ ከፍተኛ ደረጃ ኤድስ ነው 4. ሁሉም መልስ ናቸዉ 5. ሌላ (ይግለጹ) _____ 6. አላዉቅም	
202	አንድ ሰዉ በኤች አይ ቪ የተያዘ መሆኑን በምን ይለያሉ?	1. ባንድ ጓደኛ ያልጸና መሆኑ ሲታወቅ 2. በደም ምርመራ ቫይረሱ ያለበት	

	(የሚሰማሙበትን ሁሉ ያካብቡ)	መሆኑ ሲረጋገጥ 3. በአጭር ጊዜ የሰውነት ክብደት መቀነስ 4. በሰውነቱ ላይ የቆዳ ላይ ቁስሎች ሲታዩበት 5. ሌላ (ይገለጽ) _____ 6. አላውቅም	
203	የኤች አይ ቪ መተላለፊያ መንገድ ምንድን ነው? (የሚሰማሙበትን ሁሉ ያካብቡ)	1. በግብረ ስጋ ግንኙነት 2. ከስራ ጋር በተያያዘ ሁኔታ 3. ደህንነቱ ባልተረጋገጠ የደም ልገሳ 4. ከእናት ወደ ልጅ 5. በእናት ጡት/ወተት 6. ሌላ (ይገለጽ) _____, 7. አላውቅም	
204	የኤች አይ ቪ መከላከያ መንገድ ምንድን ነው? (የሚሰማሙበትን ሁሉ ያካብቡ)	1. ኮንዶምን ሁልጊዜ በአግባቡ መጠቀም 2. በመታቀብ 3. የህክምና መገልገያ መሳሪያዎችን በትክክል ማጽዳት/መቀቀል 4. ቫይረሱ በደሙ ያለበትን ሲያክሙ መከላከያ ማቴሪያል በማድረግ 5. ሌላ (ይገለጽ) _____ 6. አላውቅም	
205	የኤች አይ ቪ ቫይረስ ያለበት ሰው ምን ይመስላል? (የሚሰማሙበትን ሁሉ ያካብቡ)	1. በጣም ቀጭን 2. የቆዳ ላይ ቁስሎች ይታዩበታል 3. ታማሚ የሚመስል 4. በማየት ቫይረሱ ያለበትን ሰው ማወቅ አይቻልም 5. ጤናማ ሰው የሚመስል 6. ሌላ (ይገለጽ) _____ 7. አላውቅም	
206	ወደ ሆስፒታሉ የሚመጡ ሁሉም እርጉዝ እናቶች የኤች አይ ቪ ምርምራና የምክር አገልግሎት ማግኘት አለባቸው።	1. እውነት 2. ውሸት	

207	<p>ቫይረሱ በደሜ ከለባት እርጉዝ እናት ወደ ጽንሱ እንዳይተላለፍ ምን ይመክራሉ?</p> <p>(የሚስማሙበትን ሁሉ ያክብቡ)</p>	<ol style="list-style-type: none"> 1. የተመጣጠነ ምግብ 2. መከላከያ መድሃኒት (ፕሮፊላክስ) 3. መተላለፉን መከላከል አይቻልም 4. በጤና ተቋም መወለድ 5. ሌላ (ይገለጽ)_____ 6. አላውቅም 7. እኔን አይመለከትም/የሰራ ድርሻዬ አይደለም 	
208	<p>ለኤች አይ ቪ ለተጋለጠ ሕጻን አመጋገብ ምን ይመክራሉ?</p> <p>(የሚስማሙበትን ሁሉ ያክብቡ)</p>	<ol style="list-style-type: none"> 1. ፎርሙላ ምግብ 2. ለመጀመሪያ 6 ወራት የእናት ጡት ብቻ ማጥባት 3. ፎርሙላ ምግብና የእናት ጡት ማጥባት 4. ከ6 ወር በኋላ ተጨማሪ ምግብ 5. ሌላ (ይገለጽ)_____ 6. አላውቅም 	
209	<p>በቀዶ ህክምና ወቅት የሚተላለፈውን ኤች አይ ቪ ለመከላከል እንዲቻል ለማንኛውም ታካሚ ከቀዶ ህክምና በፊት የደም ምርመራ ማድረግ ተገቢ ነው</p>	<ol style="list-style-type: none"> 1. እዉነት 2. ወሸት 3. አላውቅም 	

የሚከተሉትን ጥያቄዎች በጥምና ካነበቡ በኋላ ያመኑበትን ምርጫ ያክብቡ

ተ.ቁ	ጥያቄዎች	ምርጫዎች	አስተያየት
210	<p>የጤና ባለሙያዎች ለኤች አይ ቪ ቫይረስ ይበልጥ የሚጋለጡት በስራ ላይ እያሉ በድንገት መርፌ/ሹል ነገር ሲወጋቸው ነው</p>	<ol style="list-style-type: none"> 1. እዉነት 2. ሀሰት 3. አላውቅም 	
211	<p>ኤች አይ ቪን የሚያስተላልፉ የሰውነት ፈሳሾች ደምና ያባለዘር ፈሳሾች ብቻ ናቸው</p>	<ol style="list-style-type: none"> 1. እዉነት 2. ሀሰት 3. አላውቅም 	
212	<p>ለኤች አይ ቪ ህሙማን የምንጠቀምባቸው መሳሪያዎች ለብቻ ተለይተው መቀቀል አለባቸው</p>	<ol style="list-style-type: none"> 1. እዉነት 2. ሀሰት 3. አላውቅም 	
213	<p>ቫይረሱ ላለባቸው ሰዎች የተለየ የህክምና መገ/ መሳሪያ ለብቻ ማስቀመጥ ያስፈልጋል</p>	<ol style="list-style-type: none"> 1. እዉነት 	

		2. ወሽት 3. አላወቅም	
214	በቫይረሱ የተጠቃ ሰው ብዙን ጊዜ በስድስት ወር ውስጥ antibodies ያመነጫል	1. እውነት 2. ሀሰት 3. አላወቅም	
215	ተደጋጋሚ የሴት አባለዘር yeast infections ወይም የማዕጸን ጫፍ ዕጢ በኤች አይ ቪ መጠቃትን ሊያሳይ ይችላል	1. እውነት 2. ሀሰት 3. አላወቅም	
216	አንድ ሰው እንዳጋጠሚ በመርፌ ቢወጋ ለኤች አይ ቪ የመጋለጡ ዕድል ዝቅተኛ ነው	1. አዎን 2. የለም 3. አላወቅም	
217	አንድ ሰው እንዳጋጠሚ ትንሽ በተጎዳ ቆዳው ላይ mucous membrane ላይ ደም ወይም የሰውነት ፈሳሽ ቢረጭበት ለኤች አይ ቪ የመጋለጡ ዕድል በጣም ዝቅተኛ ነው	1. አዎን 2. የለም 3. አላወቅም	
218	Universal precaution የኤች አይ ቪ ቫይረስ በተለያዩ መንገድ ወደ ጤና ሙያተኛው እንዳይተላለፍ የሚደረግ ጥንቃቄ ነው	1. አዎን 2. የለም 3. አላወቅም	
219	በስራ ቦታ በመርፌ ወይም በሹል መሳሪያ የተወጋች ነፍሰጡር ስራተኛ Post exposure prophylaxis ጽንሱን $\frac{3}{4}T > \hat{O}\zeta uSJ' < S-c\acute{E} \frac{3}{4}KvfU::$	1. አዎን 2. የለም 3. አላወቅም 4. አይመለከተኝም/የስራ ድርሻዬ አይደለም	
220	ከሰውነት አካል ውጭም ቢሆን $\frac{3}{4}$ ኤች ይ ቪ ቫይረስን መግደል ከባድ ነው	1. አዎን 2. የለም 3. አላወቅም	
221	በጤና ተቋም ውስጥ የትኞቹ የመድሎና የመገለል ሁኔታ መኖሩን ያመለክታሉ? (የሚሰማሙበትን ሁሉ ያክብቡ)	1. ለማከም ፈቃደኛ አለመሆን 2. ምስጢር አለመጠበቅ 3. በታካሚዉ አልጋ ላይ ምልክት ማድረግ 4. ከሌላው በተለየ ሁኔታ ተጨማሪ ጥንቃቄ ማድረግ 5. የአገልግሎት ማዘግየት 6. ታካሚዉን ወደ ዝቅተኛ ደረጃ ላሉ ባለሙያዎች (junior staff) መላክ 7. ያልተሟላ አገልግሎት መስጠት	

		8. ሌላ (ይገለጽ)_____	
222	በሆስፒታሉ ለመድሎና ማግለል መኖር አስተዋጽኦ የሚያደርጉ ነገሮች ምን ምን ይመስልዎታል? (የሚሰማሙበትን ሁሉ ያክብቡ)	1. የእዉቀትና የክህሎት ችግር 2. የአመለካከት ችግር 3. ደካማ የስራ አካባቢ 4. የህክምና መገል/ መሳሪያዎችና ሌሎች ግብዓቶች ችግር 5. ሌላ (ይገለጽ)_____	
223	በርስዎ ግምት መድሎና መገለልን በሆስፒታል ማስቀረት ይቻላል ?	1. አዎን 2. የለም	—801
224	ለጥያቄ 223 መልስዎ 'አዎን' ከሆነ በምን መልኩ ማስወገድ ይቻላል? (የሚሰማሙበትን ሁሉ ያክብቡ)	1. በቂ የህክምና መገል/ መሳሪያዎችና ሌሎች ግብዓቶችን በማሟላት 2. ከምረቃ በፊትና በኋላ ስልጠና በመስጠት 3. የጋራ እቅድ፣ ጠንካራ ክትትልና ግምገማ በማድረግ 4. የተሟላ የስራ አካባቢን በመፍጠር 5. ሌላ (ይገለጽ)_____	

ክፍል 3. ቫይረሱ በደሙ ያለበትን ሰዉ አስመልክቶ ያሉ አመለካከቶችና እምነቶች

የሚከተሉት ጥያቄዎች በጥሞና አንብበዉ ለመኑበት ምርጫ ላይ የ√ ምልክት ያድርጉ

ተ.ቁ	ጥያቄዎች	በጣም አይደለም	አስተማማኝ አይደለም	አልሰማማኝ ምንም	በጣም አይደለም	አላውቅም
301	በአብዛኛዉ ቫይረሱ በደማቸው ያለባቸዉ ሰዎች ሌሎችን ቢበክሉ አያስጨንቃቸዉም					
302	በአብዛኛዉ ቫይረሱ በደማቸው ያለባቸዉ ሰዎች በራሳቸው ማፈር አለባቸዉ					
303	በአብዛኛዉ ቫይረሱ በደማቸው ያለባቸዉ ሰዎች ብዙ የግብረ ስጋ ጓዳኛ የነበራቸው ናቸው					
304	በአብዛኛዉ ቫይረሱ በደማቸው ያለባቸዉ ሰዎች ለቫይረሱ ሊጋለጡ የቻሉት ሀላፊነት በጎደለዉ ባህሪያቸዉ ምክንያት ነዉ					
305	ቫይረሱ በደማቸው ያለባቸዉ እናቶች ልጅ መዉለድ ከፈለጉ ሊፈቀድላቸዉ ይገባል					
306	በአብዛኛዉ የኤች አይ ቪ/ኤድስ ህመማን መዉቀስ ያለባቸዉ ራሳቸዉን ብቻ ነዉ					

307	ቫይረሱ በደማቸው ያለባቸው ታካሚዎች ከሌሎች ታካሚዎች ጋር ባንድ ክፍል መቆየት የለባቸውም					
308	ቫይረሱ በደሙ ያለበት ሰው እንደማንኛውም ታካሚ ጥራቱን የጠበቀ ክብካቤ የማግኘት መብት አለው					
309	አንድ ባልደረባዬ ኤች አይ ቪ ያለበት መሆኑን ባረጋግጥ ጓደኝነቱን እንደነበረው የሚቀጥል አይመስለኝም					
310	ቫይረሱ በደማቸው ካለባቸው ሰዎች ውስጥ በአንዱ ኤች አይ ቪ ይተላለፍብኝ ይሆናል ብለው ይጨነቃሉ					
311	ቫይረሱ በደማቸው ያለባቸው ሰዎች ህይወት ቀላል እንዲሆን አንድ ነገር መስራት ይፈልጋሉ					
312	ቫይረሱ በደሙ ያለበትን የሰራ ባልደረባዬን ማገዝ ወይም በሱ/ሷ መታገዝ ምንም አያስጨንቀኝም					
313	ኤች አይ ቪ በደሜ ቢኖር ኖሮ ሀፍረት ይሰማኝ ነበር					
314	ኤች አይ ቪ/ኤድስ ያለበትን ሰው ለመንከባከብ ፈቃደኛ ነኝ					
315	አንዲት እርጉዝ እናት ቫይረሱ በደሚ ቢገኝባት ቤተሰቦቿ የማወቅ መብት አላቸው					
316	ኤች አይ ቪ ለመመርመር ፈቃደኛ ያልሆኑ እርጉዝ እናቶች ሀላፊነት የጎደላቸው ናቸው					
317	ኤች አይ ቪ በደሙ ያለበት ሰው ወይም የኤድስ ታካሚ እንደማንኛውም ሰው ክብር ሊሰጠው ይገባል					
318	በኤች አይ ቪ/ኤድስ ምክንያት በህመማን ላይ ላይ የሚደርሰው ስቃይ ከልብ ያሳዝንዎታል					

ክፍል 4. ፍርሃትና ስጋት

የሚከተሉት ጥያቄዎች በጥምና አንብበው የስጋትዎን ደረጃ ይግለጹ (የ√ ምልክት ያድርጉ)

ተ.ቁ	ጥያቄዎች	ምንም	መጠነኛ	መካከለኛ	ከፍተኛ	አይመለከተኝም
401	ኤች አይ ቪ በደሙ ያለበትን ሰው አልጋ ማንጠፍ ወይም የሰውነት መቀት መለካት ለኤች አይ ቪ የሚጋለጥ ዕድሉ					
402	ኤች አይ ቪ በደሙ ያለበትን ሰው ቁስል ማሸግ ወይም ደም መቅዳት ለኤች አይ ቪ የሚጋለጥ ዕድሉ					
403	የኤድስ ታካሚ ሆኖ በርካታ የቆዳ ላይ ቁስሎች የሚታዩበትን ሰው መጨበጥ ለኤች አይ ቪ የሚጋለጥ ዕድሉ					
404	ህመማንን ካከሙ በኋላ የመርፌውን ክዳን እንደገና መግጠም ለኤች አይ ቪ የሚጋለጥ ዕድሉ					

405	ኤች አይ ቪ በደሚ ያለባትን እናት ማዋለድ ለኤች አይ ቪ የማጋለጥ ዕድሉ					
406	ኤች አይ ቪ ላለበት ሰዉ ቀዶ ህክምና ማድረግ ለኤች አይቪ የማጋለጥ ዕድሉ					
407	ኤች አይ ቪ ካለበት ሰዉ ጋር ማህበራዊ ግንኙነት ማድረግ ለኤች አይቪ የማጋለጥ ዕድሉ (ለምሳሌ- አብሮ መመገብ)					

ክፍል 5. የሆስፒታል አካባቢና የሚከናወኑ ተግባራት

የሚከተሉት ጥያቄዎች በጥምና በአንብበዉ ያመኑበትን ይመልሱ/የ√ ምልክት ያድርጉበት

ተ.ቁ	ጥያቄዎች	ምርጫዎች		
501	በሆስፒታሉ ውስጥ የሚከተሉትን ለምን ያህል ጊዜ ተመልክተዋል/ታዝቧል? (√ ያድርጉ)	ቢያንስ አንድ ጊዜ	ምንም	
	501ሀ. የጤና ባለሙያዎች ቫይረሱ ያለበትን ወይም የጠረጠሩትን ታካሚ ለማከም/ለመንከባከብ ፈቃደኛ አለመሆን			
	501ለ. የጤና ባለሙያዎች ቫይረሱ ላለበት ወይም ለጠረጠሩት ታካሚ ያልተሟላ አገልግሎት መስጠት			
	501ሐ. የጤና ባለሙያዎች ቫይረሱ ስላለበት ወይም ስለጠረጠሩት ታካሚ መጥፎ ነገር ማወራት			
	501መ. የጤና ባለሙያዎች ኤች አይ ቪ/ኤድስ በደማቸዉ ያለባቸዉን ሰዎች ሲያክሙ/ሲንከባከቡ ተጨማሪ ጥንቃቄ ማድረግ			
	501ሠ . ከፍተኛ የጤና ባለሙያዎች ኤች አይ ቪ/ኤድስ በደማቸዉ ያለባቸዉ ን ሰዎች በዝቅተኛ ደረጃ ላሉ የጤና ባለሙያዎች (junior staff) መላክ			
	502	ኤች አይ ቪ /ኤድስ ተጠቂን ሲያክሙ በተለየ ሁኔታ የሚከተሉትን የመከላከያ ዘዴዎች ይጠቀማሉ	አዎን	የለም
	502ሀ. ታካሚን ያለ ጓንቲ በእጅ አለመንካት			
	502ለ. በቀዶ ህክምና ጊዜ ጓንቶችን መደራረብ			
	502ሐ. ለሌሎች ታካሚዎች የማንጠቀምባቸዉን የኢንፌክሽን መከላከያ ዘዴዎችን መጠቀም			
503	ከህሙማን ውስጥ አንዱ/ዱ የኤች አይ ቪ ቫይረስ እንዳለበት/ባት መሆኑ ቢጠረጥሩ የኤች አይ ቪ ምርመራ እንዲያደርግ ወይም እንድታደርግ ይመክራሉ?	1. ሁልጊዜ 2. አብዛኛዉን ጊዜ 3. አልፎ አልፎ 4. ጥቂት ጊዜ 5. ምንም		

		6. አይመለከተኝም/የስራ ድርሻዬ አይደለም				
504	በዚህ ሆስፒታል ምን ያህል ጊዜ፡-	ቢያንስ አንድ ጊዜ	ምንም			
	504ሀ. ቫይረሱ በደማቸው ያለባቸውን ሰዎች እየተንከባከቡ በመሆንም ሰዎች መጥፎ ቃል ተናግረዋል					
	504ለ. ቫይረሱ በደማቸው ያለባቸውን ሰዎች እየተንከባከቡ በመሆንም ጓደኞች ወይም ቤተሰብ አግለውዋል					
	504ሐ. ቫይረሱ በደማቸው ያለባቸውን ሰዎች እየተንከባከቡ በመሆንም የስራ ባልደረቦች አግለውዋል					
505	የሆስፒታሉ ጤና ባለሙያዎች ቫይረሱ በደሙ ካለበት የስራ ባልደረባ ጋር ለመስራት ወደ ኋላ ይላሉ	1. ምንም 2. አነስተኛ 3. መካከለኛ 4. ከፍተኛ				
	በዚህ ሆስፒታል የሚከተሉት ተግባራት ምን ያህል ጊዜ ይከሰታሉ? (የ√ UMIj ያድርጉ)					
	ተግባራት	ምንም	ጥቂት ጊዜ	አልፎ አልፎ	ብዙን ጊዜ	ሁልጊዜ
506	ሆስፒታሉ ቫይረሱ በደሙ ላለበት ታካሚ የቀዶ ህክምና አገልግሎት አይሰጥም					
507	ሆስፒታሉ ቫይረሱ በደሙ ላለበት/ባት ታካሚ አገልግሎት የሚሰጠው ክፍያ ከፈጸመ/ች ብቻ ነው					
508	ሆስፒታሉ በጣ ም የታመመ የኤድስ ታካሚን አያስተኛም					
509	በሆስፒታሉ ቫይረሱ በደማቸው ያለባቸው ሰዎች ለብቻ ተለይተው እንዲቆዩ ይደረጋል					
510	የሆስፒታሉ ጤና ባለሙያዎች ቫይረሱ በደማቸው ያለባቸው ነገር ግን የቆዳ ላይ ቁስል ወይም በሰውነታቸው ላይ ደም ወይም ፈሳሽ የሌለባቸውን ታካሚዎች ለመመርምር የኢንፎክሽን መከላከያዎችን ያደርጋሉ (ለምሳሌ- ጓንቲ፣ጋዎን፣ጭምብል...ወዘተ)					
511	የሆስፒታሉ ጤና ባለሙያዎች ቫይረሱ በደማቸው ያለባቸውን ሰዎች ለማስተኛት አለመፈለጋቸውን ለመግለጽ ሲሉ የተለያዩ ሰበቦችን ይደረድራሉ (ለምሳሌ-አልጋ የለም፣ ሀኪሙ የለም የመሳሰሉ)። ይገባል ግን መተኛት እንዳለባቸው አይክዱም					
512	በደሙ የኤች አይ ቪ ቫይረስ ያለበት ሰው የምክር አገልግሎት ለብቻ ይሰጠዋል					
513	የሆስፒታሉ የጤና ባለሙያዎች ቫይረሱ በደማቸው ያለባቸውን ታካሚዎች/ግለሰቦች ምስጢር አይጠብቁም					

514	በሆስፒታሉ ያለታካሚው እዉቅናና ፈቃድ የኤች ኦቲ ሺ ምርመራ ይደረጋል					
515	ወደ ሆስፒታሉ ለመወለድ የመጣች እናት ቫይረሱ በደሟ ውስጥ በመኖሩ ምክንያት በምጥና በወሊድ ሂደት ክትትል ትገፈጋለች					
516	የሆስፒታሉ የጤና ባለሙያዎች በመወለድ ላይ ላለች ኤች ኦቲ ምክንያት እናት ተጨማሪ የኢንፎክሽን መከላከያዎችን የጠቀማሉ (ለምሳሌ - ሁለት ጓጓዥን ማድረግ)					
517	የሆስፒታሉ ጤና ባለሙያዎች ቫይረሱ በደማቸው ያለባቸውን ሰዎች ያለ ህክምና እቅድ (treatment plan) ለተወሰነ ቀን ይቆያሉ።					

ክፍል 6: የሆስፒታል ፖሊሲ፣ መመሪያዎችና የአሰራር ማኑዋሎች

የሚከተሉት ጥያቄዎች በጥምና አንብበው ያመኑበትን ምርጫ ያከብቡ

ተ.ቁ	ጥያቄዎች	ምርጫዎች
601	ከመመሪያዎች በፊት ወይም በኋላ ከኤች ኦቲ ሺ/ኤድስ ጋር ስለተያየዙ ፖሊሲዎችንና መመሪያዎችን በተመለከተ በቂ እዉቅና ተፈጥሮልዎታል?	1. አዎን 2. የለም
602	በሆስፒታሉ ቫይረሱ በደማቸው ያለባቸውን ሰዎችን ከመድለዎና ከማግለል ለመከላከል የሚያግዙ በቂ የተቋም ፖሊሲ፣ መመሪያዎችና የአሰራር ማኑዋሎች አሉ?	1. አዎን 2. የለም (604)
603	ለ602 ጥያቄ መልስዎ 'አዎን' ከሆነ አሁን በስራ እየተተገበሩ ናቸው ወይ?	1. አዎን 2. የለም
604	ለ603 ጥያቄ መልስዎ 'የለም' ከሆነ ምክንያቱ ሆኖ ሆኖ ጥቅም ላይ ያውጥታል? (የሚሰማሙበትን ሁሉ ያከብቡ)	1. የኢንፎክሽን መከላከያ ማቴሪያሎች እጥረት 2. የስልጠናዎች በቂ አለመሆን 3. የባለሙያ ቁርጠኝነት ማነስ 4. የተቋሙ ድጋፍ 'ዎ'— SJ" 5. ሌላ (ይገለጹ) _____
605	ከዚህ በታች ላሉት ጥያቄዎች የሚሰማሙትን ደረጃ ይስጡ (የፍ ምልክት ያድርጉ)	በጣም እስማማለሁ
	605ለ. በስራ ቦታዬ ቫይረሱ በደሙ ያለበትን ሰው ባገል ችግር ውስጥ እገባለሁ	አልስማማም
	605ሐ. በዚህ ሆስፒታል በኤች ኦቲ ሺ ቫይረስ አንዳልጠቀስ የሚያስችል በቂ የሆነ ግብዓት አለ	በጣም አልስማማም

ጊዜዎን ወስደው መጠይቁን ስለምሉልን ከልብ እናመሰግናለን!!!

Annexure G: Guiding questions for indepth interview

English version

Name of the hospital_____

Date of the interview_____

Time started_____

Time ended_____

1. Background information

Sex_____Age_____Occupation_____Ethnicity_____

Level of education_____Marital status_____Religion_____

2. When did you know your sero status? _____

3. When have you been admitted to this hospital? _____

4. Have you faced any form of HIV&AIDS–related stigma and discrimination (SAD) in this hospital after your admission? _____

5. If Q4 is 'Yes', what type of SAD have you experienced in this hospital?

6. What type of health care providers do you think show more SAD in this hospital?

7. What are the factors for the existence of the SAD in this hospital?

8. Do you think HIV&AIDS-related SAD is a problem in this hospital? a) Yes b) No

9. If Q8 is 'Yes', what do you recommend to alleviate the problems of the SAD in the hospital?_____

10. Anything you want to add_____

Thank you so much for your participation!!!

Guiding questions for indepth interview

Amharic version

የጳጳሳዊ ገጽ _____

የሰጠው ግብርን _____

የሰጠው ግብርን _____

የሰጠው ግብርን _____

1. ርዕስ

1.1 የገጽ _____

1.5 የገጽ/የገጽ _____

1.2 የገጽ _____

1.4 የገጽ ለገጽ ገጽ _____

1.3 የገጽ _____

1.5 ገጽ ገጽ _____

1.4 የገጽ _____

2. የገጽ ገጽ ገጽ _____

3. የገጽ ገጽ ገጽ ገጽ _____

4. የገጽ ገጽ ገጽ ገጽ ገጽ ገጽ _____

5. የገጽ ገጽ ገጽ ገጽ ገጽ ገጽ _____

6. የገጽ ገጽ ገጽ ገጽ ገጽ ገጽ ገጽ _____

7. የገጽ ገጽ ገጽ ገጽ ገጽ ገጽ ገጽ _____

8. የገጽ ገጽ ገጽ ገጽ ገጽ ገጽ ገጽ _____

9. የገጽ ገጽ ገጽ ገጽ ገጽ ገጽ ገጽ _____

10. የገጽ ገጽ ገጽ ገጽ ገጽ _____

የገጽ ገጽ ገጽ ገጽ ገጽ ገጽ ገጽ