

**EFFECT OF HIV/AIDS EDUCATION PROGRAMS ON REDUCING RISKY
SEXUAL BEHAVIOURS AMONG ADOLESCENTS IN SECONDARY
SCHOOLS IN PEMBA: A CASE OF CHAKECHAKE DISTRICT**

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
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CERTIFICATION

The undersigned certifies that she has read and hereby recommends for acceptance by The Open University of Tanzania, a dissertation entitled **“The Contribution of HIV/AIDS Education Programs on Reducing Risky Sexual Behaviours among Adolescents in Secondary Schools in Pemba: A Case of ChakeChake District”**, in partial fulfilment of the requirements for the Degree of Master of Arts in Monitoring and Evaluation of the Open University of Tanzania.

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Date

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DECLARATION

I, **Sharifa Hamad Shapandu**, declare that the work presented in this dissertation is original. It has never been presented to any other university or institution. Where other people's works have been used, references have been provided. It is in this regard that I declare this work as originally mine. It is hereby presented in partial fulfilment of the requirements for the Degree of Master of Arts in Monitoring and Evaluation (MAME) of the Open University of Tanzania.

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Signature

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Date

DEDICATION

I dedicate this work to my beloved mother for her continued support, love, care, and spiritual prayers towards the accomplishment of this research. Also to my entire family for their patience and prayers towards my studies.

ACKNOWLEDGMENT

I would like to thank Almighty Allah (SW) for giving me the courage and the determination, as well as guidance in preparing this research, despite all difficulties.

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ABSTRACT

This study investigated, using a cross-sectional design to assess the contribution of HIV/AIDS education programs on reducing risky sexual behaviors among adolescents in Secondary Schools in Pemba, a case of Chake-Chake District, Pemba. 132 respondents were used for the study. Two research-designed questions were used to elicit the required data. The data were collected through two instruments: interviews and questionnaires. The data were analyzed qualitatively and the findings were presented as descriptive or narrations of tables and graphs. The specific objectives were: to identify the HIV/AIDS education interventions designed programs on reducing risky sexual behaviors among adolescents in Secondary Schools implemented at Chake Chake District, to assess ways in which these interventions of HIV/AIDS education interventions designed programs on reducing risky sexual behaviors among adolescents in Secondary Schools implemented at Chake chake District and to identify barriers based on HIV/AIDS education interventions designed programs on reducing risky sexual behaviors among adolescents in Secondary Schools in implemented at Chake chake District. The study indicates that many of the respondents participated in training about risk behavior of adolescents in Secondary school, As a result, the study implies that the Programs on Sexual Risk Behaviors among adolescents in Secondary School generally indicate that these programs were far more likely to have a negative impact on behavior than a positive impact. Also, there is a need to advocate more HIV/AIDS education intervention programs in school that could promotes values and attitude that could be able to say yes to life and no to premature unacceptable sex and sexual experimentation. Furthermore, the study identified major challenges towards effective implementation of HIV/AIDS education intervention programs in Secondary Schools as lack sufficient quality and quantity of health workers to manage the HIV epidemic in implementing evidence-based interventions to improve health outcomes. Therefore, on the basis of the key findings, the researcher drew conclusions and made recommendations that may help overcome problems and concerns identified in the study.

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LIST OF ABBREVIATIONS

ABYM	Adolescent Boys and Youth Mens
AGYW	Adolescent Girls and Youth Women
AIDS	Aquired Immunodeficiency Sydrome
ARRM	AIDS Risk Reduction Model
FGD	Focus Group Discussion
FP	Foreign Policy
HIV	Human Immunodeficiency Virus
LBSE	Life-skills-Based Education
NIH	National Institute of Health
NGO	Non-Government Organization
RTIs	Respiratory Tract Infections
SRH	Sexual and Reproductive Health
SRHR	Sexual and Reproductive Health and Rights
STD	Sexual Transmitted Desease
STIs	Sexual Transmitted Infections
TACAIDS	Tanzania Commission for AIDs
UMATI	Uzazi na Malezi Bora Tanzania
UNAIDs	United Nations Programme on HIV/AIDS
UNESCO	United Nations Educational Scientific and Cultural Organization
URT	United Republic of Tanzania
WHO	World Health Organization
ZAC	Zanzibar Aids Commission
ZIHHTLP	Zanzibar Integrated HIV, Hepatitis, TB and Leprosy Programme

CHAPTER ONE

INTRODUCTION

1.1 Background Information

HIV/AIDS remain a significant global challenges, particularly in the sub-Saharan African. In Tanzania, the government recognized the urgency of addressing this this epidemic and established various programs aimed at reducing HIV transmission among adolescents. Tanzania Commission for AIDS (TACAIDS), established in 2000 further supports these efforts by community awareness and knowledge about HIV/AIDS. The introduction of the education program as the primary pillar of HIV/AIDs reduction aimes to empower students with the information necessary to make informed decisions regarding sexual health and relationships (TACAIDS 2003).

The Ministry of education, Science and Technology introduced the HIV/AIDS education program in schools in 2004. This initiatives aimed to streamline actions and response from eduction sector to combat HIV/AIDS among young people and employees in the workplace. Expected outcomes of these education programs include a reduction in a new HIV infection, increased awareness of HIV Prevention methods, and the promotion of safer sexual behaviors among adolescents. Despite these efforts, the effectiveness of these programs in chnging risky behaviour remain a concern. (URT, 2009). Risky sexual behaviors among adolecents, including premarital sex, inconsistent condom use, and early sexual initiation, are significant factors contributing to the spread of HIV/AIDS. In sub-Saharan Africa, data indicate that adolescent girls are two to three times more likely to be infected with HIV than their

male counterparts are. Peer influence and lack of comprehensive knowledge about HIV/AIDS often exacerbate these risks.

In Zanzibar, recent survey highlighted that despite the introduction of HIV/AIDS education programs, there is still a concerning prevalence of risky sexual behaviors among adolescents. For example, a survey conducted by Zanzibar Integrated HIV, Hepatitis, TB and Leprosy Programme (ZIHHTLP) in Chake Chake District in 2022, revealed low awareness of HIV infection among secondary school students, even though the actual rate of HIV/AIDS infection in the region was relatively low. The Survey indicated that, 33.2% of the adolescents aged 15-24 reported having multiple sexual partners in the past year. Among sexually active youth in this age group, fewer than 50% reported consistent condom use. Furthermore, the same survey indicated that only 45.2% of young people aged 15-24 possessed comprehensive knowledge of HIV/AIDS defined as being able to correctly identify two ways of preventing HIV and rejecting common misconceptions. Meanwhile, 77.1% of youth reported knowing that condom use reduces the risk of HIV infections. Among young Women, 60.18% had been tested for HIV, with access to health care, marital status and awareness influencing testing rates.

The UNICEF report 2023 indicates that HIV/AIDS education program adds further insight: while 68% of Secondary school students in Chakechake District reported having heard HIV/AIDS, only 38% could correctly identify methods of prevention beyond abstinence. This significant gap between basic awareness and comprehensive understanding suggest a failure of current sexuality education programs to deeply

engage adolescents with accurate practical knowledge. This knowledge gap is a major contributor to ongoing risky behaviors despite the formal education.

In term of gender disparities, Zanzibar AIDS Commission (ZAC) 2023 highlighted that HIV prevalence among adolescent girls aged 15-24 at Chake chake stood at 1.3% more than double the 0.6% rate among boys in same age group, this reflects structural vulnerabilities that put girls at higher risk including limited negotiation power in relationship, societal expectations and economic dependence.

On a positive note, peer-led education and community engagement initiatives have shown promising outcomes. Civil society organizations such as ZAPHA+ have taken the lead in implementing peer education model aiming at increasing awareness, building life skills and improving youth confidence in negotiating safer sex. By 2022 over 92,000 adolescents across Chake chake District had participated in peer-session focusing on HIV prevention reproductive health and life planning underscoring the value of youth- centered approaches (ZAPHA+ 2022).

Despite these efforts, the alarming rates of risky sexual behaviors among adolescents and the apparent ineffectiveness of existing education programs in reducing these behaviors underscore the need to assess the contribution of these programs. The lack of specific research confusing on primary and secondary school students in Chake chake District further emphasis the necessity of this investigation, understanding how HIV/AIDS education influences adolescent behavior will provide valuable insights into the effectiveness of current interventions and inform future strategies to enhance

sexual education. This study therefore seeks to assess the contribution of HIV/AIDS education programs in reducing risky sexual behaviors among adolescents in secondary schools in Chake chake Pemba Zanzibar. This disconnect suggests that the presence of education programs alone is insufficient in mitigating risky behaviors. Moreover, factors such as peer pressure, alcohol abuse, and a lack of comprehensive education contribute to these behaviors. Many students remain unaware of the serious implications of engaging in risky sexual activities, which perpetuates the cycle of HIV transmission among young people.

Given the alarming rates of risky sexual among adolescent and the apparent ineffectiveness of existing education programs in reducing these behaviors, it is crucial to assess the actual contribution of these programs. The Lack of specific research focusing on primary and secondary school students in Chake chake District further underscores the need for this investigation. Understanding how HIV/AIDS education influences adolescent behaviors will provide valuable insights into the effectiveness of current interventions and inform future strategies to enhance sexual health education. The researcher therefore want to assess the contribution of HIV/AIDS education programs on reducing risk sexual behaviors among adolescents in secondary schools in Pemba-Zanzibar.

1.2 Statement of the Problem

Despite the Government of Zanzibar' efforts to enhance HIV /AIDS education program in secondary schools within Chake Chake District, there are indication that these programs have not deliver the intended outcomes. Established in 2004, these

initiatives aimed to increase awareness among students regarding the knowledge, skills and attitudes necessary for making informed decisions about HIV/AIDS (UNESCO, 2008, Plummer *et al.*, 2006). At the time of implementation, the goal was to significantly reduce risky sexual behaviours among adolescents. However, recent data indicates that the situation has not improved as expected.

According to 2019 survey report by Centre of Disease Control and Prevention , 25.9% of male and 21.6 of female of secondary students reported having two or more sexual partners in the last six months. Alarming only 9.4% of female and 8.6% of the male students reported consistent condom use condom during the same period. Furthermore, Tanzania Health Impact Survey 2016-17 showed that, about more than 1 million are living with HIV with approximately 58% lacking lacking knowledge about HIV prevention. This reflects persistently low levels of awareness among young people aged 15-24, particularly in school settings, despite the existence of HIV/AIDS education programs.

The current situation regarding HIV/AIDS awareness and prevention education among adolescents in Zanzibar is controversial issues, as there is no significant evidence of reduced rates of sexually transmitted infections (STIs) or unplanned pregnancies. Local health reports indicate that the incidence of STIs among adolescents has remained stable, with rates consistently reported at approximately 10-15% among sexually active youth, while unplanned pregnancies among this demographic account for about 30% of all pregnancies in Zanzibar (Zanzibar Ministry of Health, 2023; WHO, 2022). This data suggests that current educational

programs may not be fulfilling their objectives, as many students continue to engage in high-risk sexual behaviors, complicating efforts to combat HIV/AIDS in the region.

Additionally, the ongoing prevalence of unplanned pregnancies among adolescents constitutes a notable percentage of all pregnancies in Zanzibar. This situation suggests that the programs may not be fulfilling their original objectives, as many students continue to exhibit risky sexual behaviors, complicating the fight against HIV/AIDS in the region. Given these ongoing challenges, this study aims to assess the contribution of HIV/AIDS education programs in reducing risky sexual behaviors among adolescents in secondary schools in Pemba, Zanzibar. By examining performance indicators from the time of the programs' establishment compared to the status, this research will provide critical insights into their effectiveness. Specifically, it will analyze changes in the percentage of students engaging in risky behaviors and the overall impact of these education initiatives on their sexual health decisions. This evaluation is essential for informing future strategies and enhancing the efficacy of HIV/AIDS education in the region.

1.3 Objective of the Study

1.3.1 General Objectives

The general objective of this study was to assess the contribution of HIV/AIDS education programs on reducing risky sexual behaviors among adolescents in secondary schools at Chake chake District, Pemba-Zanzibar.

1.3.2 Specific Objectives

Specific objective of the study were:

- i. To identify risky sexual behaviours prevailing among adolescents in secondary schools at Chake Chake District, Pemba.
- ii. To assess HIV/AIDS prevention awareness among adolescents of secondary schools in Chake Chake District.
- iii. To identify the key gaps and challenges in the delivery and reception of HIV/AIDS education programs that may hinder their impact on adolescents sexual health behavior.

1.4 Research Questions

- i. What are the risky sexual behaviours prevailing among adolescents in secondary schools at Chake Chake District?
- ii. What is the level of HIV/AIDS prevention awareness among adolescents of secondary schools in Chake Chake District?
- iii. What are the major challenges and gaps affected the effectiveness of HIV/AIDS education programs in promoting safer sexual behaviors among adolescents?

1.5 Scope of the Study

This study focuses on students and teachers from secondary schools in ChakeChake District Pemba, an area characterized by both the presence of HIV/AIDS education programs and a significant risk of HIV infection. It aims to assess the level of awareness regarding HIV/AIDS prevention among respondents, identify risky sexual behaviors practiced by both students and teachers, and explore the factors

contributing to these behaviors. By examining these elements, the research seeks to provide a comprehensive understanding of the effectiveness of current education programs and the influences that shape sexual health behaviors, ultimately guiding future strategies to enhance HIV prevention efforts in the region.

CHAPTER TWO

LITERATURE REVIEW

2.1 Definition of the Terms

HIV/AIDS: HIV as it stands for human immunodeficiency virus, is the virus that causes HIV infection. The abbreviation “HIV” can refer to the virus or HIV infection. AIDS stands for acquired immunodeficiency syndrome represents the most advanced stage of HIV infection. This study adopted Rushahu's definition, (2015) which emphasizes the comprehensive nature of HIV/AIDS education as not only imparting knowledge about the virus but also fostering positive attitudes and behaviors that reduce risk.

By utilizing this definition, the research aims to evaluate the effectiveness of current interventions in secondary schools in Chake Chake District, focusing on both awareness and behavior change among students and teachers. This approach allows for a more holistic understanding of how education can impact risky sexual behaviors and ultimately contribute to better health outcomes in the community. The current HIV prevalence (NASA, 2021), it is estimated that 10,000 people are living with HIV virus in Zanzibar including Chake chake District.

The available evidence shows the HIV epidemic in Zanzibar varies by sex of the individual and Island of residence. HIV prevalence is higher among women compared to men (1.1% and 0.9% respectively) and higher in Unguja compared to Pemba (0.8% by 0.3 %) Island. Also among young Zanzibaris aged 15-24 years

whose HIV prevalence is estimated at 0.2 percent, there are three females infected for male (0.3% Vs 0.1% respectively) in this age bracket.

HIV/AIDS Program: UNAIDS defines the HIV/AIDS Program as a program with activities that provide awareness and education that aims to halt the transmission of HIV. It includes HIV/AIDS workshops, clubs, subjects, seminars and talks events conducted for creating awareness and motivations towards HIV/AIDS prevention and treatments. HIV prevention programs usually focus on preventing the transmission of HIV through a complementary combination of behavioral, biomedical and structural strategies, (the study Adopt UNAIDS. 2017).

People and communities of Zanzibar have little knowledge and education on HIV/AIDS. Many Programs are designed to support HIV/AIDS education in the communities including schools with detailed information about the prevention of infection, how and where to get confidential and reliable testing on the island, and links to information on how to live and cope with HIV. These programme aim at skills transfer next to leaving behind materials and methods that can be used in terms of sustainability.

Sexually Transmitted Infection (STI): Sexually transmitted infection (*STI*) is an infection caused by having sex which means can be transmitted from one person to another through sexual contact. Also STI can be transferred through the use of sexual toys such as vibrators. The term "sexually transmitted infection (STI)" corresponds to and is meant to replace the older term "sexually Transmitted Disease (STD)". (The

study Adopt the WHO definition, 2013). The goal of Sexual Transmitted Infections (STIs) and other Reproductive Tract Infections (RTIs) services is to reduce new HIV and STIs and to provide care and treatment to all people in Zanzibar. STI's and RTI's are highly prevalent in many communities of Zanzibar including Chake chake District where the services are provided in all 231 (148 in Unguja and 83 in Pemba) health facilities in Zanzibar. (Zanzibar Ministry of Health, 2020).

Sexual Education: Sex education is the instructional information relating to human sexuality aimed to generate knowledge, attitude and practices including sexual reproduction, age of consent and reproductive health. Sex education that covers all of these aspects is known as comprehensive sex education. Sex education can be provided by school programs, public health campaigns as well as parents or caregivers (the study adopt the UNESCO, 2018).

Formal life skills education, including topics related to sexuality, was developed in the 1990s to prevent HIV/AIDS as well as a method to strengthen 'good' behaviors among students in schools. In Zanzibar, life skills education interventions have duplicated in recent years. However, it can still be difficult to discuss topics related to sexuality and harmful traditions such as early marriage, unintended pregnancies, and the shame of condom use is perpetuated. Children in Zanzibar may therefore approach adulthood with confusion and lack of knowledge. Teachers play an important, yet difficult, role to deliver formal life skills and sexuality education.

Risk Sexual Behavior: The study adopts Tsala definition (2014): Risky sexual

behavior is the personal practices that can increase the probability of that person who engages in sexual practices with another person who is infected with sexually transmitted infections to be infected too. Risky sexual behavior includes sex without the use of a condom, mouth and genital contact, anal sex as well as starting sexual activities at a young age.

Risky sexual behaviors acquired during adolescence, such as early sexual initiation, unprotected sexual intercourse, and multiple sexual partners, can place young people at risk of HIV infections and sexually transmitted infections (STIs), teenage pregnancy and abortion complications. In Zanzibar, it was reported that adolescents like to engage in uncontrolled leisure activities, entertainment, music, alcohol, and sexual intercourse at a young age and with different people (Kohi, 2014). By the age of 18 years, 20% of the population in Zanzibar reported to have had practiced sexual intercourse, and the HIV reports show that about 114 (43%) out of 265 people who have been infected are young people of age 15 and 24 years (NBS, 2014). Although these young ones could have been infected from birth, they may be a source of HIV transmission if they get involved in unprotected sex).

2.2 Theoretical Review

Theories on HIV and AIDS Education Programs in preventing HIV infection among students in schools.

2.2.1 Health Belief Model

The theory referenced is likely the Health Belief Model (HBM), which emphasizes how attitudes and beliefs influence health-related behaviors. In relation to your study

variables HIV/AIDS education interventions, risky sexual behaviors, and barriers to effective education the HBM suggests that adolescents' perceptions of their susceptibility to HIV/AIDS significantly impact their willingness to engage in protective behaviors, such as seeking education and practicing safe sex. Furthermore, if students perceive high risks associated with their sexual behaviors, they may be more motivated to adopt safer practices. However, the model also highlights that perceived barrier, such as stigma or lack of access to resources, can hinder action, even when risk is acknowledged. Therefore, by applying the HBM, your study can explore how these psychological factors affect the effectiveness of HIV/AIDS education programs in reducing risky behaviors among adolescents in ChakeChake District. (Janz, 2002).

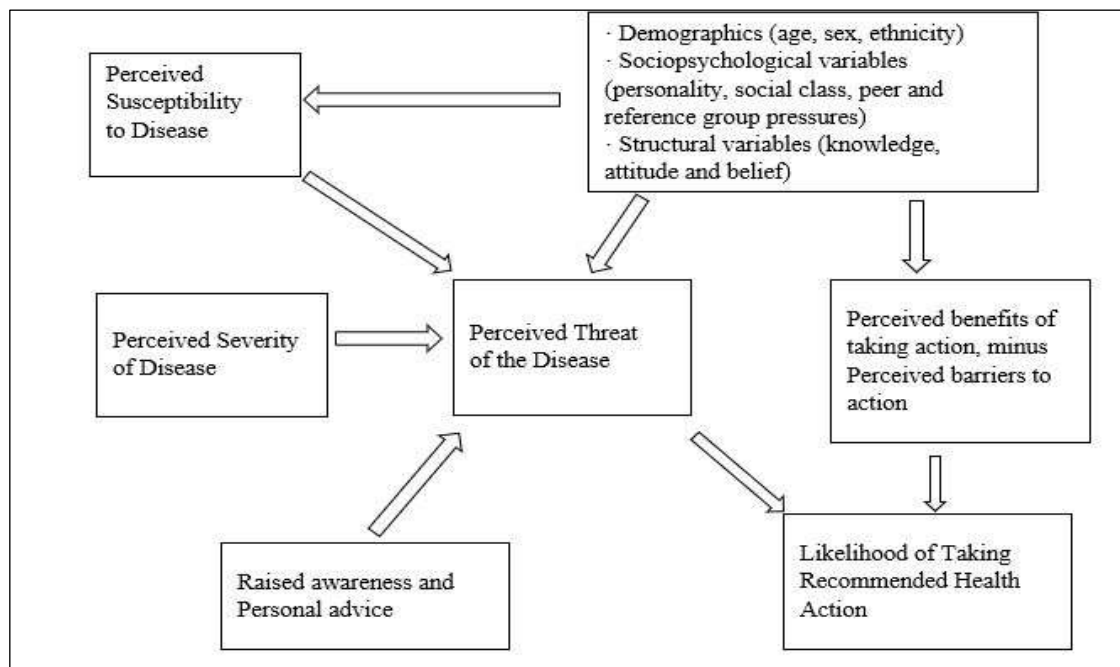


Figure 2.1: Health Belief Model

Source: Health Belief Model, adopted and modified from Rosenstock, (1974)

The AIDS Risk Reduction Model (ARRM) is directly applicable to the study's variables, as it emphasizes the relationship between individual behaviors and the various factors that influence those behaviors in the context of HIV/AIDS prevention. The model's first stage, behavior labeling, aligns with the variable of awareness regarding HIV transmission, as recognizing risky behaviors is crucial for initiating change.

The second stage, commitment to change, relates to adolescents' attitudes and motivations to alter their sexual practices based on their perceived susceptibility to HIV, which ties into the variable of perceived risk. Finally, the action stage corresponds with the implementation of safe practices, such as condom use, which is a key variable in the study.

Additionally, factors like social norms, sexual communication, and self-efficacy central to the ARRM are essential variables in understanding the decision-making processes of both students and teachers in ChakeChake District. Thus, the ARRM provides a comprehensive framework to analyze how these variables interact to influence risky sexual behaviors among adolescents.

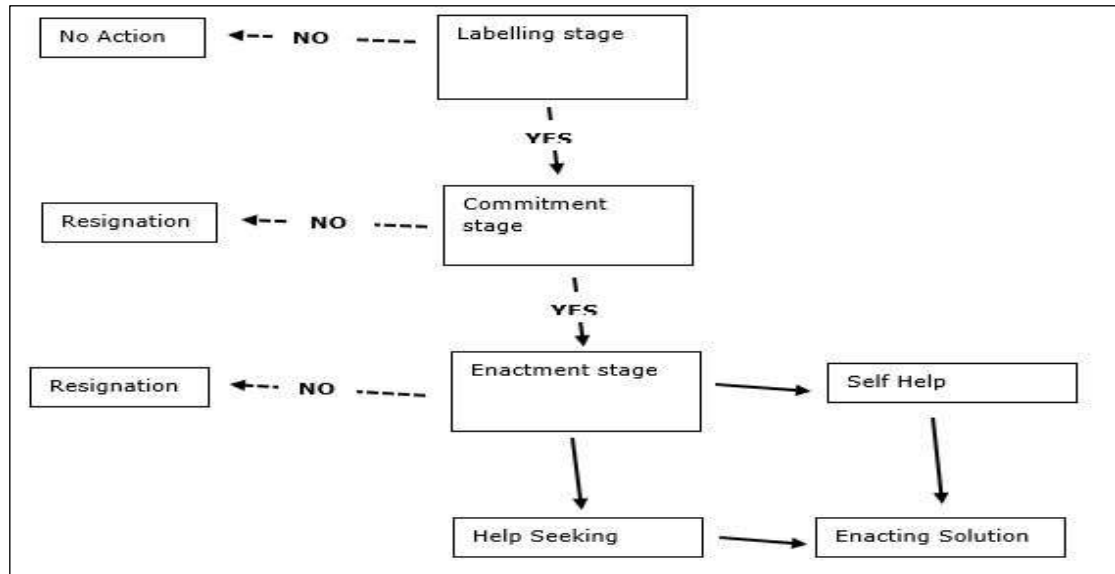


Figure 2.2: AIDS Risk Reduction Model (ARRM)

Source: AIDS Risk Reduction Model, adopted and modified from Catania *et al* (1990).

2.2.2 Theory of Reasoned Action

In the mid-1960s the theory of reasoned action introduced by Fishbein and Ajzen, to explain assumptions that human beings are usually quite rational and make systematic use of the information available to them. It guides activities focus on attitudes about risk-reduction, response to social norms, and intentions to change risky behaviours. This model is relevant in this study because it explains the idea of behavioral intention as a determinant of health behavior and the implications of individual actions in different contexts over a specified time on deciding to engage or not engage in a given behavior.

The theory also focuses on the function of two basic determinants of a person's intention as a role in determining whether or not the behaviour will occur. Those

determinants are attitude means toward the behavior and subjective norms means social influence. For example, “attitudes could be for a person to start using condoms, his/her attitude might be having sex with condoms is just as good as having sex without condoms’, and subjective norms (or the normative belief) could be most of my peers are using condoms, they would expect me to do so as well” (Fishbein & Ajzen, 2010).

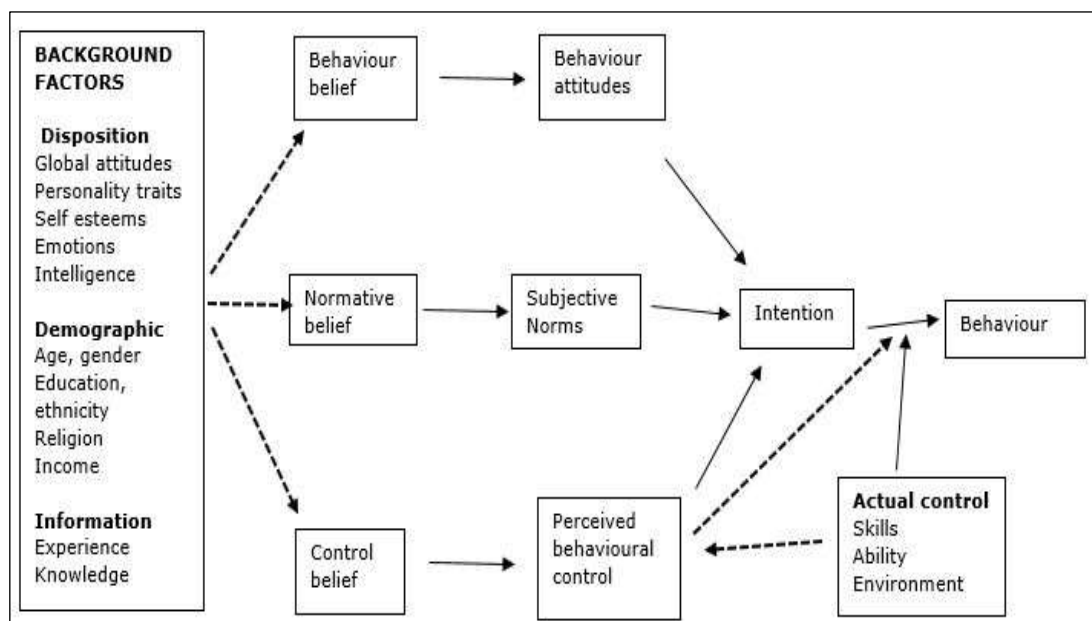


Figure 2.3: Theory of reasoned Action

Source: Reasoned action approach, adopted from Fishbein, M., & Ajzen, I. (2010).

2.3 Empirical Literature Review

2.3.1 Identification of Risky Sexual Behaviours among Adolescents in Secondary Schools.

NIH (2013) A cross sectional study design was conducted in five 5 randomly selected preparatory schools a total of 273 students to assess the sexual risk behaviour and associated factors, The finding indicated that 42.1% had risky sexual

behavior, 30.8% report that they had two or more sexual partners, 11.2% students used condom and 37% were consumed alcohol.

UNESCO (2009) in the study by UNESCO, conducted across multiple countries including Tanzania, the effectiveness of HIV/AIDS education interventions was evaluated in reducing risky sexual behaviors among adolescents. Using a mixed-methods approach, the researcher's surveyed approximately 1,200 young people aged 15-24 and conducted focus group discussions. The findings indicated that students who participated in comprehensive HIV/AIDS education reported significantly higher knowledge levels about HIV transmission and prevention. Additionally, there was a notable decrease in self-reported risky behaviors, such as unprotected sex and multiple sexual partners, suggesting that these interventions effectively empowered youth to make informed decisions.

In a study conducted by Rushahu (2015), the effectiveness of HIV/AIDS education programs in shaping student behaviour and awareness was assessed through a mixed-methods approach in Tanzania. The research involved 400 secondary school students and utilized surveys, interviews, and focus group discussions to gather comprehensive data on their attitudes toward HIV/AIDS after participating in various educational interventions. The findings revealed that programs integrating life-skills-based education (LBSE) not only improved students' knowledge and awareness about HIV/AIDS but also fostered more positive attitudes and reduced stigma associated with the disease. The study emphasized that engaging students through interactive and participatory methods significantly enhanced their willingness to discuss HIV-related topics openly and adopt safer behaviors.

2.3.2 Assessment of Prevention Awareness among Adolescents of Secondary Schools in ChakeChake District.

Kamala and Aboud (2006) use cross-sectional study in Kagera, Tanzania, aimed to assess the knowledge, attitudes, and practices related to HIV prevention among 400 secondary school students. The methodology involved structured questionnaires that evaluated students' understanding of HIV transmission and prevention methods. The results revealed that while a majority of students had a basic understanding of HIV/AIDS, misconceptions persisted, particularly regarding transmission routes. The study highlighted a correlation between improved knowledge from education interventions and a reduction in risky sexual behaviors, although it underscored the need for more comprehensive programs to address remaining gaps in knowledge and misconceptions.

Sarma et al. (2017) conducted a critical review focusing on the effectiveness of HIV/AIDS prevention programs targeting adolescent sexuality issues, including various interventions implemented in Tanzania. The review synthesized data from multiple studies and program evaluations, finding that programs integrating life skills and participatory techniques were more effective in changing attitudes and behaviors. The results emphasized that while knowledge about HIV/AIDS was critical, behavior change was influenced by factors such as peer influence and access to resources. The review concluded that tailored interventions that address specific adolescent needs significantly reduced risky sexual behaviors and improved overall awareness and understanding of HIV/AIDS among youth.

URT (2001) under the Ministry of Education implemented HIV/AIDS educational programs, integrating them into the school curriculum to assess their impact on student awareness. The evaluation involved over 1,000 students from multiple secondary schools and employed a quantitative methodology, using pre- and post-intervention surveys to measure changes in attitudes. Results indicated a notable shift in student perceptions, with an increase in positive attitudes toward individuals living with HIV/AIDS and improved understanding of prevention methods. The study concluded that comprehensive program design, including culturally relevant content and interactive teaching methods, plays a crucial role in increasing awareness and shaping favorable attitudes among adolescents.

Gao et al. (2012) conducted a study focusing on student attitudes toward HIV/AIDS educational programs in secondary schools, involving a sample of 500 students. The researchers utilized qualitative methods, including interviews and focus groups, to assess how program design influences student engagement and attitudes. The findings showed that when programs were tailored to align with students' interests and included interactive elements, students displayed more positive attitudes toward HIV prevention and were more likely to engage in discussions about sexual health. This highlights the importance of student-centered program design in fostering an open and informed environment regarding HIV/AIDS.

WHO (2006) conducted a study examining students' perceptions of HIV/AIDS, focusing on misconceptions that framed the disease as a problem exclusive to certain demographics, such as commercial sex workers. The research, which surveyed over

1,500 students across several countries, utilized a quantitative methodology with structured questionnaires. The results revealed a significant lack of proper health information, necessitating comprehensive education that addresses these misconceptions. The study emphasized that educational programs must promote healthy lifestyles and inclusivity in discussions around HIV/AIDS to effectively combat stigma and misinformation.

2.3.3 Identification of Barriers to Effective HIV/AIDS Education Interventions

In a study conducted by Danjin (2009), the impact of resource availability and teacher competency on the implementation of HIV prevention programs was assessed in Nigeria. The research involved surveys and interviews with educators and program administrators across several schools. Findings indicated that inadequate resources and insufficient training for teachers significantly hindered the effective delivery of HIV education. The study concluded that enhancing teacher competency and ensuring adequate resources are essential for improving program effectiveness.

Kharsany (2012) examined the need for tailored HIV prevention programs that address the developmental stages of adolescents, focusing on both in-school and out-of-school youth. The study was conducted in South Africa and included a sample of 300 adolescents, utilizing qualitative methods such as focus group discussions. The results highlighted that programs must be developmentally appropriate and consider the specific challenges faced by out-of-school youth to be effective. The findings underscored the necessity of creating inclusive programs that meet diverse youth needs.

Rushahu (2015) explored the relationship between HIV knowledge and behavior change among adolescents in Tanzania through a quantitative study involving 500 secondary school students. Surveys were used to assess students' awareness and corresponding behaviors regarding HIV prevention. The study revealed that, despite high levels of awareness, there was no significant correlation between knowledge and actual behavior change. This indicated that factors such as access to reproductive health services and supportive environments are critical for effective intervention.

Folasayo et al. (2017) and Anwar et al. (2010) conducted complementary studies focusing on misconceptions about STI prevention and the lack of sexual communication skills among youth. Their research involved a combined sample of 600 adolescents across various regions, utilizing both surveys and interviews to gather data. Findings indicated that prevalent misconceptions about STI transmission and prevention methods hindered effective protective behaviors. Additionally, the lack of communication skills regarding sexual health further complicated efforts to mitigate risky behaviors, emphasizing the need for comprehensive educational strategies that address these barriers.

2.4 Research Gap

Despite the significant progress made in HIV/AIDS education interventions, several research gaps remain. While studies have shown the effectiveness of comprehensive education programs in improving knowledge and reducing risky behaviors, there is a persistent lack of understanding regarding the long-term impacts of these interventions on actual behavior change. Specifically, the studies indicate that while

students may report increased awareness, there is often no direct correlation between knowledge and the adoption of safer sexual practices. Additionally, barriers such as misconceptions about HIV transmission, insufficient resources, and the need for tailored programs for diverse youth populations have been identified but require further exploration. Research that delves deeper into the specific factors influencing behavior change, such as socio-economic status, cultural beliefs, and access to reproductive health services, is crucial. Moreover, there is a need for longitudinal studies to assess the sustainability of positive changes in attitudes and behaviors resulting from HIV/AIDS education interventions, particularly in varying contexts across different regions.

2.5 Conceptual Framework

This conceptual framework mentions independent and dependent variables to be studied in this study which contribute in the HIV/AIDS education programs. The independent variables are Risk Reduction, Attitude Shift, Implementation Challenges with components of Program Components, Program designed Contents, Program adapting interventions, Program durations, Stakeholders' parameters, Program environments and influence and Program reporting mechanisms align with the dependent variables which is Program evidenced benefits and theory of change.

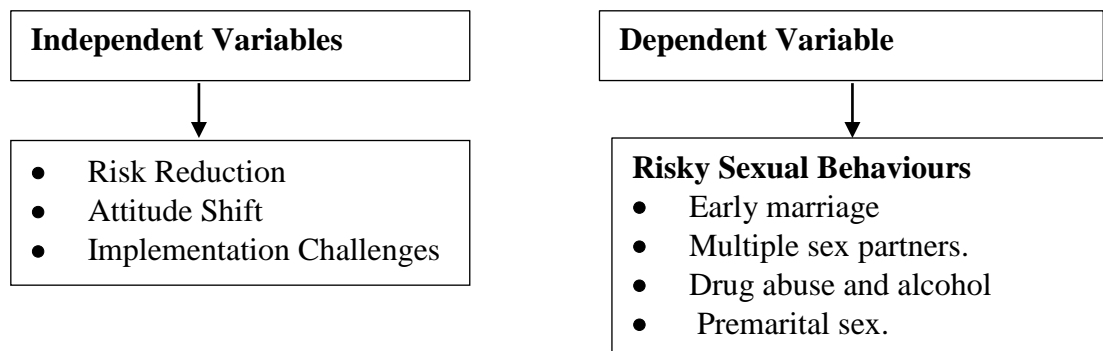


Figure 2.4: Conceptual Framework

CHAPTER THREE

METHODOLOGY OF RESEARCH

3.1 Study Area

The study was conducted in Pembea on both public and private secondary schools. Selected areas are Shehia of Gombani, Madungu, Mkanjuni, Pujini, Vitongoji, Ng'anbwa, Wawi, Tibirizi, Weshu, and Ole. This District and Shehia were selected because were among the areas with a good number of secondary schools with HIV/AIDS education programs as well as at risk for HIV/AIDS. The HIV/AIDS prevalence rate in Pemba is 0.2 and for Zanzibar is 0.4.

3.2 Research Design

A Cross sectional design was used in this study, because cross-sectional designs used survey techniques to collect data in the field. Usually, this design is inexpensive and time saving design in conducting research as well as capable of using data from a large number of subjects (Abumelhim, 2015).

3.3 Research Approach

The study used mixed research approach mixed research approach combines both quantitative and qualitative to gain more comprehensive understanding of the research problems (Aarti David, 2010).

3.4 Data Type and Sources

Both primary and secondary data were used in order to get reliable and valid data. The primary data was used to collect from selected schools' students, key informant

such as teachers, government office (education officers), and NGOs implemented HIV and AIDS education interventions or programs in schools. The secondary data was obtained from published as well as unpublished documents, reports, books, journals, newspapers and other electronic media including internet related to topic of study.

3.5 Data Collection Method

With reference to selected research design (cross-sectional survey), mixed data collection method like interview, focused group discussion and documentary review was used in this study. Primary data was collected by using interview, and focused group discussion and secondary data was collected from published and un-published reports, documents, journals, books, and web information (Pandey and Pandey, 2015).

3.5.1 Interview Method

This study involved conducting individual interviews with a small number of students and teachers to explore their understanding and perspectives on the subject. Using interview check list as a tool different questions were utilized to gather in-depth insights. According to Boyce and Neale (2006), interviews as a data collection method allow researchers to collect detailed information while maintaining direct control over the flow of the conversation. This method also provides opportunities to clarify specific issues during the data collection process.

3.5.2 Survey Method

The Survey method is the practice of gathering data for a study by asking people questions related to the research. Questionnaires were employed as a tool to gather useful information related to the study's objectives. A combination of structured, unstructured, and semi-structured interview guides was used to present questions to respondents. Before data collection, all data collection tools were pre-tested to ensure validity and reliability of the tools to be used.

3.5.3 Focus Group Discussion

A list of topics related to sturdy was developed and asked to group of respondents. This was conducted for qualitative data collection by formulating some three 3 groups with ten 10 number of respondents to discuss on the study topic checklist. Selection of group members based on mixing of gander and class/form category. FGD checklist was used to guide discussion on objectives of a study.

3.5.4 Review of Documents

This involved extraction of data in secondary sources related to study topic including published and unpublished documents such as reports from schools and government offices including education officers' office, web information, research papers as well as book and journals.

3.6 Sampling of Respondents

3.6.1 Sample Unit

A sampling unit is a selection of a population that is used as an extrapolation of the population. A study involved individual students on both government and non-

government secondary schools from form one to four with age group between 15 to 24 as well as their teachers among these selected secondary schools.

3.6.2 Sample Size

Sample size refers to the number of participants or observations included in a study. This number was usually represented by n . The size of a sample influences two statistical properties: 1) the precision of our estimates and 2) the power of the study to draw conclusions. Sample size in this study will be 132 respondents of which 100 students from different schools, 30 teachers, 1 educational officer and 1 NGO officer from the Chake chake District Pemba.

The sample was obtained by using standard formula of Yamane (1967) whereby level of depreciation of 10% to be used.

$$n = N / (1 + N(e)^2)$$

Where; n = Sample size

N = Number of members

e = Level of precision

$$n = 515 / (1 + 515\{0.1\}^2) = 100$$

Therefore 100 students + 30 teachers + 1 educational officer + 1 NGO officer= 132 respondents from different school was selected for the study on data collection.

3.6.3 Target Population

The target population is the specific group of individuals or entities that a researcher intends to study or make interference about. It's the large group from which a sample

is drawn for research purposes (Kennet J *et all*, 2008). In This study the target population is the total number of 515 students from both private and government secondary schools in Chake chake District Pemba.

3.6.4 Sampling Frame

The sampling frame for this study included 515 individuals from the Chake Chake District in Pemba, consisting of secondary school students, teachers, educational officer, and an NGO officer. This diverse group was selected to gather comprehensive data regarding the effectiveness of HIV/AIDS education interventions.

3.6.5 Unit of Analysis

Students: The unit of analysis for the students consisted of 100 secondary school students from various schools in Chake Chake District. These students were selected to assess their knowledge, attitudes, and behaviors related to HIV/AIDS education.

Teachers: The unit of analysis for the teachers included 30 teachers from different secondary schools within the same district. These teachers provided insights into the implementation and effectiveness of HIV/AIDS education programs.

Educational Officer: One educational officer was included as a unit of analysis to offer a broader perspective on the educational policies and strategies related to HIV/AIDS interventions within the district.

NGO Officer: One NGO officer was also part of the unit of analysis, contributing insights into community-based efforts and support systems related to HIV/AIDS education and prevention.

3.6.6 Sampling Procedure

Both probability and non-probability sampling were used in this study. Random probability sampling was used to obtain students from different schools as well as selection of secondary schools where the study was conducted. Also, purposive non probability sampling was used in selection of key informant including teachers, education officer, and NGO officer. Purposive sampling method may prove to be effective when only limited numbers of people can serve as primary data sources due to the nature of research design and aims and objectives (*Saunders et al., 2012*).

3.7 Data Processing

Data processing in this study involved several key steps tailored to handle both quantitative and qualitative data efficiently.

3.7.1 Quantitative Data Processing

Editing was performed on completed questionnaires and raw data to identify and correct any errors, ensuring accuracy and reliability in the data collected from students and teachers.

Coding involved assigning numerals and symbols to responses, allowing answers to be categorized into a manageable number of groups. This simplification facilitated efficient analysis by creating a structured dataset.

Tabulation summarized the processed quantitative data in columns and rows, presenting it in a compact form suitable for further analysis. This organization allowed for clear visualization and streamlined the analysis process. The quantitative data were entered into a pre-developed SPSS template, which provided a platform for statistical analysis.

3.7.2 Qualitative Data Processing

Editing was conducted on interview transcripts and focus group discussion notes to ensure completeness and clarity, identifying any ambiguities or inconsistencies.

Translation was performed on any qualitative data collected in a language other than English, ensuring all data were accessible for analysis.

Coding categorized qualitative responses thematically, allowing for the identification of common patterns and insights within the data.

Classification grouped data with similar characteristics into homogeneous categories, facilitating meaningful analysis and interpretation of themes. The qualitative data were entered into a developed Excel template, allowing for organized management of insights for further analysis.

3.8 Data Analysis Methods

3.8.1 Quantitative Analysis

The collected quantitative data was analyzed using descriptive analysis techniques. The Statistical Package for the Social Sciences (SPSS Version 20) facilitated the

statistical analysis and interpretation of the data. Findings from the quantitative analysis were presented through tables, figures, and percentages, providing a clear overview of the results.

3.8.2 Qualitative Analysis

For the qualitative data, a systematic approach was used. The data were recorded, transcribed, and coded according to relevant sub-themes and categories. This coding process allowed for a detailed exploration of the underlying themes within the data. The findings from the qualitative analysis were presented using descriptive statements that highlighted key insights and patterns.

3.9 Validity and Reliability (Trustworthiness, diagnostic checking)

3.9.1 Validity

Validity refers to the extent to which a scale or index measures the intended concept, while reliability ensures consistent results if the research were conducted by others (Kothari, 2019). To establish validity, a questionnaire was administered and piloted to evaluate both its validity and reliability. Pre-testing aimed to assess item clarity, allowing for the modification or removal of inadequate items. A pilot study involved pre-testing the questionnaire with 10 randomly selected individuals from the company's database to ensure effective administration and flow.

3.9.2 Reliability

Reliability is seen as the degree to which a test is free from measurement errors since the more measurement errors occur the less reliable the test is. In reliability, you can

either or not get the same answer by using the instrument to measure something more than once. In most cases, reliability produces stable and consistent results. A specific measure is considered to be reliable if its application on the same object of measurement several times produces the same results. Thus, through this study, the researcher used reliability to test different results under stable conditions, with consistent results and the results not varying.

3.10 Ethical Considerations

Ethical principles in the conduct of research include acquiring research clearance and the informed consent of the participants as well as maintaining confidentiality. The researcher sought the respondents' permission before including them in the research. The objectives of the study and their roles and how they are going to benefit from the study were addressed to the respondents before participating in the study. Due to the ethics that need to be considered all participants have to get the opportunity to understand the purpose of this study; the researcher assured them the information and data that would be collected would be confidential and would not be used for any other purposes.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter analyses the study findings presentation and interpretation of what has been observed from the findings of the study and thus provides a logical picture of the general objectives of the study. The data were analysed qualitatively and the presentation of the findings were narrations of tables and graphs respectively. The researcher after gathering opinions from the respondents who were secondary students, teachers, education officer, and NGO officer, the data of these results sorted for analysis. An appropriate interpretation had been then carried out coupled with supporting arguments. It was done following the three objectives and research questions that guided the study which intended to assess the contribution of HIV/AIDS education programs on reducing risky sexual behaviours among adolescents in secondary schools in Pemba: A case study was done at Chake Chake District.

The specific objectives were: to identify the HIV/AIDS education interventions designed programs on reducing risky sexual behaviors among adolescents in Secondary Schools implemented at Chake chake District, to assess HIV/AIDS education programs implemented to reduce risky sexual behaviors among adolescents in Secondary Schools in the study area. and to identify barriers based on HIV/AIDS education interventions designed programs on reducing risky sexual behaviors among adolescents in Secondary Schools in implemented at Chake chake District. The investigation was done and findings presented in tabular format, graphs,

and narrative format. Data obtained from the questionnaire were analyzed using the Statistical Package for the Social Sciences (SPSS) software.

4.2 Demographic Attributes of Participants in the Research Survey

This section shows the background of the various respondents which was the main interest of the researcher. The respondents' background covered their Gender, Age, and level of education. About 132 respondents were participated in the study.

4.2.1 Sex of the Respondents

Sex is an important variable given the influence of HIV/AIDS education interventions designed programs, interventions of HIV/AIDS education interventions designed programs, and barriers based on HIV/AIDS education interventions designed programs on reducing risky sexual behaviors among adolescents in Secondary Schools in implemented at Chake chake District. Hence, the variable gender was investigated for this study. Data related to the gender of the respondents presented in Table 4.1 below:

Table 4.1: Sex of the Respondents who took part in the Survey

Responses	Frequencies	Percentages
Men	58	43.9
Women	74	56.1
Total	132	100

Source: Field Data, August (2023)

It is quite clear that out of the total respondents investigated for this study, the overwhelming majority 56.1% of them were men whereas about 43.9% found to be

women. This finding indicates the majority of the respondents are women who seemed to have been involved HIV/AIDS education interventions designed programs. Possible reasons for this could include targeted outreach efforts aimed specifically at men, cultural norms that encourage male engagement in health programs, and greater accessibility for men in terms of logistics and scheduling. Additionally, men may have higher awareness or lower stigma around discussing sexual health issues, which could drive their participation. Understanding these factors is crucial for tailoring future programs to achieve a more balanced gender representation.

4.2.2 Age of the Respondents

The respondents' age is one of the most important characteristics in understanding their views about the particular problems. Since age indicates the level of maturity of individuals, it becomes more important to examine the response.

Table 4.2: Age of the Respondents

Responses	Frequencies	Percentages
Below 15 years	31	23.5
16-18 years	62	47.0
Above 18 years	39	29.5
Total	132	100

Source: Field Data, August (2023)

Table 4.2 reveals the age distribution of the respondents, indicating that approximately 47% were aged 16 to 18 years. In addition, 29.5% of the respondents were older than 18 years, while the remaining 23.5% fell within the 15 to 20-year age range. This data highlights a significant concentration of respondents in the younger age brackets, with nearly half of them being in the 16 to 18 age group, suggesting

that the study primarily reflects the perspectives of younger individuals regarding the topic at hand.

4.2.3 Education of the Respondents

Education is one of the most important characteristics that impact the HIV/AIDS adolescent risk reduction behaviors. In that way, the responses of contribution of HIV/AIDS education programs on reducing risky sexual behaviors among adolescents in secondary schools in Chake chake District, Pemba-Zanzibar are likely to be determined by respondents of his/her educational status and therefore the variable ‘educational level’ was investigated by the researcher and the data about education is presented below:

Table 4.3: Education of the Respondents

Responses	Frequencies	Percentages
Form 1	45	34.1
Form 11	28	21.2
Form 111	39	29.5
Form 1V and above	20	15.2
Total	132	100.

Source: Field Data, August (2023).

Regarding educational background, the results indicate that a significant portion of respondents, 34.1%, were in Form 1, while only 15.2% were in Form IV and above. The high percentage of respondents in Form 1 suggests that the study primarily captures the views of individuals at the beginning of their secondary education, which may impact their awareness and understanding of the study's topic. This finding aligns with literature indicating that early secondary education is a critical

period for health education, as students are beginning to engage with more complex social issues. Conversely, the low representation of respondents in higher forms (Form IV and above) could indicate limited access to education or a lack of engagement with educational programs, potentially affecting their knowledge and attitudes toward the issues being studied. This disparity highlights the importance of addressing educational barriers to ensure comprehensive health education for all age groups.

i. Presence of risky sexual behaviours among adolescents in secondary schools at Chake Chake District, Pemba.

The first objective of the study was to identify risky sexual behaviours prevailing among adolescents in secondary schools at Chake Chake District, Pemba. The questionnaires as well as interview schedule was used to obtain information about the implication of risky sexual behaviour young people in secondary schools. The followings were the findings and discussion of the study as per the issues nominated.

4.3 Adolescence Risky Behavior Exposure

In the questionnaire, respondents were asked to indicate whether the students have been adequately informed about risky sexual behaviors among adolescents in secondary school and the results were presented below:

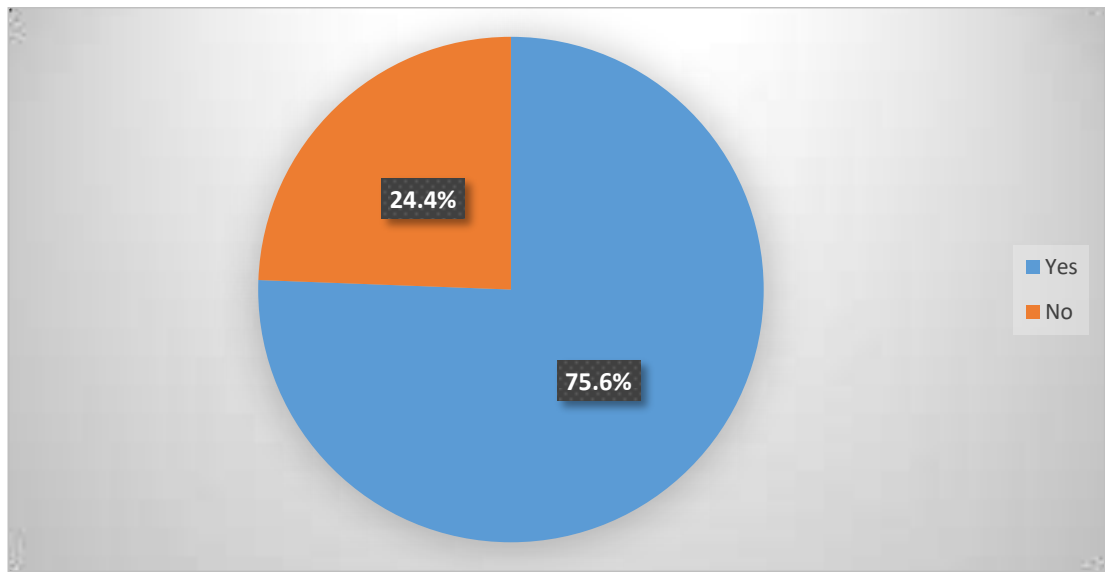


Figure 4.1: Adolescence Risky Behavior Exposure

Source: Field Data, August (2023)

As shown in the figure 4.1 the majority of respondents about 75.6% of the respondents there are some risky sexual behaviour among student like premarital sex and more than one sexual partners, while 24.4% of the respondents indicated on the basis of disagree. This finding implies that the programs should be strengthening frequently and quality of HIV/AIDS education necessary to improve greater knowledge among adolescents to changes in their risky sexual behavior.

4.3.1 Education Programs impact related with Reduce Risk Behaviors

In the questionnaire, respondents were asked to mention the impact of various HIV/AIDS education in place on reducing risk sexual behaviors among adolescents in secondary school and the results were presented below:

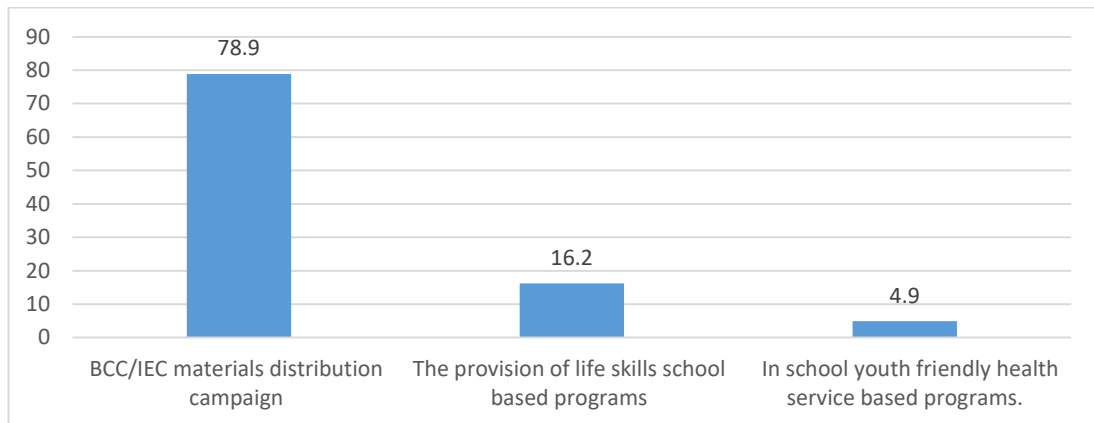


Figure 4.2: Education Programs impact related with Reduce Risk Behaviors

Source: Field Data, August (2023)

As indicated in the above figure 4.2 the respondents' perceptions regarding the kind programs in place which are designed to provide education on reducing risk sexual behaviors among adolescents in secondary school was indicated much difference. Their perception accounts for 78.9 of the respondents mentioned on Behavior Change Communication and Information, Education, and Communication (BCC/IEC) materials distribution campaign on HIV/AIDS preventions among Adolescents in secondary School were not well utilized, 16.2% of the respondents indicated on the provision of life skills school-based programs in secondary School was not well addressed and 4.9% of the respondents were on opinion based in school youth friendly health service-based programs in place but are not actively involved more programs in place. This finding implies programs need to effectively influencing behavior. This could imply a need for more behavior-focused or peer-led interventions within schools on relevant knowledge, awareness of risk, values and attitudes, self-efficacy, and intentions as being the determinants of behavior change among young adolescent.

4.3.2 Programs designed Impacts On Behavior Change Among Students

In the questionnaire, respondents were asked to indicate whether these programs have an impact on behavior among adolescents in secondary school and the results were presented below:

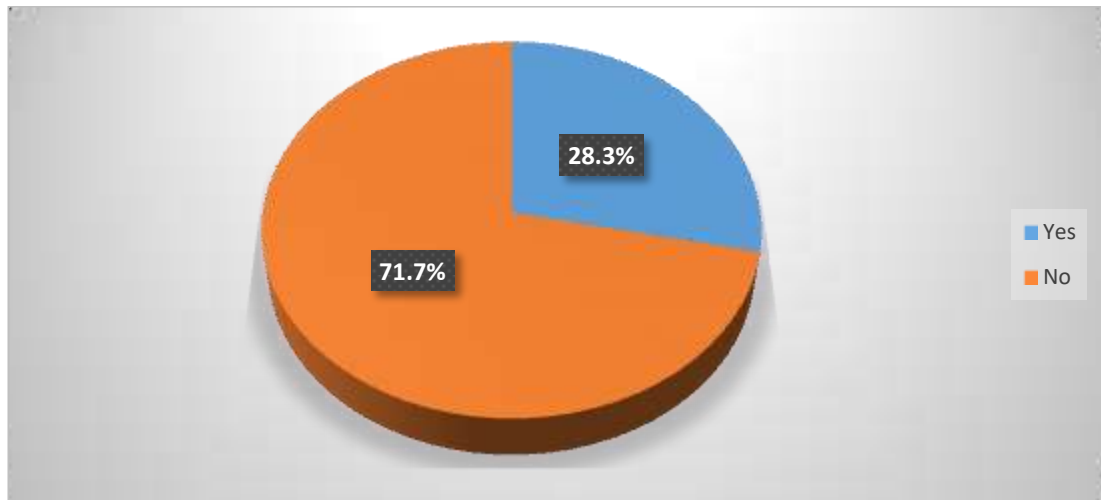


Figure 4.1: Programs designed Impacts on Behavior Change among Students

Source: Field Data, August (2023)

As shown in the figure 4.3 about 71.7% of the respondents were on disagree that the knowledge of the education program is low or inconsistent to reduce risky Sexual Behaviors among adolescents in secondary school, while 28.3% of the respondents indicated on the basis of an agree. This finding imply that the existing HIV/AIDS education initiatives are largely ineffective, as they appear to exert a negative influence on behaviors across various demographics, including urban and rural settings, as well as among different genders and age groups. Many secondary students reported engaging in unsafe sexual practices, such as having multiple partners, early initiation of sexual activity, and inadequate use of condoms and

contraceptives. These trends highlight a concerning prevalence of sexual risk-taking among adolescents and underscore the urgent need for more effective, targeted education programs that address the complexities of adolescent sexual behavior.

ii HIV/AIDS prevention awareness among adolescents of secondary schools in Chake Chake District.

The second objective of the study was to **assess** HIV/AIDS prevention awareness among adolescents of secondary schools in Chake Chake District. The questionnaires as well as interview schedule was used to obtain information on the characteristics that influence prevention of HIV/AIDS among young people in secondary schools. The following were the findings and discussion of the study per the issues nominated.

4.3.3 School HIV/AIDS Awareness Behaviour

In the questionnaire, respondents were asked to indicate whether their school implement HIV/AIDS education awareness behavior on reducing risk sexual and the results were presented below:

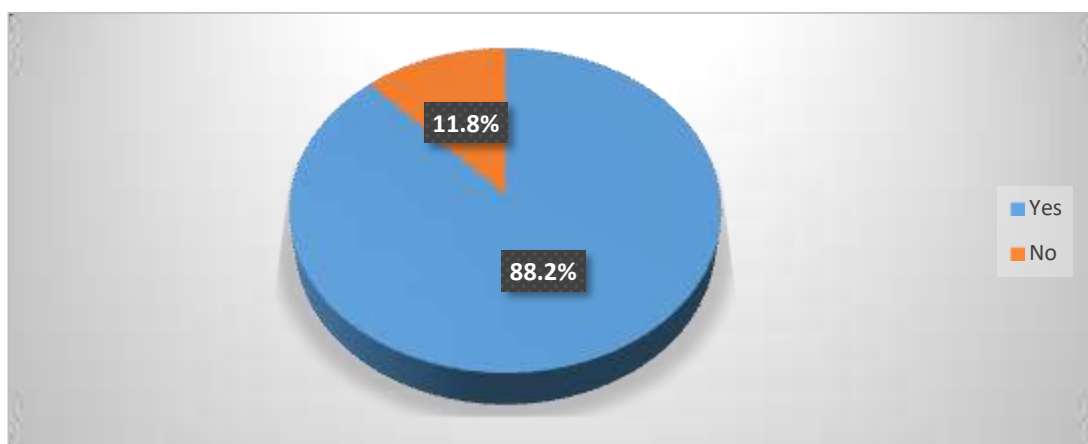


Figure 4.2: School HIV/AIDS Education Awareness Behavior

Source: Field Data, August (2023)

As shown in the figure 4.4 the majority of respondents about 88.2% of them were on agree that HIV/AIDS education behavior on reducing risk sexual, while 11.8% of the respondents indicated on the basis disagree. This finding revealed that at large extent HIV/AIDS prevention education awareness is established in their schools found to be able provide knowledgeable and awareness about different methods for HIV prevention as each one was able to mention at least one of the methods, including abstinence, safe sex using condom and being faithful with single partner.

4.3.4 Knowledge about HIV/AIDS Transmission and Prevention

In the questionnaire, respondents were asked to indicate whether the respondents have ever received training about HIV transmission and prevention to reduce risk behavior of adolescents in Secondary school and the results were presented below:

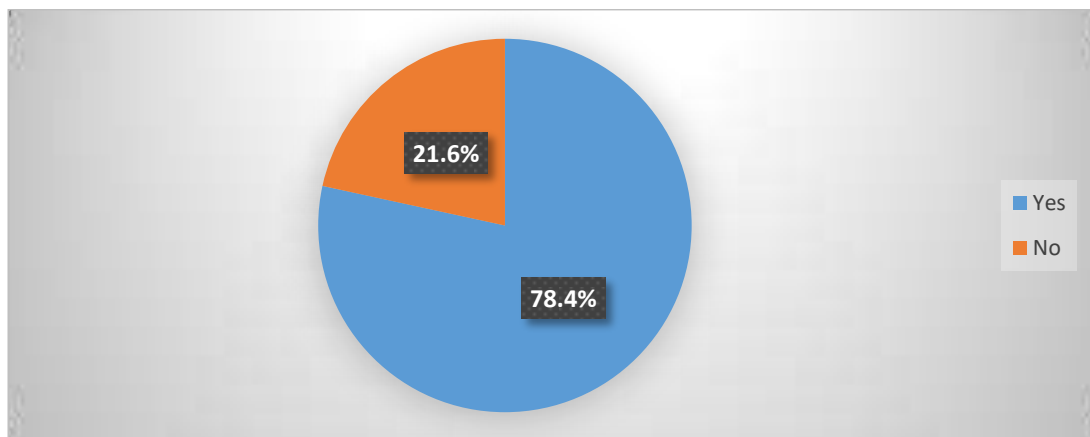


Figure 4.3: Knowledge about HIV/AIDS Transmission and Prevention

Source: Field Data, August (2023)

As shown in the figure 4.5 the majority of respondents about 78.4% of the respondents were on agree that the respondents have participated in training about

HIV transmission and prevention risk behavior of adolescents in Secondary school, while 21.6% of the respondents indicated on the basis disagree. This finding implies that there is need of training peer educators among students on HIV/AIDS transmission and prevention that could enable them to translate into behavior change, hence prevention of HIV/AIDS among them. Training based on the risk behavior of adolescents in Secondary school is very important as it incorporates sexual health and HIV/AIDS education for all ages since this training would be equipped with relevant life skills – practical skills that make them develop responsible gender roles, positive social attitude, and safe sexual behavior while enabling them to withstand peer pressure to engage in risky behaviors.

4.3.5 Attitudes towards HIV/AIDS Its Affiliations

In the questionnaire, respondents were asked to indicate whether the HIV education intervention programs taught in school is adequate enough to change the attitudes towards people living with HIV infections and the results were presented below:

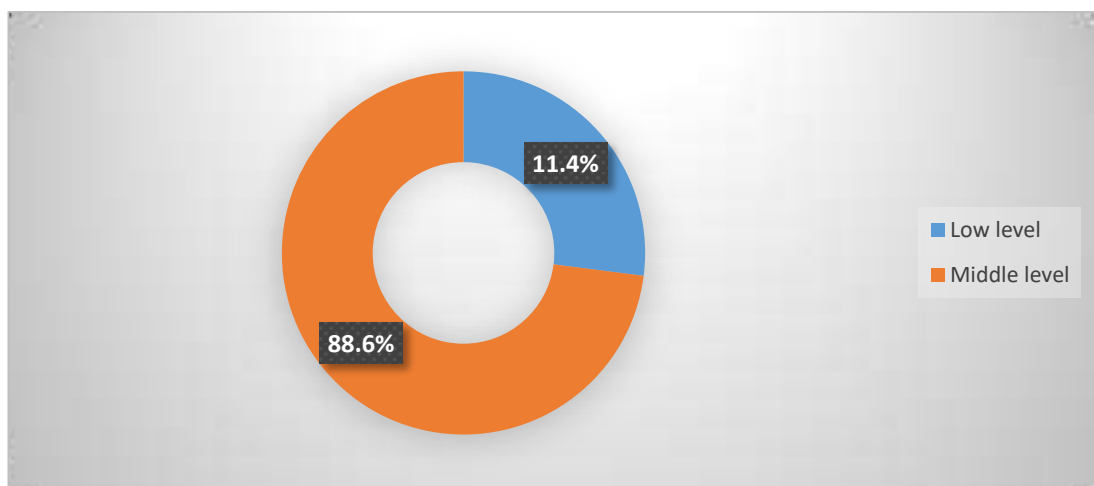


Figure 4.4: Attitudes towards HIV/AIDS its Affiliations

Source: Field Data, August (2023).

Figure 4.6 illustrates that a significant majority of respondents, approximately 88.6%, disagreed the attitudes towards people living with HIV/AIDS is still relevant, in contrast, only 11.4% expressed agreement with this statement. This overwhelming sentiment suggests that programs are not effectively addressed the emotional and social dimensions of HIV/AIDS. Programs must then be redesigned to include more empathy building content.

This finding underscores the need for a thorough evaluation of existing programs to identify areas for improvement, ensuring that they meet the educational needs of students. Furthermore, it raises important questions about the quality and relevance of the content being taught, as well as the teaching methodologies employed. Addressing these issues is crucial for enhancing the effectiveness of HIV education interventions and ultimately improving students' capacity to protect themselves against HIV infections.

4.3.6 Extent of Awareness on HIV/AIDS Learning at School

In the questionnaire, respondents were asked to indicate the extent the secondary school students are aware on the knowledge of HIV/AIDS through their learning and the results were presented below:

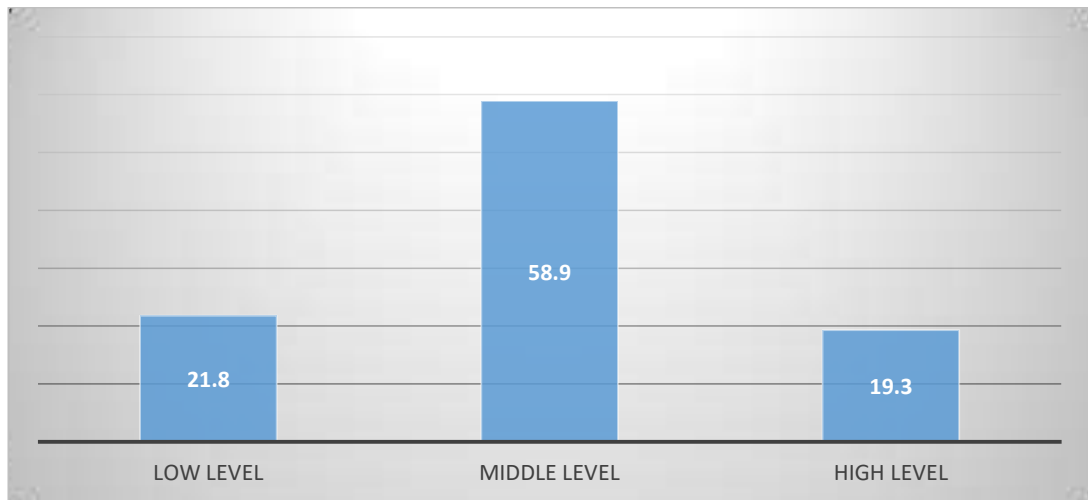


Figure 4.5: Extent of awareness on HIV/AIDS Learning at School

Source: Field Data, August (2023).

As indicated in the above figure 4.7 the respondents' perceptions regarding the extent the secondary school students are aware on the knowledge of HIV/AIDS through their learning. Their perception accounts 58.9% as a middle level, 21.9% as high level and 19.3% as low level. This finding implies that students need to be provided extra information on prevention of HIV/AIDS that could incorporate elements that reduce fear and promote confidentiality in accessing testing services meanwhile include the practical skill building like condom negotiation and usage demonstrations, not just theoretical knowledge.

4.3.7 Impacts of learning Tools on HIV/AIDS Training

In the questionnaire, respondents were asked to indicate which learning tools teachers primarily use to deliver knowledge about HIV/AIDS and the results were presented below:

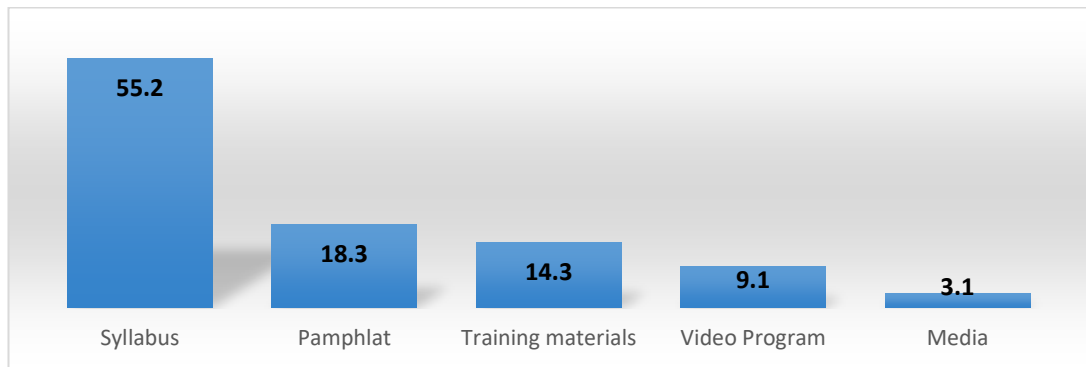


Figure 4.6: Impact of Learning Tools on HIV/AIDS Training

Source: Field Data, August (2023).

As shown in the figure 4.8 the majority of respondents about 55.2% of the respondents indicated the syllabus as the learning tools that are mostly used by teachers to provide knowledge about HIV/AIDS, 18.3% of the respondents indicated pamphlets, 14.3% of the respondents indicated BCC/IEC materials, 9.1% of the respondents indicates video programs and 3.1% of the respondents indicated over media. This finding implies that the availability of HIV/AIDS education teaching materials/tools has high impact of student learning on reducing risk sexual behaviors among adolescents in secondary school. Several materials are acquired for the teaching of HIV/AIDS education. The respondents also reported that other important materials were available in a very minimum. For instance, most of them reported that textbooks, charts, electronic equipment and the HIV/AIDS education policy were not available.

4.3.8 Perception of affiliation of Tools to Training Delivery

In the questionnaire, respondents were asked to indicate the extent of the tools to satisfy the needs of providing knowledge about HIV/AIDS and the results were presented below:

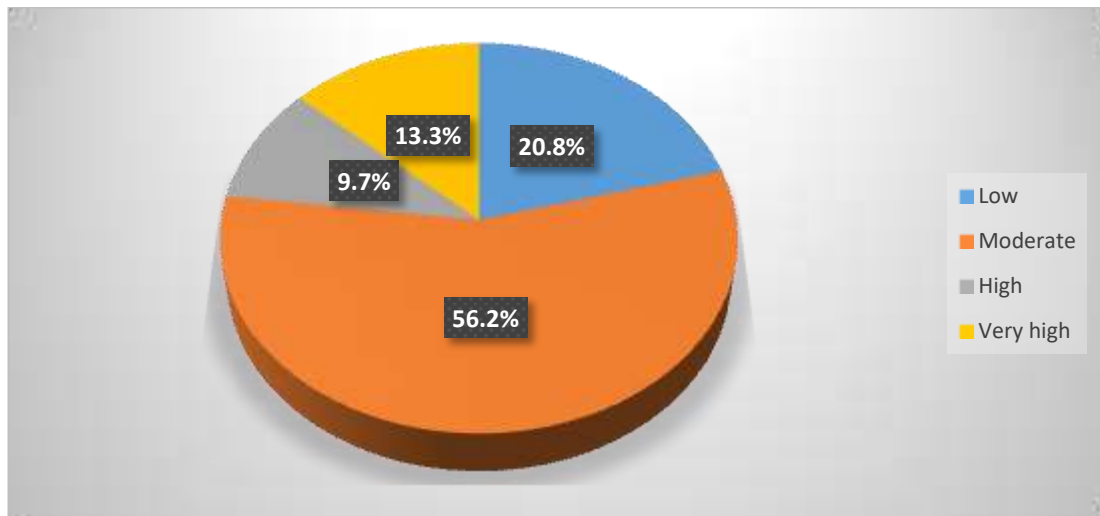


Figure 4.7: Perception of affiliation of Tools to Training Delivery

Source: Field Data, August (2023)

As shown in the figure 4.9 the majority of respondents about 56.2% of the respondents indicated that the moderate level for the tools to satisfy the needs of providing knowledge about HIV/AIDS, 20.8 of the respondents indicated low level, 13.3% of the respondents indicated very high level, and 9.7% of the respondents indicated high level. This finding implies that training tools is somewhat satisfactory and indeed if well delivered could change in attitude and behavior of students.

There is a strong need to favor of starting early and continued process in teaching about HIV and AIDS, so that the attitudes and behavior of students could be seem to be more dramatic in teenage years when youth start to be sexually active before onset of adulthood. Furthermore, the study insisted that training programmes of HIV and AIDS synchronizing the youth in order to prevent them from acquiring the pandemic through their sexual behavior and other methods such as sharing syringes, hence the importance of relevant secondary school programmes.

iii Challenges in the delivery and reception of HIV/AIDS education programs

The third objective of this research was to identify barriers based on HIV/AIDS education interventions designed programs on reducing risky sexual behaviors among adolescents in Secondary Schools in implemented at Chake chake District. The questionnaires as well as interview schedule was used to obtain information on the characteristics that influence prevention of HIV/AIDS among young people in secondary schools. The followings were the findings and discussion of the study as per the issues nominated.

4.3.9 Gaps in the Provision of HIV/AIDS Education Programs

In the questionnaire, respondents were asked to indicate whether there is something important that are missing in provision of HIV/AIDS education programs in secondary school and the results were presented below:

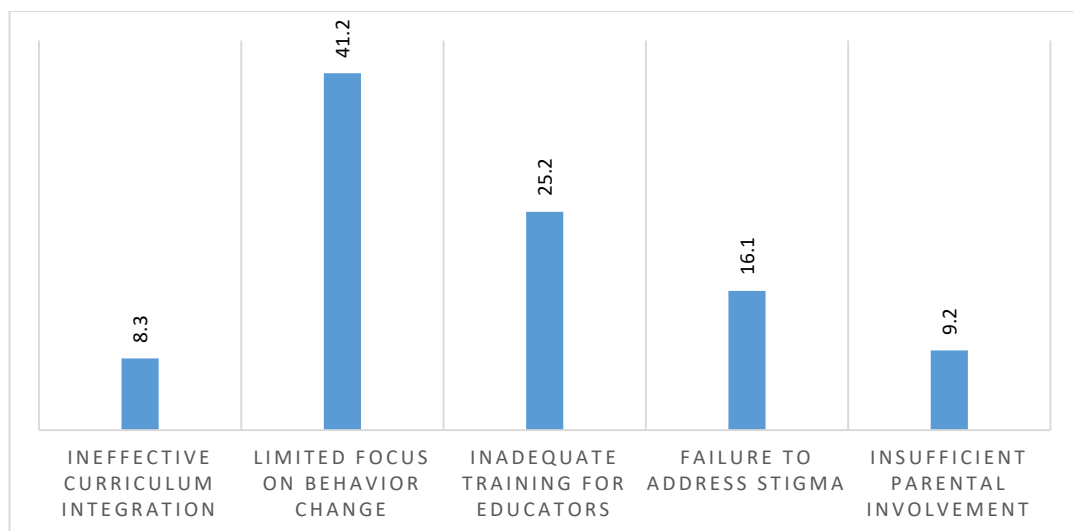


Figure 4.8: Understanding Gaps in the Provision of HIV/AIDS Education Programs

Source: Field Data, August (2023).

The data from Figure 4.10 reveals that the majority of respondents identified several critical gaps in the provision of HIV/AIDS programs: 41.2% highlighted a limited focus on behavior change, while 25.2% pointed to inadequate training for educators. Additionally, 16.1% noted a failure to address stigma, 9.2% indicated insufficient parental involvement, and 8.3% cited ineffective curriculum integration. These findings imply that without a comprehensive approach that prioritizes behavior change strategies, adequately trains educators, and addresses stigma, the effectiveness of HIV/AIDS programs will remain severely compromised. Furthermore, the lack of parental involvement and the need for better curriculum integration suggest that a collaborative effort among educators, parents, and health professionals is essential for creating a more supportive and effective educational environment for adolescents regarding HIV/AIDS awareness and prevention.

4.3.10 Needed Improvement in Delivery of HIV Education in Secondary Schools

In the questionnaire, respondents were asked to indicate things need to be done to improve in delivering HIV education in secondary school and the results were presented below

Table 4.4: Needed Improvement in Delivery of HIV Education in Secondary Schools

Responses	Frequency	Percent
HIV/AIDS education should be provided to both in school and out of school youth	60	45.5
The government should support the HIV/AIDS education programs providers	41	31.1
There should be a special established counselling unit in all secondary schools	25	18.9
Parents and guardians should promote HIV/AIDS education programs in school	6	4.5
Total	132	100.0

Source: Field Data, August (2023).

As indicated in the above Table 4.4 the respondents' perceptions regarding things need to be done to improve in delivering HIV education in secondary school. Their perception accounts for 45.5% of the respondents indicated that HIV/AIDS education should be provided to both in school and out of school youth, 31.1% of the respondents indicated that The government should support the HIV/AIDS education programs providers, 18.9% of the respondents indicated that There should be a special established counselling unit in all secondary schools and 4.5% of the respondents indicated Parents and guardians should promote HIV/AIDS education programs in school.

This finding implies that HIV programs that are designed to improve knowledge and awareness about HIV and sexually transmitted infections (STIs) as often based on the premise that greater knowledge among adolescents will lead to changes in their sexual behavior. An urgent measure should be made to enable young people to protect themselves from HIV/AIDS, development efforts would be in jeopardy. The

study further indicated that investing in adolescents and youth is one of the most cost-effective interventions to the attainment of the Millennium Development Goals of halting the further spread of HIV, reducing maternal mortality and improving child survival since consequences of unprotected sex include many aspects of reproductive ill-health.

4.4 Stakeholders Discussions

Stakeholder interview and focus group discussions (FGDs) were essential in gathering diverse insights on HIV/AIDS education interventions within schools. Engaging a variety of stakeholders including educators, parents, health professionals, students, and key informants provided a comprehensive perspective on the effectiveness and gaps in current programs. These discussions aimed to foster open dialogue and collect qualitative data that enriches the quantitative findings of the study.

During the FGDs with educators, participants expressed significant concerns regarding the adequacy of the existing HIV/AIDS curriculum. Many teachers conveyed their commitment to educating students about prevention, yet they noted that the resources available were often insufficient. There was a strong consensus that additional training is necessary to equip educators with the knowledge and tools to address sensitive topics effectively. Participants highlighted the importance of using age-appropriate materials and interactive teaching methods to engage students meaningfully. Parents involved in the discussions shared their observations about their children's awareness of HIV/AIDS. Many felt that school-based education was

lacking, often leaving them to address these issues at home. They expressed a desire for more workshops or informational sessions organized by schools, aimed at helping parents navigate conversations about sexual health with their children. This feedback underscores the need for stronger collaboration between schools and families to create a unified approach to HIV/AIDS education.

Students provided candid feedback during the FGDs regarding their experiences with HIV/AIDS education. Many indicated that the information presented in schools was not engaging or relatable, resulting in a lack of interest in the subject matter. They emphasized the need for more interactive and practical learning experiences, such as workshops, role-playing scenarios, and peer-led discussions. This input highlights the importance of evolving educational strategies to resonate better with young people's realities.

Key informant interviews with health professionals provided valuable insights into the necessity of integrating health education within the broader school curriculum. These experts stressed the importance of implementing regular health screenings and counseling services in schools, advocating for a holistic approach that not only improves students' knowledge but also empowers them to make informed choices regarding their sexual health. They recommended that school's partner with local health organizations to ensure ongoing education and support for students.

Furthermore, discussions among all stakeholder groups highlighted a strong interest in establishing community-based initiatives that extend beyond the classroom setting.

Many participants expressed the belief that outreach programs aimed at parents and community members could significantly increase overall awareness of HIV/AIDS and cultivate a supportive environment for students. By involving the wider community, these initiatives could help reduce stigma and encourage open discussions about sexual health.

Another key informant, a community health officer, emphasized the importance of collaboration between schools and local health organizations. They remarked, “Collaborative efforts with health professionals can offer students access to vital resources, screenings, and counseling services that are essential for their understanding of HIV/AIDS.” Such partnerships can foster a more comprehensive educational approach, creating an environment in which students feel supported in their health-related decisions

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter discusses the conclusion reached, the various suggestions and comments given by the respondents in the questionnaire and interview guides. Findings have been summarized alongside the objectives of the study, and conclusions have been drawn from the study and recommendations for action are also given.

5.2 Summary of the Major Findings

The study revealed significant insights into participants' perceptions of HIV/AIDS education interventions. A substantial majority, approximately 88.6%, expressed dissatisfaction with the adequacy of the programs offered in their schools, indicating a perceived lack of comprehensive knowledge and skills necessary for preventing HIV infections. This finding underscores a critical gap in the educational content, suggesting that the current curriculum may not effectively meet the needs of students, particularly in equipping them with essential prevention strategies.

Demographic analysis showed that 47% of respondents were aged 16 to 18 years, highlighting a significant concentration of young individuals within the study. This age group is particularly vulnerable and requires targeted educational strategies. Additionally, the educational background of the respondents revealed that 34.1% were in Form 1, with only 15.2% in Form IV and above. This disparity suggests that many students may not have access to advanced health education, further emphasizing the need for tailored resources that are appropriate for their educational

level and developmental stage. Moreover, the analysis of learning tools indicated that respondents had specific preferences for how HIV/AIDS information should be delivered. For instance, when asked about the effectiveness of various teaching methods, 62% of respondents favored interactive learning tools, such as workshops and group discussions, over traditional lectures. This preference suggests that incorporating more engaging and participatory approaches could enhance the educational experience and better prepare students to understand and apply HIV prevention methods effectively.

Additionally, the data revealed important demographic trends among the respondents. Approximately 29.5% were in Form III, while only 21.2% were in Form II. This distribution indicates that a significant portion of participants are at earlier stages of their education, which may impact their exposure to and understanding of HIV-related topics. The predominance of younger respondents emphasizes the necessity for early intervention programs that can effectively reach and educate students at various educational levels.

Furthermore, the study examined the types of learning tools employed by teachers in delivering HIV/AIDS education. Findings showed that 55% of respondents believed that multimedia resources, such as videos and online content, were the most effective tools for learning about HIV/AIDS. This preference suggests that integrating technology into the educational framework could enhance engagement and retention of information. By adopting diverse and modern teaching methods, schools can improve the overall effectiveness of their HIV education interventions, ultimately empowering students with the knowledge they need to protect themselves.

5.3 Conclusion

It was realized in the study that HIV and AIDS education programme's objectives in light of the existing research findings that the programme has low impact on the sexual behaviour change among the youth. There had been existing some weaknesses on the Programme's delivery thereby hindering effective achievement of the objectives. This had possible influence for many secondary students practice unsafe sex and hence have probability of composite measures of sexual risk-taking.

It was found in the study that majority of students felt they had attained most of the programme's objectives, however, teachers felt that students had not achieved much yet. Teachers and some students indicated that training of teachers would improve their ability to communicate HIV and AIDS issues effectively to students. Both category of the respondents reported that the nature of training teachers undergoes during their pre-service does not give the capacity to talk openly and boldly on issues related to HIV virus which in most cases involve detailed discussion of sexual encounters. The respondents also suggested that the Programme should be delinked from the secondary education subject and taught on its own to enable incorporation of more information as well as updating the content from time to time to keep the Programme in tandem with the improvement in HIV and AIDS prevention and management.

It was indicated in the study that the availability of HIV/AIDS education teaching materials/tools has high impact of student learning on reducing risk sexual behaviors among adolescents in secondary school. Several materials are acquired for the

teaching of HIV/AIDS education. The respondents also reported that other important materials were available in a very minimum. For instance, most of them reported that textbooks, charts, electronic equipment and the HIV/AIDS education policy were not available.

It was prudent to conclude that, HIV/AIDS programs care and treatment seemed to be unmasked with the reality that many countries lacked sufficient quality and quantity of health workers to manage the HIV epidemic. These programs constituting a massive health, economic, and security crisis, the shortage of trained, well-prepared health workers which seemed to be a major bottleneck in implementing evidence-based interventions to improve health outcomes. Thus, there is a need for the government to incorporate with various stakeholders including health workforce including health care providers, professional counselors and teachers for effective service provision. Moreover, emphases should be put in place for in-service and preservice training based on HIV/AIDS education programs as a significant contributor to a weak health care system and compromised patient care.

It was note in the study that HIV programs that are designed to improve knowledge and awareness about HIV and sexually transmitted infections (STIs) as often based on the premise that greater knowledge among adolescents will lead to changes in their sexual behavior. An urgent measure should be made to enable young people to protect themselves from HIV/AIDS, development efforts would be in jeopardy. The study further indicated that investing in adolescents and youth is one of the most cost-effective interventions to the attainment of the Millennium Development Goals

of halting the further spread of HIV, reducing maternal mortality and improving child survival since consequences of unprotected sex include many aspects of reproductive ill-health.

5.4 Recommendations

Based on the study's findings, several comprehensive recommendations are proposed to enhance HIV/AIDS education and prevention among students:

The government should initiate comprehensive HIV/AIDS programs and campaigns that are designed to reach all students across both urban and rural areas, from primary schools to higher education institutions. Given that many students are starting to engage in sexual activity at younger ages, these campaigns must be sustainable and continuously updated to reflect current trends and challenges in HIV prevention. Utilizing a variety of media and outreach strategies can help to ensure that the messaging is effective and resonates with students.

It is crucial that HIV/AIDS education be integrated into the school curriculum as a cross-cutting issue. This means that it should not be confined to health classes but should be incorporated into subjects across the board, ensuring that students receive consistent and relevant information from an early age through to their higher education. This approach can foster a more holistic understanding of the topic and encourage open discussions around sexual health.

The government should allocate dedicated financial resources to various HIV/AIDS initiatives established by the Ministry of Education and Vocational Training. This

funding should be used to develop educational materials, conduct training for teachers, and support community outreach programs. Additionally, educators need to be provided with accurate knowledge and skills regarding HIV/AIDS, enabling them to effectively teach and engage students on this important subject.

School leaders should actively utilize the available counseling services to address extreme cases of indiscipline related to sexual behavior, which could lead to HIV/AIDS infections. Counselors can provide a safe space for students to discuss their concerns and receive guidance, helping to mitigate risky behaviors before they escalate. To maintain a conducive learning environment, students engaging in risky sexual behaviors should face appropriate disciplinary measures, such as suspension or expulsion. This approach aims to prevent the spread of risky behaviors among the student population while reinforcing the importance of responsible conduct.

Schools should establish HIV/AIDS awareness clubs and counseling services, which should be supervised by trained personnel. These clubs can serve as platforms for peer education, where students can discuss relevant issues, share experiences, and learn from one another in a supportive environment.

Subject teachers should actively consider HIV/AIDS as a cross-cutting issue and integrate related topics into their lessons. This could involve discussing the implications of sexual health in subjects such as biology, social studies, and ethics, helping to contextualize the information within broader academic themes.

Adolescent students should receive targeted education about physiological changes and the implications of engaging with multiple sexual partners, highlighting the associated risks of HIV/AIDS. This knowledge can empower students to make informed decisions about their sexual health and relationships.

Special programs should be implemented in classes that exhibit low awareness levels regarding HIV/AIDS. These programs should be tailored to address the specific gaps in knowledge and understanding, ensuring that all students have access to essential information. Additionally, integrating coastal tourism education into the curriculum at lower levels can raise awareness about the sector's potential and its associated risks, fostering a more informed community.

Students should be encouraged to be mindful of the peer influences in their lives and avoid negative associations that may lead them to risky sexual behaviors. They should focus on controlling their sexual desires and prioritizing their education, advocating for the importance of waiting until they are married before engaging in sexual activity.

Parents should be reminded of their vital role in discussing HIV/AIDS with their children. Engaging in family talks about the effects of the disease can create a supportive home environment where children feel comfortable discussing their concerns and questions. Emphasizing how HIV/AIDS can impact their education and future can encourage parents to take an active role in their children's sexual health education.

5.5 Further Research Studies

Further research is essential in this area. While Zanzibar has made significant progress in addressing HIV/AIDS at the national level, this success is not adequately reflected in the secondary school curriculum. Teaching methods and formal instruction alone are insufficient to combat the HIV/AIDS pandemic effectively. Additional empirical research is needed to explore the national curricula, extracurricular educational methods, and the overall role of formal education in HIV/AIDS instruction. This research should aim to reach a broader population of children and young people in formal education across Zanzibar. Recommendations should be directed to specific individuals, organizations, and government entities to ensure effective implementation.

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APPENDICES

Appendix 1: Questionnaire

TITLE: Contribution of HIV/AIDS Education Programs on Reducing Risky Sexual Behaviors among Adolescents in Secondary Schools: A Case of Chake Chake District, Pemba-Zanzibar.

Institutional Case study: Chake Chake Secondary Schools.

Dear respondent, my name is Sharifa H. Shapandu. I am Post graduate student at OUT I am doing MAME in the Department of Economics and Community Economic Development (ECED), currently I am doing my research on the Contribution of HIV/AIDS Education Programs on Reducing Risky Sexual Behaviors among Adolescents in Secondary School at Chake-Chake Pemba District.

This interview will be confidential between interviewee and interviewer and I promise you that I will never disclose any part of this information instead of my research purposes. I look forward to your cooperation.

Demographic information of the respondents

1. Gender

a) Male []

b) Female []

2. Age of respondent.

a) Below 15years []

b) 16 - 18 years []

c) above 18 years []

3. What level are you studying in?

a) Form I []

b) Form II []

c) Form III []

d) Form IV and above []

4. Is there any programs designed to provide education on reducing risk sexual behaviors among adolescents in secondary school?

a) Yes []

b) No []

5. If yes which programs below are designed to provide education on reducing risk sexual behaviors among adolescents in secondary school?

a) BCC/IEC materials distribution campaign on HIV/AIDS preventions among Adolescents in secondary School []

b) The provision of life skills school-based programs in secondary School []

c) In school youth friendly health service-based programs [].

6. Do you think these programs have an impact on behavior among adolescents in secondary school?

a) Yes []

b) No []

7. Are your school implement HIV/AIDS education interventions programs on reducing risk sexual?

a) Yes []

b) No []

8. Have you ever participated in training about risk behavior of adolescents in Secondary school?

a) Yes ☐

b) No ☐

9. Do you think HIV education intervention programs taught in your school is adequate enough to provide knowledge and skills to you to for preventing HIV infections?

a) Yes ☐

b) No ☐

10. If not enough why?

11. To what extent the secondary school students are aware on the knowledge of HIV/AIDS through their learning?

a) Low level ☐

b) Medium ☐

c) High level ☐

12. Which learning tools are mostly used by teachers to provide knowledge about HIV/AIDS?

a) Syllabus ☐

b) Media ☐

c) Video program ☐

d) Pamphlets and case studies ☐

13. To what extent does it satisfy the needs?

a) Low ☐

b) Moderate ☐

c) High ☐

d) Very high ☐

14. Do you think there is any something important that are missing in provision of HIV/AIDS education programs in secondary school?

a) Yes ☐

b) No ☐

15. What are those things need to be done to improve in delivering HIV education in secondary school?

a) HIV/AIDS education should be provided to both in school and out of school youth ☐

b) The government should support the HIV/AIDS education programs providers ☐

c) There should be a special established counseling unit in all secondary schools ☐

d) Parents and guardians should promote HIV/AIDS education programs in school ☐

Appendix 2: Interview Questions for the Key Informants

TITLE: Contribution of HIV/AIDS Education Programs on Reducing Risky Sexual Behaviors among Adolescents in Secondary Schools: A Case of Chake Chake District, Pemba - Zanzibar.

Institutional Case study: Chake Chake Secondary Schools.

Dear respondent, my name is Sharifa H. Shapandu. I am Post graduate student at OUT I am doing MAME in the Department of Economics and Community Economic Development (ECED), currently I am doing my research on the Contribution of HIV/AIDS Education Programs on Reducing Risky Sexual Behaviors among Adolescents in Secondary School at Chake Chake Pemba District.

This interview will be confidential between interviewee and interviewer and I promise you that I will never disclose any part of this information instead of my research purposes. I look forward to your cooperation.

1. Is there any program designed to provide education on reducing risk sexual behaviors among adolescents in secondary school?
2. If yes which programs below are designed to provide education on reducing risk sexual behaviors among adolescents in secondary school?
3. Do you think these programs have an impact on behavior among adolescents in secondary school?
4. Are your school implement HIV/AIDS education interventions programs on reducing risk sexual?

5. Have you ever participated in training about risk behavior of adolescents in Secondary school?
6. Do you think HIV education intervention programs taught in your school is adequate enough to provide knowledge and skills to you to for preventing HIV infections?
7. To what extent the secondary school students are aware on the knowledge of HIV/AIDS through their learning?
 - a) 8 Which learning tools are mostly used by teachers to provide knowledge about HIV/AIDS?
8. To what extent does it satisfy the needs?
9. Do you think there is any something important that are missing in provision of HIV/AIDS education programs in secondary school?
10. If yes which are those things may barriers towards provision of HIV/AIDS education programs in secondary school?
11. What are the things need to be done to improve in delivering HIV education in secondary school?

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Appendix 3: Ethical Documents



Ref. No OUT/ PG201900032

20th June, 2023

Officer In charge,
Ministry of Education,
P.O.Box 203,
PEMBA.

Dear Officer In charge,

RE: RESEARCH CLEARANCE FOR MS. SHARIFA HAMAD SHAPANDU REG NO: PG201900032

2. The Open University of Tanzania was established by an Act of Parliament No. 17 of 1992, which became operational on the 1st March 1993 by public notice No.55 in the official Gazette. The Act was however replaced by the Open University of Tanzania Charter of 2005, which became operational on 1st January 2007. In line with the Charter, the Open University of Tanzania mission is to generate and apply knowledge through research.

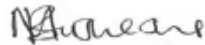
3. To facilitate and to simplify research process therefore, the act empowers the Vice Chancellor of the Open University of Tanzania to issue research clearance, on behalf of the Government of Tanzania and Tanzania Commission for Science and Technology, to both its staff and students who are doing research in Tanzania. With this brief background, the purpose of this letter is to introduce to you **Ms. Sharifa Hamad Shapandu, Reg. No: PG201900032)** pursuing **Master of Arts in Monitoring and**

Evaluation (MAME). We hereby grant this clearance to conduct a research titled **“Contribution of HIV/AIDS Education Programs on Reducing Risky Sexual Behaviours among Adolescents in Secondary Schools in Pemba. A Case of Chake Chake District”**. She will collect her data at your office from 21st June to 30th July 2023.

4. In case you need any further information, kindly do not hesitate to contact the Deputy Vice Chancellor (Academic) of the Open University of Tanzania, P.O.Box 23409, Dar es Salaam. Tel: 022-2-2668820. We lastly thank you in advance for your assumed cooperation and facilitation of this research academic activity.

Yours sincerely,

THE OPEN UNIVERSITY OF TANZANIA



Prof. Magreth S. Bushesha

For: VICE CHANCELLOR





SERIKALI YA MAPINDUZI YA ZANZIBAR

WIZARA YA ELIMU NA MAFUNZO YA AMALI-AFISI KUU PEMBA

58 BARABARA YA HOSPITAL-TIBIRINZI
KICHUNGWANI, SLP 203
74204 KUSINI PEMBA, ZANZIBAR.

Tovuti: www.moez.go.tz
BARUA PEPE: pba.office@moez.go.tz
SIMU: 2452674

KUMB NO: PS/110/116

Tarehe: 21/06/2023.

OPEN UNIVERSITY OF TANZANIA,
P.O BOX 23409,
DAR – ES – SALAAM.

YAH: **RUHUSA YA KUKUSANYA DATA.**

Nina heshima, kukuomba uhusike na mada ya hapo juu, ikiwa ni marejeo ya barua yako ya tarehe 20 June 2023 yenye kumbukumbu No. OUT/PG201900032 inahusika.

Ruhusa imetolewa ya kukusanya data katika Skuli za Sekondari Fidel Castro, Wesha, Shamiyani, Madungu, Pondeani Vitongoji, Istiqama na Ng'ambwa kuanzia tarehe 21/06/2023 hadi tarehe 30/07/2023.

Kwa nakla ya baru hii M/Mkuu wa Skuli ambayo imetajwa hapo juu unaombwa umpokee na kumpa kila aina ya mashirikiano.

Ninakutakia utekelezaji mwema.



/OFISA MDHAMINI WEMA PEMBA.

NAKLA: M/MKUU SKULI YA FIDEL CASTRO, SHAMIYANI, WESHA, MADUNGU, VITONGOJI, ISTIQAMA, NG'AMBWA NA PONDEANI