

## **Performance of Health Strategies in Reducing Hiv/Aids Prevalence in the Catholic Diocese of Homa Bay, Kenya**

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**ABSTRACT:-** HIV/AIDS prevalence within the two counties that constitute the Catholic Diocese of Homa Bay remains high despite numerous interventions and generous resource allocation both from the central and devolved governments as well as donor agencies. This study assessed the performance of health strategies in reducing Acquired Immune Deficiency Syndrome prevalence as enshrined in the 2012 – 2016 Strategic Plan of the Catholic Diocese of Homa Bay. The four strategies are; health education awareness, health nutrition training, disease prevention practices and promotion of safe motherhood. Relying on such theories as adult learning theory, social cognitive theory, theory of planned behavior and the theory of health seeking behaviour, this study investigated how application of various strategies yield results. Towards achieving this, the study purposely targeted the Catholic Diocese of Homa Bay to form a basis for objective generalization. The diocese has six deaneries with a total of 33 health facilities in whose purview the target population of 100 was constituted, whose views and opinions led to the study's generalizations. Cronbach's alpha reliability coefficient was employed to test internal consistency and thereby establish the reliability of the study instruments. Questionnaires were administered to collect data on performance indicators. The data was then processed and analyzed using descriptive and inferential statistical analyses, in which case, Pearson correlation coefficient and regression analysis were applied. Computer software, Statistical Package for Social Sciences (SPSS) version 20 was used to analyze the collected data. The analyzed data was presented in form of tables for ease of communication. The study's key findings in tandem with the study objectives were established. It emerged that, the correlation between health education awareness and success of reducing Human Immune Virus infections stood at .919 implying a strong positive association of 91.9 percent between health education awareness and success of reducing infections. It was also established that the correlation between health nutrition training and success of reducing new Human Immune Virus infections was at 0.75, implying a strong positive association of 75 percent between health nutrition training and strategic intervention in reducing prevalence. The study further revealed that the correlation between disease prevention practices and success of reducing Acquired Immune Deficiency Syndrome incidents was 0.64, implying a strong positive association of 64 percent between disease prevention practices and prevalence reduction. Regarding safe motherhood as a strategic initiative towards the reduction of new infections and mortality, it was found out that at 1 degrees of freedom, the computed  $F = 201.000$  is greater than the critical  $F = .020$ . This implies that the overall regression model was significant. The study recommended key interventions towards mitigation from all sectors. Stakeholders with keen interest in reducing prevalence should help in improving prevention practices rather than curative ones. Safe motherhood should be a key pillar in reducing new Human Immune Virus infections in the Catholic Diocese of Homa Bay. The study opened a gap for further research exploring other strategies implemented to reduce Acquired Immune Deficiency Syndrome prevalence across dioceses and counties.

**Key words ;-** Terms Strategy Implementation, Organizational Strategy, Health Strategies, Strategy

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### **I. INTRODUCTION**

#### **1.1 Background Information**

Organizational Strategy is an expression of how an organization needs to evolve over time to meet its objectives along with a detailed assessment of what needs to be done. Developing an organizational strategy first involves comparing the present state to the targeted state to define differences, and then stating what is required for the desired changes to take place; it also means the sum of the actions an organization intends to take to achieve long-term goals. Strategic plans take at least a year to complete, requiring involvement from all organizational levels (Kotter & Best, 2006). Chandler (2002) points out that formal corporate strategy is a crucial strategic tool because it allows an organization to focus multiple resources on a single objective. Without a clear corporate strategy, organizations lose sight of their objectives and lack the drive and focus that a well-designed strategy provides. It provides management with a benchmark to measure an organization's success or failure. Nixon (2010) acknowledged the fact that a strategy may be good, but if its implementation is poor, the strategic objective for which it was intended may not be achieved. Implementing a plan, according to Pearce and

Robinson (2007), is the process through which a set of agreed work philosophies is translated into functional and operational targets. Kotter and Best (2006) support this position when they state that implementation addresses the; who, where, when and how, and it is thus the tactic that drives the strategy of the organization. Chandler (2002); noted that implementation of organizational plans involves activities that effectively put the plan to work. Strategy implementation may be categorised into two groups, structure and process. Structure explains the configuration of an organization showing the relationships that exists between its various parts, especially the different levels of implementation which could either be the corporate level, managerial level or the operational level. There are six major organizational structures necessary for the implementation of organizational plans. These include, functional, geographic, decentralised business units, matrix structure and the hybrid structure. The process element explains and includes leadership, culture, resources and other administrative procedures. The structure of the organization should be compatible with the chosen strategy if strategy implementation is to be successful. The concept and practice of implementing strategic plans has been embraced worldwide and across various sectors because of its perceived contribution to organizational effectiveness (Thompson & Strickland, 2007).

## **1.2 Health Strategies**

The Catholic diocese of Homa Bay has the following strategies embedded in her 2012-2016 strategic plan to respond to the need to reduce HIV/Aids prevalence; creating awareness on immunizations, Health education and nutritional training, treatment of minor conditions and referrals, involving men in care services, maternal and child care, promoting safe motherhood as well as scaling up interventions of cost effective treatment of such conditions as Malaria, TB, HIV&AIDS (The Catholic Diocese of Homa Bay 2012-2016 Strategic Plan). Among the strategic activities that have specifically been designed to reduce the prevalence of HIV/AIDS are, awareness creation, health education and nutritional training, promoting safe motherhood, training on disease prevention practices, training CORPs, referrals for HIV testing, referral of HIV positive clients for care and treatment, couple counseling and testing, promoting formation of support groups, promoting existing VCT services, OVC support and training of HBC providers.

## **1.3 Statement of the Problem**

The consistently high HIV/Aids prevalence rates in Homa Bay on the one hand, the massive resources – both human and financial invested in the fight against the epidemic with minimal result on the other; added to the reality of a high rate of new infections is not easy to understand. This is especially crucial if an assumption is to be made that the strategies are well implemented and all necessary resources readily available. Matching organization's activities to its environment and the organization's capabilities is vital to any successful implementation of strategic plans (Ndegwah, 2014). It is against the foregoing backdrop that the need to critique, in a way of evaluation, the performance of health strategies enshrined in the Strategic plan of the catholic diocese of Homa Bay finds relevance. In a baseline survey carried out by CAFOD on 'reducing vulnerability to HIV and AIDS through capacity building in agro-enterprise development in Homa Bay district, it was found out that awareness and knowledge on reduction of transmission of HIV was generally high at 98.1%. This high disease burden negatively impacts on economic activities, as young people in their prime age spend most of their waking hours in hospitals. A high disease burden does not only affect the socio-economic power; it also deprives other equally important sectors a much needed financial support as it enjoys a generous financial budget both from the government as well as donor agencies. While implementation of strategies in any setting has its own hurdles, the success of every institution depends on the quality and commitment of its human resources to implement laid strategies (Bitange, Kipchumba, & Magutu, 2010). The present study thus endeavoured to identify any such hurdles that may peculiarly impede successful implementation of strategies on health in a faith-based organization. Research has shown that availability of resources does not always lead to successful implementation of laid down strategies. This study was therefore based on a further assumption that the near insignificant reduction of the HIV/AIDS prevalence might be due to other reasons outside implementation. While a number of research studies on performance of strategies and strategic plan implementation have been carried out in various organisations (Wambui, 2010), none had been undertaken to establish performance of health strategies on a religious organization. The present research sought to focus on individual strategies being implemented by the catholic diocese of Homa Bay to enable for an evaluation of their efficacy and consequent relevance towards the need to cause a reduction in HIV/AIDS prevalence within the two counties under the jurisdiction of the diocese.

## **1.4 Research Objectives**

The study was guided by the following objectives.

### **1.4.1 General Objective**

The general objective of the study was to evaluate the performance of HIV/Aids strategies in the Catholic Diocese of Homa Bay

#### **1.4.2 Specific Objectives**

The study set out to achieve the following specific objectives:

- i. To assess the relationship between health education awareness and HIV/Aids prevalence rates within the Catholic Diocese of Homa Bay
- ii. To determine the relationship between health nutrition training and HIV/Aids prevalence rates within the Catholic Diocese of Homa Bay
- iii. To examine the relationship between disease prevention practices and HIV/Aids prevalence rates within the Catholic Diocese of Homa Bay
- iv. To assess the relationship between promotion of safe motherhood and HIV/Aids prevalence rates within the Catholic Diocese of Homa Bay.

#### **1.5 Significance of the Study**

It was anticipated that the study would be of crucial significance to all information users who include the government leaders, government agencies, NGOs and church based organizations. Other dioceses and funding partners are also set to benefit from the findings of this study. The diocesan secretariat of the Catholic Diocese of Homa Bay that supervises the implementation of the 2012-2016 Strategic Plan would particularly find this study useful. It would also provide invaluable information to donor agencies that support the health department of the CDoHB. The strategy executors would benefit from popular views and opinions on their commitment and approaches to implementing the strategies in place to help fight the spread of HIV/AIDS pandemic, while the external government agencies such as Efficiency Monitoring Unit (EMU), Vision 2030 Secretariat and auditors would easily access pre-requisite information for respective decision making.

#### **1.6 Scope of the Study**

The study was limited to the ‘Performance of health strategies in reducing the prevalence of HIV/AIDS in the Catholic Diocese of Homa Bay, Kenya’. The choice of Homa Bay diocese was reliably informed by the national statistics on prevalence rates within the country, which shows Homa Bay and Migori counties contributing the highest percentage to new infections and people living with the HIV/Aids virus. The study areas were the health institutions within the deaneries of the Catholic Diocese of Homa Bay namely; Asumbi, Mawego, Rapogi, Mirogi, Isebania and Tonga. Specific recommendations were pegged on strategies and how the work within the specific deaneries aiming to fulfill the implementation of organizational plan on health in the Catholic Diocese of Homa Bay realized the laid down objectives.

## **II. LITERATURE REVIEW**

### **2.1 Introduction**

A guided review of literature as contained in this section was done for the purpose of understanding the study area and putting the research questions in their right scope and context. The key areas covered include conceptual framework, theoretical reviews, empirical literature review and summary of literature review and research gaps to be filled by the study.

### **2.2 Theoretical Review**

For the purposes of this study, four theories on implementation of health based strategies were reviewed to form its conceptual basis.

#### **2.2.1 Adult Learning Theory**

Many dissemination and implementation strategies are underpinned in part by adult learning theory which proposes that personal motivation is critical to achieving behaviour change. An underlying assumption of learning theory is that practitioners are rational information seekers and decision makers and that once the information has been disseminated, behaviour change will simply follow. However, evidence clearly shows that simple distribution of information is insufficient for sustained behaviour change (Bero et al., 1998; Bywood et al., 2008a; Grimshaw et al., 2004; Oxman et al., 1995). Adult learning theory suggests that adults have specific needs that should be met in order to enhance their learning capacity. The study found in this theory an evidence-based approach to health education awareness initiatives carried out by health facilities within the catholic diocese of Homa Bay. The programmatic outreach exercises disseminate crucial information about the reality of the HIV/Aids pandemic through the use of audio-visuals and interactive sessions during which superstitious myths about the disease are disabused. The accurate information received then serves as a motivation for

behaviour change and in many cases courage to visit VCT centers. This theory is key in attempts to reduce and possibly eliminate stigmatization that works against all efforts to reduce HIV/AIDS prevalence.

### **2.2.2 Social Cognitive Theory**

Social Cognitive Theory (SCT) posits that whether a person will change a health behaviour depends on self-efficacy, goals, and outcome expectancies. If individuals have a high level of confidence, they can change even when they are faced with many obstacles. If they are not confident about the behaviour in question, they will be less motivated to act or to persevere through obstacles or challenges as they arise. This theory has variously been lauded for its ability to question deeply rooted cultural orientations as it at the same time helps disabuse the many misleading myths that initially shrouded the reality of HIV/AIDS in mystery. One reason for this is perhaps its appeal to human intelligence. It also offers empirical evidence of observable change before and after a proposed practice. Furthermore, it has proven efficacy on suggesting better nutritional choices and healthy eating habits. The present study found in this theory a means of proposing to PLWHAs dietary regimes that would be consistent with their condition. Important elements of SCT include reciprocal determinism, behavioural capability, expectations, and self-efficacy, observational learning, and reinforcements (Bandura, 1986). Against the backdrop of this theory exist numerous programmatic approaches by various donor agencies that implement integrated food security programs to vulnerable communities, where vulnerability almost always also mean the HIV/AIDS condition and its attendant effects. This theory, as already mentioned, informs the quest to correct the many erroneous perceptions and attitudes that accompanied the very first cases of HIV/AIDS which militated against any genuine attempts to mitigate its effects. The social cognitive theory lends credence to the second objective of this study which seeks to investigate the efficacy of health nutrition training as a strategic activity towards the need to reduce disease burden within the catholic diocese of Homa Bay with special emphasis on HIV/AIDS prevalence.

### **2.2.3 Theory of Planned Behaviour (TPB)**

Adapted from the Theory of Reasoned Action, the theory of Planned Behaviour (TPB) places emphasis on the concept of 'behavioral intention', which is predicted by an individual's outcome expectancies, their attitude toward the behaviour and their normative beliefs as to whether others (influential or respected peers) think they should engage in the behaviour (Ajzen, 1991). This is closely related to the concept of self-efficacy in social cognitive theory. TPB includes measures of control beliefs and perceived behavioral control which is thought to influence both intention and behaviour. The TPB, which is the most extensively studied motivational theory, proposes that the proximal determinant of behaviour is the intention to act, which is influenced by the attitude towards the behaviour, subjective norms, and the perception of control over the behaviour (Hardeman et al., 2002). It has been used most frequently for predicting behaviour change. With information, persuasion, increasing skills, goal setting, rehearsal of skills, modeling, and planning/ implementing and social support as its most important components, TPB is used most often for identifying cognitive targets for change. An HIV/AIDS prevention practice which was the third strategy under investigation was anchored on this theory, whose success would then be gauged on measurable behaviour change. This theory it is, that informs all conjectures on prevention, ranging from blood safety through fidelity to voluntary testing and counseling (VCT) among other time honored prevention strategies. Separation of facts from falsehoods and distinction between sheer superstitions and realities about HIV/AIDS largely rely on this theory of planned behaviour (TPB). Prevention remains a more noble choice in comparison to prophylaxis which attracts higher financial obligations and may not be sustainable to many individuals due to their humble economic ability.

### **2.2.4 Theory of Health-Seeking Behaviour**

Health-seeking behaviour theory postulates that an individual's deeds to the promotion of maximum well-being, recovery and rehabilitation could happen with or without health concerns and within a range of potential to real health concerns (Poortaghi et. al, 2015). Employing a rigorous evolutionary concept analysis approach, the concept of health seeking behaviour was examined for its implications, use and significance in the discipline of nursing between the years 2000 and 2012. The definition of attributes, antecedents, and consequences of health seeking behaviour was performed through concept analysis. Core attributes (interactional, processing, intellectual, active, decision-making based and measurable). The antecedents of the concept were categorized as social, cultural, economic, disease pattern and issues related to health services. Health-seeking behaviour resulted in health promotion and disease risk reduction. In addition, it led to predicting the future probable burden of the disease, facilitation of the health status, early diagnosis, complete and effective treatment and complication control. Safe motherhood with its attendant components such as antenatal care and safe delivery are requisite elements of health-seeking behaviour. The mandatory HIV testing of pregnant mothers helps medical personnel save infants whose mothers are found to be positive. This, impacts positively on reducing HIV/AIDS prevalence. HIV negative mothers are reminded of the need to carry out

exclusive breastfeeding, at least for the first six months after delivery while children born with the virus are immediately enrolled into Anti-retroviral treatment (ART) programs. This theory stands out as unique because it is more an initiative of the beneficiary, who in pursuit of good health should find evidence-based practices that meet their needs and consequently works towards the achievement of desired results. It is on the foregoing theory that the researcher interrogated the fourth objective of this study.

### **2.2.5 Disease prevention practices and HIV/Aids prevalence reduction**

A study carried out by Green (2001) in Uganda revealed that involvement of faith-based organizations impacted significant behaviour change. He observes that apart from delay of sexual debut, about 7% of women and 10% of men aged 15-50 reported that they have adopted complete and sustained abstinence for HIV protection in the previous year by the mid-1990s. This rose to over 20% in 2000. A study on Factors Influencing Behaviour Change for the Prevention of the Spread of HIV/Aids among Students in Githunguri Division, Githunguri District, Kiambu (Ndegwa et al., 2012) found that slightly more females (60.5 %) than males (58.9%) thought they would be regarded as cowards when they abstained from sex. It can also be seen that more of those that had never had sex (59.9%) thought they were regarded in this manner. If the findings of the foregoing study are anything to go by, the role of peer pressure and its consequent influence on the behaviour of young people should be cogently factored in the efforts to curb new infections. There is some evidence from impact studies, such as a UNAIDS "Best Practices" study of the Islamic Medical Association of Uganda (IMAU) which shows that AIDS prevention activities carried out through religious leaders has had significant direct impact on particular populations targeted. Green (2001) concludes that FBOs are best positioned of any group to promote fidelity and abstinence. This, he says, is their comparative advantage. It is worth noting that all health facilities implementing the strategies tailored to reduce the HIV/Aids prevalence are managed by the church as guided by her social teachings (STC). The target beneficiaries however are not strictly catholic faithful, but rather the entire human population; creed, gender, ethnicity and social class notwithstanding. Disease prevention practices in our context are all encompassing. This is especially because HIV/AIDS strictly speaking is not a disease, but rather, a condition that renders the immune system weak and vulnerable. Any other pathogenic infection at once becomes potentially fatal, as the body's defense system is rendered weak. It then becomes crucial to employ disease prevention practices for all possible infections ranging from commonly treated tropical infections to more complicated illnesses like Tuberculosis.

### **2.2.6 Promotion of safe motherhood and HIV/Aids prevalence reduction**

Mwaura (2009) in his study 'HIV/Aids Prevention Strategies in Kenya: A Critical Review', observes that data evidence reveals the reality that women continue to be disproportionately infected by HIV/AIDS in Kenya. He goes on to explain that in any given heterosexual encounter, women are more susceptible than men to infection with HIV. This, he asserts is mainly due to predisposing biological factors. Scaccabarozzi (2008) as quoted by Mwaura (2009) concurs that women are more vulnerable to infection because a greater area of their mucous membrane is exposed during sex than in men; a greater quantity of fluids is transferred from men to women; there exists a higher viral content in male sexual fluids; and that the micro-tears that may occur in vaginal (or rectal) tissue due to sexual penetration expose women to infection. He goes ahead to propose this disparity as the underlying reason for the higher HIV/AIDS risk women and girls face. Any intervention focussing on women is therefore always poised to deliver better results with regard to prevalence reduction. Mwaura (2009) further proposes a number of strategies with proven success in neighboring Uganda, and which he recognizes as successful in Kenya as well. These include; preventing sexual transmission, preventing blood-borne transmission, blood safety (including routine screening of donated blood), preventing mother-to-child transmission and social strategies and supportive policies. While he steers clear of any role that could be played by FBOs, his optimism on the efficacy of various strategies is obvious. Promotion of safe motherhood therefore stands out as a dependable strategy in the quest to reduce HIV/AIDS prevalence. Vertical transmission, perhaps the most compelling evidence of the significance of viral load and transmission risk has been directly linked to MTCT of HIV/AIDS (Stefano, et al. 2005). They further observe that maternal viral load, as quantified by RNA polymerase chain reaction, is associated with increased risk in each mode of vertical transmission (Stefano, et al. 2005). Moswane (2013) accurately observes that the need to stem mother-to-child-transmission (MTCT) is an indispensable component towards significant prevalence reduction. 'MTCT', he avers, 'can occur during pregnancy, delivery, or breastfeeding. Thus, it is important that HIV-positive women be given antiretroviral (a regimen at the time of delivery) in addition to a one-week postpartum regimen for both the woman and her newborn. Access to VCT and adequate infrastructure to procure and administer ARV drugs cannot be over-emphasised for intervention purposes.' Promotion of safe motherhood activities includes assuring safety from Malaria, Cholera, Typhoid, Pneumonia and any other infections that are routinely attended to in the health facilities.

### 2.3 Conceptual Framework

The study's thematic intent was based on preposition by Hill and Jones (2010) that strategy implementation involves the use of organizational design to pursue a business model successfully. Fig 2.1 below illustrates the study's conceptual framework.

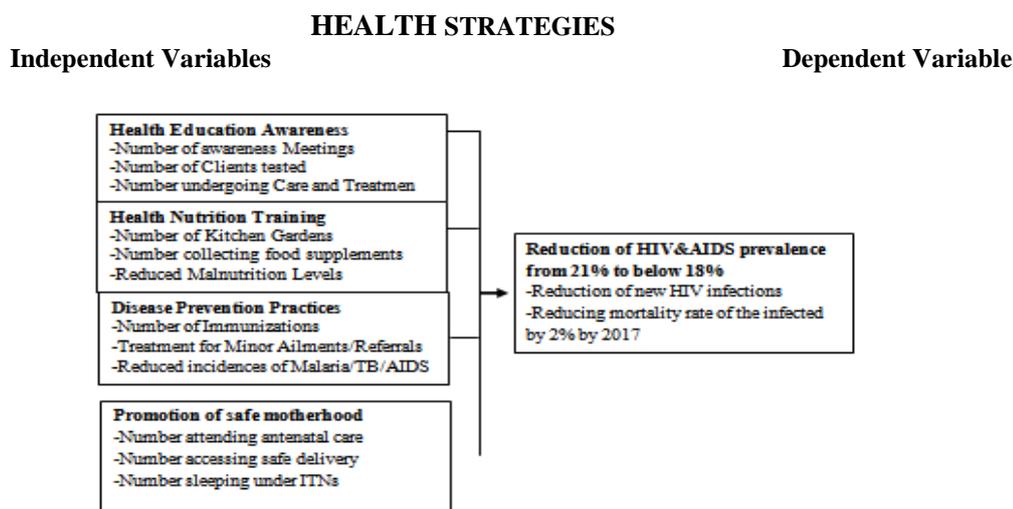


Fig. 2-1: Relationship between dependent and independent variables  
 Source: Adopted from Hill and Jones (2010)

As illustrated in Fig. 2.1 above, reduction of HIV/Aids prevalence depends on the effective implementation of the four independent strategies; that is, Health education awareness, health nutrition training, disease prevention practices and promotion of safe motherhood. It is important to note too that each of these strategies are further broken into specific, measurable, attainable, realistic and time based (SMART) deliverables which then serve as indicators of evaluating goal attainment. Under health education awareness as a strategy for instance, the number of awareness meetings, the number of clients who volunteer to know their status and the number who having discovered that they are infected, begin treatment and care serve to deliver the ultimate objective of this strategy which is twofold, reduction of new infections as well as reduction of mortality rate of those already infected. This is true for the other three strategies as well. The overall impact of the four independent variables (Health strategies) on the dependent variable (HIV/Aids Prevalence reduction) is tabulated in Table 4.33 which gives a summary of all the study variables.

## III. RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter introduced the research methodology that was used in meeting the pre-set study objectives. In particular, it explains the research design, target population, research instruments, research validity and reliability, data analysis and ethical considerations.

### 3.2 Research Design

Research design seeks to provide answers to research questions and control variance. This study adopted both qualitative and quantitative research design. Quantitative research according to Yin (2003), is structured to examine a number of logical sub-units or units of analysis within organizations. Morris and Wood (1991) acknowledge the importance of descriptive design especially when the intent is aimed at gaining broader understanding of the context of the research and processes being enacted. They argue that the design has considerable ability to generate answers to the questions of 'why?' and when? 'What?' and 'how?' Quantitative methods of data analysis can be of great value to the researcher who is attempting to draw meaningful results from a large body of qualitative data. The main beneficial aspect is that it provides the means to separate out the large number of confounding factors that often obscure the main qualitative findings. This study therefore relied on qualitative data whose ultimate meaning was then extracted from quantitative analysis.

### 3.3 Target Population

The study carried out a survey on all the administrators and nurses in all the 33 diocesan health facilities. The use of a census was most appropriate because while the administrators are the custodians of all records and statistics as well as training manuals and disease surveillance tools, the nurses were best placed to respond to more personalized aspects of medical interventions since they provide home-based care (HBC) to the

patients and interact with them on a daily basis. Furthermore, nearly all the nurses interact with different categories of patients across the two counties that constitute the diocese.

### 3.4 Data Analysis

When used along with quantitative methods, qualitative research can help us to interpret and better understand the complex reality of a given situation and the implications of quantitative data. The researcher used the qualitative data to describe variation as well as to describe and explain relationships between the variables. According to Berelson (1952), content analysis is a research technique for the objective, systematic, and quantitative description of manifest content of communications. Inferential analysis used Pearson correlation coefficient and regression analysis. Descriptive statistics involved the use of percentages and mean scores to determine varying degrees of response-concentration. These statistics were generated with aid of the computer software, Statistical Package for Social Sciences (SPSS) Version 20.0. The R<sup>2</sup> value of the variation in the performance of health strategies was explained by the variation in the independent variables jointly.

The regression equation of the form of

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + E$$

Where:

Y= Reduction of HIV/Aids prevalence

$\beta_0$ = is the constant term

X<sub>1</sub>=Health education awareness

X<sub>2</sub>=Health nutrition training

X<sub>3</sub>= Disease prevention practices

X<sub>4</sub>= Promotion of safe motherhood

Was estimated.

E= the error term captures all relevant variables not included in the model because they are not observed in the data set. The error term in the equation was used for inferential analysis. Pearson's correlation coefficient when applied to a sample is commonly represented by the letter r and may be referred to as the sample correlation coefficient or the sample Pearson correlation coefficient. We can obtain a formula for r by substituting estimates of the co-variances and variances based on a sample into the formula above. So if we have one dataset {x<sub>1</sub>...x<sub>n</sub>} containing n values and another dataset {y<sub>1</sub>...y<sub>n</sub>} containing an n value; then the formula for r is;

$$r = r_{xy} = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2} \sqrt{\sum_{i=1}^n (y_i - \bar{y})^2}}$$

Where: n, x<sub>i</sub>, y<sub>i</sub> are defined as above

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$$

(This is the sample mean: the term for y is similar)

#### 3.7.1 Instrument Validity

Dornyei (2003) argues that research instruments are measurement devices that must possess adequate reliability. A valid instrument measures what it claims to measure. Validity is determined by presence or absence of systematic error in data. This researcher relied on expert opinion of the supervisor to ensure that content and format of the questionnaires were appropriate.

#### 3.7.2 Instrument Reliability

A reliable instrument is one that is accurate, stable, consistent, dependable and predictable. Variables derived from test instruments are declared to be reliable only when they provide stable and reliable responses over a repeated administration of the test. The researcher used Cronbach's alpha reliability coefficient which normally ranges between 0 and 1. According to Gliem (2003) the closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Although the standards for what makes a "good"  $\alpha$  coefficient are entirely arbitrary and depend on one's theoretical knowledge of the scale in question, many methodologists recommend a minimum  $\alpha$  coefficient between 0.65 and 0.8 (or higher in many cases);  $\alpha$  coefficients that are less than 0.5 are usually unacceptable, especially for scales purporting to be uni-dimensional. The researcher carried out a pilot study to ascertain the reliability of the tool to be used for data collection to ascertain its ability to measure the study indicators

## IV. IV FINDINGS AND DISCUSSION

### 4.1 Introduction

This chapter presents the responses from target population of the study whose main objective was to determine the performance of health strategies in reducing HIV/Aids prevalence within the Catholic Diocese of Homa Bay. The data was analysed through descriptive statistics and presented using tables and in prose using qualitative content analysis. The study also made valid replicable inferences on the data in various contexts. At the end of every variable described, hypothesis testing was done and analysis conducted to statistically determine whether the independent variables affect or influence the dependent variable.

### 4.2 Response Rate Analysis

The study targeted a population of 100 health workers in the diocesan health facilities within the catholic diocese of Homa Bay. A total of 82 respondents were successfully subjected to the data collection instrument. This represented a response rate of 82 percent. This is a very high response rate compared to previous studies wherein Ndegwah (2014) attained 65%, Aosa (1992) attained 52% and Abok (2013) who attained 55%. Statistical authors recommend 30% as suitable for a good study that can credibly be generalized. This response rate was thus established to be good hence data processing was commenced. The response rate is shown in table 4.1 below;

#### 4.2.1 Response Rate

**Table 4.1 Response rate**

Position	Frequency	Percent
Administrators	25	20.5
Nurses	57	69.5
Total	82	100.0

**Source:** Research data, (2016)

From the above table, the response rate was established as represented by 82 percent.

### 4.3 Respondents' profile

The key personal information of respondents included gender, position in the health facility, qualification and length of time in the position held at the facility. Respondents profile has an important role to play in any study on HIV/AIDS, this is because as Moswane (2013) counsels, mitigating the impacts of AIDS in families requires a comprehensive approach and observing the relationships between cultural, political, personal practices and religious values in the community. Qualitative data would especially be analyzed while taking cognizance of the profile of each respondent.

#### 4.3.1 Respondents' Gender

This question sought to establish gender distribution of the respondents. The results of gender distribution from table 4.3 indicate that majority (67.1%) of the respondents was female and minority (32.9%) was male. A high female representation is because of a general experience that nursing profession attracts more females than males. Furthermore, a higher population of nurses was targeted for the study since they carry out follow up visits to patients and also provide home based care to the infected. They are therefore best placed to help gauge the impact of the various strategies under study. Flint (2011) observes that prevalence rates among young women far outstrip those among their male counterparts because of the physiological differences. More female respondents is therefore helpful for the study. This is because their input is not likely to be merely casual or pedestrian. It would be expected that their close relationship with the infected and the affected and their own vulnerability would help yield honest and well thought out responses to the study questions. Table 4.2 below shows the distribution of gender of the respondents.

**Table 4.2: Gender of respondents**

Gender	Frequency	Percent
Female	55	67.1
Male	27	32.9
Total	82	100.0

**Source:** Research data, (2016)

### 4.3.2 Respondents' Position in the facility

This question sought to establish the position of the respondents in the health facility. Majority of respondents were nurses (65.5%), followed by administrators (30.5%). Every health facility can only have one administrator. The facilities however have more nurses as often dictated by their respective bed-capacities and the average number of patients visiting the facility on daily basis. Position in the facility was an important variable that enables the respondent to speak with authority and make useful suggestions for possible improvement. As Mwaura (2009) mentions in his study 'HIV/Aids Prevention Strategies in Kenya: A Critical Review,' the millennium goal number six aims at halting and reversing the spread of AIDS by 2015. These projected timelines especially when taken into consideration by health officials serve as beacons against which progress can be measured. The fact that the year 2015 elapsed before this study should be a clear challenge to the administration of the health facilities within the study area to reflect on the prevailing state of affairs and offer constructive critique.

Table 4.3 below shows the distribution of position of respondents who participated in the study.

**Table 4.3: Position in the facility**

Position	Frequency	Percent
Administrator	25	30.5
Nurse	57	69.5
Total	82	100.00

Source: Research data, (2016)

### 4.3.3 Respondents' qualifications

This question sought to establish the academic qualification of the respondents. Majority of respondents had attained KRCHN qualification accounting for 50 percent; these were closely followed by Diploma in nursing as represented by 31.7 percent. Those with unspecified diploma qualifications were represented by 18.3 percent. The unspecified diplomas were mostly those held by administrators who studied management and financial accounting courses. Respondents' qualification was important for this study since it served as a useful criterion in making decisions to clean or even eliminate aspects of data that were not consonant with the area of study. Table 4.4 shows the distribution of the qualification of the respondents who participated in the study.

**Table 4.4 Qualification of the respondents**

Qualification	Frequency	Percent
KRCHN	41	50.0
Diploma in nursing	26	31.7
Diploma	15	18.3
Total	82	100.0

Source: Research data, (2016)

### 4.3.4 Respondents' Length of time in position

Table 4.5 below shows the distribution of the length of time in the respondent's respective positions in the health facilities in which they worked.

**Table 4.5: Length of time in the position in the organization**

Duration	Frequency	Percent
Below 5 years	32	39.0
6 – 10 years	25	30.4
11 – 20 years	12	14.6
21 – 25 years	8	9.8
26--30 years	5	6.2
Total	82	100.0

Source: Research data, (2016)

This question sought to establish the length of time each respondent had held their respective positions within the health facility. Majority of respondents had worked for a duration of less than five years (39%), followed by

those who had worked for durations ranging between 6 and 10 years (30.4%). Length of time of service within the facility is an important variable in establishing the trends of HIV/Aids prevalence reduction since the strategic plan was launched in 2012 to the time of the study. The fact that only 39% of the respondents had served for a period below five years and the other 61% had served for years ranging between 6 to 30 years was good for the study as a larger percentage of the respondents had the necessary institutional memory to notice change.

#### 4.3.5 Most Frequently Treated Illnesses

The distribution of commonly treated diseases is shown in table 4.6 below.

**Table 4.6: Most frequently treated diseases at the health facilities**

Diseases commonly attended to	Responses	
	N	Percent
Malaria	82	17.1%
Respiratory tract infection	41	8.5%
URTI	56	11.7%
HIV	25	5.1%
Diarrhea	41	8.5%
P.U.D.	15	3.1%
Hypertension	41	8.5%
Anemia	15	3.1%
Opportunistic infection	67	14.0%
T B	15	3.1%
Pneumonia	41	8.5%
Skin disease	41	8.5%
<b>Total</b>	<b>480</b>	<b>100.0%</b>

Source: Research data, (2016)

This question sought to establish the disease burden within the area of study. This was important for the ultimate study findings because reduction of HIV/AIDS prevalence cannot be achieved in isolation. Malaria and opportunistic Infections (OIs) had the highest prevalence rate (17.1%) and 14.0 percent respectively. The fact that all respondents listed Malaria as a frequently treated disease underscores the need to step up disease prevention and safe motherhood as strategies towards reduction of the disease burden within the area of study. Among the most useful disease prevention strategy was sleeping under insecticide treated mosquito net. It is worth noting too that the opportunistic infections came second only after Malaria. HIV/AIDS was established at 5.1 percent prevalence rate. This is consonant with the statistics from the National Aids and STI control program (NAS COP, 2014) on HIV/Aids prevalence within Homa Bay and Migori Counties. This study therefore confirms both the national statistics as well as the findings of a baseline survey by CAFOD (2014

## V. V CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Introduction

This chapter presents the summary of the research findings and discusses the broader implications of the findings for theory, practice, policy and further research in government departments of health, Faith based organizations, NGOs implementing HIV/AIDS related programs as well as in the field of strategy. The study sought to investigate the performance of health strategies in reducing HIV/AIDS prevalence in the catholic diocese of Homa Bay, Kenya. The study was guided by the following objectives; to assess the relationship between health education awareness and HIV/AIDS prevalence rates within the Catholic Diocese of Homa Bay, to determine the relationship between health nutrition training and HIV/AIDS prevalence rates within the Catholic Diocese of Homa Bay, to examine the relationship between disease prevention practices and HIV/Aids prevalence rates within the Catholic Diocese of Homa Bay and to assess the relationship between promotion of safe motherhood and HIV/Aids prevalence rates within the Catholic Diocese of Homa Bay. The study adopted both qualitative and quantitative research design. Descriptive statistics such as frequencies, percentages and tabulation were used to summarize, describe, analyze and present the study findings. This chapter summarizes the findings of the study and the statistical analysis. The presentation is organized around specific objectives and research hypotheses to assess the results by evaluating and interpreting them. The conclusions are in tandem with the specific objectives and research hypotheses. The recommendations refer to suggestions for further study or proposal for change. Each recommendation relates to each conclusion.

## **5.2 Summary of key findings**

The summary of the study's key findings are hereby presented per objective. The first objective of the study sought to assess the relationship between health education awareness and HIV/Aids prevalence rates within the Catholic Diocese of Homa Bay. It was found out that, the correlation between health education awareness and success of reducing HIV/AIDS infections was established at .919 implying a strong positive association of 91.9 percent between health education awareness and success of reducing HIV/AIDS infections. Put differently, all factors held constant, health education awareness should cause a significant reduction in the prevalence of HIV/AIDS. This finding agrees with earlier studies such as those of Moswane (2013), Oluduro (2010) and Mwaura (2009) whose findings reveal a positive relationship between awareness and HIV/Aids prevalence reduction. The second objective was to determine the relationship between health nutrition training and HIV/Aids prevalence rates within the Catholic Diocese of Homa Bay. According to the study's findings, the correlation between health nutrition training and success of reducing HIV/AIDS infections was established at 0.75 implying a strong positive association of 75 percent between health nutrition training and strategic intervention in reducing HIV/AIDS infections. Healthy nutrition particularly helps to boost immunity of PLWHAs, thereby significantly reducing HIV/Aids related complications and deaths. This finding is consistent with that of Belaynew Wasieleski, et al (2010) who observe that prevalence of malnutrition among PLHIV was the most predisposing factor to their the high HIV/AIDS mortality. The third objective was to examine the relationship between disease prevention practices and HIV/AIDS prevalence rates within the Catholic Diocese of Homa Bay. It was established in the study that the correlation between disease prevention practices and success of reducing HIV/AIDS incidents stood at 0.64 implying a strong positive association of 64 percent between disease prevention practices and reducing HIV/AIDS incidents. Green (2001) in his study attests to the efficacy of disease prevention practices, especially promotion of fidelity in marriage and abstinence. Mwaura (2009) goes farther to list such activities as prevention of sexual transmission, prevention of blood-borne transmission, blood safety, prevention of mother to child transmission and social support as some of the most reliable disease prevention practices. Oluduro (2010) maintains that, the fact that many religious leaders do not have the technical knowledge on HIV/AIDS from a medical perspective presents the need to arrange for constant and regular training of religious leaders on HIV/AIDS prevention, as well as care. This will enable them to serve both as educators as well as disseminators of this information to their congregations. The fourth objective was aimed at assessing the relationship between promotion of safe motherhood and HIV/Aids prevalence rates within the Catholic Diocese of Homa Bay. It emerged that at 1 degrees of freedom, the computed  $F = 201.000$  is greater than the critical  $F = .020$ . This implies that the overall regression model was significant. Safe motherhood as a strategy towards reducing HIV/Aids prevalence is particularly useful in reducing mother to child transmission. This finding is in line with that of Mwaura (2009) who warns that without intervention, about 40% of HIV - positive pregnant women will pass on the infection to their babies during pregnancy, delivery and the post-natal period through breastfeeding. He asserts that without preventive interventions, about 10-20% of infants born to infected mothers will contract the virus through breast milk if breastfed for two years. A further reason that necessitates sufficient focus on this strategy is the reality that most of these women are in their reproductive age and are often at their peak with regard to sexual activity. This is usually around the age of 24 – 39 when their possibility of entertaining more than one sexual partner is equally probable. Promotion of safe motherhood therefore at once minimises new infections as well as reduces HIV/AIDS mortality.

## **5.3 Discussions**

The strong positive association of 91.9% between health education awareness and success of reducing HIV/Aids as established by this study echoes the work of the National Research Council (1996) that applauded African governments as well as international development agencies, private voluntary organizations, and other nongovernmental groups that have over the years devoted resources, time, and energy to developing low-cost interventions to arrest the spread of HIV and Aids through awareness creation. The findings are also in tandem with the works of Nana Nimo, Appiah-Agyekum & Robert Henry Suapim, (2013) that established that, while knowledge and awareness does help reduce new infections, the ultimate results when this strategy when solely applied are not necessarily predictable. Green (2001) reports success in prevalence reduction in Uganda while Oluduro (2010) reports positive results achieved by religious leader's awareness campaigns in Nigeria. On the contrary, a baseline survey carried out by CAFOD in Homa Bay diocese and the findings of Nana Nimo, Appiah-Agyekum & Robert Henry Suapim (2013) in their study 'Knowledge and awareness of HIV/AIDS among high school girls in Ghana' reveal that without supporting strategies, awareness alone does not significantly cause reduction of new infections as revealed by the number of girls who thought it worthwhile to seek to know their status even when they admitted that they were sexually active. Mwaura (2013) appraises a cocktail of strategies complete with supporting policies, which he fronts as the reason behind the success story of Uganda's onslaught on the HIV/Aids pandemic.

## **S Recommendations**

Based on the findings, the following **recommendations** were made;The government, both at county and national levels should make deliberate efforts to formulate policies and strategies to increase health education awareness relating to mitigation of HIV/AIDS prevalence rates in the Catholic Diocese of Homa Bay and beyond. In the same vein, the legislature both at national and county levels should undertake new legislative works and make laws that promote efforts and strategies that increase health education awareness relating to mitigation of HIV/AIDS prevalence rates in the Catholic Diocese of Homa Bay

**Non-governmental organizations and FBOs compliment government efforts in improving health nutritional training as a means of addressing the HIV/AIDS in the Catholic Diocese of Homa Bay. The government, both county and national should create conducive environments to enable them reach as many people as possible. Improvement of preventive rather Recommendations**

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**Non-governmental organizations and FBOs compliment government efforts in improving health nutritional training as a means of addressing the HIV/AIDS in the Catholic Diocese of Homa Bay. The government, both county and national should create conducive environments to enable them reach as many people as possible. Improvement of preventive rather**

## **5.4 Conclusions**

Health education awareness is fundamental in mitigating HIV/AIDS prevalence rates within the Catholic Diocese of Homa Bay. This study has demonstrated that a greater awareness translates into reduced prevalence. Efforts to create and sustain awareness should therefore be made by all concerned parties in the fight against the HIV/AIDS scourge. Religious institutions and FBOs should particularly be on the frontline in creating awareness and addressing stigma and other retrogressive attitudes that militate against all efforts to reduce HIV/AIDS prevalence. Health nutrition training as a strategy in reducing HIV/AIDS prevalence rates within the Catholic Diocese of Homa Bay is effective as it improves the longevity of those already infected and improves the general well-being of individuals. The study concludes that disease prevention practices play a pivotal role in the reduction of the incidents of HIV/AIDS prevalence rates within the Catholic Diocese of Homa Bay. The need to step up disease prevention practices cannot be emphasized enough. While the major focus should be on the prevention of HIV/AIDS, the diocese and other FBOs should find it necessary to escalate their disease prevention strategies in all forms and work towards reducing disease burden within the catholic diocese of Homa Bay. Finally relating to the fourth objective, this study concludes that promotion of safe motherhood is a key imperative in mitigation efforts of reducing HIV/Aids prevalence rates within the Catholic Diocese of Homa Bay.

## **5.5 Recommendations**

Based on the findings, the following recommendations were made;The government, both at county and national levels should make deliberate efforts to formulate policies and strategies to increase health education awareness relating to mitigation of HIV/AIDS prevalence rates in the Catholic Diocese of Homa Bay and beyond. In the same vein, the legislature both at national and county levels should undertake new legislative works and make laws that promote efforts and strategies that increase health education awareness relating to mitigation of HIV/AIDS prevalence rates in the Catholic Diocese of Homa Bay Non-governmental organizations and FBOs compliment government efforts in improving health nutritional training as a means of addressing the HIV/AIDS in the Catholic Diocese of Homa Bay. The government, both county and national should create conducive environments to enable them reach as many people as possible. Improvement of preventive rather than the curative approach should be emphasized to everyone interested in combating the HIV/Aids pandemic. Safe motherhood is a key pillar in mitigating the HIV/AIDS prevalence in the Catholic Diocese of Homa Bay. It particularly helps to reduce mother to child transmission and so reduce new infections. Furthermore, since reproductive age is also the age of escalated sexual activity, both government and donor agencies keen on HIV/Aids prevalence reduction should purpose to channel more resources to women of reproductive age, as well as on activities that ensure safe motherhood.

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