

**COMMUNITY PERSPECTIVES TOWARDS
MANDATORY TESTING FOR HIV IN MACHA**

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LIST OF ABBREVIATIONS

VCT	-	VOLUNTARY COUNSELING AND TESTING
CDC	-	CENTER FOR DISEASE CONTROL
HIV	-	HUMAN IMMUNODEFICIENCY VIRUS
UNAIDS	-	UNITED NATIONS PROGRAM ON HIV/AIDS
WHO	-	WORLD HEALTH ORGANIZATION
HAART	-	HIGHLY ACTIVE ANTIRETROVIRAL THERAPY
ZDHS	-	ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY
TB	-	TUBERCULOSIS
ZARAN	-	ZAMBIA AIDS LAW RESEARCH AND ADVOCACY NETWORK
LAZ	-	LAW ASSOCIATION OF ZAMBIA
CAF	-	CANADIAN ARMED FORCES
ARV	-	ANTIRETROVIRAL
PWA	-	PEOPLE LIVING WITH AIDS
ZMA	-	ZAMBIA MEDICAL ASSOCIATION

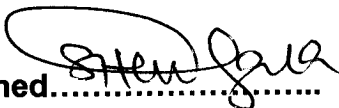
DECLARATION

I Doreen Sitali, declare that this Dissertation represents my own work and that all the sources I have quoted have been indicated and acknowledged by means of complete references. I further declare that this Dissertation has not previously been submitted for a Degree, Diploma or other qualifications at this or another University. It has been prepared in accordance with the guidelines for Master of Public Health dissertations of the University of Zambia.

Signed.....

Candidate

Date.....08/07/2011


Signed.....

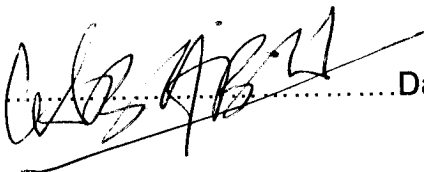
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CERTIFICATE OF APPROVAL

The University of Zambia approves this Dissertation on Community perspectives towards mandatory testing for HIV in Macha in partial fulfillment for the requirements for the award of Degree of Master of Public Health.

Examiner's Signature.....  Date..... 28/7/11

Examiner's Signature.....  Date.....

Examiner's Signature..... Date.....

DEDICATION

To GOD Almighty for His unfailing faithfulness.

To my dear husband, for his continued support and love.

To my loving children, Muzwamasimu, Namakau, Tukuluho, and, Mary.

To my dear mother for her love and support.

To my spiritual overseers, Reverend Raphael Chisenga, Pastor E.Susiku, and, Reverend I. Mubuyayeta for their prayers, guidance, and encouragement.

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ABSTRACT

Zambia's national HIV policy does not support mandatory testing of individuals on public health grounds. However, due to the low uptake of voluntary counseling and testing which is only 20% of the population, there have been recent proposals by the Ministry of Health to introduce mandatory HIV testing for individuals attending health facilities. This proposal has triggered various views from various backgrounds in society.

The aim of this study was to explore community perspectives on mandatory testing. The study also acted as a model through which the community was involved in decision making for public policy which is an important aspect of community involvement that enhances policy formulation and helps to avoid social engineering.

The study was a cross-sectional descriptive design. The study used both qualitative and quantitative approaches. Multistage sampling was used to select households for interviews. Adults above 18 years of age were interviewed from the selected households using a structured interview questionnaire. The questionnaire was translated into the local language to enhance understanding of the subject. Purposive sampling was instituted to select key informants for in-depth interviews.

The study was undertaken within the Diffusion of Innovation Theory. The theory enhances understanding of the factors that influence communities to embrace new ideas or practices.

Quantitative data was analyzed using SPSS version 16 for windows. Preliminary analyses were done followed by cross tabulations to measure associations between variables. Logistic regression was applied to determine independent predictors for supporting mandatory HIV testing. In-depth interviews were translated and transcribed into computer files; common themes were identified, after which data was categorized using the Nvivo statistical package. Interpretation of qualitative data was done manually.

A total of 809 respondents and 12 (twelve) key informants participated in the study. The age range for the cohort was 18-80 years, with mean age of 35.8 years. Of the whole study population, 42.8% were males while 57.2% were females.

The study found that the majority of respondents (61.9%) had never heard about mandatory HIV testing before. Despite this scenario, the majority (80.3%) of respondents and all the key informants supported the policy. Furthermore; most (89.5%) respondents indicated that they would accept to be tested without consent if they were to be hospitalized. Support for the policy was on the premise that the community has realized the importance of HIV testing as an entry point to HIV care, treatment, and support. Concerning issues of stigma and discrimination it was found that the majority of respondents (76.2%) felt that this is likely to reduce if mandatory HIV testing is introduced. In -depth interviews revealed that stigma and discrimination in the community had tremendously reduced due to increased awareness of HIV disease and the introduction of ARV's.

The study established that while 52.6% of the cohort thought that mandatory testing is not a violation of human rights, 47.4% felt so. The majority of respondents (71.8%) indicated that they still valued their right to privacy and autonomy, although they were ready to forego the same for the sake of knowing their status.

Prior knowledge about the policy and relative advantage were found to be very significant independent predictors for supporting mandatory HIV testing. It was found that those who had heard about the policy before were 1.5 times more likely to support the policy than those who had not (p value 0.044). On the other hand, those who thought that the policy will offer more benefits than risks were ten times more likely to support the policy than those who thought otherwise (p value 0.001).

The study established that the community was in support of mandatory HIV testing policy. It was also established that the community had realized the vital role that testing plays in accessing HIV care and treatment and was more willing to be tested. However, issues of human rights are still debatable and need to be explored more in the light of the new policy. Furthermore, it has been established that the community had began to

respond more favorably to testing using other strategies such as mobile VCT which need to be strengthened. It was also evident from the study that the poor response to VCT is not exclusively due to fear of being tested but largely due to the African culture of not wanting to be screened when one is not sick. This therefore explains why there was an increased response to mobile VCT. It is therefore evident that strengthening mobile VCT and increasing access to testing centers can significantly increase uptake of testing in the communities. Sensitization of communities is also key in increasing awareness and changing attitudes towards HIV testing and reducing stigma and discrimination.

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CHAPTER ONE – INTRODUCTION

1.1 BACKGROUND INFORMATION

Voluntary counseling and testing (VCT) is an effective and vital strategy in both HIV prevention and, for people with HIV infection. VCT provides people with an opportunity to learn and accept their HIV serostatus in a confidential environment with counseling and referral for ongoing emotional support and medical care. Pregnant women who are aware of their seropositive status can prevent transmission to their infants. (UNAIDS, 2000).

In its guidelines for HIV counseling and testing, the United Nations Program on HIV/AIDS (UNAIDS) encourages countries to establish national policies that should include the three principles of testing; confidentiality, consent, and counseling. Mandatory testing is discouraged. Despite all the efforts to promote and scale up VCT services, many people are not aware about their HIV status, leading to further infections. The Centers for Disease Control (CDC) statistics show that only 40% of people have been tested for HIV globally (Reyes, 2008).

In Zambia, at least 80% of the adult population does not know their HIV status (Zambia Demographic and Health Survey, 2008).

In 2003, The World Health Organization (WHO) formulated new approaches to HIV testing and counseling. These approaches were to move beyond the model of provision that relies entirely upon concerned individuals seeking testing, to a model that permits broader access to testing for all. In this new approach, such services would become a routine part of health care. HIV testing would be available for all those who wanted to know their HIV status; wherever medically indicated in the context of clinical care; and as part of services for preventing HIV infection among mothers and their infants. However, the guidelines indicated that HIV testing should always be; voluntary, provide counseling, and respect the individual's autonomy (WHO, 2003). WHO made it clear in its guidelines that mandatory testing is neither effective for public health purposes nor ethical, because it denies

individuals choice, and violates principles such as the right to health, including the right to privacy and the ethical duties to obtain informed consent and maintain confidentiality (Asante,2006).

Frustrated that more than 25 percent of Americans with HIV infection are unaware of their status and that 40 percent of those with newly diagnosed AIDS discover that they are infected less than a year before diagnosis, the Centers for Disease Control (CDC) recommended routine testing among high risk groups in high prevalence areas in 1993 .This was followed by publication of revised guidelines for testing adults, and adolescents from the age of thirteen to sixty- four years (13 – 64). According to these guidelines, testing for HIV will be routinely offered in all health- care settings. No signed consent from patients would be required and clients would not require pre test counseling (Asante, 2007). This policy is in contrast to voluntary testing which requires informed consent and pre-test counseling. Despite these contradictions, the policy was supported by former US president Bill Clinton, whose foundation supports the fight against HIV/AIDS. The former president proposed that HIV testing should be mandatory in countries where the prevalence of HIV is 5% or higher (Asante, 2007).

CDC's rationale for mandatory testing was that the approach would increase detection of infected persons because many infected persons with HIV infection visit health care settings years before receiving a diagnosis but are not tested for HIV. CDC also proposed that this would greatly reduce the transmission rates of HIV because the majority of persons who are aware of their HIV status substantially reduce sexual behaviors that might transmit HIV after they become aware that they are infected. A demonstration was shown that transfusion related HIV transmission has been reduced in the United States due to routine screening of blood donors and perinatal transmission rates had been reduced to less than 2% with universal screening of pregnant women. The center also proposed that when HIV is diagnosed, early, appropriate interventions such as Highly Active

Antiretroviral Therapy (HAART) can lead to improved health outcomes, including slower clinical progression and reduced mortality (Branson et al, 2006).

Since the formulation of new guidelines by CDC, several other countries have introduced mandatory HIV testing for couples intending to marry, immigrants or pregnant women.

CDC's recommendations for mandatory HIV testing have been received with diverse views concerning its value. While others have come out to support the approach, some individuals and organizations have expressed various concerns over the approach. Various researches have been conducted of which some show positive results of mandatory testing while others show adverse effects.

Among the major concerns raised by those who do not support mandatory testing are that mandatory HIV testing is not ethical. It also denies individuals' choice and violates principles such as the right to health, including the right to privacy and the ethical duties to obtain informed consent and maintain confidentiality.

Those who do not support mandatory HIV testing have argued that the approach has no public health benefits. Mandatory HIV testing is seen as a violation of human rights. In countries where there is discrimination of people living with HIV/AIDS, there are fears that mandatory HIV testing will lead to more discrimination and stigmatization. It is also said that the approach is not consistent with medical ethics and contradicts the principles of counseling and testing which are; consent, confidentiality, and counseling. Several other reasons have been cited such as issues of privacy, the cost of testing, and its value in promoting behavior change which is seen as an important requisite for HIV transmission.

However, other individuals and institutions have supported the approach for the reasons that mandatory testing increases the number of people aware of their status and therefore increases access to care and support. The strongest evidence shown is that mandatory HIV testing has greatly reduced the number of perinatal HIV transmission. Argument is given that mandatory testing has greater benefits than voluntary testing.

Mandatory HIV screening is practiced in the prevention of blood-borne viruses of all blood that is destined for transfusion or for manufacture of blood products (Gallant, 2008). Zambia has not been spared from the dilemmas of how to increase access to HIV testing. The country's HIV prevalence stands at 14.3% (ZDHS, 2008), not much reduction from the previous 16.4% in 2002.

Since the National AIDS Council was enacted in the early nineties, the country adopted a number of testing guidelines that have guided testing approaches in the country. The commonest approach in the nation has been voluntary counseling and testing commonly referred to as client-initiated HIV testing. Provider-initiated counseling has been practiced in the nation. This is an approach where HIV testing is routinely offered to all patients attending sexually transmitted infections (STI) services, ante-natal clinics, and other reproductive health services, and all TB clinic services. Diagnostic counseling and testing is another approach which has been in place. Under this approach, counseling and testing is considered for diagnosing HIV in TB patients, in HIV management, and for patients who present with signs and symptoms that could be attributed to HIV. In its policy guidelines, the council clearly states that it does not support mandatory testing of individuals on public health grounds.

Despite these clear guidelines, attempts to introduce mandatory HIV testing in various sectors and the country as a whole have been made. In 2001, Zambia's largest mining company, Konkola, compelled hundreds of its employees to undergo anonymous HIV tests. This action brought about many complaints from the employees and the public. This was followed by an announcement by the then Director General for the Defense Force Medical services, in 2003, that only HIV negative candidates would be recruited to the defense forces and the serving members who were positive would be re-categorized and offered available medical attention (ZARAN, 2003). This announcement was received with a concern that the tested individuals might suffer discrimination as a result. The Zambia AIDS Law Research and Advocacy Network (ZARAN) reacted by saying that mandatory HIV

testing was discriminatory, and impeding on the rights of applicants to liberty, security, privacy, rights to work and right to equality before the law. Despite these concerns that were raised, the policy has been implemented due to justifications that the harsh psychological and physical conditions of military life will eventually affect the health of the HIV positive person, and that by excluding HIV positive persons at recruitment, and re-categorizing those already in the service, the armed forces maintain their ability to mobilize, lengthen the life of military personnel and overall, secure national security.

The most recent attempt to introduce mandatory testing was in December 2008, when government announced through Ministry of Health, that it intends to introduce a program for compulsory HIV testing in all health institutions (Mwondela, 2009). Similarly, in Zambia, professional opinion regarding the value of mandatory HIV testing has been inconsistent.

Health professionals as well as human rights groups have clearly stated their diverse concerns over the approach. However, there has been no deliberate attempt to consult the community over their views. It seems like professionals and human rights groups are saying once more, "We know what is good for the community". However, it is important that the community is involved in what affects them in order to promote cooperation. This paper therefore aims to explore community perspectives on the issue of mandatory HIV testing.

1.2 STATEMENT OF THE PROBLEM

Zambia's national HIV policy does not support mandatory HIV testing of individuals on public health grounds (Gallant, 2008). The policy stipulates that confidentiality is essential and should be maintained when conducting testing.

However, mandatory testing is practiced in the Zambia Defense Forces, during blood donation, and in mothers attending antenatal care.

Despite promoting voluntary counseling and testing, at least 80% of the Zambian population still do not know their HIV status in Zambia (Zambia Demographic and Health Survey, 2008). Due to the low uptake of HIV testing, several attempts to introduce mandatory HIV testing in Zambia have been made. The most significant attempt was in December 2008 when government proposed the introduction of mandatory HIV testing through the Ministry of Health (ZARAN News, January – March, 2009: pg 6).

Following the mandatory HIV testing proposal made by government, opinions regarding the value of mandatory HIV testing among professionals have been divided.

The Zambia AIDS Law Research and Advocacy Network (ZARAN) and the Law Association of Zambia (LAZ) described mandatory HIV testing as a violation of human rights (Mwondela, 2008). However, little effort has been made by government to involve, engage, and consult the community in this issue. No studies have been conducted in Zambia to explore how society will react to this proposal. Only a few studies have been conducted among pregnant women. It is therefore the aim of this research to explore community perspectives on mandatory testing.

1.3 JUSTIFICATION OF THE STUDY

The aim of this research is to explore community perspectives on mandatory testing. The results of the study will serve as preliminary findings that can be used as a basis to build on other similar studies that will eventually help policy makers to arrive at a better understanding and assessment of the community's opinion concerning mandatory testing. This will help policy makers to design evidence based policies that will have the support of the grassroots.

The study will also provide the community with an opportunity to participate in policy debate and policy formulation. If change is going to be managed effectively, it is important that all stake holders are involved so that a sense of ownership is felt by all. Therefore the study will help policy makers to manage change effectively. The study will generate preliminary findings upon which other researches can be done in order to help policy makers formulate informed policies.

Ultimately the study will contribute to effective policy implementation as it will have the support of the grassroots.

The study will be conducted in Macha. Macha is a rural area situated 72kms south-west of Choma district of Southern Province. The province has an HIV prevalence of 14.5% slightly above the national average.

RATIONALE FOR CONDUCTING STUDY IN MACHA AREA

The results of the study will enable policy makers understand how rural communities perceive the issue of mandatory testing.

The study results will provide an opportunity to this remote community to participate in the ongoing policy debate as they may not get a chance to do so through media.

The site has been conveniently selected due to the limited resources that are available to the investigator.

OPERATIONAL DEFINITION OF MANDATORY HIV TESTING

Mandatory HIV testing: An approach to HIV testing where clients are tested compulsorily for HIV without the need for their consent or pre-test counseling is not necessary.

CHAPTER TWO - LITERATURE REVIEW

2.1 INTRODUCTION

There is general agreement by public health officials that HIV testing is an effective strategy in HIV prevention. However, different opinions have arisen over the approach to take when testing clients for HIV. As world organizations seek to scale up testing services, several approaches have been coined. Among the notable approaches is mandatory HIV testing which has provoked several debates both for and against it. There are divided views concerning mandatory HIV testing.

2.2. GLOBAL PERSPECTIVE

The US Centers for Disease Control and Prevention (CDC) was the first institution to issue guidelines on mandatory HIV testing. In their justification they wrote "we know that many infected people are not diagnosed until late in the course of their illness, when they're already sick with HIV-related conditions. By identifying people earlier through a screening program, we'll allow them to access life extending therapy, and also through prevention services, learn how to avoid transmitting HIV infection to others," (Doyle, 2006). The Center also projected that the guidelines will help end the stigma of HIV testing and lead to needed care for an estimated 250,000 Americans who don't yet know they have the disease.

CDC's guidelines were later supported by Schuklenk and Kleinsmidt in 2007. The duo analyzed the ethical and policy issues surrounding mandatory HIV testing of pregnant women and proposed that a mandatory approach to testing and treatment has the potential to significantly reduce perinatal transmission of HIV and defended the view that mandatory HIV testing is morally required if a number of conditions can be met.

Mandatory HIV testing has been embraced by some medical practitioners on the grounds that the approach is more convenient for them. In her article, Nancy Reyes wrote "Needless to say it was a big bother for us, for the patients, and for the lab, who had to do the work. In a small town, we had to "blind" the work even on the chart, since if someone found out that so and so was getting an HIV test, rumors would fly. Yes, I know all about the strict privacy rules. It's just that they don't always work. Things got a little easier when we started testing all pregnant women for HIV. It was "routine". So it wasn't insulting the lady to do the test, and it was very important to find out if she was HIV positive before she had the baby."(Reyes 2008).

According to Nancy, voluntary HIV testing was a troublesome procedure to both health workers and the clients as it involved a lot of paper work, hence slowing down the pace of testing. In her conclusion, she seems to imply that if issues of privacy are seen to be compromising the efficiency of delivering services, they can as well be done away with.

Nancy supported her ideas by presenting statistics from various states in America that practice opt-in and opt-out approaches. According to the statistics, the opt-out approach achieved higher rates (more than 85% for Tennessee) of testing for mothers than opt- in (25% for Oregon). This significant difference, according to Nancy was because mothers were routinely tested and did not need to sign a paper (written consent) in order to have the test (Reyes, 2008).

Other health professionals are of the opinion that mandatory HIV testing will improve the overall health of the population. In a national survey conducted by HCD Research, it was found that 63% of the general public in America and 64% of physicians believe that the overall health of the population will improve if mandatory HIV testing is introduced. In the same survey, 60% of the general public, and 59% of physicians believe that the associated health care benefits of mandatory HIV testing outweigh the social implications. (Flemington, 2005).

Results of the above survey show that a significant number of physicians and the general public support mandatory testing for HIV in the US.

On the other hand, the United Nations Program on HIV/AIDS (UNAIDS) has indicated that mandatory HIV testing has not demonstrated individual or public health benefits and can result in significant negative outcomes for those testing positive. UNAIDS argues that; mandatory HIV testing does not on its own help people to change their behavior to prevent infecting others, that it can lead to stigma and discrimination, psychological, social and economic harm to the persons concerned, discourages people from accessing health care services, and may involve false negatives for those in the window period. Such individuals then may not realize the need to seek care and to protect others from infection, and lastly that it can divert funds from more effective interventions (UNAIDS, 2001). Furthermore, UNAIDS argues that mandatory HIV testing may lead to false sense of security in the military, that over time an HIV free environment has been created and thus, there is no need to take precautions. UNAIDS also challenged the military to prove that it is different from other workplaces that make it compelling to implement HIV testing; that mandatory testing and its consequences are the least means available and will achieve its goals more effectively than voluntary counseling; and that HIV is not being singled out from other similar diseases that raise comparable issues (UNAIDS, 2001).

Similarly, some sections of society have supported UNAIDS in arguing that mandatory testing has no impact on the epidemic (Amon, 2006). It is said that, instead, such a policy will drive those who are at risk underground, and probably discourage testing at all, and in that sense, spread the infection rather than curtail it.

Other sections of society have indicated that mandatory testing is discriminatory, and a violation of human rights (Amon, 2006). At the 7TH International Conference on AIDS in Asia and the Pacific (ICAAP), it was indicated that the right of a person

to decide if and when they will be tested for HIV must be protected. While every effort should be made to increase the practicality of VCT, the principle of voluntary and informed consent remains paramount (Kobe, 2005).

Acts of discrimination after mandatory HIV testing have been demonstrated in many countries. For example in destination countries in Asia and the Middle East, migrants are reported to be treated like criminals when they test positive for HIV. They face unethical treatment by being confined and deported without explanation. It is reported that most of the clients do not receive their test results as these are sent directly to the recruitment agencies (CARAM ASIA Report, unpublished). Acts of discrimination due to mandatory HIV testing are also shown in India and Saudi Arabia where foreign workers are confined to hospital rooms and deported if found to be HIV positive (CARAM, ASIA report, unpublished).

This is seen as a breach of confidentiality and eliminates the chance for meaningful counseling. Once returned to their home, very few migrants receive compensation or referral to health services, the majority are simply left to return to their families bewildered and devastated (CARAM, ASIA report, unpublished).

Oomman (2006) observed that mandatory HIV testing leads to potential "social wreckage" devastating poorer countries with widespread HIV incidence. He doubted the fact that governments are going to fulfill their promises of guaranteeing treatment to those tested and enforcing anti-discrimination measures as Bill Clinton promised. Oomman observed that most HIV positive persons suffer from gross discrimination throughout the UK on an ongoing basis. This includes being denied medical treatments, jobs, travelling, denied opportunity to own land or property, education for overseas students, denied dental treatment despite it being against the law to refuse "positive" patients (Whitehead, 2006).

In Florida state and Malaysia, couples are required to present "AIDS free certificates" as a precondition for the grant of marriage licenses. It can be concluded from the above discussions that stigma and discrimination discourage

people from being tested. Hence it is important that HIV testing should include improved protection against stigma and discrimination, especially within the health care setting as well as assure access to integrated prevention, treatment and care services (Nakchbandi et al, 1998).

Other sectors of the population view mandatory testing as part of sex- surveillance and sex control by governments. They claim that the approach is without impact because governments have not availed accurate information about condoms, sexually transmitted infections (STI's), and where women are not able to get their birth control pills and are forced to make radical choices about their bodies (Nakchbandi et al, 1998).

The value of premarital mandatory HIV testing has frequently been questioned by those who hold opposing views to this approach. It is pointed out that the approach is a one-off test while the risk of acquiring HIV is lifelong and therefore does not guarantee that an individual or his partner will remain negative if they continue putting themselves at risk through sexual activities or injecting drugs. Furthermore, it is said to have limited impact in controlling the spread of HIV infection without specific measures being undertaken to prevent transmission of these infections. The other concern raised is that opponents doubt the likelihood of confidentiality of the results due to high level of stigma and discrimination that exists against HIV positive individuals (Adeeba, 2008).

It has been observed that HIV testing alone does not result in the types of behavioral changes that will prevent the transmission of the virus. It is suggested that instead it should be integrated as part of comprehensive control programs that promote behavioral change by providing social support and the means and skills to reduce or eliminate the risk of transmission. Otherwise such testing can drive the target people underground and make it more difficult for launching interventions (Ramakant, 2006).

Other people have questioned how mandatory HIV testing will work. The questions asked are; how are the people going to be rounded up, get them tested, and get the results to them. Practical problems to this approach are foreseen (Bernard, 2006). Still others have questioned whether countries have the necessary infrastructure, especially third world countries. In a country where villages and small towns don't have decent hospitals and laboratories, questions have been asked as to how the government will expect people to get themselves tested for HIV (Kuin, 2008).

These sentiments may be an indication that mandatory testing still has grey areas that people need to understand before accepting the approach. It may be that people need assurance that the change will not be to their disadvantage. As we clearly know, change brings with it a lot of uncertainties that need explanations and reassurance.

Yet others view mandatory HIV testing as unethical because it does not respect the basic principles guiding HIV testing. These are consent, counseling, and confidentiality. It is insisted that the three C's should always be used as a gold standard for testing: consent, counseling, and confidentiality (Adeeba, 2008).

Divided opinions over mandatory HIV testing have at times resulted in lawsuits. In Canada an electronic war operator of the naval Electronics Sense Operator sued the Canadian Armed Forces (CAF) for allegedly discriminating him by refusing to continue to employ him and by differentiating adversely in relation to his employment by restricting his duties and opportunities because of his HIV status (ZARAN, 2003). The CAF was ordered to compensate the complainant adequately for failing to make a full assessment of the complainant's condition and determine whether he was exposed to risks significantly greater than the usual risks for others.

The various concerns raised above have come from health professionals, human rights activists, and government officials. However, there have been few attempts by governments to involve the communities in the discussions.

2.3 REGIONAL PERSPECTIVE

Sub-Saharan Africa is contextually unique. The social, economic and cultural contexts within which HIV infects people and spreads across the continent differ considerably from those in other parts of the world (Asante, 2007). Therefore, even the concerns raised over mandatory HIV testing are different from other regions.

Asante 2007 pointed out that it is important that appropriate caution is exercised when prescribing policies that seem to have worked in other settings for use in Africa. The author says that although HIV testing is crucial for effective prevention, making it routine or mandatory in sub-Saharan Africa may not be feasible in the short to medium term. The author says that there are four major factors that make mandatory testing unsuitable in Africa; access to treatment, weak health systems, the culture of health service utilization, and stigma and discrimination.

Asante observes that Africans in general and particularly the poor do not use health services unless they are very sick or there is specific need. He says that studies show that even in times of infirmity, self medication and the use of traditional medicine are usually the first line of action. Therefore testing people presenting at health facilities for HIV with or without their consent, in an environment of poor health service utilization would have limited impact on preventing HIV/AIDS as significant numbers of health services will be missed. Asante also highlights that despite having the highest number of HIV cases, there is still widespread stigma and discrimination of people living with AIDS from and together with their families in Africa. This therefore obstructs the uptake of HIV/AIDS interventions. He also said that most African health systems are faced with a critical shortage of manpower, inefficient resource allocation and utilization. Therefore it is not logical that mandatory testing would lead to drastic improvements in HIV/AIDS prevention or treatment and care. Lastly, Asante reveals that no much progress has been made in expanding access to treatment. After the "3 by 5" initiative, only 18 out of 53 countries in Africa had 25% or more Antiretroviral coverage by June 2006 (Asante, 2007). Therefore it is vital to scale up access to treatment while encouraging testing in sub-Saharan Africa so that

HIV/AIDS is not misconceived as a death sentence. Asante emphasizes that instead of emphasizing mandatory testing, the above mentioned key barriers to HIV testing are removed. In particular, the lack of access to ARV therapy, the inadequate health workforce that has incapacitated many health systems in Africa, the culture of poor use of health services and the widespread stigma and discrimination associated with HIV/AIDS must be tackled (Asante, 2007).

Asante also observes that HIV/AIDS to a large extent, is a behavior-induced epidemic, and like all such epidemics the object of prevention lies in individual behavior changes which cannot be brought about by a policy of routine or mandatory testing alone (Asante, 2007).

A study done by Nyblade and Field-Nguer, 2001 in Botswana and Zambia found that stigma against HIV- positive persons and fear of discrimination were the key reasons for the low uptake of voluntary counseling and testing to prevent mother to child transmission of the virus. After making these findings, they concluded that, unless the current stigma and discrimination associated with HIV/AIDS is seriously addressed, any policy of routine or mandatory testing could even be counter-productive by driving people away from health facilities if they know they will be tested.

In Namibia in 2000, the Labor Court of Namibia heard how an applicant was mandatorily screened for HIV and when he tested positive, was excluded on the grounds of HIV status alone, from enlistment in the Namibian Defense Force. The applicant sued the defense force and the court made two orders; that the defense force enlists the candidate provided that his CD4 count is not below 200 and his viral load not above 100,000, and secondly, that no person may be excluded from enlistments into the defense force on the basis of such person's HIV status (ZARAN, 2003). The above case is a demonstration of how discriminatory mandatory testing can be and also an indication of how porous the law is. Therefore it is important that the approach be reviewed and considers other factors that can make it more acceptable.

Apart from the military, most African countries conduct mandatory testing on all pregnant women for the prevention of mother to child transmission of HIV. This has been interpreted by some gender rights activists as a violation of women's rights. They question why mandatory testing singles out women rather than testing men from whom they likely received the virus (Rennie, 2007).

Similarly in Africa, the issue has been debated mostly by HIV/AIDS groups, professionals, and politicians. There has been very little consultation of the general public. In his analysis of the issue in the Authors Journal Compilation of Botswana, Rennie wondered by saying, "more glaring is the absence of a community perspective: what are local communities likely to make of mandatory testing, not to mention enforced treatment? How would communities react if some of their members were tested, and had their results disclosed to them, without having a choice in the matter? Attempts to impose a policy from top-down, rather than working up from a grassroots level, is a known source of policy failure in HIV prevention" (Rennie, 2007). The above sentiments raised by Rennie are an indication that the community needs to be brought on board on the issue of mandatory testing if any country is planning to introduce the approach. Community involvement is a vital component of any public policy.

Similarly in Africa, those in support of the approach propose that the radical policy of mandatory HIV testing of pregnant women may have its costs, but is a lesser evil than the death and social destruction caused by HIV/AIDS (Clark, 2006).

2.4 LOCAL PERSPECTIVE

In Zambia, mandatory testing approach is not new. The approach has been in existence in national blood transfusion services in order to reduce transmission in health care institutions through blood transfusion. This policy seems to have the support of all health professionals as well as the public.

In 2001, when Konkola mine compelled its employees to unanimously test for HIV, there was general condemnation of the decision by the public and HIV/AIDS activists. *This practice did not continue due to widespread outcry of the public and did not seem to have the support of government (Zaccagnini, 2008).*

In 2003, the then Director General of Medical services in the Defense forces announced that the military would conduct mandatory HIV testing. In their briefing meeting, the defense force highlighted two reasons for implementing the approach; firstly, that the harsh psychological and physical conditions of military life will affect the health of the HIV positive person. Secondly, that the costs of care and treatment of HIV positive individuals is prohibitively high and must be kept to the barest minimum (ZARAN, 2003).

However, the news about mandatory testing in the military was met with opposition from human rights groups. Zambia AIDS Law Research and Advocacy Network (ZARAN) sought audience with the defense forces and put forward the following arguments for not supporting the approach; that the policy of mandatory testing for HIV and exclusion of HIV positive applicants is a violation of human rights to which Zambia is a signatory to the International Convention on Civil and Political Rights; that conducting one test will not identify all those who have contracted HIV in the previous three months as they may be in the window period, the military will thus not have achieved their objective; that the policy is contradictory to the UNAIDS' position that mandatory testing has not demonstrated individual or public health benefits and it can result in significant negative outcomes for those testing positive. The policy has ever since been implemented in the armed forces.

In 2002, some medical practitioners differed with their leadership in the Zambia Medical Association (ZMA) over suggestions that presidential aspirants be subjected to a mandatory HIV test before elections. In a meeting between ZMA and the Law Association of Zambia (LAZ), the move incurred questioning over the motivation behind the debate. While ZMA was proposing that the move would determine a candidate's fitness for the office, the Law Association of Zambia

debated that the move was discriminatory and an infringement of one's human rights (Xinhua, 2005).

The above reactions show that stigma, and discrimination are equally of major concern by those who question the value of mandatory HIV testing. This was highlighted by ZARAN when they published information that stigma and discrimination against people living with AIDS (PWAs) are common in Zambia. They also reported that there were acts of breaches of confidentiality, mandatory testing, and dismissal on the ground of seropositivity in some sectors. They said strongly discriminatory public attitudes are also evident from media reports of calls for stiff punitive laws against PWAs, as well as proposals for the mandatory testing of presidential candidates (Mwondela, 2002). According to Mwondela, mandatory HIV testing would not be effective unless the Constitution of Zambia adequately addresses the law on discrimination on the basis of infirmity.

In December 2008, The Ministry of Health announced that government was considering introducing mandatory testing for HIV. The reason for this consideration was that people were dying in large numbers from the disease and government has a duty to intervene. Government pointed out that mandatory testing will provide a way to ensure that those who test positive are put on treatment (International Conference on AIDS in Africa, 2008).

ZARAN expressed its position on government's plan to introduce mandatory testing. The organization made the following observations; that mandatory testing undermines human rights, and also undermines the aim that it intends to address, that of halting the spread of HIV. The network insisted that human rights must be respected at all times, even more so when people are dying. The network also observed that testing without consent damages the credibility of health services and may discourage people needing services from obtaining them. They said that a mandatory testing program is unlikely to pay attention to the counseling which is undertaken in voluntary testing since consent will not need to be obtained. The

other argument was that mandatory testing does not identify all people with HIV because there will be false negatives for those in the window period. ZARAN also pointed out that mandatory testing is expensive and diverts resources from effective prevention strategies. Lastly, it was indicated that mandatory testing does not address human behavior, which is key in HIV prevention. On the basis of the above reasons, the network disagreed with government's position and urged them not to introduce such a policy (Mwondela, 2008).

The arguments surrounding the issue of mandatory testing leaves questions as to whether mandatory testing will be acceptable to the community or not.

In a study done by Nyblade and Field-Nguer (2002), in Zambia and Botswana, the results show that many people only seek voluntary counseling and testing to determine whether a chronic illness was caused by HIV. Many people go for a test when they are sick. Reasons given for not wanting to test included fear of one's own reaction if results are positive and fear of the reactions of partners, family members, and the community as a whole.

The above study is in agreement with concerns raised by various persons. Similarly in our country, the arguments over mandatory HIV testing have mainly been advanced by professionals, anti-AIDS organizations and Human rights activists. Most of the discussions seem not to consider community reactions to the impact mandatory HIV testing would have on society. It is therefore the aim of this research to explore community perspectives on the issue so that their views are brought on board. Community participation will create a sense of ownership of any such policy that will come about. This is important to the success of any HIV prevention strategies.

2.5 RESEARCH QUESTIONS*

The questions that are going to be answered by this study are;

1. Does the community accept mandatory HIV testing?
2. What are the factors influencing perception of mandatory HIV testing?

2.6 THEORETICAL FRAMEWORK

THE DIFFUSION OF INNOVATION THEORY

The diffusion of innovation theory is a theory that examines the processes by which innovations are communicated and adopted or not adopted in a community. Diffusion is defined as the process by which an innovation is communicated through certain channels over time among members of a social system (Nutbeam and Harris, 1999). An innovation is defined as an idea, practice or object perceived as new by an individual (Nutbeam and Harris, 1999)

The four main elements in the diffusion of new ideas are:

- The characteristics of the innovation
- Communication channels
- Time
- The social system (context)

THE CHARACTERISTICS OF THE INNOVATION

The theory identifies characteristics of innovations that have been associated with successful adoption. These include:

Compatibility with prevailing socioeconomic and cultural values of the adopter: The innovation is likely to be adopted if it is consistent with the local culture and does not press demands on the socioeconomic status of the people.

Clarity of the relative advantage of the innovation compared with current practices including perceived cost-effectiveness, as well as usefulness, convenience and prestige.

The **simplicity** and **flexibility** of the innovation.

The **reversibility** and perceived risk of adoption: innovations perceived as high risk or involving an irreversible change in practice are less likely to be adopted.

Observability of the results of adopting an innovation to others who may be contemplating change.

Trialability is the degree to which an innovation may be experimented with on a limited basis (Rogers, 1997). New ideas that can be put on a pilot project before being fully implemented are generally quickly adopted than innovations that are not tried. A triable innovation presents less uncertainty to the individual who is considering it for adoption, who can learn by doing.

COMMUNICATION CHANNELS

Communication is the process by which participants create and share information with one another in order to reach a mutual understanding. A communication channel is the means by which messages get from one individual to another. The theory proposes that generally, mass media channels are more effective in creating knowledge of innovations, whereas interpersonal channels are more effective in forming and changing attitudes toward a new idea and thus influencing the decision to adopt or reject a new idea. Most individuals evaluate an innovation not on the basis of scientific research by experts, but through subjective evaluations of near-peers who have adopted the innovation.

TIME

The time dimension is involved in diffusion in three ways;

1. The first way is that the innovation-decision process is the mental process through which an individual passes from first knowledge of an innovation to forming an attitude toward the innovation, to a decision to adopt or reject, to implementation of the new idea, and to the confirmation of this decision. An individual seeks information at various stages in the innovation decision process in order to decrease uncertainty about an innovation expected consequences. The mental process is a five step process;

- a. **Knowledge** – person becomes aware of an innovation and has some idea of how it functions.
- b. **Persuasion** – person forms a favorable or unfavorable attitude toward the innovation.
- c. **Decision** – person engages in activities that lead to a choice to adopt or reject the innovation.
- d. **Implementation** – person puts an innovation into use
- e. **Confirmation** – person evaluates the results of an innovation decision already made.

2. The second way that time is involved is in the innovativeness of an individual or other unit of adoption. Innovativeness is the degree to which an individual is relatively earlier in adopting new ideas than other members of a social system on the basis of their innovativeness.

The theory classifies adopters into categories according to the time it takes for adoption to occur. **Innovators** are the people who are quickest to adopt new ideas. These form up two to three percent of the population. **Early adopters** are the people who may have the personal, social, or financial resources to adopt the innovation. They form up ten to fifteen percent of the population. Then there is the **early majority** who change after they have become persuaded of the benefits and these form up thirty to thirty-five percent. This is followed by the **late majorities** who are skeptics and are reluctant to adopt new ideas until benefits have been clearly established. These form up thirty to thirty-five percent of the population. The **laggards** are the final ten to twenty percent of the population who are seen to be the most conservative and actively resistant to the adoption of new ideas.

3. The third way time is involved is the rate of adoption. Rate of adoption is the relative speed with which an innovation is adopted by members of a social system.

D. THE NATURE OF THE SOCIAL SYSTEM

A social system is a set of interrelated units that are engaged in joint problem-solving to accomplish a common goal (Rogers, 1997). The social system constitutes a boundary within which an innovation diffuses. The theory proposes that some individuals and communities are quicker to take up new ideas than others. It is proposed that while others tend to be suspicious of change and are slow to respond to new ideas, others are much quicker. Generally, the theory proposes that traditional communities such as rural communities, where a population is more homogenous will generally take longer to adopt any innovation, while those societies that have well developed communication systems are much quicker to adopt new ideas.

THE CHARACTERISTICS OF CHANGE AGENTS

The theory also proposes that the change agent also has an important role to play in change. The person must be trusted and be a role model to the community.

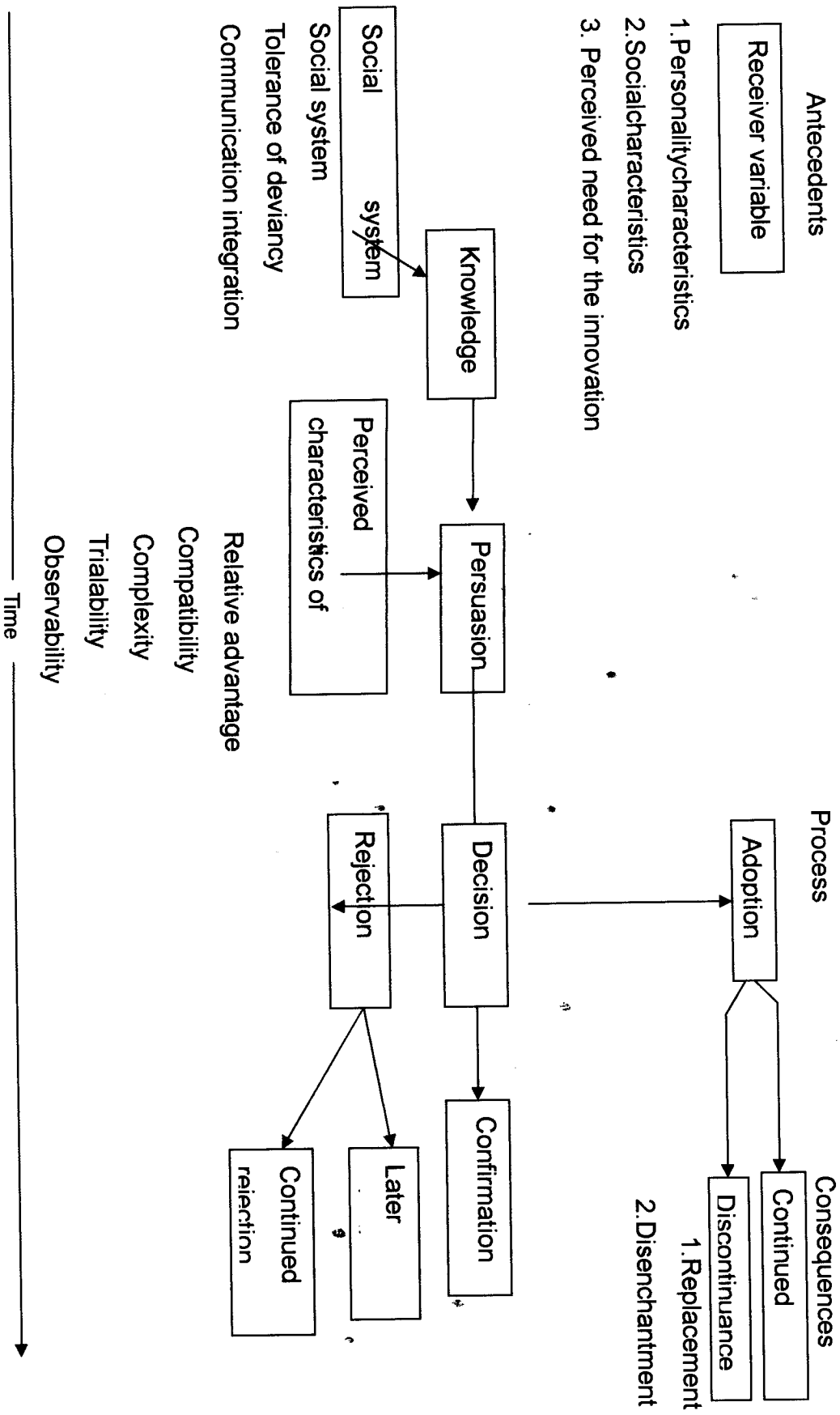
ADVANTAGES OF USING THE THEORY

The theory provides a diagnostic tool for analyzing how and why populations respond to the introduction of new ideas differently. It is an important tool in explaining the social cultural factors that determine whether an innovation will be accepted or not in a particular society.

LIMITATION OF THE THEORY

The limitation of the theory is that it does not explain factors that contribute to poor adoption of innovations by laggards.

CONCEPTUAL MODEL



CHAPTER THREE - OBJECTIVES

3.1 RESEARCH OBJECTIVES

3.2 GENERAL OBJECTIVE

The goal of this study is to explore community perspectives on mandatory HIV testing.

3.3 SPECIFIC OBJECTIVES

The specific objectives of the study are to;

1. Establish community attitudes towards mandatory testing.
2. Establish community rationale for accepting or not accepting mandatory HIV testing.
3. Determine factors that may influence community perception of mandatory HIV testing.
4. Evaluate the perceived risks and benefits of mandatory testing to help guide future research and policy.

CHAPTER FOUR - METHODOLOGY

4.1 RESEARCH DESIGN

The study was a cross-sectional design. The study used both qualitative and quantitative approaches. This enabled the investigator to have a broader understanding of the subject under study and arrive at more persuasive findings for policy makers.

A qualitative approach enabled the use of open-ended questions and probing questions that gave participants chance to respond in their own words. This brought out responses concerning beliefs, opinions, emotions, social experiences and attitudes that influence the perception of mandatory HIV testing. A quantitative approach was also be used in order to allow generalizability of findings. It also enabled the researcher to document frequencies concerning acceptability or non acceptability of mandatory testing.

4.2 RESEARCH SETTING

Macha is a rural area situated 72 kms south-west of Choma town. It is connected to the town by a gravel road, but is also reachable by air. It is a chiefdom of Chief Macha. The chiefdom comprises of 105 villages. Macha is largely an agrarian community involved in subsistence farming of crops such as maize, groundnuts, beans, and cotton. The community is also involved in livestock rearing of animals such as cattle, pigs, and goats.

4.3 STUDY POPULATION

The total adult population is 5,219 (Population Census Report, 2000).

4.3.1 INCLUSION CRITERIA

The study targeted persons living in Macha who are eighteen years (18) and above (adults).

4.3.2. EXCLUSION CRITERIA

The exclusion criteria included;

- Individuals below eighteen years.
- Those who declined to be interviewed.
- Adults who could not give consent

4.4 SAMPLE SIZE

Sample size for quantitative data was calculated using epi info version 3.3.2 stat calc. Population of Macha was 5,219 (Population Census Report, 2000).

Confidence interval 95%

Prevalence 50%

Worst acceptable level 45

This gave a sample size of 358.

Sample was adjusted to account for design effect:

Design effect is the ratio of the variance of the estimate for a particular design to the variance of the estimate for a simple random sample of the same size.

Using formula: $n_3 = Bn_2$

Where n_2 is sample size

B is design effect for multistage sampling 2 or 3

$$N_3 = 2 \times 358 = 716$$

The sample was adjusted for non response by 10% to give a total of 784. This figure was rounded off to give a final total of 800 participants.

For qualitative data, a sample of 24 key informants (3% of quantitative sample size) was to be interviewed. However, only 12 (twelve) informants were interviewed because saturation levels had been reached.

4.5 SAMPLE SELECTION

Purposive sampling was used to select participants for the collection of qualitative data.

Multistage sampling was used for collection of quantitative data. The first step involved cluster sampling of fifty three (53) villages from 105 existing villages in the chiefdom. The sampling frame was obtained from chief Macha. The second stage involved systematic sampling of households from the 53 villages using the available sampling frames from the village headmen. The third stage involved purposive sampling of adults who met the inclusion criteria from the sampled households.

4.6 DATA COLLECTION TOOLS

The study used an interview guide in order to collect qualitative data. A semi structured questionnaire was used to collect quantitative data.

4.7 CREDIBILITY, DEPENDABILITY, AND TRANSFERABILITY

The credibility of the study was ensured by asking open –ended questions and in a neutral manner. The participants' responses were also verified to ensure that there was consistence and congruity in the way questions were answered. Triangulation of data collection techniques also helped the investigator to improve the credibility and therefore even the dependability of results.

The transferability of the results was ensured by providing sufficient description of the research setting data so that reviewers can evaluate the applicability of the data to other contexts.

4.8 DATA COLLECTION TECHNIQUES

Face to face interviews were conducted to collect quantitative data.

In-depth interviews were used to collect qualitative data.

4.9 PRE-TEST

A trial pilot study was undertaken in order to test for validity and reliability of the structured questionnaire. The trial study also helped to test for credibility and dependability of the interview guide. Respondents used for the pilot were not included in the main study.

4.10 ETHICAL CONSIDERATIONS

The investigator submitted the research proposal to the University of Zambia Research Ethics committee in order to obtain consent to conduct the study.

Before the data collection exercise was commenced, permission from Chief Macha was sought. This was followed by community sensitization about the research through the village headmen.

During the data collection exercise, it was explained to each participant that there were no monetary benefits for participating in the study; however, informed consent was sought from the research participants. This ensured autonomy of the participants.

It was explained to the research participants that the research would not pose any physical harm or risks to their lives.

Research participants were assured that confidentiality of their information would be maintained and that their identity would remain anonymous. During in-depth interviews, the anonymity of participants was ensured by not mentioning names or specific places where the interviews took place.

It was also explained to the participants that they were free to terminate their participation in the research at any time without consequences. Before in-depth interviews, participants were encouraged to indicate their desire to discontinue the discussions if they so wished without facing any penalties.

In order to enhance community's understanding of the study, the questionnaire, interview guide, and consent form were translated into the local language.

4.11 DATA MANAGEMENT AND DATA ANALYSIS

The data was analyzed using computer software packages.

Quantitative data was entered using SPSS software program and analyzed using descriptive statistics.

Qualitative data was analyzed manually. Interview notes were read and reread in order to gain an understanding of their content. The interview notes were then transcribed from the tape recorders and entered into computer files. Data was then be categorized, and coded by the use of Nvivo software package.

Lastly, description of categories and subcategories of data were done, followed by identification of major themes that helped in the final analysis of the content.

4.12 STUDY LIMITATIONS

Limitations of the study are;

The study findings cannot be generalized to the entire population. Therefore the study needs to be replicated on a larger scale.

There were limited resources to allow selection of a bigger sample size.

CHAPTER FIVE – RESEARCH FINDINGS

5.0 RESEARCH FINDINGS/RESULTS

These research results are based on a sample of 809 respondents. The villages were randomly sampled and the households were sampled by systematic sampling. The response rate was above 100%. The results are analyzed by using univariate and bivariate analysis (cross tabulations), and multivariate analysis through logistic regression to predict relationships. Qualitative data is analyzed by content analysis to substantiate quantitative data findings.

5.2 DESCRIPTIVE DEMOGRAPHIC RESULTS

The age range is 18-59 years of age. The mean age is 32.37. **SD** \pm 10.305 with a median age of 37. The age distribution is positively skewed at 0.86.

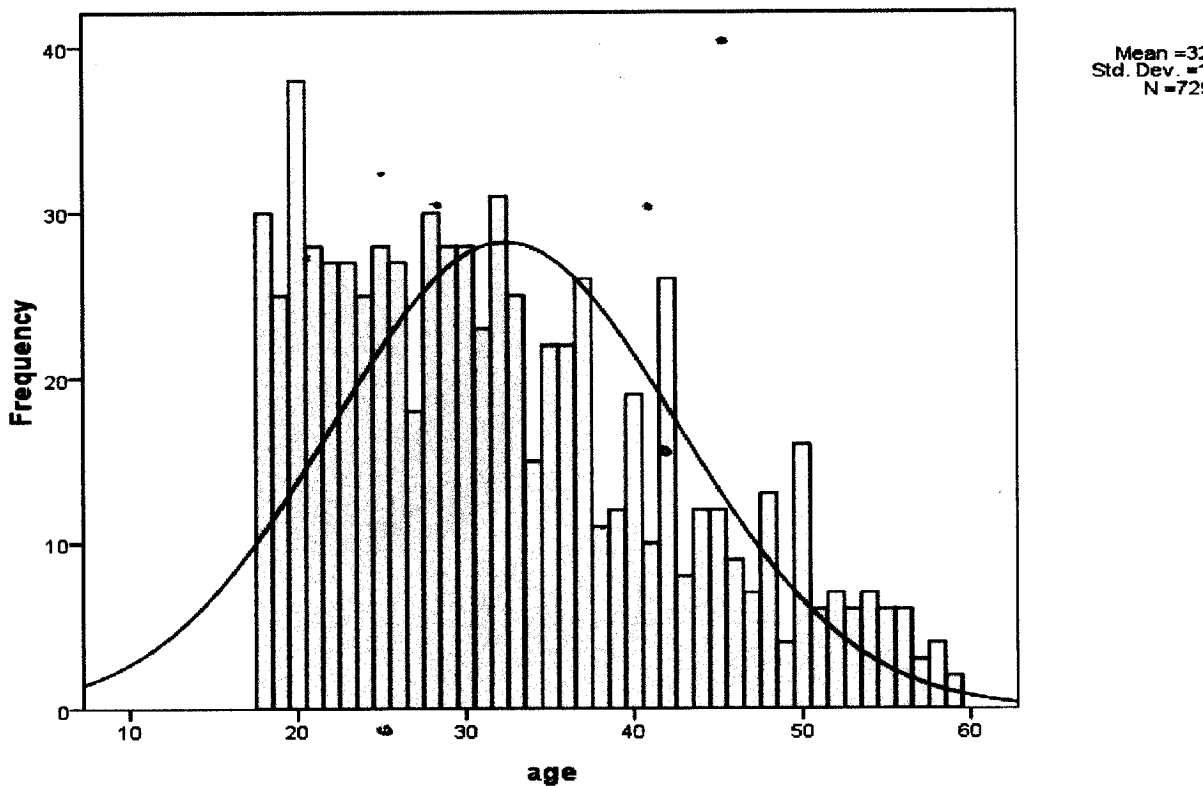


Figure 1: Age distribution

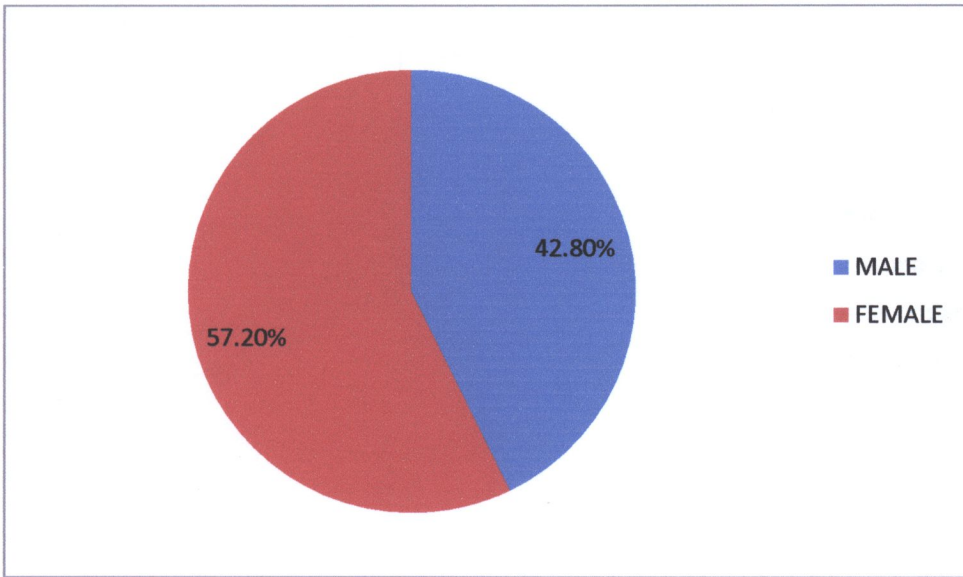


Figure2: sex distribution

Of the 809 respondents, 57.2% were females while 42.8% were males.

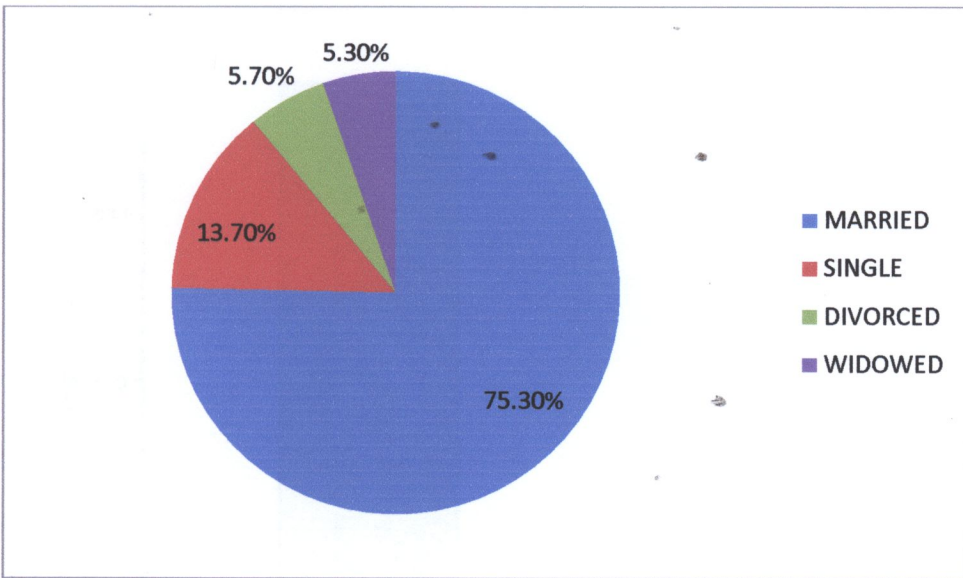


FIGURE 3: MARITAL STATUS

The above chart shows that the majority of the 809 respondents, 75.3% were married.

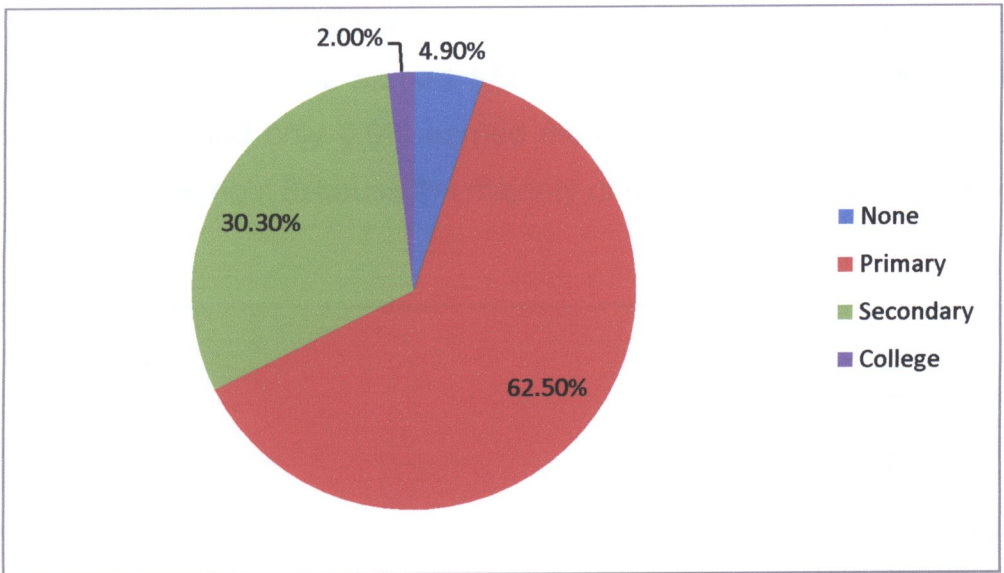


Figure 4: Education level

The majority of respondents (62.7%) only attained primary education. Only 2% of the respondents attained tertiary level education.

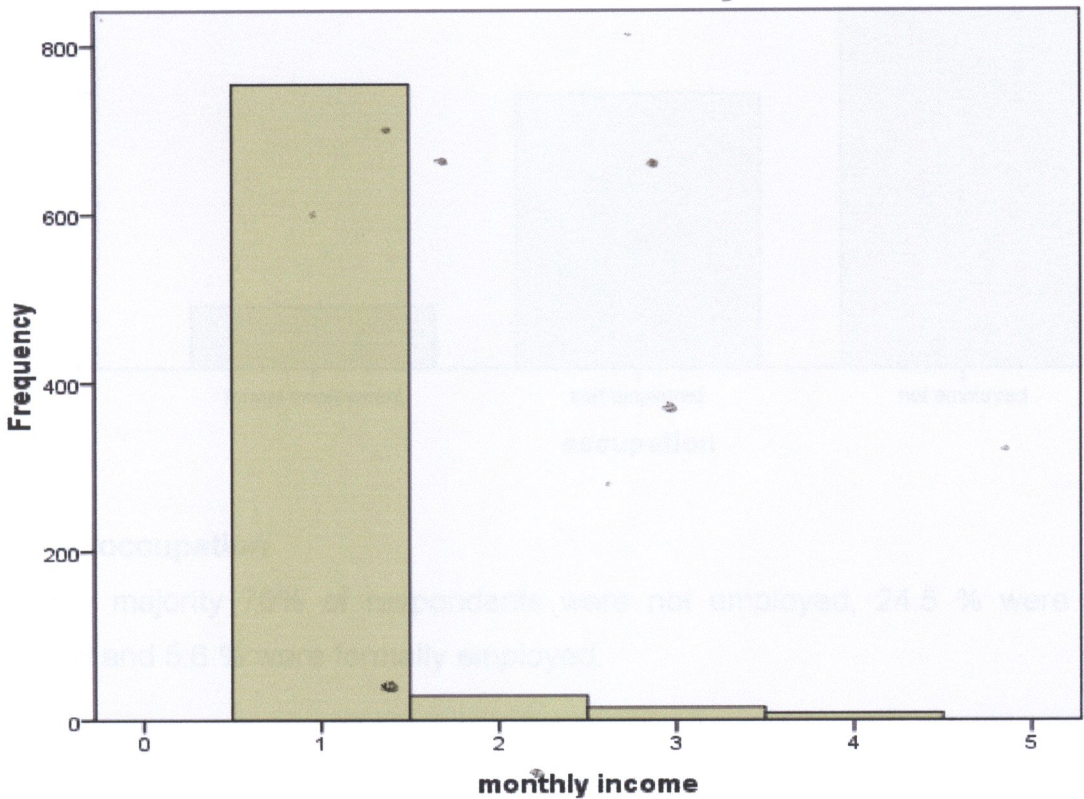


Figure 5: Monthly income

The above results show that most of the respondents 92% had no formal source of monthly income. 1.1% earned K500, 000, 1.8% earned between K500, 000 – K1000, 000, and only 0.9% earned more than K1000, 000. The graph is highly skewed to the right because the majority of respondents had no source of income.

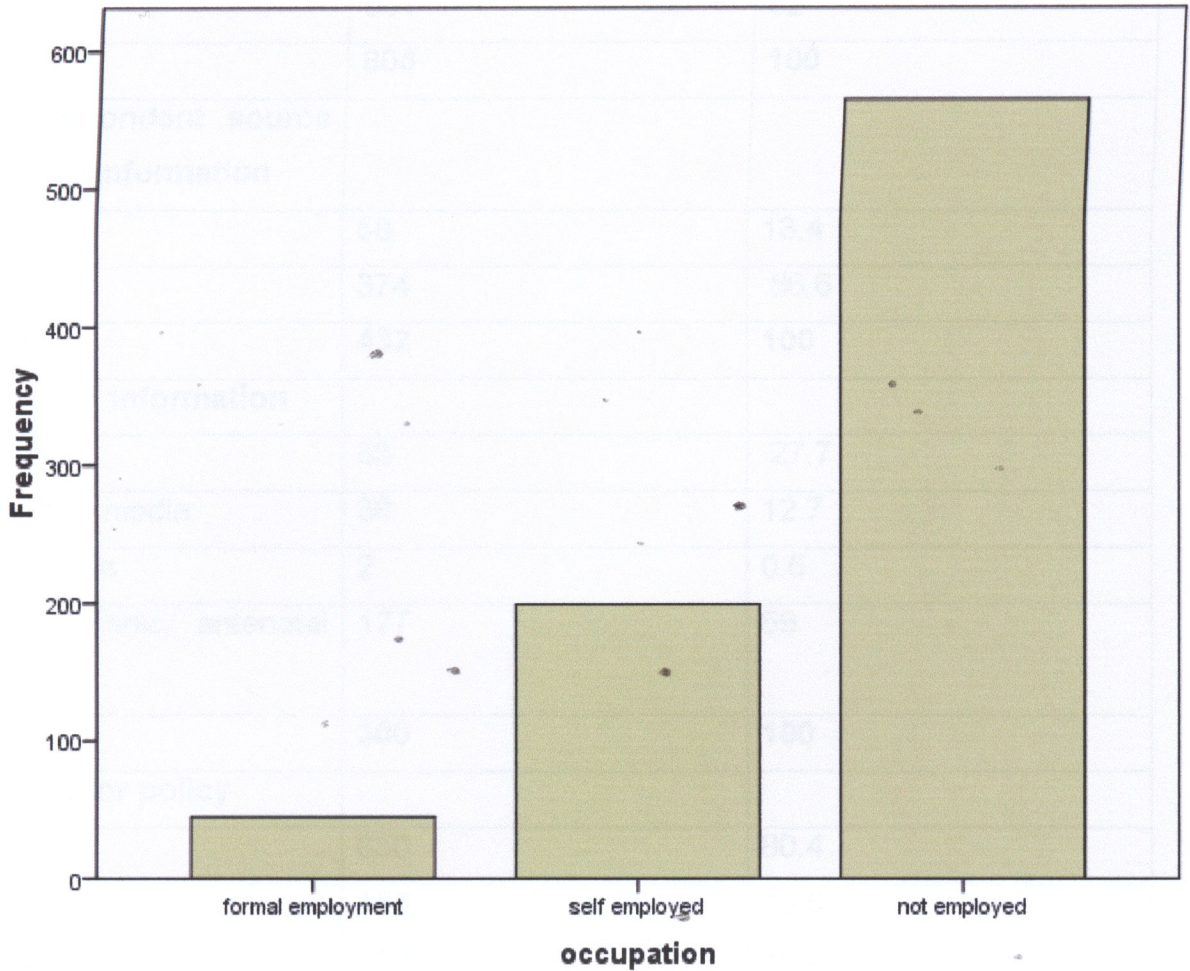


Figure 6: occupation

While the majority 70% of respondents were not employed, 24.5 % were self employed and 5.6 % were formally employed.

FREQUENCY TABLE FOR INFORMATION ON MANDATORY HIV TESTING

VARIABLE	FREQUENCY	PERCENTAGE
Heard of mandatory testing		
Yes	307	38
No	501	62
Total	808	100
Did respondent source for more information		
Yes	58	13.4
No	374	86.6
Total	432	100
Source of information		
Friend	83	27.7
Electronic media	38	12.7
Print media	2	0.6
Other (clinic, antenatal etc)	177	59
Total	300	100
Support for policy		
Yes	650	80.4
No	158	19.6
Total	808	100
Will accept testing		
Yes	724	89.7
No	83	10.3
Total	807	100
Believe policy has potential to reduce stigma and		

discrimination		
Yes	616	76
No	192	23.8
Total	808	100
Believe consent and privacy less vital than testing		
Yes	227	28.2
No	578	71.8
Total	805	100
Forego self determination in order to be tested		
Yes	548	68
No	258	32
Total	806	100
Believe policy is a violation of human rights		
Yes	383	47.4
No	425	52.6
Total	808	100
Believe benefits will override risks		
Yes	709	87.6
No	100	12.4
Total	809	100
Would policy change personal health seeking behavior		

Yes	174	22
No	555	69
Not sure	75	9
Total	804	100

Although the majority (61.9%) of the respondents have never heard of mandatory HIV testing (80.3%) of them support the policy. Most (89.4%) of the respondents also indicated that they would accept to be tested if requested to do so. The majority of respondents (87.6%) feel that mandatory testing will have more benefits than risks. Most (68.6%) also indicated that the introduction of mandatory testing would not change their health seeking behavior.

5.3 CROSS TABULATIONS

TABLE 2: Association between policy support and acceptance of testing

Support policy	Accept to be tested mandatorily		
	Yes	No	Total
Yes	637 (98.2%)	12 (1.8%)	649 (100.0%)
No	86 (54.8%)	71 (45.2%)	157 (100.0%)
Total	723 (89.7%)	83 (10.3%)	806 (100.0%)

Those that support policy were more likely to accept testing if they attended a health facility (p value=0.001).

TABLE 3: Association between sex and policy support

sex	Do they support policy		
	Yes	No	Total
Male	266 (77.3%)	78 (22.7%)	344 (100.0%)
Female	382 (82.7%)	80 (17.3%)	462 (100.0%)
Total	648 (80.4%)	158 (19.6%)	806 (100.0%)

The proportion of males that support mandatory testing is not significantly different from the proportion of females that support mandatory testing (p value 0.071)

TABLE 4: Association between policy support and relative advantage

Do they support policy	Do benefits override risks		
	Yes	No	Total
Yes	612 (94.2%)	38 (5.8%)	650 (100.0%)
No	96 (60.8%)	62 (39.2%)	158 (100.0%)
Total	708 (87.6%)	100 (12.4%)	808 (100.0%)

Those who think that the benefits of testing override the risks of testing are more likely to support mandatory testing than those who think the benefits are less than the risks of testing. (P value 0.001).

TABLE 5: Association between policy support and educational level

Do they support policy	Educational level		
	None and Primary	Secondary and College	Total
Yes	442 (68.2%)	206 (31.8%)	648 (100.0%)
No	103 (65.2%)	55 (34.8%)	158 (100.0%)
Total	545 (67.6%)	261 (32.4%)	806 (100.0%)

The proportion of educated people who support mandatory HIV testing is not significantly different from the proportion of people with low education who support mandatory testing (p value 0.527).

5.4 LOGISTIC REGRESSION

A multivariate logistic regression model was employed to identify independent predictors of support for mandatory HIV testing. The independent predictors were educational status, relative advantage, and prior knowledge. The "enter" method was used to analyze the data.

factor	Odds ratio	P value	CI(confidence interval)
Prior knowledge	1.528	.044	1.011 – 2.308
Relative advantage	10.067	.000	6.345 -15.972
Educational status	.775	.213	.518 – 1.158

The model shows that the major factors influencing whether a person supports mandatory testing are prior knowledge (p value= 0.044) and relative advantage (p value= 0.001) **CI = 6.345 – 15.972**. Educational status did not have an influence on whether one supports the policy or not. The odds of someone supporting mandatory testing is 10 (ten) times higher for those who think that mandatory testing has more advantages than risks. On the other hand, the odds of those who have prior knowledge of the policy supporting the policy is 1.5 times higher than the odds of those that are hearing about the policy for the first time (p value = 0.044) **CI = 1.011- 2.308**.

5.4 QUALITATIVE DATA ANALYSIS

5.4.1.DEMOGRAPHIC CHARACTERISTICS OF KEY INFORMANTS

To substantiate the quantitative data findings, in-depth interviews were conducted with ten (10) key informants. The informants were all drawn from Macha area. They comprised four (4) females, and six (6) males. Their age range was between thirty-four (34) and sixty-seven (67) years. Key informants were drawn from various fields such as teaching, nursing, counseling, military, pastoral, traditional leadership, and traditional medical practice. In order to uphold the anonymity of key informants; initials were used to identify them instead of their actual names. After categorizing data, the following common themes were identified;

- perspectives about the policy
- Perceived benefits of the policy
- Perceived social implications of the policy
- Suggestions to help improve policy implementation
- Key informants' experiences

5.4.2.PERSPECTIVES ABOUT THE POLICY

When key informants were asked what their views concerning mandatory HIV testing were, they unanimously supported the policy. One of the respondents *MN*, who is a person living with HIV said,

MN:" I like it 100 %, (referring to mandatory HIV testing policy) hmm, I like it because I know that it is going to help a lot of people, especially men who have stigma coming to VCT." (nodding her head and smiling).

By this statement *MN* was implying that the new policy will help those that are not willing to test to be tested .In her opinion *MN* thinks that men are the ones that usually shun voluntary counseling and testing. Her opinion is actually coherent with findings of the Demographic and Health Survey 2007 which indicates that

coverage for testing in females is higher (77%) than in males (72%). This sentiment was also expressed by another female informant, MC who is a second wife in a polygamous marriage, she said,

MC: "this policy of mandatory HIV testing to me is a good policy because it will help us especially in the villages. In the villages you find that one man is married to may be three women. When one of the wives falls sick, the man will say, you are sick because you have been sleeping around, therefore we are not going for testing with you, you go alone. So if this policy is brought on board to say everyone who attends the hospital should be tested, it will help to reduce the number of deaths, even the quality of life will improve. People will still be dying but not at the rate they are dying now".

Polygamous marriages are common in the Tonga culture. In this particular community, men are the major decision makers; therefore, they play a significant role in deciding whether any family member goes for testing or not. Unfortunately, it appears most men are opposed to testing. Therefore MC thinks that, if the policy is implemented, the death rate in the villages will be reduced because people will be tested and treated for what they are suffering from in this case, HIV/ AIDS, and ultimately the quality of life for people will improve.

Another male informant, GK alluded to the same fact that the policy will help reduce death rate in the villages. He said,

GK: "I second the motion very much because us people from the villages do not understand very much about the pandemic, now it can help us very much on knowing our HIV status for the hospital to give us help, yes because we've got a lot of deaths in the villages whereby people think that they have been bewitched whilst it is HIV, now we have to be sensitized."

According to GK, people in the villages rarely take a step to go for voluntary counseling and testing. When someone falls sick in the villages, the common

reaction is to consult traditional healers who usually point to witchcraft as the cause of disease. As a result, many people die from the AIDS disease because they do not receive treatment. Therefore *GK* thinks that mandatory testing will help to identify persons that are infected with HIV who could have been missed due to reluctance to test voluntarily for HIV.

Similarly, *LM* an informant from the police service said that she supports mandatory HIV testing because it will help people to know their status so that they can take precautions not to infect others therefore reducing the spread of the disease. She also added that the policy will be very helpful in the defense forces where personnel are away from their spouses for a long time. She said,

LM: "I for one I can say that the opinion (meaning the policy) is good so that you can know your status. It's good to know your status, if you are negative, so that you can keep yourself, on the other hand if you are positive, you should start some measures to prevent others from getting that HIV."

This was mentioned against the background that HIV testing and counseling is expected to bring about behavior change in the tested individual because of the information they will receive during counseling. *LM* added that,

LM: "more especially to we the police we are the people in defense we are the most affected people due to the nature of our work. We are meeting a lot of people, especially men and ladies; we are meeting a lot of people. Others they go for patrols, others outside the country for six months or one year for peace keeping. Others they can't stay without sexual intercourse, so others may have sexual intercourse and then they transmit that disease to other people, when they know their status, they can carry out some measures, may be they can carry a condom or to abstain from sexual intercourse."

In another interview, *MH*, a male informant thinks that the policy is good because it is going to help the Ministry of Health have accurate statistics of how many people are infected. According to *MH*, this will help government to plan for the treatment of

those who are sick and strengthen research into HIV cure. This point demonstrates that even the community understands the importance of information and statistics in planning.

JS, " me I think that this policy is good. After all it was already started with pregnant mothers. When the policy was introduced, pregnant women used to refuse to be tested, but now they are accepting. Even at pediatric ward this policy is in place, initially women used to refuse to test for fear of being beaten by their husbands. But now they are accepting to be tested. Education about HIV disease has reached most of the people in the community; therefore there are very few people that are ignorant."

The rationale for JS is that the policy has already been implemented and therefore should just be rolled out to the rest of the population. She meant that there will be some resistance initially but this will phase out with sensitization. She also added that the policy will help reduce the spread of the disease because if most people know their status, they will take precautions to avoid infecting others. According to her, most of the people that have tested positive have been helpful in encouraging others to go for testing.

Another informant, MM shares the same opinion that mandatory testing for HIV is not strange or new. According to MM, people have been submitting blood samples for various tests in the hospitals. He said clients are rarely given an explanation on what tests are carried out on those samples; therefore he feels that health facilities have the capacity to test people without necessarily getting consent from them. So he feels there is nothing new about the policy. MM said,

MM: "I personally feel the policy is good. Well, it may be bad in some quarters because some people feel they must not be known when they are sick, but you see the hospital has got the potential to test everybody whether he or she wants. For example when you have malaria and you go to the hospital, they will ask for

your blood and test you for malaria, whether they pronounce to you or not, it is actually in a way mandatory, only that it is now going to be officially pronounced. So the blood we give to the hospitals is enough for us to be tested."

This observation by *MM* is a true reflection of what is obtaining in most of our public health facilities. The common practice is that clients are rarely well informed about the treatments and investigations that they go through. This is said to be so because of the current congestion in our health facilities coupled with a shortage of health workers. Therefore the community has accepted this practice more especially that the majority do not understand their rights as patients.

One informant from the clergy supported the policy but with some skepticism, *KM* said,

KM: "At the end of the day, what does government want to achieve by this policy? If the policy is intended to make people's lives better, then it is welcome but if it is intended to just see people's status, then it is not helpful."

Yet still, others felt that government has a responsibility to care for its sick citizens and therefore need to test people in order that they receive treatment. In his statement *WS* said,

WS" I would agree with the policy on the basis that the health of every individual matters and is of great importance not only to that individual but to the nation as a whole. I would like to agree with the policy in the sense that as long as the individual is entitled to privacy on his state of health, because I think we are coming from a background of some kind of discrimination, and some kind of stigmatization of those that have been found to have that particular disease. Otherwise I agree with the policy because it is of importance to the nation and the individual because it will give enough time to a person to realize they can function in this way or the other. Once they know that they have this particular disease they can know the hindrances and what one can do and cannot do."

The sentiments of WS underscore how privacy and confidentiality are important to clients who attend health facilities, more so for those who undergo testing. Privacy and confidentiality have been issues of great concern to those who oppose mandatory HIV testing. In order to evaluate what the community thinks about privacy and confidentiality, WS was asked,

Do you think health workers will still be able to maintain privacy and confidentiality of clients if this policy is introduced?

WS: "I think to a large extent health facilities have been able to maintain the confidentiality of their clients' status that visit them, of course there may be a few that may want to divulge information for one reason or the other, which is not supposed to be the case because ethically, medical staff are not supposed to do that, but so far we have not had any rampant disclosure of the status of patients, at least this is what I have experienced as a person staying near a hospital."

WS also added that in fact, maintaining clients' confidentiality and privacy is ethically required of health workers because it is not only HIV that should cause alarm but there are many other diseases that could cause embarrassment if disclosed to other people.

It seems from WS' perspective that the community still has confidence that health workers will still be able to maintain peoples' HIV status in confidence as they have been doing with other health records in the past.

Some quarters of the community think that mandatory testing for HIV will enhance their practice. One informant, who is a traditional healer welcomed the policy and said,

LS: "in my thinking this policy is good because we have problems as traditional healers. The problem is that if you tell a client after diagnosing them that they have HIV, it is difficult. But for me there are many clients that I bring for VCT when I suspect that it could be HIV infection, but most people are not willing to be tested,

they believe that they have been bewitched. But if mandatory testing becomes policy, it will give us confidence to bring our clients for testing to the hospital”.

LS feels that the policy will help traditional healers to confirm the diagnoses of those they suspect to be HIV positive. He added that there is need for government to network with traditional healers and train them in counseling skills as this will increase uptake of testing.

5.4.3 PERCEIVED BENEFITS OF MANDATORY HIV TESTING

According to the Diffusion of innovation theory, relative advantage is a crucial factor in determining whether an innovation will be accepted by a particular community. The theory proposes that when persons perceive that a new idea or practice more benefits than the previous one, they tend to embrace the new idea or practice more readily. The relative advantage is either anticipated or observed in others. Therefore time was taken to discuss with the key informants on whether they anticipated any benefits with mandatory HIV testing.

All the informants interviewed thought that the health benefits of mandatory testing outweigh the social implications.

MN said, the benefits are that the policy will catch everybody who has HIV and treat, and when you treat, you have a normal Zambia.” (meaning a country that will be HIV free).

Key informants unanimously think that mandatory testing for HIV will help to capture those people that are missed out because they are not willing to be tested voluntarily. It is felt that the policy will enable health facilities to screen people while the AIDS disease is in its early stages. This will ultimately reduce the burden of the AIDS disease and ultimately improve the quality of life in individuals and the nation as a whole. These sentiments expressed by the informants are confirmatory of the

projections by CDC who said” we know that many infected people are not diagnosed until late in the course of their illness, when they’re already sick with HIV- related conditions. By identifying people earlier through a screening program, we’ll allow them to access life extending therapy, and also through prevention services, learn how to avoid transmitting HIV infection to others,” (Doyle, 2006). Like CDC, informants also anticipate that the policy will lead to reduced transmission of infections because more people will be on treatment and will have knowledge on how to prevent infections to others. Informants believe that when people know their status, it will help them to take precautions to avoid spreading the disease because they will be counseled.

The other benefit pointed out by one informant, *MH* was that mandatory testing will help to establish the exact number of people infected so that they are put on treatment. *MH* thinks that if government knows the exact magnitude of the pandemic, this will help to strengthen research into the actual cure of the disease and help government to plan accurately.

Apart from the anticipated benefits, two informants, *KM* and *JS*, a pastor and program coordinator respectively were able to point out the benefits that they actually associated with testing for HIV. *KM* said,

KM; “right now in Macha, people who are bedfast (bedridden) are few. So people have seen the benefits of coming to the hospital and getting treated. Because right now the role of caregivers is changing, the patients are no longer confined to their beds, the patients are out there working, and, on top of that they have seen that if you live a healthy lifestyle, even if you are HIV positive you are still a normal human being as opposed to people who are still in denial. Because if there is anything that is difficult for a person is to be kept in suspense, so many people who do not know their statuses, you know they are not healthy as far as am concerned, because their minds are not free. For me, to be healthy means that your mind is free.”

JS, a home based care coordinator also shared the same observation that, JS: " at the moment there are no clients that are bedridden under the home based care program. The clients are up and about, so they are the ones that are being used to encourage others to go for testing. We just visit to encourage them to eat well, do some farming, and adhere to the drugs, that's all.

It is evident from the discussions that the community have been able to identify some benefits of being tested. Therefore they feel that if testing services are scaled up through mandatory testing, the benefits will even increase further.

5.4.4. PERCEIVED SOCIAL IMPLICATIONS OF THE POLICY

As much as they were able to point out some benefits, some key informants also anticipated certain social implications of the policy. *MN*, who is a person living with HIV said,

MN: "some people who do not want to be tested will avoid coming to the hospital and so people will be dying in their homes."

The view agrees with sentiments raised by Asante 2007 that mandatory HIV testing will cause a lot of people to shun hospitals. He argued that if most people shun the health facilities, then mandatory testing will have little impact because only a few people will be tested.

However, another informant, *KM* viewed the above issue from another perspective, according to him; clients shun health facilities due to many factors other than for fear of being tested. He cited one major reason as being the tendency for Africans to believe more in traditional medicine than modern medicine. *KM* said,

KM: "the question is why do people shun hospitals? Is it just for fear of being tested? Maybe not. I think that the problem is that as Africans we tend to spiritualize almost everything, so we are more comfortable with a spirit oriented rather than facts oriented environment. Because whatever happens in our lives we

tend to say there is something evil that has happened or there is a spirit behind that.”

The statement by *KM* needs much attention because it highlights many challenges to the health care sector. There is need therefore to understand the issues that surround delayed attendance of clients to health facilities. These discussions underscore the fact that the community needs to be consulted in finding solutions to this problem, rather than making assumptions. It is clear from the discussions that fear of being tested is not the only factor that determines whether one attends a health facility or not once they fall sick. It is therefore vital to make community consultations so that the two parties (the community and health care facilities) can reach a common understanding that will help to make general care of patients more effective and probably increase uptake of testing in our facilities.

KM further proposed that if the information gap between the health facilities and the community are closed up and intensive sensitization is done to the community, this problem may be resolved and may ultimately improve the uptake of testing as well.

WS expressed one concern with mandatory testing for HIV. He said,

WS: 'I see certain interested groups taking advantage of knowing that this one is like this to try to downgrade others. Let me give an example of someone who may be aspiring to some position, as long as may be someone knows that someone is like this, because the problem we have is that people try to peddle in information that is not supposed to be disclosed to other people and would want to outdo each other basing on the status of the other person. I think that one to be a problem.' Secondly also just changing the mindset of every human being that has tested positive. Some of them they are better off not knowing their status, they feel they are better off because they feel once they have known about their status that would spell death on them even if they are counseled. "

The above sentiments should be of great concern to policy makers. World Health Organization emphasizes that the three C's of testing must be upheld at all times. Confidentiality is of paramount importance to clients because breach of the same can lead to social implications such as stigmatization of certain persons in society. Again, the observation made by WS that some people are not likely to change their mindset and accept their status is also of great significance. Policy makers need to seriously consider the role of counseling in changing people's mindset and behavior. If the community can anticipate that some people may not embrace positive living even if they are counseled then policy makers need to ensure that the introduction of the policy does not compromise the quality of counseling, especially post test counseling.

Acts of discrimination and stigma have been demonstrated in many sections of society and have been a major source of concern to those that do not support mandatory testing for HIV. However, the majority of key informants think that stigma and discrimination is likely to reduce if mandatory testing is introduced.

Key informants unanimously think that stigma and discrimination has greatly reduced in the community due to a lot of sensitization that has been going on in the community through the hospital AIDS Care and Prevention Program. Therefore they think that it will reduce even further if mandatory HIV testing is introduced because more people will know their status. One key informant WS said,

“ I think the issue of stigma and discrimination will reduce because some people in the villages are using certain terminologies to talk about it, for example they say: that one takes, that one drinks, I have started taking, have you started taking, that way, it simplifies the whole thing and helps them to run away from stigma and for people to discuss the issue more openly, I think this will help us a lot.” He also added that, I think the issue of discrimination will reduce because we will come to a point where HIV/AIDS issues are issues of life and death, just like people can be tested for high blood pressure, diabetes, eye sight. I think people are beginning to accept that HIV is a disease like any other disease.”

At the center of debate concerning mandatory HIV testing is the issue of human rights violation. There have been concerns that the policy violates the right of individuals to self determination. Therefore discussions concerning human rights issues were critically discussed with each informant.

Diverse interpretations of human rights were expressed. While one of the informants agrees that mandatory testing is a violation of human rights, she feels that this is done in the interest of saving life, which she thinks is more important than one's rights. MN said this,

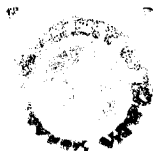
MN: "it is a violation of human rights but it is for the good of you and me. Some human rights can be bent if you think its good for such a one, then you bend it a bit for the good of one's life."

On the other hand, some informants feel that human rights should promote the well-being of the community as a whole. WS expressed his view on human rights like this,

WS: "human rights are there to entail that human beings should be treated with dignity and people should be able to know what is good for them and what is good for the rest of the friends that they live with. So actually human rights should be able to promote a culture of protection of other human beings from the danger that one may possess because they are positive. I think human rights should also be able to embrace the issue of encouraging people to disclose their status to people that matter or who may be infected if they are not aware of the others person's status. Human rights should be able to help people understand that one is living dangerously, and be exclusive of disclosing one's status when it matter most."

On the other hand KM said,

KM: "you see to define human rights, I struggle sometimes. You see human rights should promote a better life, human rights are supposed to help us express



ourselves better. So I don't know whose rights we need to follow here. Yes I know that some of these policies, if not properly handled can have all these repercussions where people think government is infringing on their rights or that government just wants to know our status for the sake of knowing. But I think the whole idea is let us look at this thing this way; "what is the motive? I think that this is going to help us to weigh on whose rights we are going to consider. It doesn't necessarily mean that just because you have been tested, then your rights are infringed upon. There are certain fundamental rights which government is failing to meet and no one does anything, why don't we take government to task? Now why should we come out so strongly on small things like HIV/AIDS which is intended to help us?"

In as far as KM is concerned; the motive of testing should be the core issue rather than considering testing as an end in itself.

The other key informants also feel that mandatory testing will be done in the interest of saving people's lives and so do not see it as a violation of human rights. It is evident that different people have different understandings of what human rights are and value them differently. However, it seems that there is agreement that human rights should be foregone if an intervention is carried out in the interest of the public.

5.4.5. PERCEIVED IMPLICATIONS TO GOVERNMENT

Some of the key informants feel that mandatory HIV testing has implications to government.

Among the most notable implications is that the introduction of mandatory testing will demand more resources from government. Therefore key informants think that more ARV's have to be made available for those that will need to go on treatment. Along with the provision of drugs, it is felt that there will be need to make available more health workers to provide the needed services in the ART clinics. Therefore informants feel that the number of nurses, doctors, and counselors have to be increased in order to meet the needs of the clients.

One key informant, who is also a counselor observed that although there are many lay counselors who are doing a tremendous job of helping with counseling services, they are not paid by government. Therefore she feels that government will need to find ways of rewarding these, so that they can continue to provide services. She further observed that lay counselors have been key in relieving the pressure of work faced in the ART and counseling units due to shortage of professional health staff.

Yet still, another key informant suggested that government will also need to increase access to testing and counseling services in the country. WS said that a lot of communities in the country have no access to testing and counseling services. Therefore he suggests that government needs to scale up these services, especially in the rural areas. He further indicated that treatment centers will also have to be brought as close to the communities as possible. He pointed out that there will be need to develop the health infrastructure so that counseling and testing services can be more accessible by the community.

He pointed out that some people fail to come for testing or to collect their results because of bad roads or long distance to the health facilities. Therefore these issues also need to be addressed.

These sentiments entail that the community think that the problem of low uptake of testing should be viewed holistically. Government will have to consider implementing integrated interventions apart from implementing the new policy as an end in itself.

5.4.6.SUGGESTIONS TO GOVERNMENT TO HELP IMPROVE IMPLEMENTATION OF THE POLICY

The key informants were asked if they had any suggestions to government concerning how it could effectively implement this policy. One key informant, GK suggested that there will be need to increase sensitization of the community about the need to test for HIV especially in the villages. It was mentioned that sensitization in the villages has been very minimal, hence the need to strengthen it.

It was suggested that if the policy has to be effective, sensitization should begin in schools, at primary level of education in order to increase awareness.

When asked how he thinks government can improve the uptake of testing for HIV, a key informant, who is a traditional healer answered,

LS;” it will be very nice that we work together with government so that government can train us in counseling so that we are able to counsel our clients as well.”

LS actually pointed out that he has been having difficulties convincing some of his clients to be tested even when he suspects that they may be HIV positive because of lacking counseling skills. So he feels that if mandatory HIV testing is introduced and government works closely with traditional healers, then some of the clients that are treated for witchcraft when they are actually infected with HIV can be saved. He also pointed out that in fact most people seek help from traditional healers than the hospitals and so it is imperative that government involves them as well. He pointed out that if traditional healers are trained as lay counselors, it will be easier for them to bring their clients to the hospital for testing. This, he said will help government to capture more clients for testing. He suggested that traditional healers should also be trained in counseling skills so that they are able to effectively counsel clients that seek help from them.

A traditional leader also suggested that government needs to involve traditional leaders in the fight against HIV/ AIDS. He said that their involvement will help to reinforce the policy because people sometimes are more loyal and trusting with their traditional leaders than other people. The traditional leader said that while health workers are more formal and lack understanding of cultural factors that matter to the community, traditional leaders are able to recognize and integrate cultural issues in most interventions. He went ahead and gave an example of the water and sanitation project that was spearheaded by Chief Macha. The leader pointed out that the program of constructing pit latrines at each household in Macha is now a success story because of involvement of local leaders. The program had failed for so many years because of the emphasis on VIP toilets

which the local community could not afford. He said, with the traditional leadership encouraging the use of local materials, there has been a big response to the call.

MM: " I have to work with government through ministry of health, like right now we have a workshop at the hospital. First of all, I took all the village headmen there. I got tested myself and announced my result and then all the headmen were tested. Out of twenty (20) headmen, two (2) were found positive and we encouraged them to come out in the open in order to motivate other people to say that it is good to go to the hospital earlier."

Lastly, one informant feels that mandatory testing for immigrants must also be considered. According to *MH*, it is important that the status immigrants is known upon entry into the country because these can potentially increased the spread of HIV infection in the country if they are not screened.

PERSONAL EXPERIENCES SHARED BY RESPONDENTS

Being people from different backgrounds, the informants were able to share their personal experiences concerning testing for HIV. One of the respondents who is also a person living with HIV/AIDS said,

MN: " I started treatment in 2003, june. Now am able to work, but that time I was very sick, my Hb (haemoglobin level) was low, I had cryptococcal meningitis and unconscious. I was transfused with three pints. Now am able to do normal routine." (meaning home chores).

When asked how MN was tested, this was how she narrated her story,

MN: " I asked myself to be tested because being a nurse I knew that I was HIV positive, I even told the doctor, please test me because I was ill health for a long time, only that I was hiding behind the bars."

Then the following question was posed to her,

Looking at your experience, which approach to testing do you think is better, VCT or mandatory HIV testing?

Her response was,

MN; "that's why am saying mandatory testing is better because if they had tested me mandatorily before I got sick am sure I was not going to reach a point where I was unconscious cos they were going to treat me right there and then. The reason why I don't speak well is because I had cryptococcal meningitis and somehow my medulla oblongata (pointing to the back of her head) was affected, so sometimes you find I have loss of memory, I don't speak well, but at least am able to communicate."

MN continued by saying,

MN; "well the other reason why I say that mandatory testing is good is because I have often times asked people that escort their relatives to come for voluntary testing to test also. On a number of occasions, these support persons have been found to be positive even when they look healthy. I have helped a number of them to start treatment while they are still looking fresh (meaning looking healthy)."

One other respondent who is involved in a HIV/AIDS programme in the community shared her experiences as well. She pointed out that the home –based care programme in the community currently has no clients to take care of because there are no bedridden clients right now because of ARV's. These clients are now active in the community and have been instrumental in motivating others to go for testing. She also pointed out that now people in the community are freer to discuss openly about HIV, they are turning out in larger numbers for testing. However, she said the new policy will go a long way in helping those who still find it difficult to test voluntarily to do so at a health facility. Disappointingly, she revealed that the youth

are not free to turn up for testing during community mobile VCT visits for fear of their parents and so this policy may assist them to be tested.

JS_“ when we go for mobile VCT, youths do not turn up. The majority of attendants are old folks and very young children, who cannot reason. The youths usually come after the activities are end, after 18;00 hours. They literally come in secrecy. When they are asked why, they say that they are scared of their parents and are not free to ask a lot of questions in the presence of their parents.”

Culturally children are not allowed to listen to their parents when they are discussing sexual issues; similarly it is a taboo for children to discuss sexual issues with their parents. This issue is a serious cultural barrier that needs to be addressed by policy makers. Therefore JS thinks that the introduction of mandatory testing will encourage more youths to be tested as well as those who are not willing to test. However, she observed that the policy needs to be implemented with the involvement of local headmen. This, she said, will help to increase the uptake of testing especially during mobile testing clinics

The suggestion to apply the policy even in the villages was also resounded by MH who thinks that local leaders like the headmen can help reinforce the policy within their villages. He observed that this will help to catch those that are not keen to go to the hospital.

CHAPTER SIX – DISCUSSION OF FINDINGS

The study was conducted in Macha, a chiefdom under Chief Macha. The area is situated 72kms from Choma town. It is predominantly an agrarian community with very few people (5.6%) in formal employment. The people found there are tonga speaking people. The commonest modes of communication were by road, telephone, and internet. Internet facilities are however only accessible to very few privileged individuals. The area is served with several primary schools, two secondary schools, and a nursing college.

The age range for the cohort was 18-80 years, with mean age of 35.8 years. For marital status, 75.3% are married, 13.7% are single, 5.7% are divorced, while 5.3% are widowed.

In terms of religion, 98.3% were Christians while 0.7% were Muslims.

Out of the cohort, only 2% of them attained college education. 30.3% attained secondary school, 62.5% attained primary education, and 4.9% had no education at all. The employment status of the community was very low; (69.8%) study established that the majority of the adult population was not employed.

My study found that the majority of respondents (61.9%) had never heard about mandatory HIV testing before. This finding may be explained by the fact that the majority of persons in the rural areas have no access to media. Access to information is essential for increasing people's knowledge and awareness of what is happening around them which may eventually affect their perceptions and behaviour. The commonest source (21.9%) of information for those that heard about mandatory testing was the local hospital in the area. Despite this scenario, the majority (80.3%) of respondents and all the key informants supported the policy. This finding is consistent with the US national survey that found that 63% of Americans believe that mandatory testing would improve the overall health of the US population (Fleming, 2005). Based on the cohort and in-depth interviews, most thought that mandatory testing will enable government to capture more people for testing and bring about early detection of infections and ultimately people will be put on treatment early. This finding is consistent with the arguments that

mandatory testing will bring the benefit of treating people early before their condition deteriorates. To cement their support for the policy, most (89.5%) people indicated that they would accept to be tested without consent if they were to be hospitalized.

Time was taken to discuss the issue of stigma and discrimination that have been a source of concern by a number of people. The study found that the majority (76.2%) of respondents felt that stigma and discrimination will most likely reduce if mandatory testing is introduced. These findings are in conformity with the US national survey findings that indicated that 60% of the general public and 59% of physicians in the US believe that the social implications of mandatory testing outweigh the associated health care benefits (Flemington, 2005). Key informants unanimously felt that if mandatory testing is introduced, stigma and discrimination will reduce in the community. It was felt that there has been considerable sensitization of the community on issues of testing, and treatment, such that people are more open to discuss issues of testing. With the introduction of ARV's, many people have seen the benefit of testing and are much more willing to be tested than in the past. It was felt that if most people know their status, stigma will eventually reduce.

Although most people supported mandatory HIV testing (80.3%), the majority of them (71.8%) still indicated that they still value their right to have privacy and consent before testing. One respondent put it this way, "*it is always good to make your own decisions, but since as Africans we are not keen to be screened for anything when we are not sick, we need such a policy.*" Despite preferring voluntary to mandatory testing, most people (68%) in the cohort said they would rather forego the right of autonomy for the sake of being tested. This was expressed by one key informant, "*the hospital has got the potential to test everybody whether he or she wants. For example when you have malaria and you go to the hospital, they will ask for your blood and test you for malaria, whether they pronounce to you or not, it is mandatory, only that it is now going to be officially made into a policy. So the blood that we give to the hospitals is enough for anyone to be tested.*" The sentiments of this informant is a reflection of what is

actually going on in the hospitals. At most times, clients are rarely involved in negotiating for their treatment. Explanations and let alone consent are rarely obtained from them when they attend health care facilities. Because of this factor, most people do not take issues of the right to autonomy seriously because they feel it is normal for the hospital to do what they think will help their clients to recover, however, clients indicated that they would prefer to be consulted in their care. On the contrary, they pointed out that most Zambians are not willing to be screened when they are not sick, hence the need to test them mandatorily.

Of great importance in the discussions on mandatory testing is the issue of human rights. In its findings, the study established that while 52.6% of the cohort thought that mandatory testing is not a violation of human rights, 47.4% felt so. Those who felt that it was not a violation of human rights did so on the basis that government has got the responsibility to protect society from people that may pose a threat to other individuals' health.

The study also found that the majority (87.6%) of clients felt that mandatory testing will offer more benefits to individuals and the nation than voluntary testing. While others cited benefits such as early treatment for those that will be found positive, others felt that mandatory HIV testing will lead to a reduction in the spread of HIV infections. These findings are consistent with CDC's findings that the perinatal transmission of HIV was demonstrated to be substantially reduced through the opt-out approach and administration of Zidovudine for those mothers who were found positive (Branson et al, 2006).

Amidst concerns raised about mandatory testing is that it would lead to people avoiding health facilities for fear of being tested. However, the study findings were that most people (69%) indicated that the introduction of the policy would not change their health seeking behavior. This is contrary to the findings of Nakchbandi et al, who indicated that mandatory testing may create the harms of avoiding prenatal care to avoid mandatory testing. However, it is important to note that these findings were among pregnant women.

The study endeavored to identify factors that are associated with supporting mandatory testing. None of the demographic characteristics seemed to play a role in influencing support for the policy. The study found that there is no association between sex and support for mandatory testing (p value = 0.071). Neither was educational status significant in determining support for policy (p value = 0.527).

Of much significance was relative advantage perceived by respondents. The study established that those who believe that the benefits of mandatory testing outweigh the social implications were more likely to support the policy than those who did not believe so (p value = 0.001). This finding is consistent with the Diffusion of innovation theory that proposes that people are more likely to accept an innovation (new idea or practice) if they perceive that there is relative advantage with the new innovation than the old (Rogers, 1995). Furthermore, cohort data shows that those who support the policy are also more likely to be willing to be tested mandatorily if they were to be admitted (p value = 0.001).

Logistic regression model was used to determine predictors of support for mandatory testing. Of great influence was found to be relative advantage and prior knowledge. It was established that those who have prior knowledge about the policy are 1.5 times more likely to support the policy (p value = 0.044) and **CI 1.011 - 2.308**. It was also established that those who think that mandatory testing offers more benefits than risks are 10 times more likely to support the policy than those who think otherwise (p value 0.001) and **CI 6.345 – 15.972**. The findings support Rogers' theory of Innovation which states that when people perceive that an innovation offers more advantages, they are more likely to embrace the innovation.

6.1 APPLICATION OF FINDINGS TO THE THEORY OF DIFFUSION OF INNOVATION

According to Everett Rogers, an innovation is a new idea or practice. Diffusion is defined by Rogers as the speed at which the new idea or practice is accepted or embraced by the community.

Rogers proposes in his theory that certain factors are key in determining whether an innovation is accepted by a community or not. Among them, he identified factors such as the characteristics of potential adopters, the rate of adoption, the nature of the social system, characteristics of the innovation, and characteristics of the change agents. Rogers also proposes that innovation is much more common in well developed societies with well developed communication systems. For the rate of adoption; Rogers' concept is that farmers are much more cautious in their response to innovation.

In this study, it is established that even without well developed communication systems, a community is still able to accept innovations. Of great significance in the study is that relative advantage played a big role in encouraging people to accept the proposed policy. It is evident from the cohort data that the community has actually observed more benefits with testing for HIV. Having seen people with improved quality of life after being put on treatment has been a major motivating factor in Macha community. Despite being an agrarian community, Macha has been able to accept the proposed policy, anticipating even more benefits. Therefore I would say that relative advantage and observability of impact seem to be the most important determinants of supporting the policy in this study.

6.2 CONCLUSION

The Macha community is in support of the mandatory testing policy although awareness of the policy is poor. However, there is preference for voluntary counseling and testing. It is evident that the majority of respondents have been able to observe benefits associated with testing through the ART services going on

at the hospital. It is also evident that the uptake for testing has increased significantly due to mobile VCT activities taking place in the community, involvement of local leaders, and massive sensitization. It is therefore definite that the community is likely to accept the policy as long as cultural issues are integrated into the intervention.

6.3 RECOMMENDATIONS

The research findings underscore the importance of community participation in prevention programs. There is need to involve the community in all phases of a program if it has to succeed. The research interviews reveal how much wealth of knowledge that the community owns. It is evident that most HIV/AIDS prevention programs have been a failure because policy makers and health workers lack the understanding of what community values are. It is also true that prevention programs have struggled to bear positive impacts because health workers fail to implement interventions that embrace community values and perspectives. What the community holds to be dear to them is what is seen to be very trivial to health workers. It is also evident that the community holds so much value to family ties and respect for traditional leaders. Without the support of these leaders, a community program is likely not to succeed.

There are also so many opportunities that government and its workers have not utilized which could have contributed to an increased uptake of HIV. It is evident that the community is very capable of determining what their needs are, what needs to be done and know how best to resolve them. They are the affected and at the same time they hold the key to their own destiny. The only handicap they have is failure of policy makers to consult them and cooperate with them in resolving health problems. In the case of HIV/AIDS prevention programs. It is evident from the discussions with the community that most programs have failed due to failure of health workers to localize the interventions and bring them closer to the community. Community leaders have not been fully utilized to get through to

community. Instead of using them to influence behavior change, these leaders were only used to give consent to health workers to work within their communities and promote cooperation. However, it is evident that community leaders are key to influencing family decisions, and reinforcing conformity to certain policies. It is therefore important that in bringing the community on board, community involvement instead of community participation should be adopted. Community involvement entails that the community is part of the planning process, implementation, and evaluation. Community leaders therefore need to be involved in the planning of mobile VCT services, and in educating and sensitizing their subjects on the importance of counseling and testing. It is also important to integrate cultural activities with VCT activities as this has shown to result in the capturing of increased numbers of clients. Also key in this matter is the issue of traditional medicine, it is important to empower traditional medicine practitioners with HIV/AIDS knowledge and train them in counseling skills because they handle the majority of sick people in the communities.

Accessibility to testing and counseling services also need to be improved especially in rural areas.

Policy implementation

The opt-out approach should be implemented throughout the health facilities instead of mandatory HIV testing. This means that HIV screening will be performed after notifying the patient that the test will be performed. The patient may decline or defer testing. The opt-out approach will accord health facilities to capture more people for testing but will also present an opportunity to clients to reserve the right to self determination. The approach should be rolled out to all health care settings and applied to all age groups. The policy should also be rolled out to local communities where mobile testing services are conducted. This will afford those who have poor access to health facilities the opportunity to test. This will also allow those that are comfortable with being tested from their homes to do so.

However, voluntary counseling and testing should continue to be encouraged.

Integration of services

Ministry of Health should involve more stake holders in advocating for testing. Traditional and local leaders need to be fully involved in sensitizing the community on the importance of testing. There is need to identify drivers of development in various communities and work with these in sensitizing people for testing. Traditional healers should also be trained and sensitized about HIV/AIDS. This will increase uptake of testing because the majority of people seek after traditional medicine therefore it is essential that these are brought on board. There is need to recognize local traditional leaders and use them to mobilize communities in taking action to resolve their own problems.

Traditional healers need to be trained in counseling skills in order to broaden the horizon of counseling.

Ministry of Health needs to increase strategies for counseling and testing. Mobile counseling and testing should be strengthened and more platforms where testing could be encouraged should be identified to increase uptake of testing.

Ministry should scale up sensitization campaigns on the importance of testing, and this should start early in people's lives such as in schools.

Mobilization campaigns on the importance of testing should be strengthened with more involvement of local leaders. There is need to combine testing activities with other cultural activities such as traditional ceremonies. This will help to reduce stigma and fear of testing.

There is need to get men to be more involved in HIV/AIDS activities and sensitization because decisions to test largely depend on them as they are the major decision makers. Therefore there is need to intensify male involvement

Infrastructure development

Ministry of Health needs to improve health infrastructure in order to improve access to testing services. Testing sites should be increased as well. According to the community, poor access to testing services is one reason why the uptake of testing has been low. Therefore intensifying community mobile VCT activities is vital before infrastructure is improved. Government also needs to provide staff, and equipment in remote areas. Testing methods also need to be rapid so that clients do not need to go back to a health facility to get results.

Training of more staff

There is need to train all health workers in counseling skills. It is therefore recommended that curricula for nurses and other clinical staff should take into consideration basic counseling skills. Government should also consider remunerating lay counselors.

Accessibility

There will be need to increase availability of ARV'S in order for those tested positive to access treatment. The level of CD4 count eligibility criteria also needs to be raised so that more people access drugs in the early stages of their disease. More ART clinic sites need to be established.

Broadening the horizon of the policy

It is important that as government is considering intensifying testing of its citizens, it also considers screening of immigrants in order to reduce infections. These must be screened upon entry into the country as they will be a reservoir of infection. Community observes that immigrants are a serious source of infection because they are likely to possess the necessary finances to lure women, who are in poverty to engage in unprotected sex.

Recommendations for further research

The study findings may have been influenced by many factors within the area's social system therefore the research needs to be duplicated in other areas.

There is need to duplicate the research at national level in order to build consensus. This will also accord government the opportunity to discover more insights and interventions that will improve policy implementation.

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APPENDIX 1

INFORMED CONSENT

TOPIC: COMMUNITY PERSPECTIVES TOWARDS MANDATORY TESTING OF HIV IN MACHA.

INTRODUCTION

Doreen Sitali, a student at the department of community medicine in the University of Zambia. I would like to request for your participation in my research study.

PURPOSE OF THE STUDY

The purpose of the study is to gain an in-depth understanding of the community's opinions concerning mandatory HIV testing. This will help future policy formulation to guide HIV testing. This will ultimately improve the uptake of HIV testing.

VOLUNTARY PARTICIPATION

Your participation in this study is purely voluntary. This means that you are free to decline to participate in the study without consequences. Furthermore, if you wish to discontinue the discussion during the interviews, you are free to do so without facing any penalties.

RISKS AND DISCOMFORTS

The study does not involve any obvious risks to you. However, I acknowledge that discussing HIV testing is a very sensitive issue. Our discussion of testing will not involve disclosing your HIV status to the interviewer.

BENEFITS

There are no monetary benefits for participating in this study. However, by participating in the study, you will contribute to information that will go a long way in

assisting the ministry to consider community opinions during policy formulation. Therefore the time you will spend in discussing the issue is highly appreciated.

CONFIDENTIALITY

I would like to reassure you that your personal information that you will entrust me with will not be disclosed to any other third party unless legally required to do so and with your consent. Your identity will be kept anonymous by using a number to identify you instead of your name.

INFORMATION AND CLARIFICATION

Please be informed that if you at any time need clarifications over the research study, direct your questions to:

DOREEN SITALI
UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE
DEPARTMENT OF COMMUNITY MEDICINE
P.O. BOX 50110
LUSAKA
CELL # 0977892417

OR
THE CHAIRPERSON
RESEARCH ETHICS COMMITTEE
UNIVERSITY OF ZAMBIA
P.O. BOX 50110
LUSAKA, ZAMBIA
TEL # 01 256067

APPENDIX 2: CONSENT FORM

I agree that the purpose of the study has been explained to me. The risks and benefits have been clarified to me and I understand that I can withdraw from the study whenever I wish to. My participation in this study is voluntary.

I _____ (NAMES)
agree to take part in the study.

Signed / Thumbprint _____ Date: _____ (participant)

Signed: _____ Date: _____ (witness)

Signed: _____ Date: _____ (researcher)

APPENDIX 2- STRUCTURED INTERVIEW SCHEDULE WITH CLIENTS

THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

DEPARTMENT OF COMMUNITY MEDICINE

STRUCTURED QUESTIONNAIRE FOR INTERVIEW SCHEDULE

TOPIC: COMMUNITY PERSPECTIVES TOWARDS MANDATORY TESTING OF
HIV IN MACHA

DATE-----

SERIAL NO -----

INSTRUCTIONS FOR THE INTERVIEWER

1. Do not write name of respondent on the interview schedule
2. Circle the most appropriate response to the question in the spaces provided.
3. Request the respondent to sign consent before you start the interview.
4. All the information provided by the respondent should be kept in strict confidence.
5. Respondents should not be forced to be interviewed.

SECTION A: DEMOGRAPHIC DATA

FOR OFFICIAL USE ONLY

- 1. Age of respondent []
- 2. Sex
 - a) Male
 - b) Female []
- 3. What is your marital status?
 - a) Married []
 - b) Single
 - c) Divorced
 - d) Widowed
- 4. What is your occupation?
 - a) Formal employment
 - b) Self employment
 - c) Not employed []
- 5. What is your educational status?
 - a) None
 - b) Primary education
 - c) Secondary education
 - d) College/university education []
- 6. What is your religion?
 - a) Christian
 - b) Muslim
 - c) Other (specify) ----- []
- 7. How much do you earn per month?
 - a) None
 - b) Less than K500,000 per month
 - c) Between K500,000 and K 1000,000
 - d) Over K1000,000 []
- 8. Have you heard of mandatory HIV testing?
 - a) Yes
 - b) No []

9. If the answer to the above is yes, where did you hear it from?
- a) From a friend
 - b) On radio
 - c) On TV
 - d) In the newspaper
 - e) Other (specify) ----- []
10. Have you sought for further information about mandatory HIV testing from other sources since you heard about it?
- a) Yes
 - b) No []
11. If the answer to the above question is yes, where did you seek the information from?
- a) Friend
 - b) Media
 - c) Newspaper
 - d) Other (specify) ----- []
12. Do you support mandatory HIV testing?
- a) Yes
 - b) No []
13. If you were to be hospitalized, would you accept to be routinely tested for HIV?
- a) Yes
 - b) No []
14. Do you think mandatory testing for HIV has the potential to reduce the rates of HIV transmission than voluntary testing?
- a) Yes
 - b) No []
15. Do you think mandatory HIV testing has the potential to reduce stigma and discrimination?
- a) Yes
 - b) No []

16. Do you think mandatory testing will increase access to treatment?
a) Yes
b) No []
17. Do you think mandatory testing will discourage people from seeking health care?
a) Yes
b) No []
18. Do you think one's right to consent and privacy are less important than the benefits of testing?
a) Yes
b) No []
19. Would you rather forego your right to self determination for the sake of testing?
a) Yes
b) No []
20. Do you believe that mandatory testing is simply a violation of human rights?
a) Yes
b) No []
21. Do you think that the benefits of mandatory testing override the risks?
a) Yes
b) No []

THANK YOU FOR PARTICIPATING IN MY STUDY

SECTION A: DEMOGRAPHIC DATA**FOR OFFICIAL USE ONLY**

1. Myaka ya uvuwa ----- []
2. Mukaintu na mulombwana
- a) Mukaintu []
- b) Mulombwana
3. Amutwambile ciimo cenu kujatikizya kwato. Sena -----
- Mulikwete/mulikwetwe []
- Tamuna kwata/ tamuna kwatwa
- Mwakalekana
- Mwakafwidwa
4. Mulimo nzi ngomubeleka?
- Uvolwa mali wamana mweezi []
- Ndilalibelekela ndemwini
- Nsibeleki pe
5. Muvola mali nzi wamana mweezi?
- Kwiina []
- Atasiki ku K500,000
- Akati kati ka K500,000 a K1000,000
- Aandilide ku K1000,000
6. Amutwaambile mpomwakatana mulwiyo lweni?
- Nseyiide pe
- Kuzwa bbuku lya Grade wani kusika kuseveni []
- Kuzwa bbuku lya grade eight kusika kumanizya
- Cikolo cipati
7. Ino muzulilwa kubukombi nzi?
- Bwaci kilisito []
- Bwaci Muslim
- Ibumbi (pandulula) -----

8. Sena kuli nomwakamvwa kuti kupimwa kazunda kasikalileke kwaando ba mulao buya na?

a) iyii

Peepe

9. Na kuvuwa kwenu kumubuzyo ooyu uuli awa atala nkwakuti iiyi ino mwakamvwida kuli?

Kuzwa ku mweenzuma

Musikapepele

Aacipekepeku

Kwinda mukubala mapepa (intanda)

Munzila iimbi (pandulula) -----

10. Sena mwakavuntauzya kumbi kujatikizya makani akupimwa kwa mulao na?

iyyi

Peepe

11. Na kuvuwa kwenu kwamubuzyo ooyu ulatala aw nkwakuti iiyi, ino mwakavuntauzya kuli?

Kuzwa ku mweenzuma

Musikapepele

Kwiinda mukubala mapepa (intanda)

Kumbi (pandulula) -----

12. Sena mulazuminana amakani a kupimwa kwa mulao na?

iyyi

Peepe

13. Na ncakuti mwabikwa mumalo kucibadela ngamwazumina kupimwa sikalileke kwa mulao?

iyyi

Peepe

14. Amutwaambile mbomuyeya amakani akupimwa kazunda kasikalileke. Sena kupimwa kwa mulao ngakwagwashilizya kuceesya kuyambukizya kazunda kwiinda kupimwa kwakulisungula?

iiyi []

Peepe

15. Sena muyeya kuti kupimwa kwa mulao ngakwaceesya lusaluluzi a kutondaikana kuba nkaambo kasikalileke?

iiyi []

Peepe

16. Sena muyeya kuti kupimwa kwa mulao ingakwagwasya kuti bantu banji bajane kusilikwa?

iiyi []

Peepe

17. Sena muyeeya kuti kupimwa sikalileke kwa mulao cilacita kuti bantu batyompwe kuya kukusilikwa kuzibadela?

iiyi []

Peepe

18. Amba cipati kulinduwe, kupimwa sikalileke kwa mulao na kube anguzu zyakuba amaseseke?

Kupimwakwamulao []

Kuba amaseseke

19. Ncili nconga wasala. Kuswekeelwa inguzu zyakulisungula kupimwa kutegwa uzibe mpoendela na kuba anguzu zyakulisungua monya koyazi mpoendela amakani a kazunda?

Kusweekelwa nguzu zyakulisungula []

Kuba anguzu zyakulisungula

20. Sena muyeeya kuti kupimwa kwa mulao kususya nguzu zyamuntu zya kulisungula?

iiyi []

Peepe

21. Sena muyeeya kuti kupimwa kwa mulao nga kuyoleta bubotu bunji na pe?

iiyi

[]

Peepe

22. Kuti nakupimwa kazunda kwaba mulao, sena ciyanza cenu cakuyanda kusilikwa mwaciswa ngacacinca na?

a) iiyi

[]

b) Peepe

c) Nsezyi kabotu

NDALUMBA KUTOLA LUBAZU MUBUVUNTAUZYI BWANGU

APPENDIX 3: INTERVIEW GUIDE WITH CLIENTS

TOPIC: COMMUNITY PERSPECTIVES TOWARDS MANDATORY HIV TESTING IN CHOMA DISTRICT

1. How old are you today?
2. What is your sex?
3. What is your educational status?
4. What is your marital status?
5. Have you ever been tested for HIV before?
6. If the answer is yes, how were you tested?
7. What are your experiences with voluntary HIV testing?
8. What is your opinion concerning mandatory HIV testing/
9. What do you think are the benefits of mandatory testing?
10. IN YOUR OPINION, how do you think mandatory HIV testing will reduce transmission?
11. Do you have any suggestions as to how the ministry can improve uptake of HIV testing apart from employing mandatory testing?
12. If you accept mandatory HIV testing, do you have any suggestions as to how the approach can be improved?

INTERVIEW GUIDE WITH CLIENTS (TRANSLATED)

MUTWE WAKAAMBO: KUYANDA KUTOLA LUBAZU MUKUPIMWA KAZUNDA KA HIV MUCISI CABA MWAMI MACHA KWIINDA MUMULAWO

1. Mujisi myaka yongaye yakuzyalwa?
2. Sena muli bakaintu na balomwana?
3. Mwakagolela muli mulwiyo lwenu?
4. Sena mulikwete/ mulikwetwe?
5. Sena kuli nomwakaapimwa kazunda ka sikalileke?
6. Na kuvwiila kwenu kumubuzyo ooyu ulatala ngwakuti iyyi, mwakaapimwa buti?
7. Amutwambile mbomuzyi amakani ajatikizya kupimwa kazunda kwakulisungula?
8. Ino muyeya buti amakanj akupimwa kuzunda ka sikalileke kwa mulawo?
10. Ino mbubotu nzi mbokuyoleta kuti kwaba kupimwa sikalileke kwa mulawo?
11. What do you think are the risks to mandatory HIV testing?
12. Amwambe twaambo twabukale tukonzya kujananika akaambo kakupimwa kwa mulawo?
13. Amutwambile mizezo njomujisi iikonzya kugwasyilizya mfulumende kuti kupimwa kazunda kwiinke kumbele?

APPENDIX 4: BUDGET

Research budget

ITEM DESCRIPTION	UNIT	UNIT COST	QUANTITY	TOTAL COST
1. STATIONERY				
Pen	each	1,000.00	5	5,000.00
Pencil	each	1,500.00	8	12,000.00
Bond paper	ream	35,000.00	4	140,000.00
Spiral binders	each	1,500.00	8	12,000.00
Calculator		150,000.00	1	150,000.00
Note book	each	10,000.00	5	50,000.00
Staples	packet	10,000.00	1	10,000.00
Rubber	each	1,500.00	5	7,500.00
Tippex	each	15,000.00	4	60,000.00
Stapler	each	100,000.00	1	100,000.00
Flash disk	each	300,000.00	1	300,000.00
SUBTOTAL				846,500.00
2.SERVICES				
Typing	page	1,500.00	230	345,000.00

Tape recorder		150,000.00	1	150,000.00
Tapes		7,000.00	10	70,000.00
CD	each	12,000.00	2	24,000.00
SUBTOTAL				564,000.00
4.TRANSPORT				
Principal investigator				
Lusaka - Macha	trip	105.00	4	420,000.00
Research assistants	day	120,000.00	30	3,600,000.00
SUBTOTAL				4,020,000.00
5.ALLOWANCES				
Research Assistants	day	200,000.00	60	12,000,000.00
Research ethics committee				250,000
SUBTOTAL				12,250,000.00
contingency				2,494,370
GRAND TOTAL				24,985,070.00

BUDGET JUSTIFICATION

STATIONERY

Stationery such as pens, pencils, and notebooks will be required for data collection by the research assistants and the principal investigator. The principal investigator will require flash disk for storage of the research document. Stationery will also be required for printing the final report.

SERVICES

Services such as printing and photocopying will be needed in order to come up with the questionnaires and interview guides as well as the final copies of the research report. The investigator will also need to engage a data analysis consultant who will do the data entry and analysis.

EQUIPMENT

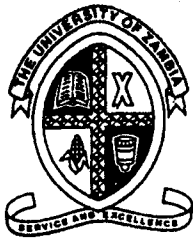
Certain equipment such as CD's will be needed for data backup. There will also be need for tape recorders in order to record the in-depth interviews. Carrier bags for each research assistant will be needed for the safe keeping of questionnaires.

ALLOWANCES

Research assistants and participants will require payments for their time spent on the research project. They will also need a meal allowance to enable them have meals since they will be required to collect data throughout the day.

TRANSPORT

Funds will be needed to enable the research assistants as well as the principal investigator to travel around the district. The projected time for data collection is about one month.



THE UNIVERSITY OF ZAMBIA

BIOMEDICAL RESEARCH ETHICS COMMITTEE

Telephone: 260-1-256067
Telegrams: UNZA, LUSAKA
Telex: UNZALU ZA 44370
Fax: + 260-1-250753
E-mail: unzarec@zamtel.zm

Ridgeway Campus
P.O. Box 50110
Lusaka, Zambia

Assurance No. FWA00000338
IRB00001131 of IORG0000774

15 September, 2009
Ref.: 012-07-09

Ms Doreen Sitali
Department of Community Medicine
School of Medicine
University of Zambia
LUSAKA

Dear Ms Sitali,

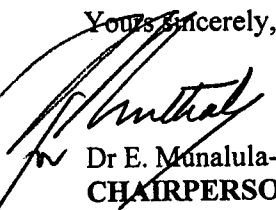
RE: SUBMITTED RESEARCH PROPOSAL: "COMMUNITY PERSPECTIVES TOWARDS MANDATORY TESTING FOR HIV IN MACHA"

The above-mentioned research proposal was presented to the Biomedical Research Ethics Committee on 29 July, 2009 where changes/clarifications were recommended. We have now received the revised proposal with changes/clarifications. The proposal is approved.

CONDITIONS:

- This approval is based strictly on your submitted proposal. Should there be need for you to modify or change the study design or methodology, you will need to seek clearance from the Research Ethics Committee.
- If you have need for further clarification please consult this office. Please note that it is mandatory that you submit a detailed progress report of your study to this Committee every six months and a final copy of your report at the end of the study.
- Please note that when your approval expires you may need to request for renewal. The request should be accompanied by a Progress Report (Progress Report Forms can be obtained from the Secretariat).
- **Ensure that you submit the final report of the study to this Committee.**

Yours Sincerely,

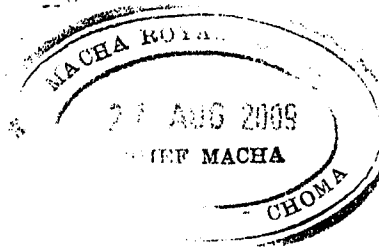

Dr E. Munalula-Nkandu, BSc (Hons), MSc, PgD R/Ethics, PhD
CHAIRPERSON

Date of approval: 15 September, 2009

Date of expiry: 14 September, 2010

HIS ROYAL HIGHNESS,
CHIEF MACHA,
MACHA CHIEFDOM.

VILLAGE HEADMEN,
MACHA CHIEFDOM,
MACHA.



RE: PERMISSION TO CONDUCT RESEARCH STUDY – MRS DOREEN SITALI

The above-mentioned is a student at the University of Zambia. As a partial requirement for her training, she is expected to undertake a research study in my chiefdom. This letter therefore serves to inform you that your village has been selected for this purpose. I therefore request your cooperation during this exercise by kindly informing your village subjects about the exercise.

Your cooperation in this matter will be highly appreciated.

Your Royal Highness,


Chief MACHA.

APPENDIX 5: WORK PLAN

Activity	Jan 2009	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Develop research proposal												
Presentation at graduate forum												
Ethics committee approval												
Data collection												
Data analysis												
2010												
Report writing												
Review by external examiner												
Research defense												

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