

THE UNIVERSITY OF HULL

Steering an AIDS-free Course:

Personal Prevention Strategies of Young People in Tanzania

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Laurie Lynn Kelly, BSc, MF, PG Dip (Research)

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Abstract

This thesis presents an exploration of the personal HIV/AIDS prevention strategies of young adolescents in Tanzania. Most of the 209 research participants were aged 10-15. They included students, those out of school and 'street children'. In this multiple method study, the young people participated in focus groups, individual interviews, questionnaires, ranking exercises, and write-and-draw exercises. Most of the participants were motivated to prevent HIV/AIDS and were able to communicate credible strategies. Many participants described tactics related to refraining from sex. Males tended to describe sexual temptation in terms of their own sexual desires, and refraining from sex in terms of the management of those desires. Females tended to describe sexual temptation in terms of the benefits males might offer in exchange for sex and the possible risks of agreement or refusal. Females described refraining from sex in terms of politely refusing, eluding and outsmarting males, and avoiding situations where rape might occur. Male participants who discussed penile-anal sex nevertheless seemed to associate HIV transmission mainly with heterosexual relationships and penile-vaginal sex. In further findings, many participants described tactics related to the prevention of blood-borne infection. Some participants mentioned testing and transmission in mother-to-child and caring relationships. Although most participants agreed in theory that condoms were a good way to prevent HIV/AIDS and that it was acceptable for a male or female to ask a partner to take an HIV test before having sex, relatively few participants included testing or condoms in their strategies. Most pilot study participants were knowledgeable about some aspects of prevention, but demonstrated no knowledge of HIV prevalence. This study indicates a role that national and international leaders, policy makers, teachers, parents and others might play to encourage young adolescents to steer an AIDS-free course, by supporting young people to build on their existing personal strategies of prevention, and to develop and adapt their strategies as they mature. That may support the young people to delay the sexual debut, to prevent HIV/AIDS when beginning and maintaining sexual relationships, to refrain from sex, if they wish, after the sexual debut, and to reduce the incidence of blood-borne transmission, mother-to-child transmission, and transmission when caring for others who may be affected.

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Abbreviations and Acronyms

ABC	Abstain, Be Faithful or Use Condoms
AIDS	Acquired Immune Deficiency Syndrome
AMREF	African Medical and Research Foundation
ARV	Antiretroviral
AZT	Azidothymidine (Zidovudine/Retrovir), an HIV/AIDS drug treatment
CBO	Community-based Organisation
CDC	Centers for Disease Control and Protection (USA)
DfID	Department for International Development (UK)
DHS	Demographic and Health Surveys
FGM	Female Genital Mutilation
GBP	British Pounds
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
HSV-2	Herpes Simplex Virus 2
IDU	Injecting Drug Use or User
ILO	International Labour Organisation
KABP	Knowledge, Attitudes, Behaviours and Practices
MSM	Men Who Have Sex with Men
NBS	Tanzania National Bureau of Statistics
NGO	Non-governmental Organisation
NMSF	National Multi-sectoral Strategic Framework on HIV/AIDS
PEPFAR	President's Emergency Plan for AIDS Relief (USA)
PLWHA	Person or People Living with HIV/AIDS
PMTCT	Prevention of Mother-to-child Transmission (of HIV)

PSI	Population Services International
SPW	Students Partnerships Worldwide
SRE	Sex and Relationships Education
STD	Sexually Transmitted Disease or Diseases
STI	Sexually Transmitted Infection or Infections
TACAIDS	Tanzania Commission for AIDS
TB	Tuberculosis
THIS	Tanzania HIV/AIDS Indicator Survey
THMIS	Tanzania HIV/AIDS and Malaria Indicator Survey
TSH	Tanzania Shillings
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organisation
UNICEF	United Nations Children's Fund
USAID	US Agency for International Development
USD	US Dollars
VCT	Voluntary Counselling and Testing
WHO	World Health Organisation
YP	Young Person
ZAC	Zanzibar AIDS Commission

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1 Introduction

The aim of this study is to explore the personal HIV/AIDS prevention strategies of young Tanzanians. Researchers, funders and policy-makers have paid relatively little attention to personal prevention strategies. Monitoring, policy, education and programming dedicated to HIV/AIDS prevention are likely to improve with greater acknowledgement, understanding and support of young people's personal strategies of HIV prevention.

This introductory chapter discusses the most popular primary prevention intervention of HIV/AIDS. It examines gaps in current research concerning young people and HIV/AIDS prevention in Tanzania. It poses the research questions and concludes with the structure of the thesis.

1.1 *The Challenge of Message-based Interventions*

Probably the most popular primary prevention intervention is telling people what to do. Family members, friends, neighbours, government workers, religious authorities, business people and media organisations all do this, both formally and informally and in a variety of ways: through lectures, public celebrations, advertising, music, dance, drama, peer education, life skills programmes and discussions.

Most people in sub-Saharan Africa hear many messages about HIV/AIDS from an early age. Messages may draw their authority from discourses of morality, sexual freedom or from the biomedical viewpoint (Iiffe, 2006:90; Parkhurst, 2010). Messages may recommend abstinence to young people and faithfulness in marriage, arguing that 'unless people stop unsafe practices, no one can help them' (Etzioni, 2003). Messages of sexual freedom may claim that abstinence and partner reduction are unrealistic (Green, 2003:87) and emphasise condoms, testing and treatment instead.

Messages conflict with each other as people are told, at various times and places, to abstain, to be faithful to a single partner, to reduce the number of their partners, to use condoms, not to use condoms, to use clean needles and not to inject drugs. Messages are often broadcast as though 'One size fits all' (Coast, 2002:18) and as though there are no conflicting messages. In the din of public discourse, people must choose which

messages to consider or ignore. Ultimately, each individual must devise his or her own approaches to the management of HIV/AIDS risk.

Many messages tend to overlook the risk run from the behaviour of sexual partners. In particular, many women, often the less powerful members of heterosexual partnerships, do not have the option to protect themselves through abstinence, faithfulness or condoms (Wight et al., 2006:996). Even if faithful, women often cannot refuse sex once in a sexual partnership, or ensure that a partner has a test for HIV and discloses the results, is faithful to her himself, or uses condoms within the relationship or with other partners.

Message-bearers often deliver messages as slogans rather than reasoned arguments. The delivery of these superficial messages is likely to deliver sub-optimal results in the absence of any mechanism to support people in selecting the best message for themselves and in integrating messages, and acting on those integrated messages with risk-avoiding and risk-minimising behaviour.

People are more likely to trust the message if they trust the messenger. Many young people in sub-Saharan Africa trust their parents and teachers more than other sources of advice and guidance, whether young or old. In sexual matters, however, it is often unacceptable for parents and others of a similar age to discuss sexual matters with the younger generation. For many Tanzanians, it is disrespectful for parents to discuss sex with those in the adjacent generation, including their own children. This reinforces the tendency of parents to advise young people to refrain from sex, because, apart from any other consideration, advising abstinence does not involve intergenerational conversation about sex. Therefore, the sexual aspect of HIV/AIDS education that many young people receive from parents and teachers, the very people that they love, respect and trust the most, is often limited to the recommendation not to have sex. This leaves a significant gap, because many young people are suspicious of advice that comes from other sources.

Young people as well as adults may be suspicious of messages that outsiders bring. Sometimes these messages carry the taint of a Western nanny state that wishes to control African sexuality. Some may perceive slogans such as 'Condoms every time' to be part of some sort of conspiracy to commit genocide or weaken the power of Africans and African nations through control of the birth rate. Many Africans are

likely to be weary or wary of ‘solutions’ that they perceive are imposed by foreigners, not least because of assumptions about Africans and African sexuality that may be perceived or which actually accompany the messages.

'Africa has suffered terribly from knowledge systems imposed on it by white westerners, and the thought, that AIDS as a sexually transmitted disease implying sexual contamination with the disease being imposed on it by white western thought systems, was quite offensive' (Cameron, 23 May 2007).

On the other hand, message hearers may be wary of local messengers of their own age, too. Peer education is a variation on message-based education, based on the assumption that young people are more likely to listen to other young people. Teachers or students may elect or select young representatives from schools. The representatives may receive training at central locations and return to their schools to carry out HIV/AIDS education among their peers. Peer education often uses the same top-down techniques as teacher-led education but with young people embodying the final stages of message delivery. Peer education sometimes suffers from difficulties similar to those of other top-down approaches: imposed solutions, lack of flexibility, and insufficient breadth and depth of expertise.

In peer education, the assumption is that people are more likely to adopt messages from people that they know. That may or may not be the case. Young people, well aware that HIV/AIDS prevention is a matter of life and death, may question whether young people like themselves are qualified enough to teach them properly. There are other problems:

We found that many children at the schools where such peer education programmes had been implemented showed resentment towards peer educators. These children complained about the peer educators' arrogance (they were found to be ‘preaching’) and inability to answer the children's more difficult questions (Van Reeuwijk, 2010b:35).

Adults who deliver prevention messages to young people often regard members of the youthful target groups as unknowing blank slates on which the messages may be ‘written’. They may regard the young people to be like black boxes, the interiors of which are unknowable. Many message-bearers hope, therefore, to ‘write’ the message on the young persons, hoping that the message will somehow penetrate their unknowable interiors and that the young people will somehow integrate the messages. The hope is that ‘The individual child's personality...becomes continuous with the

goals and means of the society itself' (James et al., 1998:24) or at least continuous with the goals and means of whoever is spreading the message. This hope is often unrealized. Young people are not blank slates or black boxes. They are more 'than the messages imagine them to be' (Walker, 2010). They consider, accept, reject, adapt, misinterpret or integrate the messages. The message-bearers would be well-advised to acknowledge that young people continually make choices and that they have individual agency, defined as the way an actor acts in a situation, when the actor could have acted otherwise (Giddens, 1984:14). Young people are competent social actors and interpreters of the world (James and Prout, 1995:90). They may not choose the messages that the message-bearers bring or behave as the message-bearers would have them behave.

Message-bearers are apt to claim credit for other people's behaviours that prevent HIV/AIDS, rather than to give credit to those who bore the risks and made the decisions. The phrase 'behaviour change', for example, carries the suggestion that people had wrong behaviours before, but that they corrected their behaviour once they heard the message and saw the light.

The concept of "behaviour change" does not serve young adolescents well. Many of them do not need to change any behaviour; they just need to maintain health behaviour. Insisting on "behaviour change" rather than on development of healthy behaviours generates confusion (Baldo and Uzamugunda, 2000:83; cited in Jackson, 2002:129).

In this regard, it is worth bearing in mind that most Tanzanian adults are HIV negative and that the rate of HIV/AIDS in Tanzania has remained lower than in many neighbouring countries for much of the epidemic. This would suggest that at least some people are already doing something right. Social, environmental and economic conditions as well as individual strategies and behaviours in existence throughout the epidemic have no doubt contributed to the prevention of the spread of the virus, too.

Message-based education assumes that people are more likely to do what others urge them to do. This is not necessarily the case. Psychological reactance describes the process whereby 'if someone tells you to do something, you probably won't feel like doing it even if you might otherwise have wanted to' (Pantalon, 2011:26). This tendency is likely to intensify when recipients feel pressured or are suspicious of a message-bearer.

In the absence of further information it could be argued that the attempted usurpation of choice simply destroys the other person's power to influence rather than creating a motivational state counter to the positive influence pressure (Brehm and Sensenig, 1966).

Those pressured to follow a message may become suspicious of the message-bearer, especially if they suspect that the message-bearer is attempting to control their morals (Edwards et al., 1990:45), sexuality or fertility. Treating people as though they are merely members of a 'target group' who need only to receive and follow messages may make coincidental compliance with the messages feel like servility and coincidental non-compliance with the messages feel like belligerence. Neither feels like autonomous choice. That is confusing and frustrating, because it makes it difficult to make choices based on their merits. Such scenarios are unlikely to lead to good outcomes.

It is probably better to promote prevention through behavioural interventions that promote the feeling and reality of autonomy so that young people can make free choices. The personal strategy approach, for example, is one way to emphasise intrinsic motivation, creative, autonomous decision making and adaptation to personal inclinations and needs.

Message-bearers often assume that repetition and attractive packaging are associated with persuasiveness and ultimately, with effectiveness in prevention. Message-bearers must seek donor approval of message content and delivery. Message bearers may not be willing or able to subject messages to empirical tests to ensure that they are likely to result in satisfactory biological outcomes.

Message bearers may consider HIV/AIDS risk in isolation, telling people for example, to abstain from sex. Young people's strategies, on the other hand, usually encompass multiple risks and aspirations. HIV/AIDS is one risk of many for young people and avoiding HIV/AIDS is one aspiration of many. Supporting young people with the tools to develop strategies in the expectation that they will go forth and mature in multifaceted lives is likely to be useful to young adolescents.

Aspirant bullfighters such as those on the Zanzibar Island of Pemba face risks and have the objective to 'win' bullfights. Presumably, the aspirant bullfighters do learn something about bullfighting, such as by observation, and develop personal strategies before they meet the bull for the first time. The aspirant bullfighters will know that

they cannot become good at bullfighting if they take the advice to postpone facing the bull indefinitely. Equally, a young person does not learn to become a good football player only by learning the rules and theory of the game, but staying off the field indefinitely. In the same way, it is not sensible to advise young people to avoid the arena of sex indefinitely. Most young people will one day have sex. Those young people who are realistic in coming to terms with this eventuality and who develop their HIV/AIDS prevention strategies accordingly are likely to be in a better position to lower their risk. In strategic terms, young people need to prepare strategies that enable them to make the transition from the tactic of refraining from sex to a different tactic or tactics such as condoms, regular HIV tests and fidelity with partners, in order to reduce their risk when they do have sex. If young people receive support to make and adapt strategies relevant to the circumstances that accompany adolescence and adulthood, they are more likely to be able to manage the HIV/AIDS risk effectively.

Approaches to HIV/AIDS prevention depend on assumptions, social practices and sanctions, especially as they concern sexuality. There is no one-size-fits-all solution. Senegal approaches HIV/AIDS prevention with strong social controls and sanctions concerning sex, and low levels of sexual knowledge among the young. The Netherlands approaches HIV/AIDS prevention with tolerance of sexual freedom, including the freedom to abstain, high levels of sexual knowledge and widely available information, contraceptives and other technologies of protection against HIV/AIDS. Although the approaches differ, both countries have low rates of HIV/AIDS compared to neighbouring countries. A third approach, often prevailing in countries with high HIV prevalence, including many parts of southern Africa and East Africa, is to advocate a high degree of (apparent) control of young people's sexuality, coupled with widespread sexual freedom for adult males (Verkuyl, 1998:125). Structural constraints such as gender inequality and widespread poverty reduce the effectiveness of this approach in preventing HIV/AIDS (Verkuyl, 1998:10; cited in Jackson, 2002:124-126).

Some efforts to support HIV/AIDS prevention in Africa have met with success, however. One such effort is Zero Grazing. When I learned the term in East Africa in the early 1980s, zero grazing was a livestock management practice, referring to the keeping of a grazing animal tethered or in a stall and collecting fodder for it, rather than letting it go free to graze hither and yon (Mango, 2002). In Uganda, the term Zero

Grazing became associated with the avoidance of indiscriminate sexual relations, and the campaign probably resulted in many people reducing the numbers of sexual partners. Others have suggested that Zero Grazing referred to condoms. This seems unlikely, given the origin of the term (Epstein, 2007:176-177; Green, 2003:11-12, 71). It may be that some persons, while continuing to associate Zero Grazing with the purported successes of Uganda in HIV/AIDS prevention, have altered the meaning of the term to accord with their own points of view.

To an extent, adolescents may be able to address the gap between societal ideals of sexual behaviour and actual sexual practices with personal strategies of their own devising. Such strategies may generate possibilities for the effective exercise of agency or free choice of behaviours, even in the context of structural constraints such as limited educational and employment opportunities, limited accessibility and take-up of treatment for STDs, and gender imbalances of power. Of course, young people may not only use their agency to lower HIV risk (Wight et al., 2006), they may use their agency to pursue other life objectives, and incidentally raise or lower their HIV risk at the same time.

While it is important to remove harmful structural constraints, young men and women in Africa cannot wait for structural improvements to occur before they begin to live their lives. Although conditions will undoubtedly change, there is no guarantee that they will improve in all respects in the future. Supporting young people to develop personal strategies of prevention enables them to engage with the world as they may find it.

1.2 *HIV/AIDS Prevention Research Concerning Young Adolescents in Tanzania and the Region*

Some studies have supported the idea of HIV/AIDS behavioural interventions as early as the pre-teen years, before the typical age of sexual debut (National AIDS Control Programme, 2004:xi; Harrison et al., 2005). There is no agreement as to the content of those interventions. A Tanzanian Ministry of Health policy recommends that those 14 and under 'should be encouraged to delay having sex' (National AIDS Control Programme, 2004:xi). While there are excellent arguments for young adolescents to refrain from sex, young people risk HIV/AIDS whenever they have unprotected sex.

Whether society considers they should be having sex is not relevant to their HIV risk if they are having sex. Interventions that assume an absence of sexual activity in the under-15 age group and provide no other recommendations for young people having sex, do not support the sexually active group to reduce their risk.

HIV/AIDS research on young people often excludes younger adolescents. Ball, (1996:27) cited younger adolescents' sexual ignorance and inexperience as the reason for exclusion. Mbugua (2004:105) wrote that older adolescents are more likely to have the maturity 'to assess their own views and feelings about sex' (Mbugua, 2004:105). This research targeted 11-14-year-old Tanzanians, and found no evidence that any but a very few were ignorant about sex or unable to assess their own views and feelings.

At this age, many young people attend primary school but some do not. About 30% of those Tanzanians who enrol in primary school do not complete the full seven years (IRIN, 2007a). Fewer go on to enrol in secondary school (UNICEF, 2010). Research samples drawn from populations of secondary or university students are likely to reflect relatively elite sub-sections of the national population (World Bank, 1999:182). In Tanzania, any research targeting students in secondary schools or university is likely to represent those with higher than average levels of education and income, compared to the national population.

Young people who do not attend school or who attend only sporadically are often under-represented in many studies in Tanzania and other countries. Researchers often recruit mainly or exclusively from schools (such as in Seloilwe, 2005; Maswanya et al., 1999; Mbugua, 2004; Bandawe and Foster, 1996; Mufune et al., 1993; Lugoe and Rise, 1999; Twa-Twa, 1997; Ross et al., 2007; Agardh et al., 2011; Lugoe et al., 1995; and Omary, 2007/8). Studies that exclude out-of-school youth (see Schifferdecker, 2000; and Bastien, 2008) exclude the possibility of learning more about their particular needs. For the present study, I recruited out-of-school youth and 'street children', because both were significant minorities of the young adolescent population.

Most young Tanzanians are workers (ILO, 2001). While commercial sex workers and 'street children' have been prominent in HIV/AIDS research in Tanzania and elsewhere (such as Campbell and Ntsabane, 1995; Evans, 2003; Varga, Christine A, 2001; Baker, Rachel, 2004), other young Tanzanians are seldom acknowledged as workers. Researchers tend to emphasise young people's identities as students or family

members rather than workers, perhaps because of assumptions based on Western norms or simply because researchers often recruit from schools. It is easy but not advisable to overlook the implications of work for HIV/AIDS prevention among young adolescents, because work may put them in places and situations of heightened risk.

1.3 *Research Questions*

This thesis explores seven research questions.

- 1) What did participants know and understand about HIV/AIDS prevention?
- 2) Did participants have personal HIV/AIDS prevention strategies?
- 3) Where strategies existed, what were their characteristics?
- 4) How did strategies differ by demographic groups?
- 5) How did advice, education and guidance influence participants' prevention strategies?
- 6) To what extent could participants be reflexive about their personal HIV/AIDS prevention strategies? Could they describe and analyse realistic structural constraints and suggest prevention methods that addressed those constraints?
- 7) What implications for social policy do the research findings suggest?

1.4 *Structure of the Dissertation*

After this introductory chapter, the second chapter discusses the context of HIV/AIDS in Tanzania.

Chapter 3, 'Strategy and Risk', examines different theoretical understandings of strategy and risk. It presents examples of personal prevention strategies to prevent HIV/AIDS. Most examples are from southern and East Africa.

Chapter 4, 'Methodology', describes the methodological and philosophical issues relevant to this research, introduces those involved in the research, presents the methods of the multiple method approach, and outlines the procedures of the research days.

Chapter 5, 'Framework of Strategies', provides results mainly relevant to Research Question 1, concerning what the research participants understood about HIV/AIDS,

and Research Question 5, concerning the sources of advice, education and guidance that young people received.

Chapter 6, 'Young People's Strategies', presents results mainly relevant to Research Questions 2, 3, 4 and 6, discussing the existence of strategies, characteristics of strategies where they existed, similarities and differences of strategies by demographic groups, and the extent to which the young people were able to be reflexive about their strategies.

Chapter 7, 'Discussion and Analysis', presents the discussion and analyses of the research findings for research questions 1-6.

Chapter 8, 'Conclusion', summarizes the design and conduct of the research and states the factual and conceptual conclusions to be drawn from the findings, particularly as relevant to Research Question 7 concerning social policy implications. Chapter 8 sets out an agenda for future research, as well.

2 The Context of HIV/AIDS in Tanzania

This chapter provides background about the HIV/AIDS epidemic, especially in Tanzania. It discusses the demographics of the epidemic, systems of knowledge and understanding, HIV prevention in the life course and HIV/AIDS prevention programmes.

2.1 *Demographics of the Epidemic*

In order to understand the context of HIV/AIDS, it is useful to consider how HIV has affected different groups in the population in terms of mortality, prevalence and incidence. Worldwide, about 34 million people are infected with HIV/AIDS (World Health Organization, 2012). About two-thirds were in sub-Saharan Africa.

Worldwide, mortality or deaths due to HIV/AIDS fell from 2.1 million in 2004 to 1.8 million in 2009. Nearly three-fourths of 2009 deaths were in sub-Saharan Africa (UNAIDS, 2010b:19, 25). There, between 2001 and 2009, the rate of new infections was reported to fall by 25%, with about ten males infected for every thirteen females (UNAIDS, 2010a:2-3).

Many sub-Saharan Africans who qualify for antiretroviral (ARV) treatment have begun to receive it, including half the expectant mothers, for the prevention of mother-to-child transmission (PMTCT), and a third of the qualifying adults in the general population (UNAIDS, 2010a:1). Research has shown the advantages of treating people at earlier stages of infection (International AIDS Society, 2012:1) so estimates of the number of persons who might benefit from treatment are growing. The availability of testing and treatment, take-up and adherence influences the success of treatment programmes. In a relatively recent Tanzanian study, about 42% of those who were tested and who qualified for ARV treatment received it (World Health Organization, 2011). Adherence has been satisfactory (Ware et al., 2009).

Methods of measuring, sampling and estimating HIV/AIDS in populations each have inherent biases. Prevalence, often called seroprevalence when discussing blood-related diseases, is the percentage of people alive and HIV positive in a given population. Sometimes researchers draw prevalence estimates from sample populations of pregnant women receiving antenatal care. This survey method is likely

to overestimate the prevalence in the general population, because unlike all men and women in a population, all pregnant women have been sexually active. The 2007/8 Tanzania HIV/AIDS and Malaria Indicator Survey (THMIS) estimated prevalence from a sample of 15-49 year old men and women who agreed to test in over 9000 households, from 475 sampling points (TACAIDS, 2008:xviii).

Prevalence is only a crude measure of prevention success or failure. Death and emigration of infected persons can reduce prevalence, and survival and immigration of infected persons can increase it. Successful ARV treatment increases prevalence because it helps infected people to live longer.

Incidence estimates the percentage of people in a population who become HIV positive in a single year. It indicates the effectiveness of prevention better than prevalence because it does not reflect survival, death or migration rates. However, incidence data is difficult and expensive to collect so often, so-called incidence data is derived from prevalence data rather than measured (Green, 2003:147).

In sub-Saharan Africa, estimated incidence peaked at 2.2 million in 2001, fell to 1.8 million in 2009 (UNAIDS, 2010b:16), and stayed at that level in 2011 (UNAIDS, 2012). In most nations with the highest prevalence in eastern and southern Africa, including Tanzania, estimated incidence decreased at least 25% in these eight years (UNAIDS, 2010b:17), slowing to about 3.4 per 1000 person-years in 2008 (Hallett et al., 2010:147).

In Tanzania, females aged 15-19 were about twice as likely as males of the same ages to have contracted HIV. Females aged 20-24 were about three times as likely as males of the same ages to have contracted HIV (TACAIDS, 2008:115). The epidemic throughout the world is concentrated among higher-risk groups, but in sub-Saharan Africa, the epidemic is generalized in the population, too (Green, 2003:9; UNAIDS, 2004:1-2).

HIV-1 is the predominant viral type in the world (Noble, 2007; Popper et al., 1999:1121). In 2008, there was 9% HIV-1 prevalence in Tanzanian urban populations and 5% in rural ones (TACAIDS, 2008). Rural females had less than half the prevalence of urban females (5%, 11%) and rural men had lower prevalence than urban men (4%, 6%) (TACAIDS, 2008). Prevalence among those aged 15-19 was about 1%, and prevalence peaked among those aged 30-39 at about 10%. Prevalence

of the employed was double that of the unemployed (6%, 3%). Prevalence was higher for women in the highest 20% of wealth than women in the other four quintiles of wealth (10%, 5-7%) but about the same for men in all five wealth quintiles, at 5-6%. (TACAIDS, 2008:116). In this survey, then, HIV risk correlated with employment, being female, urban residence and for women, relative prosperity. There was no clear correlation between prevalence and years of schooling completion.

In a study based on Demographic and Health Surveys of twenty countries in sub-Saharan Africa, Tanzanian rural HIV prevalence was higher among the non-poor half (7%) than among the poor half of participants (4%) (significant at $p < 0.001$) (Magadi, 2013:1649). Rural females and urban non-poor females were about 1.5 times as likely to be HIV positive as their male counterparts were. Poorer urban-dwelling females suffered a particularly high likelihood of prevalence relative to males. They were almost twice as likely to be HIV positive as poorer urban-dwelling males (Magadi, 2013:1652-1653).

Rural Tanzanians are more numerous than urban dwellers and so have a greater influence on national statistics. Nationally, there is a positive correlation between relative wealth and risk of HIV/AIDS infection because that correlation prevails in rural areas. In urban areas, however, there is a positive correlation between relative poverty and HIV/AIDS infection. Poorer urban women are at greatest risk.

2.2 Systems of Knowledge and Understanding

Researchers' typologies of indigenous African systems of knowledge and understanding have identified such diverse elements as coolness, heat, greed, envy, balance, imbalance, pollution, purity, witchcraft, the ancestors and ancestral spirits, God's will, chance and biology (Feierman and Janzen, 1992; Mshana et al., 2006:45). Such diversity would suggest that assumptions of homogeneity of knowledge and understanding amongst peoples of sub-Saharan Africa are likely to be false. Nevertheless, researchers such as Caldwell et al. have claimed that there is 'a distinct and coherent African system embracing sexuality, marriage and much else...' (Caldwell et al., 1989:187). Their suggestion has been strongly criticised (Maina Ahlberg, 1994; Heald, 1995; Stillwaggon, 2003). Others have attempted to establish essential differences between Africans and others in explaining the different rates of

HIV/AIDS between societies. One of these attempts concerns hypotheses of multiple concurrencies, and ‘findings’ that Africans are more likely than non-Africans to have more than one sexual partner within a given period of time. Sawers and Stillwaggon (2010) have specifically criticised the models, methodology and assumptions of some studies of multiple concurrency (see also Morris and Kretzschmar, 2000), noting, ‘Broad acceptance of the concurrency hypothesis acts as an impediment to examination of other factors that could be driving the epidemic’, such as poor screening and inadequate treatment for STDs and other diseases.

Each system of knowledge and understanding comes with its own baggage and biases. While some regarded the medicine of the imperial era as one of its most indisputable benefits, others perceived that ‘the “successes” of western medicine arrived late in the colonial era and benefited only a fraction of the population (Arnold, 1988:4, 45). Historically, biomedical knowledge and understanding has conflicted with systems of knowledge and understanding of some Africans (Iliffe, 2006:80). Traditional healers are important and diverse in sub-Saharan Africa. They often provide accessible, affordable health care, so they are often ‘the first line of contact for people with infections, particularly in rural areas’ (Jackson, 2002:59). Many people consult healers in both biomedical and traditional healing systems. Indigenous healers may incorporate religious, biomedical, indigenous and new age beliefs in their repertoires (Van Dijk, 2006), perhaps intending the combination to convey authority, power and relevance. Treatments based on combinations of beliefs may better reflect, account for and address the complexity of competing claims on clients’ lives and identities. Different systems of knowledge and understanding may be combined in processes ‘in which new knowledge is integrated and existing knowledge is extended’ (Allen and Heald, 2004:1144; Wolf, 2001:106). This can contribute to great local diversity of knowledge and understanding. For example, rural South African participants attributed tuberculosis variously to sexual transmission, cultural violations or biomedical factors (Edington et al., 2002).

Tanzania first reported HIV/AIDS in 1983, about thirty years ago (WHO, 2005:1; Kallings, 2008:228), so traditional’ knowledge about HIV/AIDS does not exist. However, some people think that HIV/AIDS is a new manifestation of diseases already known to indigenous knowledge systems. There are many claims for indigenous cures for AIDS (Iliffe, 2006:90). Some have appeared through dreams or stories (Murchison,

2006:128-129) and involve symbolic or magical protection as well as herbs, injections and pills (Forster, 1998:544; Iliffe, 2006:95). Billy Chisupe of Malawi, for example, said he dreamt of herbal medicine called *mchape* to cleanse and cure AIDS. Chisupe would not submit *mchape* to scientific testing so the national authorities were unable to support it. Chisupe said they did not support it because he was poor and black (Probst, 1999:115). Many pilgrims came for treatment until Chisupe died (Lwanda, 2004:40; Probst, 1999; Iliffe, 2006:95).

Some traditional healers support collaboration between biomedical prevention efforts, because they treat symptoms and provide care for those affected by HIV/AIDS. Both biomedical and traditional healers, however, urge caution in defining and implementing meaningful collaboration in caring for or treating HIV/AIDS (UNAIDS, 2000; Kayombo et al., 2007).

Issues of morality influence how people approach risk. Often, policy makers do not adequately acknowledge the complexities and dilemmas of moral decision-making. While morality is common element to most or all systems of knowledge and understanding, concepts of morality and moral transgression vary according to the meanings that people ascribe to intentions and behaviours.

Morals can lead to lower-risk behaviours, but do not always do so. For example, moral ideals support an unmarried woman who wishes to preserve her sexual reputation by upholding the moral ideal of chastity, to reduce HIV/AIDS risk. Public professions of morality may lead to high-risk gaps between appearance and reality. People may feel obliged to uphold moral standards publicly but transgress them privately, if they perceive a system of morality to be a counsel of perfection rather than practical or reasonable for real life. For example, a woman may wish to preserve her sexual reputation yet have sex with one or more partners, so may mislead the partner or partners about the timing of her sexual debut or other aspects of her sexual history (Fuglesang, 1997:1252-1253; Silberschmidt and Rasch, 2001). To do this, she risks her own health and that of her partners, but she may be trying to convey her moral standing by showing trust in a partner and presenting as trustworthy herself. To the biomedical point of view, condoms or taking HIV tests with partners are ideal ways for her to reduce risk. However, if she wishes to maintain her moral reputation within certain moral contexts, she might feel that she must appear ignorant or indifferent to those technologies. Some practitioners of the biomedical model may think of condoms

and HIV tests as rational and impersonal tools of risk reduction to health, similar to crossing the street or bathing regularly. Many people in Africa as elsewhere, however, find it difficult to ask partners to use condoms or to take an HIV test and disclose the result, because they consider that sex, and the technologies related to sex, are not only personal but social and moral, involving specific claims, questions and accusations, often of guilt or innocence.

When they do not consider that moral ideals are likely to lead to lower-risk behaviour, people may select partners whom they perceive to be low risk from the outset, and hope for the best thereafter. While selecting a sexual partner by reputation may reduce HIV/AIDS risk better than selecting one at random, it is not a reliable method of risk reduction.

It can be particularly difficult for people to reduce their HIV/AIDS risk when subject to plural, non-complementary systems of morality. For example, some understand HIV/AIDS to be similar to other illnesses or a more virulent manifestation of other illnesses, brought about by disrespect or disregard to traditional morality and related practices regulating sexuality, love and family life (Allen and Heald, 2004:1144; Walker et al., 2004:96; Klaitz, 2005:53). Campaigns that provided sex education to audiences mixed by age, on the radio for example, were considered shameful (Wight et al., 2006:991), although the harm of the epidemic has led many to see this as a somewhat dated point of view.

Respect is an important aspect of moral systems of knowledge and understanding, but its meanings vary depending on culture and related systems of morality. Meanings of respect related to sexuality vary, not least because of differing understandings of its profane and sacred aspects.

In Tanzania, respect often entails deference to elders, males and other authority figures such as teachers. Members of many cultural groups consider it disrespectful for parents and their children to discuss sexual matters with each other. 'Tanzanian parents are authoritative and children respectful and obedient, with a taboo on communication about sex' (Wight et al., 2006:989). Discussing sexual history with a partner can be problematic because of understandings of respect. 'Confessing to your partner about an "illicit" relationship is beyond consideration: it is not only too cruel but disrespectful' (Haram, 2005). Men are more likely to use condoms with partners they

hardly know than with regular partners, not least because the regular partners might perceive the condoms to be immoral or disrespectful in the context of their intimacy.

Religions have their own systems of knowledge and understanding. One hundred years ago, most sub-Saharan Africans were animist, with a minority of Muslims and a smaller minority of Christians (Pew Forum on Religion and Public Life, 2010). Now, most Tanzanians claim an affiliation with Christianity or Islam. As elsewhere in the world, people have integrated religious and indigenous beliefs. For example, some people from the Fipa ethnic group in Tanzania believe that while Catholic practices probably work best on Sundays, traditional habits are better for the rest of the week ('Catholic Beliefs, Fipa Adaptations,' 2006; Smythe, 2006).

In Christian and Islamic moral teachings on HIV/AIDS prevention in Tanzania, many Islamic, Protestant and Catholic leaders insist on abstinence and faithfulness. Many among them agree that talking about sex leads to sex, and so prefer a policy of minimal sex education or sex education that emphasizes abstinence in order to avoid enticing unmarried young people to have sex (Boesten, 2009:72). Nevertheless, many members of faith-based institutions are well aware of the central dilemma with such educational systems. In practice, many people are not abstinent, faithful nor practicing protected sex. This puts them and their partners at risk. Therefore, some in faith-based organisations take a flexible approach. Religious leaders may privately advise some people to use condoms, for example (Trinitapoli, 2009). Pope Benedict edged away from a total ban on condoms. For one Catholic priest in Zimbabwe, this was welcome news: 'Now the message has come out that they can go ahead and do safe sex. It is much better for everyone' (Hooper, 2010). Some Muslim leaders have accepted that discordant couples may use condoms. Islamic institutions may advocate or even require HIV tests before marriage (Mzee, 2007:205).

There may be policy differences between religious and government policies. 'The government's official standpoint... is that sex education at primary level and condom promotion is essential' (Boesten, 2009:72). In order to get and keep funding, national policies of governments must at least seem to in line with the biomedical or moral perspectives of international donors, or to both perspectives. At the grassroots, government representatives such as schoolteachers are more likely to emphasise religious and moral teachings. Most Tanzanians declare an affiliation with Christianity or Islam. Therefore, many people may align themselves at least to some extent with

Christian and Muslim morals and values when working with young people, whether at home, in classrooms, in church or at the mosque.

Many religious systems of knowledge and understanding entail a belief in the transformative and healing powers of faith and love. These powers are more often discussed in relation to caring for the affected (Tutu, 2008:ix.), than in relation to prevention.

Some African conceptions have linked the phenomenon of HIV/AIDS to 'foreign' practices and identities such as homosexuality, sex tourism and the accidental or intentional infection of blood or vaccines (Chirimuuta and Chirimuuta, 1989:97; Walker et al., 2004:96). Some conceptions place the blame for HIV/AIDS on technologies, often brought by foreigners, to prevent, treat, cure diseases or influence reproduction (Heald, 2002:4; cited in Walker et al., 2004:96). Some suspect 'whites' who are withholding the cure (Steinberg, 2009b:157). In such understandings and discourses, some believe that the very tools associated with healing, by those who hold the biomedical viewpoint, may be weapons of destruction. These understandings can influence how people respond to HIV/AIDS interventions that come from foreign sources. Indigenous African conceptions and approaches can be made out as the scapegoats for failures to roll out effective HIV/AIDS prevention and treatment (Chinsebu, 2009).

Conceptions of pollution and blood mixing exist in indigenous, biomedical and other systems of understanding. Pollution beliefs are arguably more common than beliefs about attribution of diseases to witchcraft and spirits in southern Africa (Green, 2004). Pollution beliefs are not necessarily supernatural or personal in character but are often based on observations of cause and effect relationships (Green, 1999:51). Some indigenous pollution beliefs reflect the presence and strength of gendered and other hierarchies.

'I believe some pollutions are used as analogies for expressing a general view of the social order. For example, there are beliefs that each sex is a danger to the other through contact with sexual fluids. According to other beliefs, only one sex is endangered by contact with the other, usually males from females...Such patterns of sexual danger can be seen to express symmetry or hierarchy' (Douglas, 1966:4).

Often, beliefs reflect power relations in societies. The more powerful members of relationships, such as males, may designate themselves as the ones in danger and the less powerful ones, such as females, as the sources of contagion.

Before the emergence of the HIV/AIDS epidemic, Beidelman (1973) found that in the matrilineal Kaguru tribe in Tanzania, traditional pollution beliefs identified women, especially those in their reproductive years, as sources of ‘danger and polluting disruption’. The ability to draw moral distinctions was considered to be compromised among women of reproductive ages, such that men were considered to be the better decision-makers (Beidelman, 1971:45). These pollution beliefs reflected gendered hierarchies that discriminated against women. They provided a rationale for women’s exclusion from power in public life, such that women had limited opportunity to influence the policies that oppressed them. Such structures of exclusion may contribute to women’s increased vulnerability to HIV/AIDS infection and at the same time make it harder for women to influence social outcomes.

In another example, young women are often involved in peer education programmes. Since their age and gender places them low on social hierarchies, some listeners may come to think of the peer educators themselves and the condoms that they discuss and distribute, as carriers of HIV/AIDS. The young female peer workers are ‘trapped in the web that connects knowledge of a death with potential implication in the fatality’ (McNeill, 2009:370). On the other hand, religious and biomedical systems of knowledge, understanding and practices may at times provide alternative platforms from which to contest systems in which women and women’s moral standings are blamed for sickness and death (Klaitis, 2005).

Like biomedical conceptions, pollution beliefs and biomedical conceptions involve knowledge and understandings of infection and body fluids. Pollution beliefs are often concerned with the social relationships of the persons having sex or having children. In other words, the natures of the social relationships are important to understandings of infection. Biomedical beliefs are more likely to be concerned with how infective body fluids and HIV-receptive body tissues make contact under conditions conducive to infection, regardless of the social relationships between the persons concerned.

Blood mixing is a kind of pollution belief. Blood mixing, more commonly cited in southern African than East African studies, involves linkages of knowledge and

understanding with morality, sexuality, reproduction, kinship and death, the nature of men and women, foreign beliefs and practices leading to the disregard of traditional practices, including practices that regulate sexuality (Walker et al., 2004:96-97). In some conceptions, the indigenous term for 'blood' encompasses sperm and vaginal fluids as well as blood itself (Lwanda, 2004; Varga, 1997; MacDonald, 1996:1329; Klaitz, 2005).

In some indigenous systems of knowledge and understanding, the blood mixes intrinsically within certain relationships and certain circumstances, such as when two people have a child. These systems of knowledge and understanding may support indigenous beliefs that it is not important to prevent blood mixing between a couple and their children for example, because the social and familial relationships of marriage and parenthood make such blood mixing inevitable. Obviously, such elements of knowledge and understanding make prevention of HIV/AIDS problematic according to the biomedical system (Brown, 1999). A person developing a strategy who believed partly in systems of knowledge that included blood mixing and pollution beliefs and partly in biomedical conceptions would need to explicitly examine and come to terms with how the two systems of knowledge and understanding are similar and how they differ, in order to reduce HIV risk.

Sometimes different systems of knowledge and understanding can be complementary in terms of particular recommended behaviours, but not always. Some indigenous conceptions do not complement biomedical ones. The conception of having sex with virgins to clean or dilute hot or dirty blood (Lwanda, 2004:42) is antithetical to biomedical conceptions that hold that violent sex cannot cure anyone but can only lead to greater chances of infection or co-infection for both attacker and victim.

Those who hold biomedical perspectives do not hold a monopoly on objectivity, however. While most people agree that sex is the main mechanism of HIV transmission, some ignore or underestimate the risks of iatrogenic transmission. There is evidence that iatrogenic infection through injection in clinical settings occurs in sub-Saharan Africa (Reid, 2009), for example, but the extent is not known. Unsafe medical practices can and do spread HIV through blood infection. Medical personnel are under-paid, under-resourced and consequently some of them are vulnerable to corruption. Free government drugs go missing from health centres but become available for sale in the pharmacies nearby. Needles and syringes presented as clean,

may not be (Reid, 2009). Injected antibiotics are in great demand, and overprescribed (Gwimile et al., 2012). Fortunately, one-use-only injection equipment, when available, may help to address the problem. Training and other technologies can help to address the problems of HIV/AIDS transmission in medical settings. Progress will be speeded if all those who hold the biomedical view more fully acknowledge any problems that arise. Many representatives of national governments and many of those who support global and biomedical perspectives believe that transmission in medical contexts is rare. Many prefer not to encourage lay people to question national health systems, in part because they consider that this questioning might destroy trust and thereby reduce compliance with important biomedical public health procedures such as antenatal care and vaccination. While this is a reasonable concern, proponents of biomedical approaches can sometimes go into denial when a critical light shines on actual biomedical practices. Hunsmann (2009) found that national governments and proponents of global and biomedical knowledge and understanding often underestimate or deny factors unrelated to sexual transmission, such as iatrogenic blood-borne transmission and biomedical co-factors of HIV/AIDS that make it easier for the virus to infect people. These include malnutrition, helminth infections and sexually transmitted diseases and their symptoms (Chapman et al., 2010). Governments often do not have adequate incentives to research and fully acknowledge the influence of these factors in the epidemic. A continual focus on individual sexual behaviour can divert attention from demands on governments to address structural and medical problems that contribute to the epidemic (Hunsmann, 2009).

2.3 *Stigma and Denial*

The previous section set out different systems of knowledge and understanding about disease and illness in general and HIV/AIDS in particular, in Tanzania and elsewhere, and showed examples of how the different systems interacted. This section examines how stigma and denial have affected people during the course of the epidemic.

Schoepf (2001:336) maintained that ‘Disease epidemics are social processes’ and that the ‘Spread of infectious agents is shaped by political economy, social relations, and culture’. Stigma and denial are two such social processes. Goffman based his theories of stigma on the preliminary conception that humans categorise and are categorised by the social identities of others in order to expedite their movement through their

social worlds. Tentative categorisations soon become expectations (Goffman, 1990b:12).

Humans often link negative attributes with discredited social identities. 'Stigma' is a mark or sign of disgrace or discredit (Fowler and Fowler, 1991:1139). The so-called disgrace or discredit is often beyond the bearer's control. While the bearer of the spoiled identity may realise that social stereotyping is responsible for the stigma, an awareness of the processes that lead to stigma does not necessarily help a stigmatised person to escape its effects. The stigmatized person may or may not accept or come to terms with the 'special discrepancy between virtual and actual social identity', that is, the gap between the true self and the identity that others perceive (Goffman, 1990b:12-13). Often the stigmatized individual accepts the stigma and feels shame (Goffman, 1990b:17-18). The internalisation of stigma is an additional burden. People with HIV/AIDS (PLWHA) may feel stigma, may self-stigmatise and feel shame, even if no one knows their status, by being aware of their own attitudes and the attitudes of people around them toward PLWHA. They may anticipate future stigma (Roura et al., 2009). Some, on the other hand, may come to see their social identity in a different light, realising that the negative attributes ascribed to PLWHA do not apply to themselves.

The crux of Goffman's book 'Stigma: Notes on the Management of Spoiled Identities' is neither stigma itself nor the negative attributes associated with the discredited identities, but the ways in which stigmatised individuals or groups come to think and behave towards themselves and others in living with stigma. Stigma can lead to isolation or self-imposed isolation and withdrawal, and evoke feelings such as anxiety, bewilderment, hostility and depression (Goffman, 1990b:24).

At the beginning of the epidemic, when people began to accept HIV/AIDS as a real condition, there was a strong belief in Africa, Europe and North America that HIV/AIDS originated elsewhere from outside their own social worlds, from people designated as 'other', and from suspect attributes and practices (Schoepf, 2001:342). These beliefs have persisted, with some variations, although many are unfounded. From the point of view of some North Americans and Europeans, suspect or suspected practices of the 'other', that is Africans, have included bestiality, voodoo, promiscuity, and 'dry' sex. From the point of view of some Africans, suspect or suspected practices of the 'other', that is, North Americans and Europeans. These practices have included

homosexuality, MSM sex, promiscuous sex, sex tourism, and the intentional infection of condoms, vaccines and the needles and other medical equipment used for HIV tests.

People stigmatise PLWHA with behavioural and moral judgements. One of the reasons that people stigmatise others is because they perceive their behaviours to be avoidable, even though the stigmatised persons may not actually practice those behaviours. Stigma may be stirred up by perceptions of degenerative or fatal outcomes, potential for contagion, harm to others or potential for disruption to social interactions (Herek and Capitanio, 1999). All of the above mechanisms can be relevant at the same time in the case of HIV/AIDS, increasing the effects of the stigma.

Many people with HIV/AIDS have experienced stigma or discrimination such as the withdrawal of love, affection, affirmation and material support.

...families don't treat you well. They won't share spoons, bathroom...they watch you closely...nobody wants you to come when you are ill (Gilbert and Walker, 2010:144).

Some parents and husbands reject or banish children and wives. Employers and co-workers may stigmatise workers, who may lose their livelihoods or experience discrimination in the workplace. People with HIV have experienced discrimination from health workers (Lekas et al., 2006). Health workers themselves can experience stigma, hindering their ability to care for those affected and discouraging them from working in communities where they might be accused of wrongdoing (Steinberg, 2009b:115).

HIV/AIDS is now a treatable if not yet curable condition. Nevertheless, stigma and discriminatory treatment still influence the lives of many (Roura et al., 2009). While testing and treatment help to support the prevention of infection (Salomon et al., 2005), they may not be taken up, even if freely available and accessible (Gilbert and Walker, 2010:141). Stigma may make it less likely for some people to seek HIV treatment (Nsigaye et al., 2009), yet treatment can reduce enacted stigma through mechanisms that normalize HIV. Those successfully treated may manifest fewer signs of HIV/AIDS and so may experience fewer of the damaging effects of stigma and self-stigmatisation (Roura et al., 2009).

While the manifestations of illness are sometimes relevant to HIV stigma, those affected by HIV often do not appear to have any disease. Individuals are likely to experience stigma only if others know or suspect that they are infected. Therefore,

individuals may conceal or avoid the physical and social manifestations of their condition for as long as possible, including test results, feelings of illness, medication and health-enhancing regimes. Goffman referred to such processes as ‘adjustments’ involving information control. The information control helps the bearers of the condition to ‘pass’ as ‘normals’ who by definition are without the association of discredit or deviance. The concealment becomes incorporated in the bearers’ identities (Goffman, 1990b:84).

Eventually, however, others may learn of the infection. Then, those nearest to the infected individual may feel that they are bearing the stigma, by association. In telling those individuals who are closest, an individual may be able at least to retain the status of someone who has related honourably, even though they risk rejection (Goffman, 1990b:117). In the case of HIV, the noble feeling of having behaved honourably may offer cold comfort. A Miss Stigma Free beauty contest winner in Botswana discussed the difficulties: ‘If you tell your boyfriend you are HIV-positive, he just leaves you and gets another girlfriend. So I don't think we are going to win this war unless we change our attitudes’ (Phillips, 2005). Sometimes people do not feel that they can disclose their status, even when knowing that doing so might prevent the infection of a sexual partner or partners or children. A South African woman said, ‘I did not tell my husband as he had previously revealed that he would kill me and the child if he knew we were HIV positive. This made me feel bad and keep our status a secret’ (Gilbert and Walker, 2010:142). Some people refuse to disclose after seeing how others are treated. “Positive meant I was a deviant and I also feared the stigma that would be attached to my family.” (Greeff et al., 2008:319, 320).

Sometimes disclosure can have positive consequences, helping individuals to treat the physical manifestations of the condition and withstand the social stigma that accompanies it.

My girlfriend is the one person who constantly reminds me that I should be taking my medication, ... her family continuously stressing that she should leave me as she is HIV negative and she still stayed (Gilbert and Walker, 2010:144).

Stigma can be countered with greater familiarity of information and knowledge about HIV/AIDS (Stigler et al., 2006:448).

Denial is a statement that something is not true or a rejection of something (Fowler and Fowler, 1991:310). Across cultures and belief systems, denial is a normal way to

cope with death and other difficult situations (Kübler-Ross, 1969). AIDS denial in the West has interacted with AIDS denial in Africa (Steinberg, 2009a:35). Many people deny the existence of HIV/AIDS or that HIV is the cause of AIDS.

A South Africa man said 'I do not know anyone who is sick...I do not believe there is such a sickness. It is a myth from the old government or maybe from overseas' (Varga, 1997:54). Some people in Africa have seen AIDS, at least potentially, as an American or a white South African conspiracy. Unlike most other diseases, there is not yet a cure. Others have become interested in the intersections of health, government and finance, claiming for example that HIV/AIDS is merely a ploy for governments to get money from donors (Lwanda, 2004).

Some individuals deny the need for HIV/AIDS prevention. Some deny because they do not feel vulnerable. By associating the epidemic with certain stigmatised persons, such as homosexuals and prostitutes, some people who do not belong to those groups do not feel that they are at risk (Kallings, 2008:235).

Beliefs that witchcraft may have brought about HIV/AIDS or that prayer might be able to cure it, often accompany denial. These beliefs can influence health-seeking, risk-avoiding and risk-reducing behaviour, for instance, by keeping persons from testing or adhering to treatment (Roura et al., 2009).

Some, who freely acknowledge that many people in society are ill with HIV/AIDS, nevertheless deny that anyone in their personal circle is affected. Kindness, compassion and good manners are often at the root of denial that any particular individual has HIV/AIDS. The denial may alleviate or eliminate the possibility of stigma for the persons infected and their associates. Unfortunately, those who engage in this denial with sincerity may find it difficult to know whether they have ever known an infected person. Thus, they may feel that being HIV positive is more unusual than it actually is amongst their personal circle. Such denial may increase stigma for the few people who do disclose. Furthermore, if people believe that there is little HIV in their circle of acquaintances, they may not feel personally vulnerable. They may not, therefore, take to heart messages about reducing or avoiding risk, believing that the messages are not personally relevant (MacPhail and Campbell, 2001:1619). Others may become fatalistic, engaging in a kind of denial in which people believe that their personal efforts will have little influence on whether they become infected or ill or

stay well. Fatalism has been linked to religious beliefs, less schooling and perceived lack of control over other aspects of life (Hess and McKinney, 2007; Zou et al., 2009).

2.4 *HIV/AIDS Prevention through the Life Course*

Along the pathway of the life span lie retrospective and reflexive thoughts and memories from the past, present needs and choices, and future dreams, hopes and plans. Agency in structured environments occurs in space and time in the course of an individual life (Hitlin and Elder, 2007:176).

A better understanding of youth sexuality may aid efforts to support youth to develop effective personal HIV/AIDS prevention strategies in the life course. ‘Life course agency refers, we might say, to the selection of various identities in the process of making (socially delineated) life course transitions’ (Hitlin and Elder, 2007:183). Ideally, an effective HIV/AIDS prevention strategy encompasses prevention in the period of celibacy before the sexual debut and after, in the context of the sexual, social, economic and family relationships that develop. Continual adaptation is required.

2.4.1 *Virginity and Abstinence*

The ability to choose not to have sex is an important aspect of empowerment for females (Green, 2003:12). It is important for males, too. Many males and females withstand peer pressure to have sex and pursue goals, such as studying to increase life chances (Van Reeuwijk, 2010b:195, 198). ‘In general, school seemed to be the only peer accepted excuse to postpone sexual activity’ (Van Reeuwijk, 2010b:198). For males, love relationships as well as purely transactional relationships have a financial cost, so choosing not to have sex makes it easier to amass the necessary capital to achieve other goals.

Cleland and Ali’s 2006 study of 132,800 women in 18 African countries suggests that there has been little overall change in primary abstinence (virginity) but that there has been a rise in secondary or temporary abstinence, that is, in refraining from sex after the sexual debut (Green, 2003:89). Self-reported abstinence is not easy to verify because of the possibility of misreporting, so these are only tentative results (Cleland and Ali, 2006:1788-1789, 1791-1782).

In Swahili, abstinence is sometimes translated in the ABC message (abstinence, be faithful, use condoms) as '*Subiri*', which means 'Wait' (Nduru, 2004). Green found that 'Abstinence seems to be more acceptable when it is phrased as delay of sexual onset or debut' (Green, 2003:89) suggesting that while young people perceive that delaying sex can be advantageous, they do not necessarily plan to delay sex indefinitely or until marriage. Many young people think of primary or secondary abstinence is the means to an end, then, rather than an end in itself. While girls have to guard their reputations, most people do not necessarily expect that individual Tanzanian females will be virgins when they marry (Van Reeuwijk, 2010b).

Young people are not always able to choose the circumstances of their early sexual encounters. Nearly one third of Tanzanian females and 18% of Tanzanian males surveyed reported that they had been unwilling participants in their first act of sex (UNICEF Tanzania et al., 2011:2). The most common form of sexual violence was sexual touching, followed by intercourse.

2.4.2 Sexual Debut

On average, Tanzanian females begin to have sex at an earlier age than males. Of males and females aged 20-24 in 2007-8, 12% of females and 8% of males reported that they had begun to have sex by the age of 15. By the age of 18, 59% of women and 42% of men reported that they had begun to have sex (TACAIDS, 2008:73). Better-educated young people may make their sexual debut earlier than less-well educated ones. One study of secondary school and college students in Dar es Salaam revealed an earlier sexual debut at the average age of 15-16 for males and females (Maswanya et al., 1999:190). Females run a higher risk of HIV/AIDS in adolescence and young adulthood because the mean age of sexual debut is earlier for females than males.

2.4.3 Intergenerational and Transactional Sex

The age gap between younger females and older males emerged as a risk factor in high risk populations (Chapman et al., 2010). Young males' reasons for sex involved pleasure, gender expectations, approval and demonstrating competence as adults. Females generally did not communicate an interest in sex for its own sake (Van Reeuwijk, 2010b:201). Females played a more passive role, presumably because of

the societal expectation that females show sexual reticence for the sake of their reputations. Whether the reticence was feigned or real, the effect was often to increase the money or benefits offered to them for sex, and to support them to keep their options open (Van Reeuwijk, 2010b:117).

Young Tanzanian females had less desire to have young Tanzanian males as partners. Young males had less money, were less likely to be interested in long-term relationships, and less able to hide relationships. As a result, relationships between younger males and females often only lasted a short time or took the form of single encounters (Van Reeuwijk, 2010b:133, 211).

Younger females were more likely to be respectful and obedient to older men. If a pregnancy or relationships occurred, some parents were more likely to consider older men as respectable and eligible partners for their daughters than younger boyfriends because the older men were more likely to be in a financial position to look after the females and any children who might be born (Nnko and Pool, 1997:87). Some females had relationships with older men for status and the desire to demonstrate maturity and independence, to 'no longer have to depend on the finances or wishes of parents or caretakers' (Van Reeuwijk, 2010b:201).

The young females in van Reeuwijk's study said that they prioritized manners and character in a prospective partner, while the young males said that the young females' primary interest in relationships was financial (Van Reeuwijk, 2010b:132-133). An adult interviewed in 2005 for the present study observed that young females sometimes tease or disparage younger male suitors who approach them for lacking the maturity or wherewithal to provide them with adequate money or gifts. Such behaviour may make some young males feel vulnerable (Van Reeuwijk, 2010b:197, 205). Young males may risk ridicule from peers or family members if they do not have sex. Some males respond by pretending to have girlfriends, who are cheaper, less risky and less trouble than real ones (Van Reeuwijk, 2010b:198, 202; Wight et al., 2006:993). Some males reported two groups of males forming within a class at school: those who encouraged each other to have sex and those who encouraged each other to delay sex in order to pursue life goals. The membership of the two groups was uncertain, because nobody knew for sure who was having sex. Many young people engage in impression management, communicating different information about their sexual activity or inactivity to peers, teachers and parents (Goffman, 1990a; Van Reeuwijk, 2010b:202).

Another study found that for females, material benefit, attractiveness, likeability and eligibility of the partner for marriage were primary motivations in transactional sex. The females did not consider that their relationships were all about money. Few regarded the linking of sex with money or gifts as immoral, but as a normal aspect of the formation of sexual relationships (Wamoyi et al., 2010:1,3-4). The study found a clear association between sex and gifts. Only about one out of four male and female participants aged 10-19 felt that ‘a girl was not obliged to have sex if she had received a gift from a boy’ (Wamoyi et al., 2010:7). While some girls engaged in ‘skinning’, the practice of accepting gifts and not reciprocating with sex or delaying sex in order to increase the amount or quality of the gifts received, such practices ran the risk of ‘conflict and force from the boy’ (Van Reeuwijk, 2010: 203).

While some parents beat girls for having sexual relationships (Wight et al., 2006:995), not all parents were opposed to transactional sex. Some parents tacitly or explicitly encouraged young women to engage in transactional sex to bring home money or food, for example, or to supply items for themselves that parents might have provided in earlier years (Wamoyi et al., 2010:1, 7-8; Van Reeuwijk, 2010b:68). One participant, for example, said that she acquired school supplies through transactional sex in order to avoid beatings at school (Wamoyi et al., 2010:7).

2.4.4 Faithfulness and Partner Reduction

The mean number of partners that a population has had in a lifetime or at any given time is relevant to the spread of HIV/AIDS. In a study in Northern Tanzania, men and women, using voluntary counselling and testing (VCT) facilities, reported their lifetime number of partners. For both men and women, the numbers of partners the research participants reported correlated with the probability that they were infected with HIV, but women were three to nearly five times as likely to be HIV positive as men who reported the same number of sexual partners (Landman et al., 2008).

Table 2.1 Self-reporting of Lifetime Numbers of Partners and HIV Prevalence in Men and Women Visiting Voluntary Counselling and Testing (VCT) Services

Numbers of Partners Reported	Percent HIV Positive, Men	Percent HIV Positive, Women
1	4	19
2	7	28

5	15	45
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(Landman et al., 2008)

Some of those in the Landman study may not have reported accurately. In another Tanzanian study, women were more likely to under-report their sexual history, men to over-report (Nnko et al., 2002). In any case, for both men and women, lifetime numbers of partners correlated with infection. ‘Partner reduction should be coupled with efforts to place tools in the hands of sexually active women to reduce their risk of contracting HIV’ (Landman et al., 2008:1). Sexually active men need such tools as well. One such tool is more discussion about research findings like this one, to reinforce people’s understanding of the correlation between HIV status and the lifetime numbers of sexual partners.

2.4.5 Condoms

Condoms can prevent the transmission of HIV and other sexually transmitted diseases, the presence of which can increase vulnerability to HIV infection (Mann et al., 2002).

In the Tanzanian population, the prevalence of multiple partnerships was high and condom use was low (National AIDS Control Programme, 2004:x). Among Tanzanian 10-19 year olds, there was no association between multiple partnerships and condom use. Many young people found condoms difficult to access (Exavery et al., 2011:7-8). Some Tanzanians are suspicious of condom quality and the ability of condoms to stop HIV. In the past, Tanzania has had to refuse poor-quality condoms from China (U.S. Centers for Disease Control and Prevention (CDC), 2002).

There is sometimes formal religious opposition to condoms on moral or technical grounds or both (PlusNews, 2010; Ferdinand, 2003). Within the Catholic Church, condoms may be considered acceptable in limited contexts (Fisher, 2006). Some Tanzanians consider that condoms waste sperm (Coast, 2003). Men are unlikely to wear condoms within marriage or stable partnerships, especially if they want to have children, because condoms work to prevent conception. Some men may be more willing to use condoms with casual partners and sex workers. Their selective usage in non-normative contexts probably strengthens people’s mental associations between condoms and immorality.

2.4.6 Voluntary Counselling and Testing (VCT)

In one recent study, about one out of four Tanzanian secondary students had used VCT services. Nearly all thought that VCT services were necessary to check HIV status and to provide education and advice, if infected. Only a few thought VCT services misled society or were contrary to religious teachings (Sukari, 2007/8a).

While HIV testing does not strike most Tanzanians as morally questionable, there are practical difficulties with using VCT as an HIV prevention strategy at the beginning of a relationship or in the course of a relationship. Many people fear HIV stigma and HIV itself (Ostermann et al., 2011) and so hesitate to learn their own status. Lugalla et al. (2008:xiv) found that most Tanzanians who tested positive only disclosed their status if they expected to gain social support after the disclosure. Wives and other females were more vulnerable to accusations of infidelity (Lugalla et al., 2008:xiv-xv) and subject to abandonment or banishment. Since wives were more likely to be supportive than husbands, married men were more likely than married women were to disclose test results to their spouses. Most single, divorced and widowed men and women did not disclose HIV test results to their sexual partners (Lugalla et al., 2008:xii).

2.4.7 Unprotected Anal Sex

In Tanzania as most other places, penis-vaginal sex is the norm. Many people believe that anal sex with women is perverse. Nevertheless, some Tanzanians practice heterosexual or MSM penis-anal sex, or both. Some believe it is ‘somehow protective’ (Desmond et al., 2005:1744, 1747). While unprotected anal sex does protect against pregnancy, a significant consideration for young adolescents, it carries a high risk of HIV transmission. Anal tissue is more easily infected than healthy vaginal tissue (Brody and Potterat, 2003), so the practice of unprotected anal sex, whether between two males or a male and a female, carries a higher risk for HIV transmission.

As in many other places, heterosexual relationships are the norm. Consensual male and female same-sexual relationships are illegal in Tanzania (UNAIDS et al., 2010:1; International Gay and Lesbian Human Rights Commission, 2003). Some Africans believe that homosexuality is due to foreign influences, in spite of considerable evidence to the contrary (Epprecht, 2008; Jackson, 2002:99; Prins, 1961:89; Schapera,

1940:183). Swahili vocabulary to describe same-sex relationships includes *-sagaji*, *hanithi*, *shoga*, *basha* and *-senge* (The Kamusi Project, 2011). Males who practice MSM sex do not necessarily consider their behaviour or themselves homosexual and may engage in heterosexual relationships (Ammon, 2008).

Most all HIV messages assume heterosexual sex. Homosexual sex and anal sex between two men or a woman and a man are so highly stigmatised that some people prefer to treat the phenomena as though they do not occur. Many young people do not know that unprotected heterosexual and MSM penile-anal sex are high-risk practices, because relatively few public health messages refer to the practices.

2.4.8 Marriage, Early Marriage and Polygynous Marriage

Married women of all ages often have less power to prevent HIV/AIDS than single ones. Many people believe that married women lose ‘their right to consent to sex or to insist on condom use’ (National AIDS Control Programme, 2004:xi) so early marriage can be problematic. Nearly one-quarter of Tanzanian females are married by the age of 19 (TACAIDS, 2008:30).

Tanzanian legislation stipulates 18 as the legal age for sexual consent, for both males and females. One of the Swahili words for puberty, *ubalehe*, signifies the approach of marriageable age (Johnson, 1981:26). Some religious authorities and others think that puberty or even younger is an acceptable age for a girl’s marriage, if it is not the intent to consummate before the female is 12 (Immigration and Refugee Board of Canada, 2003; Odhiambo-Mabona, 2007; Emory University Law and Religion Program, 2002; IRIN, 2007a). The age of legal marriage, 15, is not in harmony with the legal age of sexual consent, either. Married girls over 15 lose their status as children and so lose the limited protections conferred to children. The marriage itself may be assumed to be proof of consent, but often females’ fathers rather the females themselves consent to the marriages (Research Directorate of the Canada Immigration and Refugee Board, 2003). Family members have an incentive to encourage females to marry early if they stand to gain from the bride wealth (Browning, 2011:24; IRIN, 2006). In practice, there is no single, recognized age of sexual consent for girls and women, because there is no single, recognized age of marriage.

Females who marry or are in stable partnerships when young typically have more unprotected sex and sexually transmitted infections (TACAIDS, 2008:33; Browning, 2011:3-4, 50). Early marriage is a risk for younger women. Younger married women are more likely to have sex regularly than their unmarried female counterparts and are likely to find it difficult to negotiate safe sex (IRIN, 2006). Using birth as an indicator of unprotected sex, more than half of teenage females who were married or in stable partnerships had given birth, compared to less than one out of five of all teenage females (TACAIDS, 2008:43). In 56% of marriages, husbands were at least five years older than their wives were. In 13% of marriages, husbands were at least ten years older and in 6% of marriages, at least 15 years older than their wives (TACAIDS, 2013:46). Early marriage is no guarantee of safety from HIV risk, for the younger females or the older males. Five per cent of all Tanzanian marriages with 15-19 year old females were discordant. In 3% of these marriages, females were the HIV positive partner and in 2%, males were.

Of married 15-19 year old females, 11% were in polygynous marriages and 88% were in monogynous marriages (TACAIDS, 2008:32). Polygynous marriages were more common among rural dwellers and couples where the wives had less schooling. Women of all ages not currently in unions were most likely to be HIV positive than women in polygynous or nonpolygynous unions: 5% of women both in polygynous and nonpolygynous unions were HIV positive, as were 8% of women not currently in unions. Polygynous men were more likely to be HIV positive: 6% of men in polygynous unions were HIV positive, as were 5% of men in nonpolygynous unions and 2% of men not currently in unions (TACAIDS, 2013:113).

2.4.9 Parenthood

Parenthood is relevant to young people's HIV/AIDS prevention strategies. Currently, Tanzanian women bear an average of six children. Fertility is higher among rural and less-schooled women. Fertility has declined slightly over the past 20 years (TACAIDS, 2008:40-42).

Tanzanians generally expect to conceive children. While both the objectives of parenthood and HIV/AIDS prevention are valid, the actions that people take to achieve them may not be complementary. For example, condom usage is not compatible with trying to have children.

High fertility among females aged 15-19 correlated with less schooling, lower income, rural rather than urban residence and particular geographic zones. In the Southern Zone of Tanzania, 33% of 15-19 year old females had given birth, while in Zanzibar, only 6% of females had given birth at that age (TACAIDS, 2008:45-46).

2.4.10 Widowhood and Dispossession

When husbands die, their widows often possess no income or property of their own. While women have the right to the property and goods that they owned when they were married, they often do not possess inherited property or other goods when they marry. Many Tanzanian women have little time and few means to acquire income or property independently after they are married, because their duties often keep them near home (Rwebangira and Tungaraza, 2003:47; Wamoyi et al., 2010:3).

Of women aged 15-49 in the Tanzanian household survey, 5% had been widowed at least once (TACAIDS, 2008). The deceased husband's relatives often take possession of the family property, often ostensibly or actually to take care of the children (TACAIDS, 2008:158). More than half of all 15-49 year old widows with at least one child of any age have been dispossessed (TACAIDS, 2008:159). Some widows and child heads of household were able to challenge the dispossession (Evans and Day, 2011). Age sometimes conferred limited protection but many widows lacked the support and wherewithal to challenge their late husband's relatives. Women in unsanctioned relationships risked dispossession if their partner died. For some widows and orphans, dispossession led to conditions in which they needed to remarry or engage in transactional or commercial sex to survive.

Some members of some ethnic groups practice widow cleansing. The practice may take the form of a brother of the deceased having sex with the widow as part of the burial rights, with accompanying infection risk for both. The cleansing may be required to address beliefs attributing illness to the breaking of taboos and modernity prompting 'the collapse of generational and gender hierarchies' (Dilger, 2006:109). A widow may have to choose between dispossession and sex with one of her husband's relatives. If the relative does not want her because he thinks that she may be HIV positive, he may dispossess her in any case. In some ethnic groups, the widow has some say over whether she is willing to have sex or marry one of her late husband's relatives. Traditionally, among the Fipa ethnic group, the relative is meant to have sex

with the widow or widows inherited on the night of the very day of the husband's death, giving the widow little time for a considered decision (Willis, 1966:30)

Dispossessed Tanzanian women are more than 50% more likely to remarry than those who retain their property (TACAIDS, 2008:158). Laws and enforcement mechanisms that make it simpler for women and children to inherit property after the death of the husband, male partner, or father, would probably reduce the suffering of widows and orphans (TACAIDS, 2008:158; UNICEF, 2005).

2.4.11 Orphans

For parents, foreknowledge of death entails the dread of knowing that children will become orphans. About ten percent of children in Tanzanian households have lost at least one parent to death from all causes (TACAIDS, 2008:154). About 18% of all male and female Tanzanian children who live in households are orphans or designated as vulnerable for some other reason (TACAIDS, 2008:153). Children living in institutions, on the streets, or elsewhere outside a household, are not included in these statistics (TACAIDS, 2008:151).

Many vulnerable children live with an ill parent or other relative. Extended families may take some of the children with relatively few problems. For some children, the death of one or both parents sets off a process of deterioration in terms of quality of life, life chances and the ability to avoid HIV.

Orphaned females are more likely than males to live within a household. The status and working conditions of orphaned females may be unenviable or even dire, but males are more likely to end up living on the street (Evans, 2002). In a group studied by Lockhart (2002), male 'street children' were vulnerable to rape by outsiders or other 'street children'. The young males themselves called this kind of sex *kunyenga*, a word that normally means 'to interrogate' but that in this context connotes violence rather than sex. They referred to being the penetrative partner as being *pizzed on*. In contrast to *kunyenga* sex, which was to some extent normalised among the young males, the 'street children' used the pejorative word *mhanisi* for an individual who practiced homosexual sex or masturbated. This term is probably related to the Swahili word *hanithi*, meaning sexual pervert, shameful person, impotent man, catamite or sodomite (Johnson, 1981:127). Up to the age of 12, most of the male 'street children'

had only had *kunyenga* sex, but by the age of 18, all had had both *kunyenga* and heterosexual sex. The male street children had non-penetrative sex with each other, too, considering that sort of interaction to be play rather than sex. The ‘street children’ considered that HIV/AIDS could only come from sex with women, so they did not necessarily associate *kunyenga* sex with HIV/AIDS transmission. Homeless males were vulnerable to HIV/AIDS because they lacked the power to prevent unwanted sex and the knowledge that anal sex is a major route of HIV transmission.

2.5 Prevention Programmes and Policy

HIV/AIDS programmes in Tanzania are many and diverse. Local and foreign organizations create and fund them. Some organisations provide only HIV/AIDS services while some include HIV/AIDS care, prevention or treatment among other services. The most common activity in these organizations is education, followed by orphan care. There are frequent mentions of home-based care, behaviour change, advocacy, capacity building and income generation (TACAIDS, 2009a).

HIV/AIDS prevention programmes and interventions for young people in Tanzania address a specific context. The 2002 behavioural surveillance survey found that most 15-24 year olds were sexually active and that premarital sex among this age group was common. Median age of sexual debut was 15-20. The occurrence of multiple partnerships was high, and condom use was low (National AIDS Control Programme, 2004:x). While most youth knew where to find HIV testing services, few had ever had an HIV test. Females said it was possible for women to negotiate condom use with their husbands, but few wives did.

2.5.1 National Prevention Policy and Funding

The Tanzania Commission for AIDS (TACAIDS), under the office of the Prime Minister, oversees and co-ordinates HIV prevention strategy into operational plans. TACAIDS involves all levels of government, NGOs, community-based organisations, development partners and communities (TACAIDS, 2009b:43).

The Tanzanian government and donors pursue risk reduction and harm reduction policies. Tanzania’s Second National Multisectoral Framework (NMSF II) 2009-2012 set out nine prevention strategic objectives to HIV/AIDS prevention.

NMSF II HIV Prevention Strategic Objectives

- 1) Empower young people with knowledge and skills to dialogue about sexuality; adopt attitudes and practices that protect against HIV infection.
- 2) Reduce risk of infection among those most vulnerable due to gender inequality, sexual abuse, and socio-cultural factors.
- 3) Increase the proportion of public, private, and informal sector enterprises developing and implementing comprehensive workplace interventions with attention to mobile workers.
- 4) Expand quality, gender responsive and youth friendly STI services including counselling and condom promotion to all health facilities and enhance utilization of services.
- 5) Increase the number of people who know their HIV status and who adopt appropriate measures to protect themselves and their partners from HIV.
- 6) Reduce the transmission of HIV from mothers to their children, during pregnancy, birth and/or breast-feeding and ensure entry into care and treatment for HIV-infected mothers and babies.
- 7) Increase the proportion of the sexually active adults especially in rural areas, who use condoms consistently and correctly and promote and expand the availability of female condoms as a female controlled and dual protection method.
- 8) Reduce the risk of HIV transmission through blood, non-observance of universal precautions, and through use of contaminated instruments.
- 9) Emerging prevention interventions are introduced based on international scientific evidence.

Behavioural initiatives in the NMSF II included communications programmes to reduce risky practices such as low condom use, mixed aged relationships and multiple partners (The United Republic of Tanzania, 2009:6).

To pursue NMSF II and other HIV/AIDS interventions, Tanzania needs funding. Tanzania's average annual per capita income was estimated at \$390 in 2006 (UNDP, 2006:2) although per capita income was as low as \$120 in two districts (Foster et al., 2008:63, 65). International donors supply about 95% of HIV/AIDS funding because local resources are limited.. HIV/AIDS interventions comprise one-third of all aid to Tanzania (Foster et al., 2008:7).

Globally, major donors to HIV/AIDS interventions include USAID, DFID, World Bank, Gates Foundation, Merck Foundation and Clinton Foundation (Avert, 2011a). Typically, organisations work co-operatively. For example, the UK Department for International Development (DfID) does not have its own HIV/AIDS programmes in

Tanzania. Instead, it funds and works co-operatively with organisations such as Clinton Health Access Initiative, Harm Reduction International, and London School of Hygiene and Tropical Medicine (DfID, 2012; DFID Tanzania, 2012).

Instead of considering how best to prevent HIV/AIDS, organisations including the Tanzanian government must first consider how to secure funding. Rather than devoting the lion's share of resources to programmes and policy development, organisations must devote considerable time and money to maintaining a presence in major cities, filing reports and keeping in contact with donors (Bunch, 1982:58). Donors, for their part, may have limited understanding or ability to ensure that programmes spend money in ways that are likely to slow the epidemic.

More than two-thirds of the money to fund HIV/AIDS programmes in Tanzania comes from the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and the Global Fund (Foster et al., 2008:9; TACAIDS, 2009b). In 2004 - 2008, PEPFAR I dedicated 15 billion dollars to HIV/AIDS programming worldwide. The original funding restrictions or earmarks called for 55% of the funds for treatment, 15% for palliative care, 10% for orphans and vulnerable children and 20% for prevention. One third of the 20% for prevention was earmarked for abstinence until marriage programs (Oomman et al., 2008:6; Foster et al., 2008:9). Funding earmarks may have hampered governments from pursuing programming and policies on their own merits. PEPFAR I did not allow the Tanzanian government to prioritise primary prevention (Tanzania Commission for AIDS (TACAIDS), 2007; Avert, 2011b). PEPFAR provided funds but restricted the ways that funded nations could approach the issue of prevention. This probably restricted the array of techniques that would otherwise have been available to address the epidemic. For example, educational programmes and other interventions promoting mainly abstinence and faithfulness imply that a faithful marriage is the endpoint of the HIV/AIDS prevention strategy, yet HIV/AIDS prevalence is often lower among never-married people. HIV prevalence was 1% for unmarried Tanzanian men and 3% for unmarried women, 5% for married men and 5% for married women, 9% for divorced men and 15% for divorced women, 28% for widowers and 25% for widows (TACAIDS, 2013:113). To be fair, one of the reasons that prevalence is lower on average among unmarried people is because they are, on average, younger than married people. Marriage, however, is no guarantee of reduced

risk. One important reason for this is the gender imbalance of power in marital relationships.

By promoting abstinence and marriage as guaranteed protection from the virus in cultures where the very structure of marriage is based on gender inequality, PEPFAR programs deprive women and girls of prevention strategies that are, literally, lifesaving. Because of the financial pressures and cultural practices in these developing countries, an abstinence until marriage message offers very little protection to the women and girls affected, yet it is often the only PEPFAR-funded message for those populations (Kay and Jackson, 2008:30).

From the outset, PEPFAR forbade funded organisations from promoting or advocating the legalization or practice of prostitution or sex trafficking, though organisations could offer, for example, treatment services to prostitutes. A large BBC media programme, hampered by the restriction, abandoned an anti-AIDS campaign (Avert, 2011c; Gill, 23 January 2006) because the makers of the programme preferred to deal with the issue of HIV/AIDS and prostitution in a non-judgemental way. The PEPFAR restriction remained in place until overturned by the U.S. Supreme Court (Wetzstein, 20 June 2013).

The PEPFAR 2 funding allocation provided for global spending of 48 billion from 2008. Like PEPFAR 1, the funding earmarks of PEPFAR 2 favoured treatment over prevention. Malaria broadened the programme's remit (Kaiser Family Foundation, 2008:6). The 10% earmark for orphans remained. Half of the bilateral aid was to be spent on AIDS treatment and care, with 'balanced funding' for prevention of sexual transmission of HIV/AIDS through abstinence and partner reduction (Kaiser Family Foundation, 2008:2). Nations with generalised epidemics were required to notify US Congress if less than half of prevention funds went to abstinence and partner reduction (The Office of the Law Revision Counsel 'United States Code', 2010). Some applicants omitted condoms from their proposals, due to confusion over the guidelines and fear of losing funding (Avert, 2011c). PEPFAR 2 guidelines continued to discourage host governments and other organisations from designing their own programmes based on need and local circumstances.

The Global Fund began in 2002. It now supports the efforts of countries to fight HIV/AIDS, TB and malaria. It devotes two-thirds of its funding to malaria and TB and nearly one quarter to HIV/AIDS. It works to make sure that the money is used in accountable and transparent ways to deliver results (Global Fund, 2011). A key result is 260,000 people on ART (Global Fund, 2012). In Tanzania, half of the approved

funding of the Global Fund, nearly a billion dollars, goes to HIV/AIDS. Most of the money goes to the government and some goes to civil society organisations. Global Fund-Tanzania has several grants in its current portfolio. From the round that began in 2003, 5.4 million USD went to the Ministry of Finance. Much of that funding was devoted to the renovation or construction of 12 buildings. Other expected outcomes were implementation of a plan for dissemination of information in information centres in 12 districts, training of district trainers in three districts, sensitisation of half of the primary schools in 3 districts with accurate HIV/AIDS info, and collection and analysis of school data in 12 districts (Global Fund, 2012). The grant's ambitions, such as aiming to 'sensitise' half the pupils in only three of Tanzania's 129 districts (Law, 2003), were extremely modest, given the level of funding involved.

Other early Global Fund grants in Tanzania:

- 1 87 million USD to the Ministry of Finance to scale up access to voluntary testing and counselling,
- 2 79 million to the Ministry of Finance to fill critical gaps in impact mitigation for orphans and vulnerable children, condom procurement, care and treatment, monitoring and evaluation, and national coordination;
- 3 24 million to the Ministry of Finance for VCT and care and support services,
- 4 13 million to AMREF for care and treatment,
- 5 7.9 million to Pact Tanzania for orphans and vulnerable children,
- 6 2.4 million to Population Services International for condoms; and
- 7 2 million to the Zanzibar AIDS Commission for a community programme.

Apart from a grant of 79 million with mixed objectives that did not include primary prevention objectives, apart from condom procurement, 124 million was specifically allocated to VCT services, care and treatment; 88 million to orphans and vulnerable children and 10 million to primary prevention. About a quarter of the 10 million was earmarked for Zanzibar where HIV prevalence was about one-tenth that of the mainland. Only a small proportion of the grants went to primary prevention on the mainland.

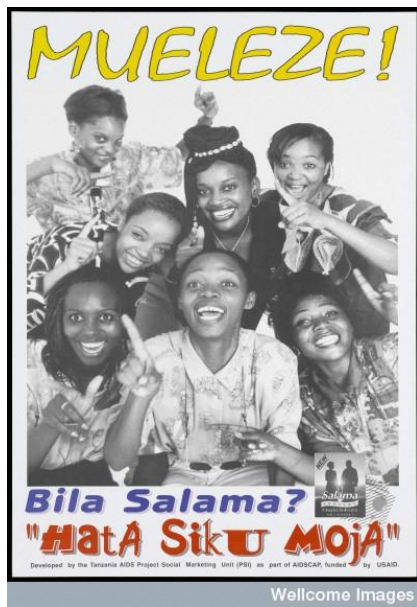
Another organisation, Population Services International (PSI) listed six donors for Tanzania programmes: The Global Fund, USAID, and development organisations of

the US, Germany, Netherlands and Ireland (PSI, 2012). PSI employs commercial and social marketing strategies to promote condoms. For Tanzanian HIV programmes, PSI ostensibly targets commercial sex workers and their partners, those in the mining and trucking industries, other migrant workers, and youth (PSI, 2012). PSI promotes the ‘Salama’ brand condom, named after the Swahili word for peace or security. PSI officially markets the condom to the 15-24 age group as well as older groups (PSI/Tanzania, 2009:2). The official marketing strategy for the Salama condom explicitly excludes young people of typical primary school age, even though about six out of ten 18-49 year old Tanzanians agree that 12-14 year olds should be taught how to use condoms to avoid HIV/AIDS (TACAIDS, 2013:69).

PSI markets a female condom and several kinds of condoms for males, including free, inexpensive, luxury and flavoured varieties. In 2009, PSI sold the cheaper 3-pack for 100-200 Tanzania shillings (TSH). This is about 4-8 pence in British currency and 6-12 cents in US currency. In Tanzania, it is about the price of a cup of tea in an unpretentious teashop. The condoms were so cheap that they were undercutting both the domestic commercial market and the PSI market in neighbouring Kenya (PSI/Tanzania, 2009:2-3), yet raising the prices was an unattractive option, because even the lower price was a barrier for many.

As in the poster that follows, some PSI campaigns have promoted the idea of women negotiating condom use.

Poster 2.1 ‘Make It Clear to Him! Without a Condom? “Not Even Once”’



(Wellcome Images and PSI Tanzania, 1996)

In Poster 2.1, above, the caption, ‘Make it clear to him! Without Salama? “[Not] Even for One Day”’ apparently either assumed or sought to promote women’s power to negotiate condom use. The central woman in the poster appears to be wearing trousers. While wearing fitted trousers in public is an acceptable form of dress for women in the many countries, some Tanzanians do not regard visibly fitted trousers to be respectable dress for women. If the persons who posed or approved the image were Westerners, they may not have known this. The use of trousers in the poster makes it slightly unclear whether the women in the poster are supposed to be sex workers. By extension, the target of the message to use condoms is unclear. Perhaps the ambiguity was intentional, because those who designed the poster hoped that it would persuade a variety of people who looked at it.

The following advertisement for Salama condoms may have had men or women as its target.

Poster 2.2 ‘If You Really Love Her (or Him), You Will Protect Her (or Him)’



(Gudrais, 2009)

Advertisements with slogans such as the one above, ‘If you really love her (or him), you will protect her (or him)’ are common in southern and East Africa. The condom is surrounded with the words ‘Salama Condom: Reliable Protection’. The slogan is ambiguous by gender because Swahili pronouns do not by themselves indicate a gender. The woman in the poster is probably wearing trousers so it may not be clear to all Tanzanian viewers whether the image represents a wife, regular partner, casual partner, or sex worker. This poster may suggest that a man or woman can show love for a partner by protecting the partner against HIV while continuing to have sex with other partners, thus emphasizing risk-reduction for people with concurrent or sequential multiple partner relationships.

Presumably, the intent of these slogans is to appeal to people’s interest in the well-being of their sexual partners. While many people do care about their sexual partners, their own personal health is often likely to be of more immediate concern.

Other PSI services include care and prevention kits for PLWHA and information campaign kits for HIV service providers and their clients (PSI, n.d.). PSI recently developed the ‘Trusted Partner’ campaign to promote the message that even trusted partners can transmit HIV (PSI, 2012).

Donors may devote more resources to treatment and care partly because of a relationship between the supply and demand sides of health practices. The supply side is characterised by those who develop and create drugs and other technologies (Bandura, 2004:144). Actors on the supply side usually have more incentives and resources to lobby donors, because they have specific products to sell and specific target groups to treat. When resources are disproportionately dedicated to the supply side, nations may struggle with high health costs, as they consume resources that might have been more usefully devoted to preventive health care (Bandura, 2004:144).

The rollout of HIV/AIDS testing and treatment has been rapid. According to TACAIDS (2013:83-84), 27% of men and 30% of women aged 15-49 in Tanzania have had an HIV test and received the results in the past year, and 47% of men and 62% of women have had a test and received the results at some time in their lives. The rollout of antenatal testing to prevent mother-to-child transmission, the second most common cause of HIV infection, has been rapid. In a recent study, 77% of pregnant women aged 15-49 had an HIV test and received the results (TACAIDS, 2013:85-86). The TACAIDS report does not note what percentage of Tanzanians who qualified received treatment after testing, but in an international study, in 21 African countries with a high burden of HIV, two out of three people who qualified were receiving ARV treatment (WHO, 2013a).

Some health professionals and other adults may discourage young people from testing, making follow-up visits, asking for drugs or complying with treatment regimens. These social barriers are likely to become less common if health workers receive training and management to ensure that national guidelines for ARV treatment provision are observed and if the health workers are supported to provide services to an array of populations, including young people (National AIDS Control Programme, 2009:52).

While ARV treatment works for most patients, there are issues of ‘compliance, resistance, toxicity and cost’ (Lafeuillade, 2012). Ensuring initial evaluation and treatment continues to be a challenge. Not all people have internalised the idea that testing and treatment are acceptable courses of action.

Another issue: HIV retroviruses continually mutate, even within ‘an individual during the progress of the infection’ (WHO, 2007). Behavioural, economic, logistical and

other challenges lead to compliance patterns that may increase the likelihood of viral mutations. Therefore, there are other challenges entailed in keeping ARV treatment relevant to new and emerging retroviruses. It will continue to be important to get the funding balance right between treatment and primary prevention interventions. Treating HIV/AIDS helps the prevention effort by reducing the amount of transmissible HIV in the population. Preventing HIV/AIDS helps the treatment effort by reducing the number of people that need treatment, so that there is enough money for those who do need treatment. This balance is particularly important in light of the reality that not all donors have met their funding commitments in recent years (Avert, 2011a).

The demand side of health practices is characterised, for example, by social cognitive approaches promoting self-management of health. The impact of ARV treatment in recent years has been dramatic. The success of treatment has overshadowed primary prevention efforts, but neglect of primary prevention costs money and lives (Canning, 2006:139). Success in primary prevention is difficult to measure. Donors prefer interventions with measurable effects and it is easier and cheaper to count persons treated than persons who prevented their own infection in the first place. Statistics highlight the importance of primary prevention, though: for each person beginning ARV treatment, two more become infected (International AIDS Society, 2012). Better prevention interventions will help to ensure that there is enough money to go around for technological advances, including treatment, in future.

It is understandable that donors are concerned with measurable results. Where monitoring of behavioural interventions for prevention does occur, programmes are more likely to monitor and evaluate improvements based on variables such as self-reported changes in knowledge, attitudes, behaviours and practices (KABP) (such as Ross et al., 2007). Some of those variables, while easily measurable in the short term, are subject to the social desirability bias, in which research participants say what they think the researcher wants to hear (Plummer, Mary L et al., 2004). Furthermore, they do not necessarily reflect changes in biological outcomes.

Biological outcomes are the gold standard in the monitoring and evaluation of behavioural interventions, but few programmes measure biological outcomes of behavioural interventions such as changes in rates of HIV, STI or pregnancy over time (Duflo et al., 2006; Dupas, 2011; and Duflo et al., 2011).

2.5.2 Prevention Interventions for Younger Adolescents

Much Tanzanian HIV/AIDS research and programming for youth reaches secondary schools. *Fema*, a popular HIV/AIDS educational magazine, targets 15-25 year olds. The magazines are sent to 2500 secondary schools but not to primary schools ('FEMA,' 2012; 'Si Mchezo! (It's Not a Game),' 2012).

Tanzania needs a greater emphasis on research and educational programmes for young people in primary school. In many countries, research and programmes for this group are relatively rare (Palmer et al., 2010:4). As a result, the government and other organisations are missing opportunities to support HIV/AIDS within the context of the only formal education that many young people will ever have.

... in sub-Saharan Africa, where young persons now constitute the main pool sustaining the epidemic, the role of youth specific interventions aimed at preventing STI/HIV/AIDS cannot be overestimated (Paul-Ebhohimhen et al., 2008).

For programmes to be very effective, they need to reach primary school children as well as out-of-school and 'street' children of the same ages, especially where these groups form a significant percentage of the young adolescent population. Programmes and interventions can ideally address the social and economic vulnerabilities of these young adolescents relative to HIV/AIDS and the barriers that contribute to their vulnerabilities (Nnko, Chiduo et al., 2001; Bastien, 2008; Evans, 2002; and Evans and Becker, 2006).

Some materials designed for youth aged 10-14 do not adequately address the needs of the young people who are or shortly will be sexually active. Many parents and teachers do not want primary school children to have sex. While most parents want children to have sex and relationships education (SRE), they often want such education to be conducted along restricted lines, '...in order for SRE to reach the classroom...it must also successfully overcome the stark criticism from gatekeepers, including parents' (Mkumbo and Ingham, 2010:68).

Many Tanzanian adults believe that if young people discuss sexual matters, they will be prompted to experiment with sex, by trying out what they have learned. As a result, educational interventions are often restricted in content to messages such as abstinence-only. To be sustainable, educational interventions must somehow be sensitive to the concerns of parents and teachers, otherwise schools are unlikely to

support them. At the same time, educational interventions must serve the needs of students, however. Some students are older than the normal age of 14 when they finish the seven years of primary school. Some enrol late, and many attend infrequently. Successful educational materials will take into account that some young people are already having sex and others will soon begin, both in sanctioned and informal relationships. Some young people in both primary and secondary schools are sexually active or soon will be and therefore face the same challenges as older people with respect to HIV/AIDS prevention in the context of sexual relationships. Learning materials will ideally include more information than recommendations for abstinence and faithfulness, and can and should go much further than the ABCs of HIV/AIDS prevention. While the learning materials can continue to encourage young people to refrain from sex, they can also encourage young people to identify specific actions that they will take to prevent HIV/AIDS, such as using condoms or getting an HIV/AIDS test with their partners, whenever they do have sexual relationships.

Some Tanzanian parents do not want topics such as condoms, homosexuality, masturbation and sexual pleasure to be discussed (Mkumbo and Ingham, 2010). Subjects not discussed may nevertheless be practised. In one study of sexually active Tanzanian adolescents, 8% self-reported anal sex, 8% self-reported oral sex and 29% reported masturbation (Kazaura and Masatu, 2009). Since non-normative sex is stigmatised, such practices may have been under-reported in that study. Restricting the topics of HIV/AIDS prevention to those that are acceptable in terms of the norms of society does not support HIV/AIDS prevention among young couples who practice anal sex. Neither does restricting the topics of discussion support young people who may wish to masturbate rather than have sex, as part of their HIV/AIDS strategies.

‘...if sexual behaviour is more elastic on what we could call the intensive margin (what type of sex to have and with whom) than on the extensive margin (whether to have sex or not), HIV education programs that focus only on abstinence may be ignoring an important margin along which youths could reduce their risk of infection’ (Dupas, 2011:2).

Educators need considerable sensitivity and cultural knowledge to discuss non-normative practices.

2.5.3 Monitoring and Evaluation of Prevention Interventions

Those who deliver behavioural interventions often do not follow up with any monitoring and evaluation. As mentioned previously, it is even more unusual for educational interventions to be monitored for biological outcomes and more unusual still for the monitored intervention to demonstrate a change in biological outcomes (Ross et al., 2007).

Possession of the knowledge or skills ‘to dialogue about sexuality’ for example, mentioned in the first NMSF II strategy objective, does not correspond with desirable biological outcomes. Indicators involving knowledge and skills are widely assumed to correlate with the ultimate success of interventions, but much evidence suggests otherwise. For example, there ‘...is no statistical correlation between high knowledge levels and behaviour change’ (TACAIDS, 2009b:7). The lack of correlation between prevention interventions and biological outcomes may be due in part to the way that knowledge and skills to prevent HIV/AIDS are valued and measured. In a DHS survey used by USAID-supported HIV/AIDS monitoring and evaluation programmes, the biases of those who drew up the survey were clear. The word ‘condom’ appeared in questions 29 times, but there was only one question about the age of first intercourse and one about multiple partners. There were no questions about abstinence (Green, 2003:68). Green noted that in some studies, there were often five or ten times as many responses concerning faithfulness, reduction in the number of sexual partners, delay of sexual debut among youth and secondary sexual abstinence than concerning condoms. In those studies, however, answers concerning condom use tended to be counted while the other answers were often overlooked, ignored, or buried in the ‘miscellaneous’ category (Green, 2003:9).

One three part intervention, presented in a school lesson, was monitored. It included a video portraying sugar daddies as predators, a presentation showing how HIV prevalence rises among members of older age groups, and a discussion of the video and presentation. Using pregnancy as an approximate indicator of unprotected sex, the researcher found that female students exposed to the three-part intervention had less unprotected sex with older men, but more sex with younger men. The school girls, however, were apparently more likely to have used condoms in those relationships with younger men (Dupas, 2011).

A systematic review of schools-based interventions found that while most interventions were effective in changing knowledge and attitudes about HIV/AIDS, changing behavioural intentions was more difficult. There was little or no evidence that actual behaviours had altered in any sustainable way because of the interventions (Paul-Ebhohimhen et al., 2008). There is therefore a longstanding need for more effective interventions. Van Reeuwijk (2010), argued that those who devise interventions ‘must modify their approach to address the daily reality of these children...there are multiple elements that influence a person’s decision to engage in or to refrain from sex.’ Simple and relatively inexpensive structural changes may be at least as effective as some behavioural interventions concerned with message delivery. For example, in a Kenyan primary school study, with female participants beginning the study at mean age 13.5, researchers compared three interventions: a structural intervention, a behavioural one, and a combination of the two.

The first intervention was the supply of two school uniforms at no charge. This intervention was the most likely to prevent students leaving before they completed primary school. Early fertility was lower but STI risk was not.

The second intervention was exposing students to an HIV/AIDS curriculum emphasizing abstinence only. The abstinence-only educational intervention did not influence primary school completion rates, or STI incidence. It did not influence early fertility, but pregnancies more often occurred within marriage.

The third intervention was both the supply of two uniforms and exposure to the abstinence-only curriculum. The combination of interventions led to a reduction in STI risk and a slight reduction in early fertility (Duflo et al., 2011:2-4).

This kind of trial is unusual in that it subjected social-policy ideas ‘to randomized control trials, as one would use in testing a drug’ (Parker, 2010). These kinds of monitored trials, which provide indications of which interventions are likely to result in desirable biological outcomes, are appropriate prior to scale-up. It seems reasonable to assert that only interventions that have a) been tested, and b) demonstrated value in terms of biological outcomes, should be scaled up. As noted previously, though, trials involving biological outcomes of behaviour interventions are uncommon. Duflo et al., (2006:3) noted of school programmes, ‘To our knowledge, there is only one randomized trial of sexual health education in Africa that looks at biological outcomes.’ Duflo et al. were referring to monitoring of an intervention called *Mema kwa Vijana*, which means Good Things for Young People. The *Mema kwa Vijana* adolescent sexual and reproductive health programme was tested in 62 Tanzanian

primary schools and 18 health facilities. When the intervention was monitored, there were improvements in knowledge, attitudes and self-reported behaviours but not in biological outcomes (Duflo et al., 2011:6). Nevertheless, the programme expanded from 60 to 600 schools. Admittedly, the biomarker used by the programme, detection of a 50% reduction in HIV, might not have been sensitive enough to register a difference between control and experimental groups. More sensitive biomarkers for behaviours involving unprotected sex might have been the incidence of STI or pregnancy, for example (Duflo et al., 2011:6). The *Mema kwa Vijana* scale-up evaluation described the issues involved in the process of scale-up but did not raise the question of whether the scale-up was justified from the monitoring of what occurred with the original 60 schools (Renju et al., 2011). A follow-up *Mema kwa Vijana* study found no improvements in reduction of HIV and HSV-2 prevalence (Doyle et al., 2010).

From the evidence, we can conclude that it is possible and advisable to monitor behavioural interventions. Biological outcomes should be the most important indicator of an intervention's failure or success. Educational interventions and other behavioural interventions that, when monitored, do not demonstrate improvements in biological outcomes in small-scale programmes, should not be scaled up.

2.5.4 Encouraging Young People to Take an Active Role

Global and biomedical authorities, as well as local, indigenous ones, often impose, or attempt to impose, tactics and strategies as well as messages. For example, in a study of virginity testing in South Africa, (Leclerc-Madlala, 2001), parents and other elders controlled events. Policy makers, whether global or local, often have a 'centralist', hierarchical bias that discourages them from thinking about 'plural, diverse, strategies' (Curtis, 2004:51), instead relying on familiar worldviews and techniques.

For more young people to choose to adopt less risky behaviour and to achieve better biological outcomes such as lower infection rates over time, programmes need approaches that stimulate young people to take active and autonomous roles in developing and deploying strategies of HIV/AIDS prevention.

For example, in a Kenyan intervention, young people debated condom use and had an essay competition about how to prevent HIV/AIDS. The intervention resulted in

‘increased self-reported use of condoms, without increasing self-reported sexual activity’ (Duflo et al., 2006).

One way to encourage autonomous, active approaches is to pay respect and attention to local knowledge and understanding. ‘Research has shown...that the impact of AIDS intervention programmes in Botswana has been negligible because the model of intervention was based on Western experiences and expertise (the biomedical model)’ (Walker et al., 2004:91). Encouraging young people to develop strategies by presenting messages that are based on one system of knowledge and understanding only, such as the biomedical system, is likely to be ill advised, because other systems of knowledge and understanding may influence young people’s attitudes and behaviour. Young people may have difficulty believing in or adhering to strategies if those strategies do not take their multidimensional worldviews into account. One study found that trainee teachers argued that customs such as widow inheritance made HIV/AIDS education more difficult (Oluga et al., 2010:365). Other teachers know that by it is only by acknowledging and discussing diverse beliefs, can teachers better support young people to tell what they know about their own cultures, and to develop resilient HIV/AIDS strategies that take those cultures and beliefs into account. Different systems of knowledge and understanding are not necessarily complementary, so rather than pretend that such differences do not exist, the way forward is to examine and discuss the similarities and differences, and the implications for the young people’s HIV/AIDS prevention strategies, with sensitivity.

Policy makers can do more to design programmes that encourage young people to take an active role in addressing HIV/AIDS. Encouraging young people to develop their strategies of HIV/AIDS prevention, taking into account their world as it is, is one way to do this.

2.6 Conclusion

The demographics of the HIV/AIDS epidemic provide information about its reach and influence. Biomedical, indigenous, religious and other systems of knowledge and understanding interact, often in unexpected ways. Stigma and denial surrounding HIV/AIDS endure, influencing how young people perceive HIV/AIDS and develop strategies to prevent it. Young people may consider strategies only at the present time

in their lives or they may look forward to HIV/AIDS prevention throughout the life course, considering aspects and situations of risk that they may face in their current and future lives. These may include refraining from sex, prevention in the context of sexual relationships and avoiding blood-borne and mother-to-child infection.

This chapter examined how donor funding and local sensitivities influence policy and interventions, and how and why younger adolescents may be excluded from in-depth HIV/AIDS education, apart from what amounts to the recommendation to refrain from sex. It described the rarity of the phenomenon of testing of interventions of a behavioural nature using randomised controls and variables with measurable biological outcomes. I recommended that such monitoring of behavioural and educational interventions become standard practice prior to the scale-up of interventions, both to improve donor confidence in behavioural interventions and to ensure that young people and others are served with programmes that actually work to support them to prevent HIV/AIDS.

In future chapters, I will describe how efforts to educate young people about HIV/AIDS can be enhanced. I will continue to argue for more comprehensive interventions for younger adolescents and pre-adolescents that go beyond messages, for interventions that provide appropriate information and encourage young people to take an active and autonomous role in addressing HIV/AIDS in their lives, and for better monitoring of all behavioural interventions.

In the next chapter, I will review the literature on strategy and risk.

3 Strategy and Risk

The first part of this chapter examines the concept of strategy, including the different ways that social scientists and others define and perceive strategy. The second part examines the appraisal and management of risk, essential to theoretical understandings and practical personal and public responses to HIV/AIDS prevention. The third part provides empirical examples of personal HIV/AIDS prevention strategies from the existing literature, mainly from Tanzania and other countries in East and southern Africa.

3.1 *Understandings of Strategy*

Graham Crow (1989:2), having surveyed the use of the word and concept of strategy in the sociological literature, concluded that ‘No consensus exists concerning such fundamental issues as to what is to qualify as a strategy, the nature of the relationship between strategies and agency or the relationship between strategies and rationality’.

The purpose of this review of sociological and other literature is to examine differences in the meanings of strategy, in order to emerge with meanings relevant to young Tanzanians’ personal strategies of HIV/AIDS prevention.

3.1.1 Strategies as Organizational or Individual Endeavours

People often think of strategy as a purposeful endeavour of an organization or group such as a business, government, school, hospital, team or army. Organizational strategies to address HIV/AIDS and behavioural changes are often applied from the global or biomedical perspective, such as in Bandawe and Foster (1996), Hunter et al. (1997), Wasserfallen et al. (1997), UNESCO (2004) and Coates et al. (2008). Concepts such as the ABC of prevention and prevention strategy are sometimes used more or less interchangeably (Ntseane and Preece, 2006).

Members of organisations may not consider individuals to be strategy makers. Rather, they may regard individuals as members of target groups who should implement ‘behaviour change’ in accordance with whatever the organisations recommend. Organizational strategies are applied from local or indigenous, (Leclerc-Madlala, 2001), global or mixed perspectives (Sikwibele et al., 2000).

Many sociologists are familiar with the concept of strategy as an individual endeavour. Crow (1989:9-12) identified individual coping, marriage, financial and employment strategies. Goffman (1970) discussed individual strategic interaction. Beyond sociology, the self-help industry is committed to the concept of personal strategy in fields such as business, sport, and health. While studies of organizational strategy provide points of reference, this thesis mainly considers strategy as an individual endeavour. Individual strategies, however, are subject to social influences. People may learn from each other's advice, successes and failures. In that sense, individual strategy creation and deployment involves collective endeavour.

Curtis (2004:51) argued that policy thinking has a centralist and hierarchical bias that discourages sensible thinking about 'plural, diverse, strategies', noting that managing the contradictions of the plurality and working with the diversity is of great practical importance (Curtis, 2004:53).

Individual strategy is a personal matter. Strategy objectives are personal, too. Some individuals are indifferent to HIV/AIDS prevention, while others are committed.

3.1.2 Strategies as Bellicose and Creative Endeavours

The widespread understanding that strategy is an organizational endeavour probably corresponds to the origin of the word. The Greek *strategos* meant to lead an army spread out upon the ground. *Stratego*i were political subunits working together to conduct war in the Athenian democracy of around 508-7 BC (Cummings, 1998:25). Many authors through history have linked the concepts of strategy, wars fought to achieve objectives, especially gaining, regaining and maintaining power (Sun Tzu, 2011; Machiavelli, 2011; Clausewitz, 1982).

Mintzberg, (1998:93) in writing about management strategy, used words such as *launching*, *rivals* and *projectiles*, suggesting that strategy, like war, was an essentially aggressive and by implication, essentially masculine activity. (Carter et al., 2008:15). Such assumptions may exclude or alienate females from strategy making. The notion that females are less capable than others of the development and deployment of strategies is too silly to protest in this forum, but the silliness wears a human face. Organizational strategists are 'disproportionately drawn from the gilded elite of upper middle-class, middle-aged, white males' (Carter et al., 2008:122). A bias toward white

males is detectable in organisations dedicated to strategies of HIV/AIDS treatment and prevention, if for no other reason than that they reflect the power and economic basis of the wider society.

Females and other members of less privileged demographic groups do not lack the ability to develop personal strategies but they may lack the power to deploy them. When an older or higher-status male is paying attention to a younger or lower-status female in Tanzania with a view to having sex with her, she may not reproach or reprove him, as she might conceivably do with a boy of her own age or possibly with a male of very low status. It is not in the behavioural repertoire of many Tanzanian females to be rude to a higher-status or older male. If an individual has the courage to decline the persuasive talk of the male, she is likely to phrase her refusal with extreme courtesy and to speak in a gentle and unassertive manner, avoiding conflict through somewhat ambiguous behaviour. The male, following his own cultural norms, may misread the signals or intentionally fail to take the hint. Thus, if a female has an unsatisfactory encounter in word or deed, she is unlikely to complain to her parents or anyone else, because she may feel complicit. The male may wish to encourage this feeling. The female is likely to experience this situation as an isolated individual, not realising that her socialisation may not have provided her with a rich array of examples of how to tell an older or higher-status male, clearly and *safely*, that she does not want to have sex with him. It might not occur to her to tell a higher-status male that he has no business approaching her in the first place. Indeed, no good might come of such a declaration, which might meet with retribution or revenge.

Perhaps strategy and war are closely associated because simple strategies have single objectives, such as to win. Life strategies, on the other hand, often require the simultaneous pursuit of multiple objectives. Young adolescent Tanzanians are likely to pursue life strategies with multiple objectives, not all of which are complementary in terms of the means required to achieve them.

Jeanne Liedtka (2005), in a challenge to the utility and gender bias of war metaphors, likened strategy to creative endeavours such as design, suggesting that power sharing can be at the centre of the strategy agenda.

Values play a vital role here, as do hypothesis generating and testing, and the ability to conjure a vivid picture of a set of possibilities that do not yet exist.

Design offers a different approach and would suggest processes that are more widely participative, more dialogue-based, more issue-driven than calendar driven, conflict-using rather than conflict-avoiding, all aimed at invention and learning, rather than control (Liedtka, 2005:74).

Design often seeks to achieve multiple objectives. Effective HIV/AIDS strategies are likely to entail aspects of creation, design and the sharing of power as well as destruction, war and the gaining and retention of power, in order to achieve those objectives.

3.1.3 Strategies Are Not the Same Thing as Intentions, but Are Relationships between Behaviours and Intentions through Time

Strategy entails intentions. Intentionality is ‘The distinguishing property of mental phenomena of being necessarily directed upon an object, whether real or imaginary’ (Allen, 2011). In an innovative study to develop a coding instrument for strategy, Sanderson et al., (1999) chose to control for current and past behaviour by excluding those research participants who practiced certain behaviours, such that intention, artificially divorced from past and current behaviour, was considered to be more or less the equivalent of strategy.

In the present study, I considered that intention, while an important aspect of strategy, was not the same thing as strategy. I did not control for the influence of past or current behaviour or exclude research participants based on their past or current behaviours, because such exclusion would have been counterproductive. Harrison et al. (2005:260) found that young men with early sexual debut were ten times more likely to have had multiple partners, even after controlling for duration of sexual activity. Klepp et al. (1997) found that prior behaviour was a better predictor of intention to have sexual intercourse than attitudes, subjective norms or self-efficacy. Attempts to artificially separate intention from past, present and future behaviours, then, are likely to lead to a poorer quality of data gathered. Although intention is fundamental to the concept of strategy, strategy is, among other things, a relationship between intentions and past, present and future behaviour through time.

Pernicious side effects of the assumption that strategy is the same thing as intentionality are skewed research studies and HIV/AIDS policy and education programmes that overlook large populations who are already practicing lower-risk

behaviours. The exclusion of lower-risk research participants from studies is common, simply because many studies focus on populations at high risk. If those designing HIV/AIDS prevention messages fail to remember the original selection criteria for study participants, they may apply lessons learned from populations at high risk to general populations. That can contribute to HIV/AIDS prevention messages treating people who practice low and high risk behaviours alike, as though all need to pursue 'behaviour change'. This is undermining, disrespectful, and factually incorrect. Such programmes are likely to confuse or annoy those who do not need to change their behaviour. False assumptions based on such generalisations may justifiably fuel accusations that those devising the interventions are out of touch.

The Tanzanian study methodology reflects our understanding that intentions are not the same thing as strategy. Past and present behaviours are at least as likely to support or subvert strategies as intentions are. I did not ask the research participants directly about their current sexual behaviour, not only because such an interrogation would go against my normal standards of courteous behaviour, but because I did not believe that it would have resulted in the capture of reliable data (Plummer, Mary L. et al., 2004; Plummer, Mary L et al., 2004).

3.1.4 Strategies as Relationships between Means and Ends

De Bono wrote, 'Strategy is not a detailed plan but an overview' (1985:157). Strategy, as I understand it, involves both plans and overviews. People devise plans to exercise power over things, events and people. Personal strategies are, among other things, plans to exercise power over oneself.

Strategy is concerned with the relationship between means and ends. Means are the intentions and behaviours that support the implementation of ends in the long-term perspective (Crow, 1989:19). The strategy perspective or overview enables a young person to prioritise or downgrade the objective of personal HIV/AIDS prevention relative to other life objectives. For example, a young person might have several main objectives, such as to be true to a religious faith, to find the right person to love, to prevent HIV/AIDS, to finish education and to get a good job. The young person will acquire additional short-term and long-term objectives, and relinquish others, as life goes on.

As noted, past behaviours influence current ones. Well-executed means do not necessarily guarantee desirable ends, but most individuals take actions to attempt to increase the chances of achieving the desirable ends. Means and ends continually change in individuals' lives because of feedback concerning which outcomes have already occurred and which are still achievable. Reflective individuals learn from feedback and adapt means according to what they have learned. Therefore, a reflection and feedback process between means and ends involves outcomes, adaptation and learning.

Unlike the temporal framework of Sanderson's research, in the research on Tanzanian 11-14 year-olds' strategies, the temporal framework of strategy elements encompasses the past, present and future. One of the implications of this broader conception of strategy is to make the claim that strategy is not just another word for intentionality. The conception of strategy sketched out for the proposed research involves a relationship between intentions, behaviours, objectives and long-term perspectives as they interact to influence individuals' lives in the present and future.

3.1.5 Strategy as a Bridge between Structure and Agency

The likelihood of understanding strategy increases with an understanding of the relationship between structure and agency. Strategy offers us the opportunity to go 'beyond the classic structure/agency dichotomy' (Crow, 1989:1). Strategy can be a bridge between structure and agency, as agents generate and conduct strategies in structured contexts.

'Indeed, some of the most interesting situations (for sociologists) are those where strategies are developed under conditions of severe constraint, and in this way the investigation of strategies promises to have a valuable contribution to make to the study of structures, as well as to much of the rest of sociology besides' (Crow, 1989:20).

Along life's path lie memories, retrospective and reflexive thoughts, immediate exigencies, whims, choices, dreams, hopes and plans. While these help to create the conditions of agency, they are not agency itself: '...agency refers not to the intentions people have in doing things but to their capability of doing those things in the first place' (Giddens, 1984:9). In analysing the concept of agency as operative when a person 'could have acted otherwise', Giddens (1984:14) noted that agency was not a condition of success. The 'world as constituted by a stream of events-in-process

independent of the agent does not hold out a predetermined future' (Giddens, 1976:75; cited in Pleasants, 1999:99). Nevertheless, some research indicates that qualities related to agency, such as self-efficacy, the belief in one's ability to exert agency to improve one's condition, tend to increase that ability (Bandura, 2000:1).

Tanzanian young people make choices and exercise agency in contexts structured and bounded to greater or lesser degrees by structural factors. These include gender, age, status, education, religion, culture, customs, explicit and tacit knowledge and other factors. Structure and agency in this conception are not separate but interact in mutually influential ways. 'Individual strategic flexibility' (James and Prout, 1995:94) occurs as young people exercise agency in differently structured contexts, for example, when at school or with friends, family or lovers.

The existence of agency is debated (Bhaskar, 1989:114; cited in Pleasants, 1999:99). If 'what the have-nots lack is agency' (Farmer, 2003), then it is pointless to discuss their personal strategies. Without agency, only fatalism remains. Farmer suggests that it is the haves who need to improve their performance, not the have-nots. Those who make unfair economic policies, who write and enforce laws that are unjust or who sell drugs intended to be free and available at the point of need can do better, and should be encouraged to do better. Whether some of them will do better is another question. It seems undesirable to behave as though the poor have no agency at all, not least because it seems unlikely that unfortunate structural constraints will cease to afflict the have-nots in the future.

While it seems unlikely that Farmer meant to suggest that poor people had no agency whatsoever, it is hard to deny that some people's structural circumstances are such that their ability to exert control is very limited. Still, Scott (1992) noted that even people with little power exert agency. Sentumbwe (2001:13) described a commercial sex worker's partner reduction strategy as limiting the number of her clients to one or two per day: enough to ensure survival, but no more. The sex worker observed her situation, reflected on its constraints, made choices, and acted. Choices can be even more starkly limited, though, such as a sex worker under the control of a pimp, unable to control the number of clients. Evans (2003) described the situations of young Tanzanians who became 'street children'. Their live chances often became more and more tenuous over time after an initial incident or incidents of family crisis. The children's ability to exert control over their own situations often also became more

tenuous because of the structured limitations of their situations. As their personal situations deteriorated, their life became more risky. Their ability to observe, reflect and take action to exercise control became important as never before, but because their power was so limited, their efforts to reduce risks and accomplish their other objectives became less and less effective. The exercise of strategy is unlikely to have been a complete failure in even those cases, because their situations may have deteriorated even more quickly without the individuals developing and deploying strategies to exert some kind of control. Agency itself is not in short supply among the have-nots, but the power to use agency to increase the chances of desirable outcomes can be constrained. The exercise of agency is dependent on the retention of power. To pretend that all people have enough power to exercise agency in order to achieve their life objectives, is fatuous.

Nevertheless, not all who experience similar undesirable structural conditions make the same choices. Those who make different choices often experience different outcomes. Although the outcomes may not all be brilliant, some are likely to be better than others are. Addressing structural inequalities is crucial. Nevertheless, if the have-nots can improve their lives through exerting their own agency, they should do so. Ideally, working on the fronts of both structure and individual agency is likely to achieve better outcomes in HIV/AIDS prevention.

In her work on children, sex and HIV/AIDS in Tanzania, Van Reeuwijk (2010:194-6), noted the usefulness of Hitlin and Elder's (2007/8b) theoretical model of the four ways that bounded agency is oriented in time. The model uses heuristics or ideal types with 'fluid boundaries and overlapping characteristics' (Hitlin and Elder, 2007:171). The four agencies are existential agency, identity agency, pragmatic agency and life course agency. The model follows, adapted with examples drawn from HIV/AIDS prevention. In the model, agency is inseparable from structure. For example, at birth, most of us become a daughter or a son, yet each of us fills our structured role in an individual way.

Table 3.1 Model of Four Temporal Aspects of Agency (Hitlin and Elder, 2007), with Examples Related to HIV/AIDS Prevention

	Pragmatic Agency	Identity Agency	Life Course Agency
Time Frame	Present, in the ‘now’	The time needed to embody or rebel against social roles	Throughout life
Examples	Asking someone to have sex Refusing or accepting to have sex. Choosing to stay and play football with mates or go home and think about girls Using a condom or not	Being faithful or unfaithful in identification with social roles such as wife, lover, mother or young person	Having or not having an HIV/AIDS test in order to support the achievement of HIV/AIDS prevention and to succeed in the achievement of educational, livelihood or social objectives

	Existential Agency (underlying the other three kinds)
Time Frame	Operates continually in all time frames and circumstances
Examples	Sexual delay or debut Having one or multiple partners Being prepared to use a condom or not Having an HIV test or not Managing treatment or not

A more detailed explanation of the four temporal aspects of agency and their relevance to HIV/AIDS prevention is below.

Existential agency underlies pragmatic, identity and life course agency and is operative at all temporal horizons and in all circumstances. Existential agency entails the essential element of free will and the ability, however bounded or constrained, to initiate and control one’s behaviour to exert influence on our structured existence. Existential agency requires being free to act ‘within the constraints of physical reality’. Some choices and actions are more likely to attract praise, reward and other desirable consequences; others, blame, punishment and other undesirable consequences (Hitlin and Elder, 2007:171, 175-177). I have placed examples of tactics of HIV/AIDS prevention under the heading of existential agency in the table, because preventing HIV/AIDS is arguably an existential act, requiring free will, ability, and sense of

responsibility to initiate and control one's behaviour to influence one's structured existence.

Pragmatic agency occurs in novel or unfolding situations and is 'expressed in the types of activities that are chosen when habitual responses to patterned social actions break down' (Hitlin and Elder, 2007:178). The temporal scope of pragmatic agency is the present. Current choices are likely to influence future ones (Hitlin and Elder, 2007:176). Pragmatic agency provides us with the wherewithal to innovate when routines break down. 'If habits fail...we must make choices, and such choices necessarily occur within the flow of activity' (Hitlin and Elder, 2007:178). Pragmatic agency develops our 'emergent, creative aspects'.

We make choices within the flow of situated activity, and emotions and personality traits—along with idiosyncratic personal histories, moral codes and predispositions—influence the choices we make in emerging situations' (Hitlin and Elder, 2007:176-178).

For example, a male may support his wife to be faithful by sharing his wealth fairly with her, such that she does not need to look beyond the relationship to supply her material needs.

Identity agency involves roles. 'Following established ways of acting, role enactment, or identity performance, involves agentic action' (Hitlin and Elder, 2007:179). Although the roles themselves are a form of social structure, humans exert agency to embody and comply with social roles as well as to deviate from them. The nature of conforming to social roles means that much of our social interaction is routine, so to a certain extent, social roles enable us to function automatically, thus freeing our attention to identify and work toward other goals. We wish to maximize the benefits such as social credibility that accompany our identities and minimize the detriments. Of course, not all the social roles of individuals call for the same kinds of agency. Each individual must somehow manage the contradictions and dilemmas (Hitlin and Elder, 2007:176, 179-181). Adolescents must continually fulfill some social roles (daughter, son, student, brother, sister, friend) while growing out of others (child, primary student, celibate being) and growing or changing into others (secondary student, adolescent, sexually active being, orphan, wife, adult, parent). Some roles, such as livelihood roles, may be taken on voluntarily. Structure and socialization play a great

part in this ‘voluntary’ selection of roles: e.g., teacher, farmer, shopkeeper, religious figure, gladiator, cheerful or miserable person, prosperous person or pauper.

In HIV/AIDS prevention, the way an individual exerts agency to select and fulfil the roles that they play is critical. For example, a young male whose earlier understanding of masculinity involves unprotected sex with multiple partners, may later decide to emphasize other aspects of his masculine identity instead, such as a man who demonstrates self-control.

The temporal scope of life course agency involves long-term, future life plans. Considered actions taken in the present bring the individual ever-closer to the achievement of those plans. (Hitlin and Elder, 2007:176-178). Transitions and turning points are central. Life course agency requires management and forethought because the achievement of different goals usually requires different actions.

For individuals, effective HIV/AIDS prevention strategies encompass prevention in the whole life course, in the context of the period of celibacy before the sexual debut as well as after, and in the context of sexual, social, economic and family relationships. Strategies demand continual adaptation to new situations along the way.

3.1.6 Strategies Employ Tricks, Tactics and Stratagems

Strategies must encompass more than the concept of intentionality. Humans do not always behave in the way they intend, and events do not always happen in the way they intend them to happen. Fortunately, there are ways to factor unintentional behaviour and undesirable outcomes into strategies. To use a comparison relevant to war, the best generals account for the element of surprise, with strategies that account for both the expected and the unexpected. To do this, they use tricks, tactics and stratagems.

A stratagem is a ‘cunning plan or scheme for defeating the enemy’. A trick is ‘an action or scheme undertaken to fool, outwit or deceive’. Tactics are ‘the plans and means adopted in carrying out a scheme or achieving some ends’ (Fowler and Fowler, 1991). Clearly, there is much overlap between their meanings and between them and strategy itself.

Ariely suggested the promotion of the tricks, tactics or stratagems to assist people to devise their sexual strategies. Sexual arousal changed the ways that Berkeley

University students evaluated the riskiness of sexual practices. Research participants were completely unable to predict which sexual practices they would be willing to risk when they were aroused, when they were not aroused (Ariely and Loewenstein, 2005; Ariely, 2008).

Ariely noted that it is not enough to tell young people to ‘Just say “No”’, because if young people thought that they could just say ‘No’, they would be unlikely to carry condoms. Nevertheless, they might need condoms in the heat of the moment. Yet many HIV/AIDS messages are of the ‘Just say “no” ’ variety. Such messages as ‘Just say “no” ’ do not concern the means of HIV/AIDS prevention and are less concerned with tricks, tactics and stratagems than with ideals. Young people may not be able to live up to those ideals if they do not have the tools to deal with different situations and their own altered emotional states.

Either we can teach them how to say no before any temptation takes hold, and before a situation becomes impossible to resist; or alternatively, we can get them prepared to deal with the consequences of saying yes in the heat of passion (by carrying a condom, for example). One thing is sure: if we don’t teach our young people how to deal with sex when they are half out of their minds, we are not only fooling them; we’re fooling ourselves as well (Ariely, 2008).

Avoiding sexual interaction requires tricks, tactics and stratagems. A girl who wishes to elude a pursuing male does not, usually, wish to anger or upset him, because she does not want him to harm her later. She may act to ‘cool the mark out’ (Goffman, 1952), that is, to avoid sex with him whilst simultaneously preventing or assuaging any anger or humiliation that he might feel from her refusal.

Courtship is a way not only of presenting oneself to alter for approval but also of saying that the opinion of alter in this matter is the opinion one is most concerned with. Refusing a proposal, or refusing to propose, is therefore a difficult operation. The mark must be carefully cooled out. The act of breaking a date or of refusing one, and the task of discouraging a “steady” can also be seen in this light, although in these cases great delicacy and tact are not required, since the mark may not be deeply involved or openly committed (Goffman, 1952).

Of course, some males do not like to take ‘No’ for an answer, however involved or committed they may be. That is another problem.

Stratagems, tricks and tactics are critical details of strategy development and can support people to deploy their strategies successfully in order to achieve their objectives.

3.1.7 Strategies Take Place within Contexts of Power

Closely related to questions of the device and deployment of strategies is the relationship between strategy and power. ‘Since the use of the term strategy implies choice, it raises questions of power. Where one strategy is pursued in preference to another, the choice may have involved some exercise of power’ (Crow, 1989:3). Society often considers strategies to be the preserve of those who wield power. The generation and deployment of strategies can be the justification for wielding power. Perhaps generating and deploying strategies can make people more powerful, too.

Expressing an idea similar to Goffman’s front stage, backstage and off stage selves, (1990a), James Scott (1992) wrote that the way in which people present themselves and relate to each other varies depending upon the hierarchies of power in relationships between the people concerned.

Freire (1993) discussed banking education, involving deposits of knowledge from educators to those to be educated, and dialogic or problem-posing education, a potentially liberating and reflective activity in which people analyse the current situation, examine an array of alternate possibilities, make choices, take actions and repeat the cycle. It is not that dialogic education is necessarily better than banking education. Both can create desirable and undesirable outcomes (Taylor, 1993:68). Banking education, however, often reflects an inequality of power between the educators and those who are to be educated. The more powerful members of society deliver facts to ‘fill’ the less powerful members, with progress gauged through accumulation. Banking education often seeks an accrual in its objects (the people being educated) of socially constructed ‘knowledge’ about reality that serves the status quo, that is, the interests of the more powerful members, and conceals or obscures other perspectives on reality that might serve to threaten the status quo. Some educators in banking education may ‘suffer from an absence of doubt’ (Moreira Alves quoted in Freire, 1993:21). The more powerful actors define the desirable means to achieve the desirable objectives. In this case, the desirable means are the permitted methods to achieve the selected objective of HIV/AIDS prevention.

For the members of the target groups of banking education, it is not so simple. They may prioritise other life objectives over HIV/AIDS prevention. Furthermore, different power bases may use banking education to educate people to do different things.

Messages from churches or mosques may deliver different messages from national AIDS agencies, for example. Blind compliance with all sources of power is impossible. Ultimately, people must choose to whom they will listen and respond.

The advantage of dialogic or problem posing education is to support people to make explicit in their own minds the various educational messages that people are trying to deliver to them, and to evaluate the value of different messages when developing personal strategies. To this end, problem-solving education that encourages *praxis* can be useful. Freire (1993) described how *praxis*, cyclical feedback processes involving observation, reflection and action, may support the generation and improvement of strategies, to support people to achieve desired objectives. ‘In problem-posing education, people develop their power to perceive critically *the way they exist* in the world *with which* and *in which* they find themselves; they come to see the world not as a static reality but as a reality in process, in transformation’ (Freire, 1993:64). Posing problems may empower people to be conscious of current strategies, critical about those strategies and able to make changes if desired.

Students need some means to evaluate the truth of what they have learned. They may wish to do this on a scientific basis, as expressed by proponents of the biomedical view. On the other hand, young people may choose on some other basis. They may believe that only some alternatives are acceptable to God, for example, as expressed by the leaders of the religions they follow.

3.1.8 Strategies Entail Tradeoffs

Strategies entail trade-offs, because different objectives may require different and incompatible measures to achieve them. ‘Simply put, a trade-off means that more of one thing necessitates less of another (Porter, 2002:18). Sometimes this means that individuals must choose between competing objectives. For example, a young man can choose between spending his money and time on sexual relationships or on building up a business.

3.1.9 Strategies Can Be (Apparently) Irrational

Sometimes strategic analysis entails conscious and rational decisions in situations that are broadly predictable (Crow, 1989:2). Sometimes it does not. Rationality implies access to accurate information on which to base actions and decisions, but humans live

with imperfect knowledge and understanding. Young people with limited life experience may not be able to predict the probable outcomes of their actions, and are likely to be partly ignorant of biomedical and cultural data relevant to sexual conduct. If the young people did an analysis of strengths, weaknesses, opportunities and threats, with respect to HIV/AIDS prevention, the analysis would be dependent on their knowledge and understanding and so would be incomplete. Furthermore, in HIV/AIDS prevention, the individual, peer group, epidemiologist and social scientist may not agree on facts or causal relationships or on which actions young people need to take to prevent HIV/AIDS. Their knowledge is socially constructed and socially contested (Berger and Luckmann, 1966:26). Carter et al., (2008:54) noted that 'Strategy is driven by what you are able to do and have.' Therefore strategies vary, depending, among other things, on individuals' economic, social, cultural and symbolic capital (Bourdieu, 1986). None of this prevents a young people from pursuing personal prevention strategies. Realistic strategy formation entails a willingness and ability to expect and address the unexpected, and employ feedback processes to learn and adapt as more information becomes available. Ideally, strategies both 'eliminate and incorporate uncertainty' (Tsivacou, 1996:70; cited in Carter et al., 2008:23).

Crow (1989:13) noted that rationality, even where it exists, does not necessarily 'obviously and immediately advertise its presence'. He noted that exploring meanings and looking for deeper rationales might pay off in terms of better insights into strategies.

An adolescent commercial sex worker said of her condom use,

I have a steady client and we have since ceased using condoms... What use is it anyway? If I insist on condoms he will simply look for someone else to spend his money on (Banda, 2011).

An outsider to the situation can understand that if the teenager's perspective prioritises earning a living over preventing HIV/AIDS, then her attitude is rational. After all, she needs to eat. If the outsider disregards her objectives apart from HIV/AIDS prevention, her statement sounds irrational, as though she is merely rationalising her risk behaviour due to her wish for gain. Gender inequality, poverty, and the social construction of her knowledge and understanding about her situation are all relevant to her strategy.

3.1.10 Summary of Strategy

There is no consensus concerning the meaning of strategy in the sociological literature or elsewhere. While more people are familiar with the concept of organizational strategy, the construct of individual, personal strategy is useful within sociology and everyday life. Strategy usefully employs metaphors of war, involving the getting and keeping of power, and metaphors of design, involving power sharing and planning to achieve multiple objectives. Strategy is a relationship between behaviours and intentions through time. It is a relationship between means and ends: means such as intentions, behaviours, and perspectives, and ends such as objectives. Strategy is a bridge between structure and agency. Strategy employs tricks, tactics and stratagems. Strategy takes place within contexts of power. Strategy entails trade-offs. Strategy can be (apparently) irrational.

Do people need a strategy? Edward de Bono said, 'If you are being successful without [a strategy], then perhaps you do not. Otherwise, you certainly do' (De Bono, 1985:157). Some people have succeeded and others have failed in preventing the contraction and onward transmission of HIV/AIDS in southern Africa. The HIV/AIDS prevention community has paid insufficient attention to the social and individual reasons for this diversity of outcomes. A greater acknowledgement and understanding of existing personal strategies and the connections between HIV prevalence and strategy formation might well assist people to avoid infection. Further work with personal HIV/AIDS prevention strategies is likely to be worth a try.

3.2 *Risk Management*

Just as there was no consensus on a definition of strategy, there is no consensus on understandings of risk.

3.2.1 Structural Drivers of Risk

Douglas (1985:1) noted that risk is often construed as an ‘individual rather than a social phenomenon’ although individuals manage risk in social contexts. This research seeks to explore the contribution of the social context of risk management in individual strategies. Governments, funders and many natural and social scientists often construct ‘strategy’ as an organizational endeavour but assume that the management of HIV/AIDS risk is an individual endeavour requiring behavioural change. Governments and funders tend not to construe HIV/AIDS risk as a collective endeavour, in part because that understanding might lead to calls for ‘those currently in power [to be] willing to accept fundamental changes in the allocation of political and economic resources in order to effectively address the epidemic’s structural drivers’ (Hunsmann, 2009:837).

To examine some of these structural drivers, I now consider twelve nations with the highest adult HIV prevalence rates of 6-26%. They share borders in East and southern Africa to form a continuous land mass. The eight nations with the next highest HIV prevalence rates, 3-5%, are all in West or West Central Africa: Cameroon, Gabon, Equatorial Guinea, Central Africa Republic, Nigeria, Republic of the Congo, Cote d’Ivoire, and Chad. Apart from Cote d’Ivoire, these nations form a contiguous land mass.

There is a correlation between HIV/AIDS prevalence and geographic position. There is another correlation between HIV/AIDS prevalence and measures of inequality. Four measures of inequality are examined here.

- a) Absolute poverty, measured here by Gross Domestic Product (GDP) per capita,
- b) High levels of inequality in the domestic distribution of family income, as estimated by the GINI Coefficient, a mathematical indicator of that inequality,
- c) High to moderate levels of gender inequality, as estimated by the Gender Inequality Index, an indicator of reproductive health, empowerment and participation in the labour market, and
- d) Combinations of different kinds of inequality

Table 3.2 Twelve Nations with the Highest Adult HIV/AIDS Prevalence Compared by GDP per Capita, Domestic Inequality and Gender Inequality

Nation	Adult HIV Prevalence	GDP per Capita in USD	Domestic Inequality of Family Income Ranking, 136 Nations Greatest Equality=136	Gender Inequality Ranking, 146 Nations Greatest Equality = 1
Kenya	6%	1,800	50	130
Tanzania	6%	1,500	76	119
Uganda	7%	1,300	47	116
Malawi	11%	900	68	120
Mozambique	12%	1,100	38	125
Namibia	13%	7,500	1	84
Zimbabwe	14%	500	24	118
Zambia	14%	1,600	20	131
South Africa	18%	11,100	2	94
Lesotho	24%	2,000	3	108
Botswana	25%	16,200	4	102
Swaziland	26%	5,400	21	110

(CIA World Factbook, 2012c; CIA World Factbook, 2012a; CIA World Factbook, 2012b; UNDP Human Development Reports, 2011)

Low GDP, a measure of international inequality, correlates with high rates of HIV/AIDS prevalence. Like eight of the twelve nations with the highest prevalence, Tanzania's per capita GDP is \$2000 or less.

Unequal domestic distribution of family income correlates with high rates of HIV/AIDS prevalence. There was a strong correlation between the seven nations with the highest adult HIV prevalence and the 25% of nations with the most unequal domestic distribution of family income. Those seven countries, Namibia, Zimbabwe, Zambia, South Africa, Lesotho and Botswana, occupy a continuous land mass in southern and south-central Africa. There was a weaker relationship between HIV prevalence and domestic family inequality among the five countries with adult HIV prevalence rates of 6-12 per cent. They are Kenya, Tanzania, Uganda, Malawi, and Mozambique. Those countries occupy a continuous land mass from East Africa to the eastern side of southern Africa. Tanzania has the highest rate of domestic equality between families of all the twelve nations with the highest HIV prevalence (UNDP Human Development Reports, 2011)

Gender inequality correlates with high rates of HIV/AIDS prevalence. Eight of the twelve nations with the highest prevalence of adult HIV, Tanzania among them, are among the 25% of nations with the greatest gender inequality, indicated in the table by a national ranking of greater than 109.5 in the 'Gender Inequality' column. Tanzania has a relatively high rate of gender inequality.

Other structural drivers of HIV/AIDS in sub-Saharan Africa and elsewhere often include inadequate health, education and social welfare systems. Particular structural drivers to HIV are health systems that do not systematically address co-factors known to lessen immunity to HIV/AIDS, such as malnutrition, parasites and iatrogenic infections (Stillwaggon, 2009). Probably, these drivers correlate to higher than average levels of international, domestic and gender inequality.

3.2.2 Positivist Approaches to Risk Management

Positivism, an epistemological approach to describe and verify 'facts' about perceptions of reality through experience, uses the scientific method for 'the establishment of the laws and causal relations of social phenomena' whilst rejecting motives and intentions in favour of structures as causal agents (Abercrombie et al.,

1984:322). Carter et al. (2008:98) wrote that the prevailing assumption of positivism for the social sciences was that the laws of the social world could be considered in similar ways to the law of gravity. Positivist approaches of risk management assume an external, objective standpoint and ‘the rationalist belief that the human mind can discover the innate laws that govern the workings of the universe’ (Darwin et al., 2002:118, 127). Positivist calculations of risk, therefore, often include variables such as the probability of the risk and the likely costs and benefits of taking or not taking the risk (Darwin et al., 2002:20; Douglas, 1985:51). Positivist calculations assume a connection between knowledge and action, for example, that the more a person knows about a risk, the better the person is likely to assess and manage the risk (Douglas, 1985:21).

Such approaches to the management of risk are found in the cognitive sciences, and are drawn from findings in psychology and other behavioural sciences (Douglas, 1985:27-28). The Health Belief Model, for example, assumes that individuals will take action to manage risks if they regard them as likely to occur, likely to be detrimental, and if a course of action is at hand to address the risks for which benefits outweigh costs of implementation (Kazdin, 2000:79).

Knowledge-based models of health rest on the assumption that if people have correct information, they will make healthy choices. Knowledge does not necessarily equate or lead to power and action, however, if men and women do not have the inclination or ability to implement choices construed as healthy in this model. ‘This [biomedical] model does not take the social circumstances in which the woman lives sufficiently into account...priority is not given to the social circumstances of the learners’ (Walker et al., 2004:91).

As individuals, it is not difficult to recall exceptions to the connection between knowledge and apparently rational actions in our own lives or in the lives of others. Humans do not necessarily manage risk in (apparently) rational ways, even when we have the power, and on some level, the will to do so.

In both the social and biomedical spheres, there are so many unknowns that it can be difficult to know what ‘rational behaviour’ might be. Bujra (2000:66), for example, found that Tanzanians seldom knew the HIV status of potential partners. Tanzanians

who do not have the power to ask a partner to use condoms or to get an HIV test do not have any way to behave ‘rationally’, whether or not they would like to.

It is not easy for many Tanzanians to estimate risk even in the context of non-sexual transmission. If medical workers disregard best practice by reusing or reselling needles, there may be little to stop them unless they get caught, unless technology makes such actions impossible. There is consequently no way for Tanzanians to estimate the risks of contracting blood-borne infections of HIV when obtaining medical treatment (Gisselquist et al., 2003; Boily et al., 2003). Even where information is available in theory, there is often no way to interpret whether the information is accurate or to determine appropriate actions in practice (Darwin et al., 2002:14). In any case, knowledge and understanding do not necessarily result in behaviours likely to prevent HIV transmission (Bennell et al., 2002:ix). Therefore objectivity and rationality can be difficult to achieve, because humans live in complex social contexts where so much is unknown to so many.

There is another difficulty with positivist calculations of risk aversion. Many individuals are not risk-averse in the first place. Douglas, commenting on field work among homosexuals and intravenous drug users, warns against the economist’s usual assumption that individuals are risk averse:

The thesis here to be proposed is that the self is risk-taking or risk-averse according to a predictable pattern of dealings between the person and others in the community. Both emerge, the community and the person’s self, as ready for particular risks or averse to them, in the course of their interactions. The person who never thought of himself as a risk-taker, in the unfolding of the drama of his personal life, and under the threat of the community’s censure, finds himself declaring a commitment to high risk (Douglas, 1992:102).

Whether a person takes risks depends on many factors other than rationality, such as whether an individual behaves autonomously or is influenced by structure, if the person is a member of a central or marginal community (Douglas, 1966:106) or another group that lives by different values (Arnoldi, 2009:46). Other factors might be the thrill of adventure, the rush of adrenaline (Ferrell, 2005:84), the desire for catharsis (Miller, 2005:156), to subvert social controls (Ferrell, 2005:84) and to exert greater control over their own lives (Miller, 2005:156). People take risks to explore their humanity, to connect with others, and to search for the divine. Risk-taking is natural and necessary for growth and maturation of both individuals and civilizations.

‘The one thing which we seek with insatiable desire is to forget ourselves, to be surprised out of our propriety... to do something without knowing how or why; in short, to draw a new circle’ (Emerson, 1936:218).

Without risk, people are unlikely to encounter new situations that challenge and help them to become fully human. Risk avoidance is not universally pursued, and is not, indeed, universally desirable.

Douglas noted that many people put no faith in science and are therefore impervious to any information that science may provide to help them to reduce risk: ‘If scientific information does not diffuse smoothly and quickly, it is because of its value in the cultural struggle’ (Douglas, 1992:110).

Personal beliefs influence what people believe about scientific principles. Some people believe that they are extremely vulnerable to HIV/AIDS and others do not (Douglas, 1992:110-111). In this context, the kinds of risks that some people are willing to run can create a challenge, not least in the form of a counter-discourse, for the accepted wisdom of HIV/AIDS prevention that comes from the global or biomedical recommendations. Strategies that emerge from this risk-taking, risk-accepting or risk-embracing members of the population may or may not be effective in preventing HIV/AIDS, but certainly the methods employed are likely to differ in small ways or large from the methods of HIV/AIDS prevention recommended by the biomedical community.

Positivist approaches to risk management are unlikely to reflect situations in which humans must manage risks without knowing the intentions or actions of others. Crow (1989:4) noted that ‘Some of the most sophisticated strategies are those developed in response to the strategies of others’. Goffman (1970) wrote that in strategic interactions, one of the sophisticated strategies that humans use is to manage risks with feints, behaviours at variance with subjects’ perceptions of the truth. Feints normally have various objectives. Feints may support individuals to misdirect others to think that a person’s intention is to achieve one objective when the real intention may be to achieve some other objective. In the case of HIV/AIDS prevention strategy, the central objective may be something other than the management of HIV/AIDS risk. That may make the feint at odds with the objective of managing HIV/AIDS risk so that the implementation of the feint will not reduce HIV/AIDS risk but may even increase it. For example, a woman may feign sexual ignorance to maintain or secure her reputation

as a virtuous woman (Bujra, 2000:67). This feint may require her to run HIV/AIDS risks of which she may or may not be aware. If a woman feigns virginity to secure her sexual reputation, her partner, too, runs the risk of ignorance of her sexual history. Of course, as Goffman (1970) suggests, in strategic interactions, parties to transactions often act in the knowledge that the other party or parties may be feinting. Feints are a further hindrance to an objective approach to HIV/AIDS prevention, so the positivist approach to HIV/AIDS prevention is inadequate in situations where one or more partners in a sexual relationship do not have the power, for example, to demand and obtain accurate and up-to-date information. As noted earlier, the formation of relationships is often culturally structured such that an appearance of trusting the partner, e.g., not enquiring much into their sexual history or HIV status, is the norm.

3.2.3 Ecological Approaches to Risk Management

Ecological approaches to risk management are based on individual, group or species responses to environmental constraints and opportunities. To understand the ecological perspective, it is useful to observe how non-human organisms cope with environmental variables (Douglas, 1985:24-28). Access to water, food and shelter influences the ability of organisms to survive and reproduce, as do the probabilities of injury, meeting predators or encountering diseases. Like other organisms, human responses to environmental constraints and opportunities may be based on competition, such as 'survival of the fittest', or on inter-connectedness, integration and co-operation (Darwin et al., 2002:254-265). In both human and non-human populations, how organisms effect and are affected by other organisms and others of their own species in their ecosystems is complex, so in attempts 'to simplify particular elements of the ecosystem into simple cause-and-effect relationships, we too often drew misleading and inaccurate generalizations' (Spurr and Barnes, 1980:366).

While useful, ecological conceptions are inadequate tools to model human risk management strategies and interventions, especially if the models omit social, economic and cultural factors (Torry, 1979). However, ecological conceptions can and do contribute to our understanding of human behaviours. For example, research on many species, including humans, indicates that risk taking behaviour increases when resources are insufficient, because of the likelihood that some risk-takers, such as those who are doing something different from others, will be more likely to survive to

reproduce. Risk-taking behaviour often supports populations, though it is not always a successful strategy for the individuals concerned. Instinct may trump 'rational' behaviour to increase the chances of an individual taking risks. Researchers found, 'Faced with life-threatening circumstances, even the most disciplined individual may not be able to engage in individually rational behaviour thanks to adaptive "hard-wired" neural mechanisms that conferred survival benefits to the species (and not necessarily to any given individual)' (Gapper, 2012; Brennan and Lo, 2009).

Risk-taking behaviours such as having unprotected sex with multiple partners confer the likelihood of increased reproductive success of a population. Unfortunately, at both the individual and population levels, such risk-taking behaviours are likely to result in an increase of HIV/AIDS and the accompanying challenges to the social and economic resilience of a population. Not only will the children suffer, but also society as a whole will miss the contributions of children and adults who are ill or who have died, in terms, for example, of their contribution in labour or income, of their characters or of their knowledge.

Health interventions often overlook ecological imperatives such as survival in terms of birth and death rates. A Tanzanian health message for youth suggests, 'If you delay having sex or use a condom every time, you will realize your dreams' (Centre for Communications Programs, 2005). If the youthful sexually active population were to comply with this suggestion, the rate of HIV/AIDS for most people in this age group would drop but so would the birth rate, with significant ecological and social consequences.

The ecological approach to risk management may not adequately reflect individual responses to rapidly changing environmental conditions over time, because it tends to focus on the survival of species or communities of organisms. In populations, organisms have short-term and long-term strategies for individuals and reproductive strategies to ensure the population of a community or species. People whose access to resources is dependent on high-risk behaviour in the short term are less likely to pursue long-term survival strategies (Douglas, 1985:26). Some women cope with poverty in the short term by earning their livelihood through transactional sex (Dunkle et al., 2004). These short-term survival strategies probably make those women more vulnerable to HIV in the long term. Evans (2003) recorded the survival strategies of Tanzanian orphans and children from poor families over time. Children who lost one

or more parents often moved to foster families or relatives. If their situation deteriorated further, some of the children wound up on the streets for some or all of the day or night or both (Evans, 2003). The children learned different survival strategies from the ones that they had learned when their families were intact. Their strategies tended to change from longer to shorter term, in order to manage new risks as their situations deteriorated. The shorter term survival strategies that the children pursued often correlated with behaviours likely to lead to a greater risk of infection.

3.2.4 Social and Cultural Approaches to Risk Management

‘Not enough is understood about the cultural aspects of sexuality in which HIV transmission takes place’ (Parker et al., 2003:418). Understanding the social and cultural contexts of transmission is important, not least because primary prevention interventions, if effective, have the potential to make the money for secondary prevention interventions and other improvements in health systems go further.

Individuals manage risk in cultural contexts. Douglas noted that the ‘neglect of culture as an influence on the acceptability of risk was both systematic and entrenched...No guidelines are yet established about how to take the values generated in the social environment systematically into account’ (Douglas, 1985:1, 35). HIV/AIDS prevention strategies are informed, among other things, by cultural understandings of sexuality, kinship and gender roles. Research on cultural understandings of sexuality inform research on personal strategy, because

...human sexuality is directed, sometimes rigidly structured, in every particular culture. Every culture has a distinctive sexual configuration with its own specialized patterns of sexual conduct and its own ‘anthropological’ assumptions in the sexual area (Berger and Luckmann, 1966:67).

Social, cultural and historical factors have influenced the extent and nature of gender inequality. In sub-Saharan Africa, indigenous culture, the slave trade, colonialism, religion, migration, urbanisation and modernisation have all influenced gender inequality. For example, colonial administrations reinforced structures of women’s subordination when it was in their interests to do so, co-opting African males into cash-crop agricultural production and forms of migrant labour, by enabling them to earn small amounts of cash, while African females tended to be left with the task of subsistence agricultural production (Bryceson, 2002; Bryceson, 1995:52-56).

Men and women are more likely to survive HIV/AIDS if they have greater equality in relationships, such that both men and women have the power to manage HIV/AIDS risks (Walker et al., 2004:24, 40). Gender inequality reduces women's effectiveness to respond effectively to HIV/AIDS. Risk does not distribute itself equally among individuals in populations. Douglas noted that 'the poor risk more' and that 'the present distribution of risks reflects only the present distribution of power and status' (Douglas, 1985:6,10). In Tanzania, sexual risks, though in theory available to rich and poor alike, tend to be socially constructed such that unprotected sex with multiple partners is more 'available' to richer males and poorer females, and by extension, with the other sexual partners of both. Society expects males to provide some form of financial support for sexual partners because females are less likely to have substantial financial resources of their own (Kuate-Defo, 2004; Luke, 2005; Silberschmidt and Rasch, 2001). In this social environment of risk, wealthier men have more access to sexual partners. Poorer women have less access to resources obtainable by means other than transactional sex. Therefore, both of these groups and their partners are vulnerable to a relatively high risk of exposure to HIV.

An example of a culturally based understanding of risk that departs from the biomedical view comes from Uganda. In the biomedical worldview, male circumcision has been much lauded as a way of supporting HIV/AIDS prevention efforts, because 'A strong geographical correlation exists between male circumcision practices and lower HIV prevalence' (WHO, 2006:7). Much of the emphasis in circumcision programmes has been on scaling-up the technology rather than considering how different individuals understand risk. One Ugandan man reported others saying that they had heard that some men had their first sex after surgery with casual partners because they thought that if they had sex first with their wives, the sexual act would leave on curse on the wives (Matovu et al., 2007:69).

3.2.5 Summary of Risk

This section on risk has examined the structural drivers of risk, particularly poverty and inequalities. It discusses several theoretical approaches to risk management and emphasizes the need to pay attention to the contexts of risk management.

Some of the personal strategies in the literature accorded with methods of risk avoidance and reduction recommended in the biomedical model. There were many

examples in the literature of risk avoidance strategies. These included refraining from sex (such as Bhana and Epstein, 2007:120, 121; Wight et al., 2006; Balmer et al., 1995:87; Wazakili et al., 2006:82; and Wax, 2005) and being faithful to a single partner (such as Balmer et al., 1995:91; Bhana and Epstein, 2007:121; Painter et al., 2007:27-28; Epstein, 2005). There were examples of risk reduction strategies, including using condoms (such as Bhana and Epstein, 2007:120, 121; Varga, 1997:57; Sentumbwe, 2001:8; Barkham, 2005:18; Susser and Stein, 2000) and not drinking to excess (such as Norris et al., 2009). Some strategies involved non-biomedical elements and approaches. Often, participants pursued objectives other than HIV/AIDS prevention.

The literature reviewed in the following section provides examples of personal strategies and risk management.

3.3 Empirical Examples of Prevention Strategies and Risk Management

Some researchers, such as Balmer (1995:8), Sanderson et al. (1999) and Smith and Watkins (2005) have explicitly and systematically explored personal strategies to prevent HIV/AIDS. Other researchers have provided information about how people prevented or intended to prevent HIV/AIDS, without acknowledging or considering strategies. Some researchers have emphasised the problems surrounding HIV/AIDS prevention in detail, such as sugar daddies, the reluctance to use condoms and the effects of hegemonic masculinity, but they did not ask research participants about the strategies or the approaches that the research participants or other people that they knew might have to address those problems.

The examples of strategies and tactics below are thought-provoking. Some vary, at least at first sight, from tactics as a biomedical worldview might define them. Many successful strategies involve creativity and willingness to adapt to situations as they are in reality, rather than the adoption of prefabricated solutions.

3.3.1 Prevention Strategies of Children and Young People

Researchers in the field of childhood studies are acknowledging that like adults, children and young people construct their personal life by exercising their agency in the context of the structural circumstances that they encounter.

Social studies of childhood have made available numerous studies of children's agency in circumstances and surroundings far beyond the more narrow vicinities in which children have so far been seen as victims conceptually and empirically (Qvortrup et al., 2011:5).

Childhood and early adolescence often affords young males and females with greater opportunities and societal support to exercise their agency to prevent HIV/AIDS, than they might enjoy in later years. Many males and females below the age of 15 or so, particularly those at primary school, are expected to be abstinent, so are able to choose whether to have sex or not. For young males and females, the expectation that they need not have sex means, among other things, not having to perform masculine and feminine roles that involve HIV/AIDS risks. For females, not having sex means not running HIV/AIDS risks in relationships where their ability to address the risks is curtailed, due to the greater power of males in sexual relationships.

While it is unusual to find accounts of the HIV/AIDS prevention strategies of children below the age of adolescence, Bhana and Epstein studied the personal prevention strategies of South African children, aged around 7-8, exploring conceptions of gender, sexuality and knowledge of HIV/AIDS (Bhana and Epstein, 2007; Bhana, 2009; Bhana, 2010). White South African children spoke of 'catching' HIV/AIDS from flies or food fallen on the floor (Bhana, 2010:1085-1086). They espoused healthy living (Bhana and Epstein, 2007:118) and the avoidance of blood contamination (Bhana, 2010:1087). Some resolved to shun people with HIV/AIDS, while acknowledging that this might make those shunned feel lonely (Bhana and Epstein, 2007:119). Many white children found it difficult to articulate HIV/AIDS strategies, even if they were knowledgeable, because they felt that adults disapproved of their having sexual knowledge at their age (Bhana, 2010:1087-1089).

The black South African children spoke more frankly about sex. They discussed the following strategies for when they were older: refraining from sex, avoiding rape, using condoms, minimising numbers of sexual partners and going for HIV testing (Bhana and Epstein, 2007:121; Bhana, 2009). Knowledgeable about biomedical

conceptions of HIV/AIDS prevention, most had not had sex yet, so peer pressure and the desire to have sex did not feature in their strategies. The strategies they communicated were similar to biomedical recommendations.

When young people begin to have personal experience with sex, they often discover dilemmas in trying to carry out their biomedical understandings of prevention. For example, one ten year old complained that he couldn't find a condom that was small enough (Van Reeuwijk, 2010:10).

Many young people lack accurate information about HIV/AIDS prevention and matters related to sexuality. A 12-year-old boy in Harare, Zimbabwe said,

I think we should be told a lot, because we need to know. We need to use condoms when we are older. We need to know to stick to one partner and not go sleeping around with everyone. We need to know how HIV is spread, what the risks are and also how likely we are to get it (Jackson, 2002:130).

As they grew older, sometimes peers or others encouraged young people to have sex to demonstrate norms of masculinity or femininity, experience sexual pleasure or to demonstrate status. Some parents told young people to refrain from sex but not all parents did so. Sometimes the real message was less straightforward. Some parents or other caregivers encouraged girls to have transactional sex or turned a blind eye, so long as the girl was discreet and did not become pregnant, if it meant that she might earn enough through transactional sex or more rarely, commercial sex work, to supply some of her own needs or those of her family. Some family situations leave young people with little choice. One said,

I first had sex when I was ten years old...Because I was hungry, I used not to get food from my aunt, so I accepted the 2500 shillings and slept with him (Van Reeuwijk, 2010b:67).

Some girls, growing up in environments of sexual risk, faced loss of sexual reputation by circumstance and association.

There is one girl in this school, her parents own a local bar in...She has to work in that bar. Then drunken men ask her to dance with them and she has to say yes, otherwise they will go away and they will lose customers. I think she'll do almost anything with these guys for this reason (Van Reeuwijk, 2010b:130).

In many contexts of transactional sex, where the sex occurs in order to supply a need, Wallman (1996:229) noted that what looked like irresponsible sexual behaviour might

provide the funding to fulfil responsibilities such as paying for funeral expenses, school fees, medical bills or sustenance costs.

Telling children not to have sex is an important default position in parent-child communication because of the social taboos against young people discussing sexual matters with their parents. Young people must make sexual decisions in the context of confusing messages and limited knowledge from other sources. A community worker in Botswana identified the problem: 'Parents cannot talk about sex so children don't know the disadvantages unless by experience... youth only learn from bad outcomes' (Ball, 1996:70). Obviously, however, HIV/AIDS is not a good subject to learn by trial and error.

The most common HIV/AIDS prevention strategy of Tanzanian children aged 10-14 and under was not to have sex. Young people who forego heterosexual sex must often forego affectionate relationships with the opposite sex, because of the expectation that such relationships entail sex. Many young people refrained from sex if they had academic goals. Peers often accepted both the refraining from sex and the academic rationale.

The female participant below was probably hoping to get good enough marks on the national examinations to get a place at a government school, where the Tanzanian government pays many of the costs.

I know I'm from a poor family. So it will be very important to finish school first. If I would have a boyfriend now, my mind would go out to him and I would be thinking about him too much. Then I could not concentrate on my studies or what the teacher is saying. But it is important that I pass examinations with good marks, so that I can go to secondary school. Only if I finish secondary school I could get a job and help my family (Van Reeuwijk, 2010b:96).

Adolescent females and males may 'join with the group that does not get involved' (Van Reeuwijk, 2010a:92).

Some young people considered that school was not only 'the key to a better future' but potentially, a means to postpone pregnancy and marriage (Van Reeuwijk, 2003; Van Reeuwijk, 2010a:52). In Tanzania, some people considered girls to be marriageable when they finish Standard 7 (Van Reeuwijk, 2010a:54).

Some young males faced inconvenience and pressure if they wished to refrain from sex but they were able to see the benefits of refraining.

It has happened that I went to the beach with my friends and they all had girlfriends with them, except for me. So I would sit aside...I realize that desire goes away, if you do not concentrate on it. My friends cannot control themselves. Once you have tasted the honey, you want to taste again. So it is better to not yet get involved but to postpone (Van Reeuwijk, 2010a:94).

Some males adopted a ruse of pretending in order to get their friends to stop bothering them.

Yes, they are trying to convince me. They told me "Find a girl!" I cannot tell them I do not want to so I say, 'Okay, I'll try to find.' But then I delay, I do not want to find right now (Van Reeuwijk, 2010a:96).

School was not always a safe haven. Often, children sexually harassed by teachers had inadequate means of relief or redress. There was a 'guardian' in a school where van Reeuwijk was doing her research, who was supposed to embody a means of protection or at least reporting in cases of sexual harassment but 'none of the children or (female) teachers want to expose themselves in case of repercussions or negative consequences' (Van Reeuwijk, 2010a:42-43).

Many males find no employment when they leave school. That makes it difficult for them to earn enough money to pay a bride price until they are much older (Van Reeuwijk, 2010a:54-55). A few young people wanted to wait until marriage to have sex (Van Reeuwijk, 2010a:138). While many of the young people wanted to refrain from sex for the moment, fewer young males or females had more than a moderate commitment to keep their virginity until marriage. One male informant said, 'The way it's going I might manage but I could be carried away' (Van Reeuwijk, 2010a:137).

Children or young adolescents may make their sexual debut and decide to refrain from sex thereafter. They may feel they wish to wait until they feel ready for sex, at least until they find someone that they want to have sex with.

This girl found a boy of the same age for me. I had sex with the boy. That is how it started. I did not really like the boy. I just did it to impress the girl but I wasn't ready for it yet (Van Reeuwijk, 2010a:88-89).

In a four-district study, about 9% of Tanzanian 10-14 year olds self-reported to have had sex compared to 37.5% of 15-19 year olds. While a smaller proportion of the 10-14 year olds self-reported having had sex, and were as likely to have had multiple partners, a higher proportion of young people in the younger age group reported engaging in higher-risk sex than those aged 15-19. 'Condom use at the last sexual

intercourse was nearly 4 times higher among 15 - 19 year-olds compared to the 10 - 14 year-olds' (Exavery et al., 2011).

Some young people who are already infected have strategies for staying well and preventing onward transmission of HIV. A 12-year old boy from Lesotho was discovered near death with a very low CD4 count of 2. Responding rapidly to treatment, he delighted in the return of his health and took responsibility for the management of his treatment (Nolen, 2007:198-207).

For young people whose parents have died, survival and the proper conduct of everyday life become critical. Orphans may have HIV/AIDS prevention strategies. Nolen (2007:34-43) related the story of a girl, Tigist, and her younger brother Yohannes in Ethiopia. They did not remember their father, who died when Tigist was young. Tigist learned to manage the household under her ill mother's direction, while caring for her. When the mother died, the children were alone but the local burial society and the NGO CARE helped them. Both children worked at times. Tigist plaited hair and Yohannes shined shoes, sometimes losing his earnings and equipment when older boys stole them. When Tigist grew older, she became afraid that she would have to have sex in order to stay on at their rented accommodation. She confided to the women at the burial society, who set out to find the children a new place to live. Both the children continued in school and continued to look after each other.

Many young people's life strategies concern plans and aspirations for marriage. Since young males are unlikely to marry until they are wealthy enough to begin paying the bride price, those who have sex in the meantime have to have it in the context of temporary relationships. Some relationships only last until the male reaches his 'target' of having sex with the girl. Some relationships endure, sometimes with the prospect of eventual marriage or cohabitation and childbearing in mind (Van Reeuwijk, 2010a:148).

Both males and females placed a high importance on faithfulness, but many young people doubted that faithfulness was easy to come by. As such, it was highly prized. Many young males felt that faithfulness was, for many females, largely a question of finance. With some exceptions, males considered that money might encourage a girlfriend to be faithful.

‘If you get married to a woman when you’re kind of low, then she will kind of stick with you. But if you are rich and you marry someone and she gets used to a high-class life style, once you get broke, she will clearly leave you. You will have to keep on making money; otherwise she’ll leave you’ (Van Reeuwijk, 2010a:134-135).

In a Malawian study of 15-24 year olds in rural areas, the picture concerning aspiration and sexual behaviour in pre-marital relationships was complex. Like other relationships, partnerships that eventually led to marriage began with the male’s proposal to have a sexual relationship in extended courtships. Both males and females who expected to marry soon were much more likely to be sexually active than those who expected to marry after five or more years. Some females refused sex with their fiancés, wanting to wait until marriage. Sometimes the male partners would have another sexual partner at the same time to redress what they felt was a deficit. So while both males and females expected greater faithfulness from their fiancés or fiancées, not all were faithful. In addition, they were less likely to use condoms with their fiancées than other partners. Many young people were keen to use HIV testing services before marriage but at that time, the services were not always readily available (Clark et al., 2009).

For some adolescent females, a crucial aspect of HIV/AIDS prevention strategy is control over the timing of marriage. A young Malawian woman married to a 24 year old when she was 13, but who left the marriage when she was 14, said,

Some of my friends were married but they were a little older than me. They encouraged me to get married. They used to tell me marriage was nice. When I got married, I discovered there was lots more housework I was expected to do...I missed lots of things – one thing I missed was that I could not play with my friends...I would tell my school friends who are maybe 12 or 13 not to go into early marriage. They should continue with their education because education is very important to a child’s life (Kay, 2010).

Many marriages of adolescent females are likely to be forced. Some parents force young women to leave school to be married or to take part in initiation rituals (Immigration and Refugee Board of Canada, 2003). Married adolescents often have less contact with peers, lower social mobility, less education and access to media and health messages. As such, they are less likely to be able to negotiate safe sex with older partners (IRIN/PlusNews, 2010).

3.3.2 Prevention Strategies of Women

Females who had passed or were approaching the sexual debut had to consider biomedical recommendations for prevention not just in theory, but also in the context of the social and cultural environments in which they found themselves.

Some young females wished to refrain from sex because of educational and professional aspirations (Wax, 2005). Other strategies were motivated by fear, especially of falling pregnant (Wazakili et al., 2006:82) or being raped (Jewkes et al., 2005:1813).

Young women often had to develop their HIV/AIDS prevention strategies, if any, in the cultural context of transactional sex. Women often found it difficult to develop effective strategies because of the imbalances of power between men and women.

Silberschmidt and Rasch, (2001), in their study of adolescent females in Dar es Salaam who had undergone at least one abortion procedure, were hardly able to identify any HIV/AIDS prevention strategies, regardless of the kinds of relationships in which the females were involved. Nearly three-quarters of the adolescent females' male partners were at least eleven years older than the females. All or nearly all of the relationships had taken place in the context of transactional sex. Men had provided all the girls with small 'luxuries' such as underwear, soap, pocket money and textbooks in exchange for sex. At least one female had gained a more substantial asset such as lodging (Silberschmidt and Rasch, 2001:1820, 1823). They referred to their partners differently depending on whether the relationship was purely transactional: *rafiki*, a boyfriend; *mpenzi*, a lover; *mshikaji wa muda*, a partner of the moment; or *buzi*, an amplification of *mbuzi*, a goat, though not *beberu*, a he-goat; so possibly, just as Silberschmidt and Rasch suggested, a goat for milking (Silberschmidt and Rasch, 2001:1820; Johnson, 1981). "No money, no sex" was a recurrent remark' (2001:1822). When the flow of gifts or other benefits slowed to a trickle or came to the end, so, apparently, did the relationship. The females were not very worried about STDs, because they had all been treated for them at least once (2001:1818-1819). Some of their partners had told them they had nothing to fear in terms of HIV if they were faithful (2001:1818). Though many of the relationships were stable (2001:1819), many of the females were unfaithful. They did not feel that having sex with just one male provided adequate benefits. The females did not know whether the men had

wives or other partners but given that the men were usually older, many of them probably did. Some of the females took a fatalistic attitude to HIV/AIDS, referring to the contraction of HIV as *ajali kazini*, a workplace accident (2001:1820).

Abstinence before marriage and faithfulness after marriage is often promoted as an ideal. The ABC of HIV/AIDS prevention implicitly promotes a faithful marriage as the endpoint of a strategy. For many males and females, a faithful marriage can indeed be the happy conclusion of an HIV/AIDS strategy. For others, marriage is an additional risk factor. Women are vulnerable because they tend to lack power and control in relationships, including marriage. Many women see marriage not as an event to suggest an adaptation of HIV/AIDS prevention strategies but just as the end of the strategies. A Kenyan woman said, 'Even when my husband comes in late after having had sex with another woman somewhere he can still want it with me. I have to give in, even with the knowledge of AIDS, and I just pray to God that I don't get infected' (Balmer et al., 1995:91).

Some women were able to address their own lack of power by appealing to their partner's interests. One Zimbabwean woman, trained in condom negotiation techniques, said to her partner, '...they found I had dirt in my uterus, so how about if we use condoms to prevent disease?' Others encouraged partners to be faithful or use condoms by appealing to their partners' love for their children. 'It is better to use condoms, so that I can stay and look after the children when you are dead. We can't both die' (Smith, 2000). The study recorded a great increase in condom use, from 2-68%, but the study was of short duration, so it was unclear whether the females were able to negotiate condom use in the long term.

In rural Malawi, 'Women reported worrying most about their husbands as a possible source of infection' (Smith and Watkins, 2005:649). Here, too, women attempted to persuade their husbands to be faithful by discussing the implications for the children if the parents should die. In a few cases, the women tracked down and attacked extramarital partners. With such limited measures available to them, it was evident that many women felt relatively powerless to avoid infection within their marital relationships, to the extent that some considered divorce as '...the only certain way to avoid infection from an unfaithful spouse' (Smith and Watkins, 2005:655).

A Tanzanian woman said that she preferred to remain divorced after twice marrying:

‘What would I be looking for in re-marrying if it’s not to chase risk? So I decided to leave it’ (Desmond, 2009:257).

That woman was financially independent, however. Most women are not. Many women who left unfaithful partners did not have the wherewithal to support themselves and their children. Some Zimbabwean women who had unfaithful marriages were later compelled to incur risks from new husbands and other sexual partners, in a multiple partner scenario that one reporter called ‘The 3rd, 4th Wife Syndrome’ (Mwauryakufa, 2012).

3.3.3 Prevention Strategies of Men

Some male strategies were similar to biomedical recommendations. Other strategies were more complex, with ideals of masculine identity contributing to the complexity. Peers and others encouraged males to have multiple sexual partners (Bledsoe and Cohen, 1993; Varga, 1997:177). While a reputation of having multiple sexual partners demeans women, it often elevates men in power and status (Bledsoe and Cohen, 1993:67,71,84). Varga found that ‘Men who engage in risky sexual behaviour do so less from conscious choice than because that is how men are expected to behave’ (2001:177).

Some Zambian men felt anxious about expectations that they enact hegemonic or violent forms of masculinity learned as boys, that included sexual behaviour that puts them and their partners at risk of contracting HIV (Simpson, 2005:586). In some cases, males incorporate violence in sex in a dynamic where the norm of female respectability entails not wanting sex (Jackson, 2002:136). Feelings of discomfort in performing domineering or violent masculinity can sometimes be the harbingers of personal change and development. For example, Walker (2005:172) found that young men, living through political transition in South Africa, sought ‘emotional order’ to counter their often disordered and violent personal histories. The men were often motivated to develop ‘different, non-violent versions of masculinity’. One man discussed how he had changed:

Even today I look at myself and say, hey, I’m so proud of myself with the fact that even if I go out with a girlfriend and with the intention that maybe we might go out and then come back and spend a night together, and suddenly she says no, I’m not in the mood to have sex with you’, I would immediately accept that...After so many workshops I have been through I sometimes feel so guilty, how many girlfriends have I actually

manipulated by persuading them to sleep with me. I realize somehow that I'm also part and parcel of those who are going to be part of the rape of women (Walker, 2005:171).

However, new, less macho norms of masculinity were not necessarily appreciated by male peers or potential sexual partners (Walker, 2005:176).

Some men continue to have multiple partners, yet may have personal strategies of HIV/AIDS prevention, such as using condoms with casual partners. Some men manage multiple partner strategies differently over time: beginning with a higher number of partners when young and reducing the number later in life (Wight et al., 2006:994).

Some (multiple) partner selection strategies may have reflected personal sexual preferences. One Malawian man said that he would have sex only with plump, healthy-looking married women rather than skinny, single women or schoolgirls (Smith and Watkins, 2005:655). His strategy, if implemented, would admittedly have reduced risk for the single women and schoolgirls in his vicinity but was risky for him, his married girlfriends and their husbands, because older married women were more likely to have been infected than schoolgirls, because more years had elapsed for them to become infected.

Other people selected partners on the basis of whether their partners were clean and healthy-looking and could be 'trusted' on that basis (Silberschmidt and Rasch, 2001:111; Varga, 1997:54, 57; Wazakili et al., 2006:85). Public health campaigns have emphasised that it is impossible to assess which people are infected with HIV by their appearances, but many people seem not to have incorporated the knowledge into their strategies.

Having younger girls as sexual partners was a part of men's HIV prevention strategies in the context of multiple partner sex. Some men considered this practice as part of their approach to HIV/AIDS risk, because of their perception that adolescent girls were probably too young to be infected (Silberschmidt and Rasch, 2001:1816). This was an example of the practice of judging potential sexual partners on the basis of their appearance. In this case, a healthy and youthful appearance was desired.

Other strategies, though creative, seemed counterproductive. Some raised more questions than they answered. A Kenyan husband said that he argued with his wife '...after moving with someone else, till I'm sure that I'm not infected' (Balmer et al.,

1995:90). The man did not say how he would know whether he was infected or how he planned to follow up this behaviour with either partner in future. It was unclear whether his explanation was really an HIV/AIDS prevention strategy or a face-saving device. It was unclear what his wife's reaction might be in terms of her future sexual behaviour.

Other strategies seemed more likely to prevent HIV/AIDS. One Tanzanian man's strategy involved providing his wife with a bicycle, enabling her to travel easily to her numerous social, economic and religious commitments. The man faced criticism from other men in the village, who said that he was making it easier for his wife to be unfaithful. The man replied that he trusted his wife and that if she had her own bicycle, she would not have to trade sex for lifts on bicycle taxis (Desmond, 2009:189-190). The couple's tactic went beyond biomedical messages, yet addressed HIV/AIDS prevention in the context of real-life social and economic concerns.

Some international agencies promote circumcision as an effective method to support HIV prevention although it is not intended to be a substitute for other measures of HIV/AIDS prevention. About 70% of adult males are circumcised in Tanzania either by traditional or biomedical practitioners (WHO, 2006:13). Informants said that circumcision was becoming increasingly popular because of enhanced penile hygiene, reduced STD incidence and improved STD cure rates (Nnko, Washija et al., 2001).

Some ethnic groups practice partner selection strategies that stigmatise sex with those of other races or ethnicities (Blystad, 2004:3; Coast, 2005; Bhana and Epstein, 2007:119). Sometimes elders recommend these isolationist strategies while recommending that members of the ethnic group return to traditional ways. Of course, many elders' memory goes back to the time before HIV/AIDS, so it is not surprising that some elders make associations between the old times, the old ways, and a lower prevalence of HIV/AIDS.

Do you know that we used to live respectfully and were rich, healthy and had many children and cattle? But now, respect is quickly coming to an end. Datoga youth are starting to ignore our tradition. They drink and have sex here and there and we are now becoming poor and unhealthy. Before people died of age and accidents; now even our young start to fall ill and die. It is because they are losing respect for our traditions (Blystad, 2004:48).

Though the males of ethnic groups such as the Masai may be sincere in wishing to uphold the ideals of sexual isolationism (May, 2003; Coast, 2005), they may have

difficulty doing so. If they work away from home for months or years on end and are unable to stay in touch with other females from their ethnic group, they are unlikely to experience the usual structures of social support and behaviour control. They may simply decide to have sex with people from outside their ethnic groups. Some may not know much about HIV/AIDS or how to prevent it.

I was in real shock when a friend told me about this disease HIV/AIDS because when I went with this woman to the guesthouse in the afternoon I did not know about this disease. I am now very scared because I think I am at risk of this disease (Coast, 2005).

Isolationist strategies, if observed by a sufficient proportion of people within an ethnic group, may have some value for prevention but since HIV prevalence statistics are not usually gathered by ethnicity, it is impossible to know.

Some research participants mentioned condoms as a strategy or part of a strategy. At the 15th International AIDS Conference in Bangkok, Uganda President Yoweri Museveni recommended the ABC with the condom as the appropriate action of last resort: 'Abstinence, be faithful to each other...but if you can't, use the condom' (Baker, Mark, 2004). In Swahili, the format is sometimes similar. '*Subiri, kuwa mwaninifu, na kama unashindwa, tumia kondomu*', meaning 'Wait, be faithful, and if you are defeated, use a condom' (Nduru, 2004). Unmarried Dar es Salaam females aged 15-19 who had had abortions, said that males and some females felt that condoms limited pleasure, delayed sex (which was often had in haste, to escape detection), were against God's will, were uncomfortable and gave skin reactions. Furthermore, some of the females' partners had told them that sperm entering their vaginas was good for them (Silberschmidt and Rasch, 2001:1818). Cost, in this case, was not as significant as a factor. Some of the men who had refused to use condoms with much younger female partners subsequently advised and even paid for abortions (Silberschmidt and Rasch, 2001:1820).

Some young males start to use condoms when they learn about sex.

I saw my brother using a condom because we are sharing a bedroom. He was having sex with his girlfriend...I felt stimulated and I felt like I wanted to do it too. So I asked my brother everything about it and I started learning everything about sex and condoms, because I wanted to do it, too (Van Reeuwijk, 2010a:67).

Sometimes men's prevention strategies include condoms, but men rarely use condoms in marital or other stable partnerships.

Men who do not wish to face the possibility they may have infected their wives, or may infect them in future, are less likely to be inclined to go for an HIV test. Without a test, they are unlikely to access treatment, safeguard their own health or protect others.

Some strategies involve blame. A male in a Tanzanian gold-mining town said that he used condoms frequently with other women but laughed at the suggestion that he might use them at home with his wife. He acknowledged the HIV risk that he was taking but said that his biggest risk came from his wife, because due to his work, he seldom slept at home.

You can't know it because, because we Africans, if someone is given some money she just takes it, she just takes it' [Laughter] (Desmond, 2009:253).

His untested assumption that his wife had sex outside the marriage offered him emotional and social protection if anything went amiss. If either he or his wife tested positive or acquired AIDS, it provided him with a script to play out in his own mind and if necessary, to play out in his marriage and community, that portrayed him as the victim of his wife's unfaithfulness. In its function, this man's statement was not only a prevention strategy, but also a strategy of what to say if either of them tested positive or became ill.

Other men felt that blaming others obviated the need for developed prevention strategies. A Tanzanian man with two wives had lost the child he had had with his second wife. The husband blamed the wife's previous sex life. Since he perceived HIV/AIDS to be an abstract risk associated with commercial sex, he did not think that he was at risk (Desmond, 2009:255). His strategy, such as it was, may have involved denial, not only of HIV/AIDS risk but the denial that grieving for a death often entails (Kübler-Ross, 1969).

3.3.4 Prevention Strategies Common to Men and Women

The average self-reported age of sexual debut in Tanzania has changed little in recent years: 18.5 years for men and 17.5 years for women (Zaba et al., 2004:74; TACAIDS, 2008). The average self-reported age of sexual debut, 15-16, was younger for both male and female Dar es Salaam students in secondary school and higher education (Maswanya et al., 1999:190). It was unclear whether this had more to do with the

urban residence, participation in secondary education, varying levels of veracity in self-reporting or other factors.

There is a consistent association between alcohol use and sexual risks for HIV infection (Kalichman et al., 2007:141). Research stressed the importance of avoiding a mix of sex and alcohol and noted that people who practiced one kind of risk behaviour were often more likely to practice others.

Alcohol drinking, associated with Risk-2 behaviour, [having multiple partners without using condoms], should also be considered in future AIDS educational programmes. Drinking alcohol, smoking cigarettes and attending discos were positively associated with sexual activities in northern Tanzania (Lugoe et al., 1995; cited in Maswanya et al., 2000:195)

Among Tanzanian plantation workers and unemployed people resident near the plantation, residents identified a problem with the management of desire, not least because of the limited earning, social, and recreational opportunities at the plantation. 'Lonely people desired sex and jobless people desired money' (Norris et al., 2009:1170). Some women had sex with the bosses to get jobs or easier jobs. To counter these factors, some of the plantation residents refrained from going to bars or drinking to excess, saying that alcohol undermined judgement and caused the loss of shame and respect.

Beer leads to temptation. Even [the bar], don't think of going in. It decreases honour and respect. [With drinking] there is no protection. If you have started to drink, there is no protection (Norris et al., 2009).

Alcohol-avoidance strategies are probably effective in reducing HIV/AIDS risk. Those who used alcohol were three times more likely to have an STI than abstainers. Alcohol users who had ever had transactional sex were even more likely to have an STI (Norris et al., 2009).

The biomedical discourse considers testing as an important weapon in the fight against HIV/AIDS. Testing, however, can only help prevent HIV if those tested, especially those who test HIV positive, take one or more of several actions, such as disclosing their status to partners, refraining from unprotected sex and using condoms with all, rather than a selection of, sexual partners, and complying with counselling and treatment recommendations.

Normally a person is only eligible for treatment if they meet treatment guidelines. These frequently change but at the moment, people can have enough HIV in their bodies to infect others for a long time before they are eligible to receive treatment.

There were significant cultural barriers blocking the disclosure of test results or the disclosure of suspected illness. Zambian men, suspecting they might be infected, wondered, 'How can I even begin to talk about this with my wife?' (Simpson, 2005:586). It can be more difficult for wives who admit to infection, because some men's strategies entail banishment if they are infected. A woman in a remote rural area of Tanzania, in discussing her experiences of disclosure, reported her husband as saying, 'If you are in that condition, then we will have to separate' (Roura et al., 2009). Banishing an infected wife is likely to harm her in economic and social terms but the practice is likely to harm husbands as well. Women who suspect their husbands will banish them upon learning of their HIV positive status may not bother to get a test or disclose the results to the person who might banish them. More than 90% of those who came for testing came because they had been ill for some time or because a partner was ill (Lugalla et al., 2008:xii) and many of them were probably seeking treatment.

There were relatively few instances of people coming for an HIV status check, whether as an individual or as a couple, before starting a relationship. Married women tended not to disclose their positive HIV status to their spouses, because they feared rejection, discrimination, violence and accusations of unfaithfulness (Lugalla et al., 2008:xiv-xv, 15). While most disclosed their positive status to someone, especially a female blood relative, they did not necessarily disclose to their spouses or other sexual partners.

Husbands were more likely to disclose to wives than the other way around because husbands held more social and economic power, were less vulnerable to rejection and discrimination within the family and were more likely to believe that their spouses or sexual partners would provide social support and maintain confidentiality (Lugalla et al., 2008:xiv-xv). Wives' hesitance to disclose was sometimes related to their belief that their husbands were unlikely to provide the needed social support (Lugalla et al., 2008:xiv). Single men tended to disclose to their parents and other relatives but not to their sexual partners (Lugalla et al., 2008:xiv), perhaps because they were out of touch with some or all of the sexual partners and because unrelated sexual partners lacked the formal social obligations to care for the men if they became ill.

Treatment can be an important part of an HIV/AIDS prevention strategy. It is important not only to treat HIV/AIDS but for other infections that make the body vulnerable. Health seeking behaviour for other diseases, such as sexually transmitted diseases, tuberculosis and malaria is important, too.

Many people try to hide that they are taking HIV/AIDS drugs, because it raises suspicions that they may be infected. Celebrities often get HIV tests publicly, to help popularise the practice. Botswana has made HIV testing a routine part of coming into contact with the national health care system. Nevertheless, there are still difficulties with stigma against people who are infected. People are reluctant to get treatment for fear that others will learn they are infected. In her bid to win Miss Stigma Free Botswana 2005, one contestant seized the moment:

Cindy walked slowly down the catwalk in a knee-length brown wool dress, carrying a clay water pot on her shoulder, swaying her hips. At the end of the runway, she sank gracefully to her knees, lowered the pot and reached inside. She lifted out a bottle of mineral water and a pill container. And there, in front of the crowd, Cynthia Leshomo took her ARVs (Nolen, 2007:136).

The man who has probably contributed more than any other African to the roll-out of ARV treatment in sub-Saharan Africa is South African Zachie Achmat. After people beat activist Gugu Dlamini to death after her public revelation that she was HIV positive, Achmat declared that he, too, was infected. With other activists, he founded the Treatment Action Campaign (TAC), exposing the profiteering in HIV/AIDS medication by transnational drug companies and the unwillingness of the South African government to provide HIV/AIDS drugs for infected people. At that time, only a minority of South Africans had enough money to pay for HIV/AIDS drugs. Achmat was one of them, but in 1999, he said, 'I will not take expensive treatment until all ordinary South Africans can get it on the public health system' (Nolen, 2007:183).

The campaign's first triumph was to ensure reasonable prices for drugs to prevent parent to child transmission. For the rest, the TAC faced considerable opposition, not least from South Africa's then-president Thabo Mbeki. Minister of Health Manto Tshabalala-Msimang cautioned against poisoning infants with drugs but repeatedly recommended those infected to strengthen their health by eating garlic, lemon, olive oil, beetroot and African potatoes. While it is good to eat a nutritious diet, food is not a good substitute for ARVs. In 2003, Achmat responded to the ANC's plea to take his

AIDS medicines. Four days later, the campaign triumphed and South Africa began to make ARV treatment available in public clinics. Achmat, though very ill then, regained enough strength after five days of treatment to scrub his kitchen floor (Nolen, 2007:182-194).

3.3.5 Non-Strategies

Some people interviewed in the literature had no apparent strategies or approaches to risk management, even when explicitly asked for them. Desmond (2009:259) interviewed a Tanzanian woman who did not note HIV/AIDS as a risk. She mentioned other health risks such as malaria as inevitable but not as phenomena she could take steps to avoid. Oster (2007) found people were less likely to take actions to prevent HIV/AIDS, such as reducing numbers of sexual partners, if their life expectancy was shortened by other conditions as well, such as high local rates of malaria or maternal mortality. The Tanzanian woman's attitude might have been simple fatalism, but Oster's finding suggests that attitudes might be influenced by many factors and that a change in those factors, such as overall improvements in health and reproductive health might lead to recalculations and renewed consideration of HIV/AIDS prevention strategies.

3.4 Conclusion

The literature on strategy and risk management presents a diversity of approaches and perspectives. From these, a conception of strategy can be set out that entails relationships between means and ends and structure and agency through the past, present and future. This understanding of strategy does not assume an idealised vision of the world requiring rationality and predictability. It acknowledges that the pursuit of other objectives may subvert or support the objective of HIV/AIDS prevention. Understandings and critiques of positivist, ecological and social approaches can enrich understandings of the management of risk.

Many research participants in previous studies have had HIV/AIDS prevention strategies, even though researchers have not always recognised them as such. Many based their strategies on biomedical recommendations, mediated by perceptions of environmental, social, cultural and economic risk with respect to HIV/AIDS and other

factors such as wealth and status. Young black South African children's prevention strategies were more likely to reflect a single-minded pursuit of HIV/AIDS prevention and trust in biomedical recommendations, perhaps because they had not yet reached an age where sexual behaviour in social life required a complex response. Many strategies, however, were more complex than a mere recital of tactics such as refraining from sex, being faithful or using condoms. The responses of adolescents and adults were more complex because those persons were more likely to have considered life objectives apart from HIV/AIDS prevention such as economic well-being and the maintenance of status and self-esteem. Some personal strategies encompassed political and humanitarian objectives, as well.

An examination of empirical examples of strategies in the literature provides a glimpse into the kinds of strategies people develop, and why they develop those strategies. The examination reinforces our understanding that the strategies people make provide information about their structural challenges as well as about their agency to address those challenges.

4 Methodology

4.1 *Introduction*

The aim of this study is to explore the HIV/AIDS prevention strategies of young adolescent Tanzanians and to shed light on whether the acknowledgement and exploration of personal prevention strategies might be of use in supporting young people to prevent HIV/AIDS.

The organization of this chapter relies heavily on the chronology of events as they unfolded, beginning with preliminary conversations with key adult informants before the year of the research, research locations selected and the processes of research permission. Following those topics is a discussion of the recruitment and preparation of research assistants, the recruitment of research participants, and the demographic characteristics of the participants.

There follows the study design and the conduct of the research, including a discussion of the research days and the choice of a multiple-method study, with the research instruments of focus groups, individual interviews, ranking exercises, questionnaires and write-and-draw exercises examined in detail, as are the pilot groups and the changes made thereafter.

After that is a discussion of the interviews and focus groups that the research assistants and I conducted with adults during the main research year.

Finally, there is a discussion of issues important to the entire research process: research with young people, my own relationship as a researcher to the research, working in Tanzania, ethical considerations, and feedback.

In this chapter, the pronouns ‘we’ and ‘us’ refer to the research assistants and I, except where the context indicates otherwise, such as in a quotation.

4.2 *Preliminary Conversations and Interviews with Key Adult Informants*

In preliminary conversations and interviews with key adult informants, I gathered information to help me to understand the relevant issues and to carry out the research in a well-organized and productive way.

I made a preparatory journey to Tanzania, Zambia and Botswana in 2005, supported with a CASS pump-priming award from my Department of Comparative and Applied Social Sciences at the University of Hull. In Tanzania, I met with persons from organizations including DFID, UNAIDS, United Nations Population Fund, USAID, GTZ, Student Partnerships Worldwide, University of Dar es Salaam, Muhimbili University College of Health Sciences, COSTECH, AMREF and TACAIDS. In addition, I met religious leaders and workers, and representatives of local NGOs. I interviewed adult Tanzanians who were not associated with any HIV/AIDS organisation. In each interview, I sought to learn something of what each respondent understood about HIV/AIDS and their ideas concerning appropriate approaches to prevention. In most cases, I asked respondents what they thought about the investigation of personal HIV/AIDS prevention strategies. My questions varied, depending on the specialisations and interests of interviewees. I usually took notes.

Most of the adult respondents discussed social, economic and cultural issues relevant to behaviour and youth strategies to prevent HIV/AIDS. Many discussed HIV/AIDS funding, policy and education. Those who worked for organisations shared their organisations' policies and approaches. Many respondents provided literature or directed me to other people, organisations or resources. Some gave valuable tips, advised on research methods and clarified the procedures for research clearance.

To preserve the anonymity of all the adult informants, and participants in informal conversations, focus groups and interviews, I have not listed their names. They may nevertheless be sure of their contribution to this work and of my gratitude.

4.3 *Research Access*

After applying to the Tanzania Commission for Science and Technology (COSTECH), I received the research permit in 2008 (Please see Appendix 2). My designated contact was Professor Melchizedek T. Leshabari, Behavioural Sciences Department, Muhimbili University of Health and Allied Sciences. Professor Leshabari provided kind and valuable guidance at the beginning of the research and thereafter. The research permit required me to submit progress reports quarterly and to submit any publications made after the research. Ministry of Education officials granted permission to conduct the research as well.

I obtained a Resident's Permit once in Tanzania. I received the immigration documents subject to notification of the relevant Regional Immigration Officers, Regional Commissioners, District Administrative Secretaries, Divisional Officers and Ward Executive Officers or Town Officers for each location of the research. After that, I was free to recruit the young people. I followed the recommended procedures and the gatekeepers granted access. Gatekeepers are 'professional stranger-handlers' (Agar, 1996) and in Tanzania there was a formidable array. The official procedures in Tanga Region were similar to those I followed in the other regions. The many people I met through the process of gaining access provided insights into HIV/AIDS, culture and other topics of interest. Much of what I learned was valuable to the logistics and conduct of the research.

The permission and access procedures protected me as well as the children by making rights and responsibilities clear.

4.4 *Research Locations*

My COSTECH research permit (Appendix 2) stipulated for the research to be in Manyara, Arusha, Mbeya, Tanga and Dar es Salaam Regions. I carried out research in all of these except Arusha.

At the time I applied to COSTECH, Tanga Region's estimated 6% HIV prevalence was similar to the national average (TACAIDS, 2004:12).

Manyara Region prevalence, like that of Kigoma Region, was at 2%: the lowest estimated prevalence of regions on the Tanzanian mainland. Of the two, Manyara probably had more in common with other inland regions, so I chose to work in Manyara.

At 14%, Mbeya Region had the highest estimated HIV prevalence at the time I was selecting research regions. One of the research locations was alongside an international road and rail corridor and the other was near the border with Malawi.

Dar es Salaam Region had 11% estimated HIV prevalence. It is important as Tanzania's most populous region.

The table below shows estimated regional HIV prevalence from the three most recent Household Indicator Studies in the four regions in the research. Prevalence has been

dropping over past eight years in each of the four study regions, including Manyara, where prevalence of slightly above 2% has fallen to slightly below 2%.

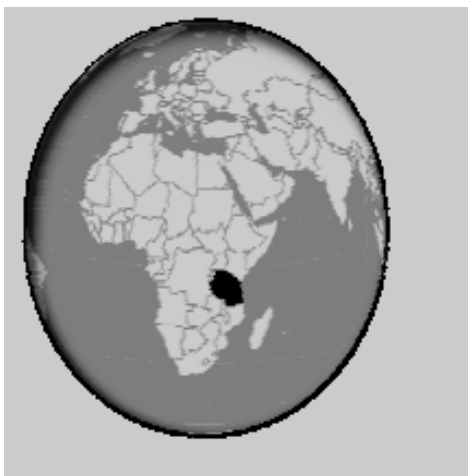
Table 4.1 Regional HIV Prevalence Estimates for the Four Study Regions in 2003/4, 2007/8 and 2011/12

Region	Prevalence 2003/4	Prevalence 2007/8	Prevalence 2011/12
Tanga	6%	5%	2%
Manyara	2%	2%	2%
Mbeya	14%	9%	9%
Dar es Salaam	11%	9%	7%

(TACAIDS, 2004; TACAIDS, 2008; TACAIDS, 2013)

The following map shows the seven zones and thirty regions of mainland Tanzania and the offshore islands, and the two main islands of semiautonomous Zanzibar: Unguja and Pemba. It shows Tanzania's global position and position relative to other countries, the Indian Ocean and the major lakes. The area of Tanzania is about 1 million sq km.

Map 4.1 Zones, Regions and Global Position of Tanzania



(TACAIDS, 2013:xviii)

The table following shows population and economic information for regions included in the study as well as for Tanzania as a whole. The table shows a large and quickly growing population, particularly in urban areas, and a very low provisional per capita GDP.

Table 4.2 Census and GDP Data for the Study Regions

Region	Region Population (million)	Annual Population Growth (percentage) 2002-2012	Density : People per sq km	Percent of National Population	Provisional Per Capita GDP in TSH
Tanga Region	2.1	2.2	77	4.7	886,343
Manyara Region	1.4	3.2	32	3.3	879,014
Mbeya	2.7	2.7	Region: 45 Mbeya Urban District: 1300 Kyela Urban District, 131	6.2	998,210
Dar es Salaam	4.4	5.6	3,133	10	1,961,074
Tanzania	45	2.7	51	100	869,436 (about 562 USD)

(Manyara Regional Commissioner, 2013; National Bureau of Statistics and Office of Chief Government Statistician, 2013:iii, 1-14; National Bureau of Statistics and Tanga Regional Commissioner's Office, 2008; IPPMedia.com, 2011; UN Data, 2013; National Bureau of Statistics and Ministry of Finance, 2012; Planning Commission and Regional Commissioner's Office, 1997).

Tanzanian real GDP has grown 6-7.4% each year from 2006 to 2011. Average annual inflation is high: 18% in 2011-12. Inflation has been particularly high in the food sector (Ndulu, 2012:vi-vii).

I recruited research participants from five districts within four regions. Census data for the study districts is in the table following.

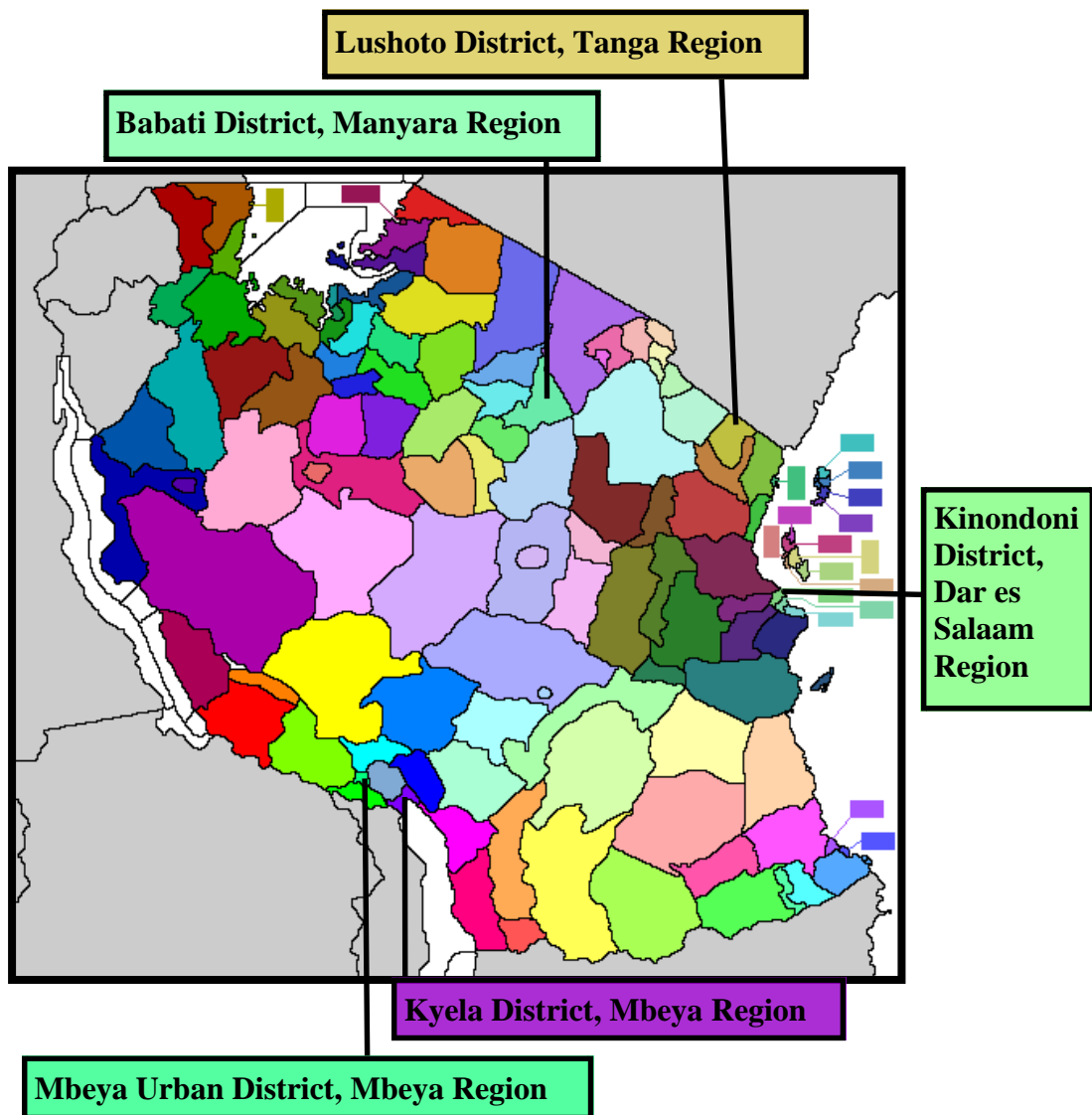
Table 4.3 Census Data for the Study Districts

District	Region	District Population	District Sex Ratio Males:Females	Average Household Size
Lushoto	Tanga	492,441	94:100	4.7
Babati Town	Manyara	93,108	103:100	4.4
Mbeya City	Mbeya	385,279	90:100	4.2
Kyela	Mbeya	221,490	92:100	4.1
Kinondoni	Dar es Salaam	1,775,049	95:100	4.0
Tanzania			95:1000	4.8

(National Bureau of Statistics and Office of Chief Government Statistician, 2013)

The following map shows the districts and regions of the research.

Map 4.2 Districts and Regions of the Research



(Districts of Tanzania, 2012)

In Lushoto, Tanga Region, Northern Zone, we carried out the training and preparation of the research assistants in March 2008. Then, the research assistants and I conducted four pilot research groups in April 2008.

From the main road leading from Dar es Salaam to Arusha, a paved road winds up through rugged, green hills to Lushoto. The Usambara Mountain climate is relatively cool, with an annual rainfall of 800-2000 mm. Most people work in agriculture, often in mixed farming with small and large livestock and subsistence and cash crops including fruits, vegetables, maize, sugar cane, coffee, tea and spices. Other economic activities include fishing, forestry, mining, trade, commerce, public administration, education and manufacturing. The area is home to people of Sambia and Pare ethnicity. As elsewhere in Tanzania, urbanisation, internal migration and intermarriage have contributed to people from many ethnic groups residing there (Government of Tanzania, n.d.; National Bureau of Statistics and Tanga Regional Commissioner's Office, 2008).

Babati, Manyara Region, Central Zone, is a few hours south of the large city of Arusha. A relatively small town, it is the administrative headquarters of Babati District and the newly created Manyara Region. We conducted the research in May 2008. Babati is generally lower and drier than Lushoto, with annual rainfall around 800-1000 mm, while Manyara Region has some of the driest places on the mainland. Babati town centre is dominated by a bus park and lodging houses, befitting its role as a minor transportation hub. Most people work in agriculture. The locally famous Dabil Mnada livestock auction takes place nearby, serving this pastoral region. During our stay, sunflower seeds were drying in front of many buildings. Other important crops are sunflower, maize, wheat, legumes and vegetables. Mining, especially of Tanzanite, forestry, beekeeping, fisheries, tourism and wildlife management are other important economic activities. Major ethnic groups are Iraqw, Garowa, Hadzabe, Barbaig, Ndorobo/Akea and Maasai (Manyara Regional Commissioner, 2013).

Mbeya Urban District, Mbeya Region is in the Southwest Highlands Zone. During our stay in June 2008, it became very cold and dry with night temperatures only a few degrees above freezing. Rainfall can exceed 2500 mm per year. Crops included maize, groundnuts, beans, wheat, potatoes, coffee, bananas, tea and cocoa. Dairy farming is common. The administrative headquarters of the region and the Mbeya City District are in the city of Mbeya. The school was in an outer suburb of the city of Mbeya, next

to both major road and rail routes linking Dar es Salaam with the copper belt region of Zambia and points beyond in southern, southwest and central Africa. Persons living near transport corridors are often at higher risk for HIV/AIDS prevalence than those who live in remote areas. The major ethnic groups around Mbeya District are the Safwa, Malila and Sangu, but the urban area itself is ethnically more diverse (Planning Commission and Regional Commissioner's Office, 1997).

The town of Kyela is in Kyela District, Mbeya Region, on the northern shores of Lake Nyasa, also called Lake Malawi, near a Malawi border post. During our research in July 2008, the climate was warm and humid. There can be 2500 mm of rainfall per year. Fish, oranges and the highly valued Kyela rice were plentiful in the markets. Cacao beans were drying in front of some buildings. Tobacco, maize, sorghum, finger millet, cassava, groundnuts, cashew nuts, palm oil and bananas are other important crops. Livestock and fishing are other important economic activities. The Nyakyusa are an important ethnic group (Planning Commission and Regional Commissioner's Office, 1997).

Dar es Salaam is a city and region in the Eastern Zone. While Dodoma is the capital of Tanzania, Dar es Salaam is the largest city. Dar es Salaam is a major transport nexus with roads and rail on land and ships, dhows and ferries on the Indian Ocean. Trading, agriculture and ocean fishing are all important, as are government administration, tourism, services and industries. Dar has a warm, humid, coastal climate. The region is diverse ethnically. Kinondoni Municipal Council where our research took place in August 2008, is the largest district in the Dar es Salaam region (Office of National Statistics, 2002).

The following table shows the number and percentage of participants in each district.

Table 4.4 Districts of the Research Participants

District	Individuals Taking Part	
	Number	Percent of Participants
Lushoto	33	16%
Babati	71	34%
Mbeya Urban	17	8%
Kyela	30	14%
Kinondoni	58	28%
Total	209	100%

The following map shows primary paved roads and rail lines. Not all the rail lines ran passenger services in the year of the research. We travelled by road from Dar es Salaam to Lushoto and Babati, and between Mbeya and Kyela. We travelled by road and rail between Dar es Salaam and Mbeya.

Map 4.3 Tanzanian Roads and Railways



(World of Maps.net, 2014)

4.5 *Research Assistants*

I chose to work with research assistants rather than collecting data first hand. Free and spontaneous spoken expression was desirable but young people can be reticent when in the presence of people who are unfamiliar to them. The research assistants had more in common with the research participants in terms of race, nationality and age than I had. Having the young people work with research assistants in the single-sex focus groups and interviews was very helpful in breaking through the young people's natural reserve, particularly for the parts of the research when the young people discussed sensitive issues such as sexuality, illness or death.

The research assistants spoke English and Swahili well. While I can communicate fairly well with Tanzanian adults, who speak standard Swahili and enunciate, I anticipated that communicating with children would be more difficult, and it was. During the research days, if we felt that the research participants had not fully understood anything that I said, the research assistants were able to explain or reiterate. The research assistants were not only skilled in interpreting formal Swahili. They understood colloquialisms, slang, youth slang, and expressions of Arabic derivation, better than I did.

Having three people working during the research days meant that the research team could accomplish more than I could accomplish by myself in the time. It enabled us to be more flexible. For example, when more participants reported to research days than expected, the team was usually able to support full participation.

I wanted to select and recruit one male and one female research assistant. I had known Paulo Ngonyani for a long time. In 1994, Judie Mwarabu invited me to visit her and her husband Andreas, and their children in Tanzania. Paulo had spent part of his youth staying with Judie and Andreas while attending school nearby. I had visited the household in 2002 and 2003, and found Paulo to be capable, affable and equable. My choice for the male research assistant was therefore clear.

I did not know any suitable candidate for the female research assistant. Judie had suggested Charlene Bumpas. Charlene spoke both English and Swahili as first languages. She was competent, friendly, and adaptable.

I thought that the research assistants would learn more effectively through supported, independent learning rather than through an overly didactic approach. The training had several components. Using the Mavis Beacon software (Broderbund, 2005) that Charlene's sister Zelda had kindly brought from overseas, the research assistants quickly learned to type and use the laptop. I asked them to read the literature review that I had prepared for the research. Then they read selected chapters from 'The Good Research Guide for Small Scale Social Research Projects' (Denscombe, 2003). They discussed the material, took notes and prepared a presentation on the material in English and Swahili for a gathering of family, neighbours and friends who came to hear them. Paulo read a book about the political anthropology of the Shambalai (Feierman, 1990), the ethnic group in Lushoto where Paulo had lived part of his life.

I asked the research assistants to prepare '100 Tough Questions' about the research, in hopes that it would set a pattern of encouraging them to critique and challenge my practice, smooth the way for the research and anticipate, solve or counter some of the practical, emotional, intellectual, methodological and philosophical problems of the research. I hoped that they would include some questions that I had not already considered. They did. They indicated that they were running out of questions after 53. Following are examples of their questions.

Do you think that we are prepared (Paulo, Charlene) to be your helpers?

How do you think this research will help the society (children)?

If the informant lives far away from the venue, how can we persuade them into coming on time?

Do we have the qualities to help you in your research?

Do you think that the capital you have is enough for the research?

How are we going to be accepted in a foreign place?

What if the informants have different beliefs about issues?

If the weather is rainy, how are we going to get to town?

The '100 Tough Questions' exercise was extremely useful. After discussing the questions, we were able to answer some with a degree of certainty, some with uncertainty and some with a willingness to do further work or exploration. For example, in response to a question about how the team was going to avoid losing the digital recorders, we developed and practiced a protocol for using and collecting the

recorders. Other questions were more philosophical or speculative and had no immediate answer. Only time would tell.

The members of the research team discussed the research questions and the five research methods. We translated the research questions into Swahili. We worked out and practiced conducting all the research methods. During and after the research with the pilot groups, we consulted on changes that we wished to make for subsequent groups.

Some researchers found that the problems of supervision outweighed the benefits of having assistants (Barrett and Cason, 1997:86-88) or cited difficulties with power relationships, friendships, sexual relationships and harassment (Barrett and Cason, 1997:89). While not everything went as planned in this study, there were relatively few problems. We conducted ourselves as professionals and worked well together. The research assistants were extremely conscientious. For example, they always remembered the protocol in using the digital recorders. When there were problems, we generally wasted little energy on apportioning blame but simply considered how to solve the problem or to do better on future occasions. Since we worked together and saw each other daily, we were able to solve problems quickly and easily by consulting and making necessary changes.

Power relationships were, of course, significant. I was more powerful, certainly, due to my status as the employer and my seniority in age. My race and nationalities were relevant. My research assistants had personal power as individuals and insiders. They were often able to understand what was going on at more and different levels in social situations because they were from Tanzania and understood the culture better. I tried to create an atmosphere where the research assistants were able to teach me and provide insights. During training, for example, Charlene explained to me that the delightfully swishy term that usually translates as ‘temptations’, *vishawishi*, means ‘attractive things that are bad for you’. The research assistants occasionally advised or corrected me in social situations, too. They practiced, in so far as was compatible with their employment, a certain degree of self-determination. We all valued our privacy and usually spent many hours apart, in our own rooms or in common spaces, pursuing our own objectives, each day.

The expense of the research assistants' living expenses and salaries was significant but not prohibitive. Our team benefited from donations and donations in kind, such as the kind offer of accommodation while we were completing the transcriptions and translations. The research assistants increased the quantity and quality of data collected and supported me to understand the data better. The decision to have research assistants was a good one.

4.6 *Participant Recruitment*

I dedicated much time to gaining access and consent to work with the young research participants. Gatekeepers for the in-school groups were heads of schools, other government employees or representatives of NGOs.

Out-of-school recruitment was sometimes difficult. At first we tried walking around, asking people directly if they knew of any young people out-of-school, but even in Lushoto, where people knew Paulo well, the attempt failed completely. School attendance, I was to learn, was a sensitive issue. Next our team asked Ward (or Town or Village) Executive Officers and assistants, community workers, NGO representatives and personal contacts to identify and recruit out-of-school participants. In the Lushoto group, a government official and one of Paulo's friends helped us find appropriate participants for the out-of-school groups. In Babati, officials helped us to recruit the out-of-school groups and all went smoothly. In Mbeya, the out-of-school recruitment fell through. In Kyela, some of the ostensibly out-of-school participant recruited were too old, too young or too well educated to fit the usual profile of any of our other groups. The data collected from those participants was useful, though, so instead of discarding the data we renamed the group: 'Kyela Mixed'.

The following table is an overview of the 21 research groups. There were ten female groups, ten male groups and one large, mixed group from a Dar es Salaam school. The Dar es Salaam students only carried out the write-and-draw exercises.

Table 4.5 Overview of the Twenty-one Research Groups

	Lushoto	Babati	Mbeya	Kyela	Dar es Salaam	Total
In-school	2	2	2	2	1	9
Out-of-school	2	2				4
Mixed				2		2
‘Compassion’ sponsored children		2				2
‘Street children’		2				2
Recruited by organization for PLWHA		2				2
Total Groups	4	4	2	4	1	21
Total Participants	33	71	17	30	58	209
Percent of Sample	16%	34%	8%	14%	28%	100%

4.7 Demographic Characteristics of Research Participants

The research sample involved 209 young people in total. The purposive sample targeted ‘a group of people, or settings, with a particular characteristic’ with an aim to ‘understand complex phenomena and to generate hypotheses’ rather than to apply findings to an entire population (Bowling, 1997:187, 190).

The gender composition of the sample group was 113 males (54%) and 96 females (46%). There was approximate gender balance in 19 groups but more males in two groups.

The following table shows that more than 95% of participants of the total sample were aged 10-15, within one year of the target age range of 11-14. The mean and median age for all participants was 13 and the modal age was 14.

Table 4.6 Ages of Participants in the Research Sample

Age	Frequency	Percent
9	3	1.4%
10	14	6.7%
11	44	21.2%
12	46	22.1%
13	30	14.4%
14	54	26.0%
15	11	5.3%
16	3	1.4%
17	0	0.0%
18	2	1.0%
19	1	0.5%
Unknown	1	N/A
Total	209	100%

In much HIV/AIDS research and programming in countries where out-of-school youth of the appropriate age cohort form a significant minority or majority, research samples are often recruited mainly or exclusively from primary schools (such as Klepp, Ndeki, Leshabari et al., 1997), secondary schools (such as Kapiga S.H. et al., 1991) or colleges (such as Maswanya et al., 1999). Some research has included out-of-school young people, especially in slightly older age groups (such as Plummer, Mary L. et al., 2004). Some research has targeted ‘street children’ (such as Evans, 2002), too.

The present research included students, out-of-school young people, and ‘street children’. I wanted to explore the strategies of young people with a variety of experiences of schooling, because norms for sexual activity and marriage for schoolchildren were likely to vary among young people with different schooling and life experiences (Wight et al., 2006:990).

Of the young people who took part in the full research day, mean class completion was 4.4, modal class completion was Class 6 and median class completion was Classes 4 and 5. The Dar es Salaam participants all came from the upper classes of their primary school. We asked the Heads to recruit ‘typical’ children of the appropriate

ages, not the best or worst in their classes, and to reflect, if possible, the relative proportions of Christian and Muslim children in the schools.

A few of the adults interviewed, but none of the young participants expressed the view that the social culture associated with either Muslims, Christians or indigenous religions was likely to explain the 'greater' prevalence of HIV in that group. I know of no national statistics concerning HIV prevalence by ethnicity or religion in Tanzania, perhaps because of the national ethos that promotes unity rather than division of religious and ethnic groups. While the CIA (2011) estimated that 30% of Tanzanians were Christians, 35% were Muslims and 35% held indigenous beliefs, another organisation, the Pew Forum (2010) estimated a higher ratio of Christians to Muslims: 57% Christians, 29% Muslims and 13% animists. Muslim populations are more numerous than Christian in the east of Tanzania. In most other parts of the country, there are similar numbers of Christians and Muslims or more Christians than Muslims (Pew Forum on Religion and Public Life, 2010).

When I asked, 'What is your religion?', using the word *dini*, meaning religion, creed or worship (Johnson, 1981:75), about seven out of ten participants identified as Christian and about three out of ten identified as Muslim. One participant did not know or name a religious affiliation. No participant identified any other religious affiliation.

Many young people in Tanzania work (Global March Against Child Labour, n.d.). This labour contribution often goes unmentioned in studies of Tanzanian children. Researchers, apparently, think of young people as students (or not) than as workers. Work is relevant to young people's well-being, in both positive and negative ways and is specifically relevant to young people's HIV/AIDS prevention strategies. The ability to earn income is seen as a sign of maturity (Van Reeuwijk, 2010a:51). Young people may receive direct payment for their labour, if their labour has a cash value, which may provide goods or services for the young person, another family member or members, or the family as a whole. One question was included on the questionnaire concerning the young people's labour contribution. The results are in Chapter 6.

A few participants had visual, auditory, physical or cognitive disabilities. We did not recruit these participants on the basis of disability but by the same mechanisms as we recruited the others in the research groups. We made adjustments in order to support access to full participation. In a few cases there were communication difficulties which

our research team tried to address, but we were not always entirely successful (Lewis and Kellett, 2004:200).

4.8 *Design and Conduct of the Research*

To carry out this research, the study used a multiple methods approach with three qualitative and two quantitative research instruments. Our research team carried out the five research instruments with the first twenty research groups, and carried out a single research instrument, the write-and-draw exercise, with the twenty-first group.

4.8.1 Research Days

We had research days at a conference centre, an orphanage, NGO facilities, school classrooms, a lakeside hotel, and government buildings. At a few venues, other children peeped through the windows at us, but they were not close enough to hear conversations or clearly see the write-and-draw exercises in progress, so we were able to uphold privacy and confidentiality. Apart from the research team, no other adults were present during the research.

Carrying out the five methods in a single day was a practical approach based on my own experience of working in Africa. It would probably have been difficult to meet with many of the young people more than once. It was not easy to get access to some of the young people even once, because of their responsibilities as family members, workers and students. I doubt that some head teachers would have allowed students to miss school for more than a single day. It would have been difficult in many cases to contact some of the same young people on subsequent occasions.

The study design and use of research days enabled us to gather a great deal of high-quality data from each research group, quickly and efficiently. The research day format enabled large numbers of young people to participate in the research, investing excitement and energy in the one-day events. Their commitment might have been difficult to sustain in subsequent meetings.

Some researchers are wary of single meetings with children, fearing that ‘one-off interviews with children...are at risk of not providing the context within which children can respond in accordance with their own views’ (Christensen, 2004:168). I questioned whether this would have been the case in the investigation of a sensitive

subject related to sexuality. I thought that we might experience diminishing returns on the quantity and quality of data collected if we met participants more than once. Knowing that they were only meeting us once may have helped participants to be open and frank. The cultural taboos relevant to children communicating on sexual matters with adults may have reasserted themselves if they knew that we planned to meet again.

We conducted the research day formally, as befits important events in Tanzania. The research day usually began at 8-9 am. Once the young people had assembled, I began the introductory session, with the research assistants' support, by explaining the objectives of the research. I encouraged the young people to participate as fully and honestly as they could, emphasising that the research would not be valuable if they were not honest. I urged them to preserve each other's confidentiality by only talking in a general way with others after the research and to avoid attributing specific statements to any individual. I told them about the importance of informed consent. In some meetings, I provided some historical background for international standards for research, such as the history of the Nuremberg Code. I told them that their participation was voluntary: they could stop participating at any time or refuse to answer any individual question. I read the permission form out formally. Then I asked them to choose to sign or not sign. I emphasised that it would be all right if they did not sign the consent form and that they could still stay with us during the day and have lunch and any other refreshments with us, even if they did not participate. We then provided consent forms for them to sign. All the young people signed. Then each participant received a unique number, written on a piece of paper. We informed them of the purpose of using numbers rather than their names, for the sake of confidentiality.

Nearly all participants completed the research days. Of the 209 young people who were research participants, 151 took part in most or all of the entire research day, participating in the focus groups, interviews, ranking exercises, questionnaires and write-and-draw exercises. Fifty-eight took part in the write-and-draw exercises only. On one research day, one of the members of the research team had a problem that necessitated leaving the venue. On that day, the other research assistant and I only managed to conduct most of the research methods with most of the young people. Usually, however, the team was able to facilitate all the research methods planned with all or nearly all the participants, unless they left the venue themselves.

The research team and participants ate lunch together whenever it was ready and resumed afterwards. After each participant had completed the five research methods, we ended each research day with a short education session about HIV/AIDS prevention. In this, we provided general information and discussed misconceptions about HIV/AIDS heard during the day, such as the idea that you can tell whether a person is HIV positive from their appearance. There was usually a short question and answer session. We repeated the importance of keeping confidentiality concerning what others had said during the research day. In closing, each participant received an exercise book and pen. We thanked them for their participation and said goodbye. The end of the research day was usually about 4 or 5 pm, allowing participants enough time to get home before dark.

4.8.2 Introduction to the Multiple-method Research

Parker et al. (2003:419-420) suggested that supporting quantitative research with ‘qualitative research on sexual culture in relation to HIV/AIDS’ was likely to be worthwhile, in order to develop ‘a fuller understanding of the AIDS epidemic and more effective strategies for AIDS prevention.’

Multiple methods are more likely to shed light on different aspects of an issue than any single method applied alone. They are useful in gaining a ‘richer and more comprehensive picture’ (Lambert et al., 2013:611). It is not that each method is likely to demonstrate the ‘validity of method’ (Mason, 1996:149) but that the use of multiple methods is likely to aid the researcher to interpret the findings (Bowling, 1997:66). Using multiple methods enabled me to think about personal HIV/AIDS prevention strategies from different perspectives.

I included both etic and emic approaches in the research. The etic approach is ‘primarily concerned with generalized statements about the data’ (Pike, 1967). For example, from the quantitative questionnaires and ranking exercises, I can make general statements about whether most research participants approve or disapprove in theory about various tactics of HIV/AIDS prevention. The two quantitative methods of ranking exercises and questionnaires supported me in collecting data relevant to participants’ HIV/AIDS prevention strategies. The purpose of the emic approach is ‘...to discover and to describe the pattern of that particular language or culture in reference to the way in which the various elements of that culture are related to each

other in the functioning of that particular pattern' (Pike, 1967). Behaviour in the emic approach is 'described as seen from the perspective of cultural insiders,' with the 'content analysis of texts providing a window into indigenous thinking' (Morris et al., 1999:783; taken from Pike, 1967). The three qualitative methods of focus groups, interviews and write-and-draw exercises supported me in collecting and apprehending patterns in the participants' communications about their understandings of HIV/AIDS and their strategies for HIV/AIDS prevention.

The qualitative and quantitative methods were complementary to each other. Loosely following the priority sequence model (Morgan, 1998), I determined that the priority was to carry out qualitative research, because the exploratory nature of the study was related to meanings and interpretations attached to young people's personal HIV/AIDS prevention strategies. During the research day, participants participated first in the qualitative methods of focus groups and individual interviews; third and fourth, in no particular order, the quantitative methods of questionnaires and ranking exercises, and last in the qualitative write-and-draw exercises.

Other researchers name the difficulty of getting the 'truth' about sensitive subjects such as sexuality as a limitation of their studies (Ball, 1996:48; Van Reeuwijk, 2010b). In some ways, it was a limitation of this study, too. As discussed in the section on the write-and-draw exercises following, some of the factors that determine what a young person is willing to communicate about HIV/AIDS prevention might influence what a young person is willing to do about HIV/AIDS prevention in a sexual relationship. For example, a reluctance to discuss condoms might arguably be a limitation of the study, but it might also foreshadow a reluctance to discuss or use condoms in a relationship.

4.8.3 Focus Groups

Focus groups were a key method in the multiple methods approach of this research. 'In multi-method uses, focus groups typically add to the data that are gathered through other qualitative methods' (Morgan, 1997:3). They supported the exploration not only of 'what people think but how they think and why they think that way' (Kitzenger, 1995:299).

The Tanzania research included the focus group method so that the young people, including those in ‘vulnerable and marginalised’ groups, might be able to talk more freely about sensitive subjects in small groups (Liamputtong, 2011:107). Participants in focus groups tended to cover more subjects in greater depth than they did in the individual interviews (Fenton et al., 1998). The young people were less intimidated by focus groups than when ‘in a one-to-one interview with a stranger’ (Kellett and Ding, 2004:167), and stimulated ‘to develop their accounts and be reminded of things they otherwise might not have mentioned’ (Hill, 1997:175-177).

The presence of peers alters the power balance...and can give children confidence to communicate or to resist influence. Focus groups make it more difficult for the researcher to impose her own meanings. Focus groups are likely to ‘shift the balance of power during data collection, such that research participants have more control over the interaction than does the researcher’ (Wilkinson, 1998:114).

The focus groups were useful for gathering sensitive information. They were very good for young people from relatively ‘vulnerable and marginalised’ populations. While there may have been advantages to having mixed-sex focus groups (Pattman and Kehily, 2004:140), I decided to have single-sex focus groups and interviews in order to minimise embarrassment that group members might feel, to avoid flouting taboos against discussion of sexual matters between males and females and to encourage freer discussions (Bowling, 1997). In the single-sex focus groups, facilitators were the same sex as the group members. As the research assistants had predicted, males usually had more to say in their focus groups than the females did.

The Tanzania focus groups with both young people and adults had a different dynamic than groups I have read about in other cultural settings, such as in the US or UK. While the focus groups, in theory, provided an opportunity for participants to interact to produce data (Wilkinson, 1998:121), this interaction occurred in ways that were culturally appropriate in Tanzania. Only the ‘street children’ interrupted each other or directly challenged or contradicted what others were saying. The other young people did at times give similar or different opinions from those given before, and comment, politely and obliquely, on statements made earlier. For the most part, though, the young people drew as little attention as possible to differences of opinion. Each young person simply made his or her own statement. For example, when Paulo asked the focus group question, ‘What do people need to know more about to prevent this disease of HIV/AIDS?’ one participant said,

To understand how to get this disease of HIV/AIDS, having sex or using condoms and not using sharp things or transfusing blood that hasn't been tested, maybe.

The next participant said,

To just stop immorality and careless desires like to desire a woman and to make love to her (Males, Babati Out-of-School Focus Group).

The adult informants waited politely for others to finish speaking before beginning to speak, and disagreed obliquely if at all with previous speakers. These culturally appropriate practices were not problematic. Indeed, it was easier to write the transcripts than it would have been if participants had been continually interrupting and speaking over each other.

The social pressures entailed in focus groups may have occasionally had some inhibiting effects. For example, in an in-school group, a male said that shared underclothes can transmit HIV/AIDS, and the other participants laughed. The speaker may have been embarrassed and that embarrassment may have inhibited his further participation. In one of the adult focus groups, I wondered whether the opinions of one of the most powerful members of the group were not influencing the contributions of others.

After the research days, the research assistants transcribed the focus group and interview data from the digital recordings. 'Rigorous analysis of focus groups involves both tapes and transcripts' (Morgan et al., 1998:45). I listened to the tapes a second time to ensure that the Swahili transcripts were accurate. I made many changes, most of them minor. I often consulted with the research assistants concerning words and phrases that I did not understand.

After checking the transcripts, I translated them into English, frequently consulting the research assistants. The research assistants then checked my translations and made suggestions and corrections. In that way, our team double-checked both the Swahili transcripts and the English translations so that I could be confident that our team had accurately transcribed and translated much of the data. After returning to the UK, I coded the focus groups and interviews using NVivo software. I mainly relied upon the English translations of the transcripts but sometimes referred to the Swahili transcripts and the original recordings. In some cases, I altered the translations and in some cases,

I could interpret the data in more than one way. No doubt, I have made some mistakes in the translation and in conveying the participants' intended meanings.

My content analysis and assessment of the three qualitative methods had both qualitative and quantitative aspects (Ball and Smith, 1992:28-31). I not only considered the themes and their relationships to each other. I noted how often each code occurred. I kept the coding 'open and flexible' (Bazeley, 2007:124), using as many codes as necessary (Bazeley, 2007:73). Coding supported the identification of themes. I attempted to look at the whole of the speech events (when an interviewee or focus group member said something) as well as the details, and to convey what was happening at the time, such as when there was laughter. In that way I hoped better to understand both the letter and spirit of what the young people were communicating.

4.8.4 Individual Interviews

After the focus groups came the individual interviews. I intended the structured interviews to complement the focus groups, by asking the young people what they thought about the focus group discussions and whether there was anything further that they wanted to say that they had not felt comfortable saying in the focus groups.

While individual interviews may be suitable for some older children, (Kellett and Ding, 2004:166), many participants in this study evidently found them to be somewhat 'intimidating or inhibiting' (Hill, 1997:175). Some participants who had been relatively relaxed and communicative within the focus groups had less to say in the individual interviews.

I had anticipated this to some extent, based on earlier observations of child-adult interactions. Interactions between teachers and students, for example, often rely on 'teacher-centred recitation routines' (Arthur, 2001:347) rather than spontaneous communication. While I did not feel that the question and response format would produce invalid or unreliable knowledge (Lewis and Kellett, 2004:200), the interviews did not usually amount to anything approaching a dialogue (Mason, 2002:64). Nevertheless, the individual interviews did provide some valuable information.

Usually Paulo interviewed the males and Charlene the females, so usually the interviews were single-sex. After naming various behaviours or tactics that supported HIV/AIDS prevention strategies, young people had the opportunity to evaluate the

strategies named. In the pilot research and in an abbreviated format after the pilot, we attempted to do a PMI exercise. The PMI has been carried out in other contexts with children as young as ten (De Bono, 1989:20). PMI stands for ‘Plus’, ‘Minus’ and ‘Interesting’. The purpose was to enable participants to make explicit the benefits, drawbacks and interesting points of any particular strategy element in order to support the young people in their critical analysis of the strategies (De Bono, 1989:19).

The first interview question concerned which strategy elements the young person liked best from those mentioned in the focus groups. The second question concerned what strategy elements they had not liked. Many young people answered these in an unexpected way. Instead of saying that they liked condoms and disliked abstinence, for instance; many simply named the strategy they liked, and then named its opposite as the strategy that they did not like, rather than naming a different strategy as the one that they did not like.

The next question, about what aspects of their strategies were ‘Interesting’ tended to lead to a reiteration of the strategy that they liked, because the Swahili word I used to mean interesting, *-pendeza*, carries the connotation of something that causes you to like it.

Many of the young people answered with a polite negative to the interview questions that followed: ‘What things did we not discuss in focus group?’ and ‘Do you have anything to add to what was said in the focus group?’

The young people were asked if they would use a strategy to prevent HIV/AIDS and if so, to describe it. When asked whether they had seen the importance of HIV/AIDS prevention, most participants answered ‘yes.’ When they did, we asked when they first became aware of the importance. Many participants named an age or a class in school. Some said since Class 1. A few said that they had only learned the importance on the day of the research. Most said that they had known of its importance for one or more years. Sometimes they named an event: the day that nurses came to talk to their class, for example, or from the time that they had known someone who was suffering from AIDS.

We analysed the data from the interviews, using a process of transcription, translation and NVivo coding, as described in the ‘Focus Groups’ section above.

Examples of statements made during the focus groups and interviews are in the following two chapters.

4.8.5 Ranking Exercise: The Game of Importance

The ranking exercise, though quantitative, is a participative and visual research method, that has been used in other studies with children (Women's Dignity Project and Engender Health, 2006:6; Kellett and Ding, 2004). In this study, the young people ranked values and objectives above or below the objective of HIV/AIDS prevention. In contrast to some other researchers (Ryan et al., 2001:iii-iv), I found the ranking exercise worthwhile. The costs of preparing, conducting and analysing it were much lower than any of the other research methods and it provided useful data. We called the ranking exercise *Mchezo Muhimu*, The Game of Importance.

Participants played as individuals. We asked each participant to rank objectives and values according to their importance relative to HIV/AIDS prevention. The research assistant or I showed each participant the game 'board', a piece of A4 paper with a sticky note in the middle on which I had written 'Preventing HIV/AIDS'. The research assistant or I read out twelve to fourteen values or objectives, each written on its own sticky note. The participant indicated whether they thought the value or objective was more or less important than HIV/AIDS prevention. If more important, the research assistant or I would place the sticky note higher than the centre. If less important, lower. The research assistant or I recorded the numbers of the sticky notes placed higher than 'Preventing HIV/AIDS' after each person played the game.

I analysed the results with Excel spreadsheet and SPSS statistical software. Full results of the ranking exercise are in the following chapter.

4.8.6 Questionnaires

The other quantitative research instrument was the questionnaire. The questionnaire explored participants' knowledge about HIV/AIDS, beliefs about peers' approaches to sexuality and HIV/AIDS prevention, and beliefs about suitable ages to begin to have sex, marry and have children. The questionnaires provided information about their personal aspirations in terms of education, livelihood and demographic information. The questionnaires enabled a great deal of data on these subjects to be collected quickly and easily (McNeill and Chapman, 2005:30).

In keeping with our desire not to be intrusive, we asked no questions about personal behaviour. The questionnaires were confidential and anonymous (Stafford et al., 2003:367) with respect to the other participants, because they were carried out with individual participants. Most participants seemed to understand the questions and were apparently comfortable in answering the questions. Questionnaires eliminate or at least reduce the ‘effect of personal interaction with the researcher’ (Denscombe, 2003:161). In any case, I was able to deliver the questionnaire without problems.

Participants often answered the questionnaire questions with one of the answers indicating uncertainty such as ‘I don’t know’, ‘It depends’ or ‘I’m not sure’, highlighting the disadvantage that questionnaires sometimes limit and shape the nature of answers, which can be frustrating for participants (Denscombe, 2003:159-161). Sometimes participants indicated that they wished to refrain from answering some questions. The researcher or research assistant recorded responses by pen on a printed answer sheet.

I analysed the questionnaire results with Excel and SPSS software. The questionnaire results concerning the demographic characteristics of research participants are in this chapter. All other questionnaire results are in Chapter 6.

4.8.7 Write-and-draw Exercises

I arranged for the young people to write and draw because I wanted to see whether this technique complemented the others in supporting young people to articulate or communicate their prevention strategies. Participants carrying out the write-and-draw exercises communicated different kinds of information than they did with the other research methods.

...the act of drawing makes possible the magical identity between thought and action because to draw is the quickest medium and can therefore protect the intensity of thought. To draw is never a transcript of thought (in the sense of writing) but rather a formulation or elaboration of the thought itself at the very moment it translates itself (Fisher, 2003:22; cited in Harty, 2012).

The qualitative technique of write-and-draw is broadly meant to explore how participants interpret their social worlds (Backett-Milburn and McKie, 1999:388). There are potential drawbacks. Young people may be more likely to draw things that are easy to draw, (Lambert et al., 2013:611), that are not embarrassing and that are consistent with social norms. People may draw their ideal selves or the selves that they

feel adults expect them to be. Research participants may conceal or omit to draw the real problems of their social worlds (Backett-Milburn and McKie, 1999:395).

In some cases, however, the apparent limitations of the research method may actually make it more likely that participants will represent their strategies accurately. For example, young people may be more likely to draw strategies that emphasise refraining from sex rather than measures to prevent HIV/AIDS while having sex. The latter may be more embarrassing to draw and known to be contrary to social norms of abstinence for young people. If young people are embarrassed to draw such measures, they may also be embarrassed to take such measures in real life. For example, females who are too embarrassed to draw themselves asking males to wear condoms may also be unlikely to ask males to wear condoms in real life.

In conducting the write-and-draw exercises, the research assistants and I asked each young participant to describe his or her personal strategy of HIV/AIDS prevention. We also gave participants the option to 'draw something else' if they did not feel that they had a personal prevention strategy.

Depending on the venue, some participants could see and comment on each other's exercises in progress. For this reason, the method did not completely ensure complete confidentiality, any more than the focus groups did, because the young people often looked at and discussed each other's drawings while they were making them. This was not a problem in terms of information gathering, because young people at this age often discuss sexual matters together and the norms of the social group may influence their decision-making. When, as occasionally occurred, participants copied drawings; the writing in the write-and-draw exercises often differed, such that each exercise carried its own set of meanings.

I had originally thought that the write-and-draw exercises would be useful for preliterate young people, assuming that drawing came 'from the world of the child' (Backett-Milburn and McKie, 1999:389) but I was wrong. Drawing, like writing, is evidently an acquired skill that not everyone acquires. In wealthier countries and among wealthier and urban populations in Tanzania, children usually learn to draw before they learn to write. They are exposed to many different kinds of visual representations (McCandless, 2010:389; Backett-Milburn and McKie, 1999) that support and stimulate them to learn how to illustrate ideas. In contrast, less-schooled

or rural-dwelling Tanzanian young people often have less experience in seeing or producing different visual forms. They see things in real life, of course, but they are less likely to see visual representations of things or ideas such as drawings, paintings or cartoons. In this research, many of the less-schooled participants were able to draw objects from their environments such as houses, animals, plants and cars, but did not seem able to draw in order to communicate their own ideas. The contested assumption that 'drawing enables children to communicate their thoughts any more than does conversational language' (Backett-Milburn and McKie, 1999:387) was evidently false for these less-schooled young people, most of whom were far better able to communicate through conversation than drawing. In later research groups, we asked participants who were unable to produce any writing or whose drawings were difficult to interpret, if there were any strategies in their drawings, or whether they had drawn the 'something else' that we had suggested if they did not think that they had a strategy. The young people often indicated that they did have strategies relevant to HIV/AIDS prevention, and proceeded to narrate them while we wrote them down.

The research procedure may have put pressure on some participants to communicate a strategy, even if they did not have one. No participant admitted to not having a strategy, after we offered to narrate them, even though we had explicitly provided an option 'Draw something else' if participants did not have them.

To ensure that the participants were not assembling strategies based on their previous participation on the research day in the focus groups, interviews, questionnaires and ranking exercises, I asked the students in the Dar es Salaam group to complete the write-and-draw exercises without participating in any of the other research methods. We did have a brief talk with those students about their understandings of HIV/AIDS and strategy before they began the write-and-draw exercises, just to be sure that they understood the framework of the question, 'What is my HIV/AIDS prevention strategy?' All members of the Dar es Salaam group completed write-and-draw exercises. Their exercises were similar to those in the other in-school groups. It seemed that ability to communicate HIV/AIDS prevention strategies in a write-and-draw exercise was probably not dependent on participation in the other research methods. That finding provides evidence that many young people have pre-existing strategies, or, at least, are able to develop and communicate strategies at short notice if asked.

After transcriptions and translations of the write-and-draw exercises were complete, I examined all the images visually, assessing what each participant wanted to communicate in terms of the collection of measures they wished to take to prevent HIV/AIDS, allusions to social and economic structures and to their personal aspirations. I tried to take their exercises at face value based on the image and writing, resisting the addition of further speculative analysis unless it was obvious from visual examination. For the write-and-draw exercises from all but the Dar es Salaam research groups, I counted the exercises in which common themes appeared. That gave me a basis for comparison of the content of the write-and-draw exercises with the data generated by the questionnaire participants from the same groups.

The write-and-draw exercises were effective in enabling the young people to communicate different information about their strategies such as the context of their strategies, including sensitive issues such as sexual interactions and negotiation (Hall, 2009), aspirations and structural constraints such as poverty, gender inequality and shortages of educational opportunities. It is not that the young people did not discuss or allude to all these subjects in the other research methods, but the drawings were more effective in putting me as the researcher 'in the picture' so that I felt that I was better able to understand their social worlds.

The inclusion of write-and-draw exercises in the multiple-method study was useful. Examples of the exercises are found in the following two chapters.

4.8.8 Pilot Research Groups and Changes Thereafter

All of the four pilot groups were in Lushoto. The groups after the pilot were in Babati, Mbeya and Kyela. The last group was in Dar es Salaam.

In the pilot, we asked parents as well as teachers or other gatekeepers for their informed consent. Then one participant said she had forgotten her signed permission form. I allowed her to participate because that was her wish. That led me to consider what I was trying to accomplish with parental permission slips. They were difficult to administer and there was a small risk of endangering the privacy of participants (Valentine et al., 2001; Powell et al., 2012), so after that, I decided to dispense with parental permission slips. After the pilot, I asked head teachers, governmental officials

or organizational representatives rather than parents to give consent for the young people's participation in the research.

In the first, in-school pilot groups, I asked head teachers in eight different schools to recruit one male and one female each. I did this in order to preserve confidentiality, reasoning that if the students came from different schools they were less likely to be able to gossip about each other. Recruiting all of the young people from different schools might have been disadvantageous if it 'dislocated people from their social context' (Wilkinson, 1998:111) but I saw no evidence that it did so. After the pilot, though, I decided that recruiting from so many different schools was not worth the extra time and expense. The responses to research questions revealed little information of a personal nature, anyway. In Babati, Mbeya, Kyela and Dar es Salaam, I recruited the in-school participant groups from a single school in each location.

The research questions used, both before and after the four pilot groups, are in Appendix 1. Most questions worked well, so most changes were minor.

In the pilot groups, there were no preliminary focus group questions. After the pilot, we prefaced the focus group questions with two preliminary questions, 'What is HIV/AIDS?' and 'What is a strategy?', in case any participants were unfamiliar with these concepts. The two preliminary questions enabled participants to pool their understandings about HIV/AIDS and strategies from the outset.

After the pilot groups, I asked the research assistants to write down answers to questions specifically concerning strategies or plans used to protect against HIV/AIDS infection. I asked them to do this in order to give us a better record, but the audio recordings provided a complete record of what was said, and the mood of the discussions, anyway. The main advantage of the research assistants' taking a few notes was that it slowed the focus group slightly, so that each participant had more time to consider his or her response.

To support the research assistants in encouraging the young people to speak more freely in the focus groups, I drew up the following guidelines.

1. Ask every question of each participant.
2. Read questions at least twice and explain further, if necessary.

3. Use waiting and silence to elicit responses rather than assuming that silence means that all has been said.
4. Ask for additional information or explanations of very short answers.
5. Elicit additional information through repeating responses: e.g., ‘So you think it is important to avoid temptations. Which temptations will you avoid, and how will you avoid them?’
6. Let participants talk as long as they wanted without interruption, and
7. Do not laugh unless participants are being intentionally funny.

Points 1-6 increased focus group participation considerably over that of the pilot groups. In hindsight, Point 7 was probably unnecessary.

The ranking exercise stayed the same after the pilot groups. Two values or objectives were added to the other twelve that were to be evaluated as more or less important than preventing HIV/AIDS: ‘To be loved’ and ‘To study with effort’.

In the questionnaire, I dropped Questions 33 and 34 because there was no evidence that pilot group participants had heard estimates of local and national HIV prevalence. Participants did not seem to understand the concept of prevalence or the mathematical concept of percentage. There is a fuller discussion of this finding in the questionnaire results in Chapter 6, ‘Young People’s Strategies’.

I told the first research group of in-school males that they could write *or* draw. They all chose to write. Drawing is often perceived as a ‘pre-writing skill’ of lower status than drawing, often an activity to be pursued when doing ‘art’ (Hall, 2009:179), rather than as a medium to communicate feelings, ideas and knowledge (Hall, 2009:179-180). The exercises of that group were not particularly illuminating. Several of the males simply wrote a list of everything they knew about HIV/AIDS, often stated as edicts or recommendations without indicating the tactics or strategies that they might personally favour or prioritise. The males did not express an indication of how their knowledge of HIV/AIDS prevention might guide their personal conduct, because they did not make drawings. After this first pilot group, I asked all other research groups to write *and* draw. Some young people still drew up lists concerning what they understood about how to prevent HIV/AIDS, but the pictures and captions that accompanied the lists communicated more than the lists could, by themselves.

In the earlier groups, we offered participants as many sheets of paper as they wanted. Some of the less literate drew numerous pictures with limited content relevant to HIV/AIDS prevention, as far as we could see. In later groups, when we wrote down oral narrations of strategies for young people, we learned that strategies apparently existed, even if we could not tell that there was a strategy from the evidence of the illustration or illustrations alone.

After the pilot groups, I restricted participants to one or two sheets of paper. This worked fairly well until the last Dar-es-Salaam group of primary school students who were only doing the write-and-draw. Some time after we began, a few participants, concerned that their drawings contained 'mistakes' and asked for extra paper to start again. I declined, saying that I was interested in the ideas that their drawings contained rather than in the perfection of the drawings.

In addition to changes in the research methods, we made changes in how we conducted the research days. During the pilot, we held pilot groups on four separate research days: in-school males, in-school females, out-of-school males and out-of-school females. After the pilot groups, I decided to conduct male and female research groups, such as Babati in-school males and Babati in-school females, on the same research day. This change simplified logistics considerably, such that twice as many people, typically sixteen rather than eight, could participate on a single day. The males and females attended the briefing and then separated into single-sex research groups for the focus groups. Participants carried out the interviews, ranking exercises and questionnaires as individuals, led by one of the research assistants or me. They carried out the write-and-draw exercises seated separately or together, mainly depending on their own preference and the amount of space we had in each venue. Males and females came together again for the debriefing, educational session and vote of thanks at the end of the day.

In the pilot groups, I brought a football for the young people to play with, for times after the focus groups when individuals were waiting to participate in the individual research methods. I suspected that some participants were being hasty in their participation so that they might have more time to play football, so I stopped bringing the football after the pilot groups. The young people seemed happy to relax and chat in their free moments after that.

4.9 *Supplementary Conversations, Interviews and Focus Groups with Key Adult Informants*

The research team and I carried out conversations, interviews and focus groups with key adult informants in the year of the principal research with the young people. The purpose was not a systematic exploration of the views of adults but an attempt to inform my understanding of the social context of young people's approaches to HIV/AIDS prevention in Tanzania. I was particularly interested in the education, advice and guidance that young people might receive from adults, programming available for young people concerning HIV/AIDS and other issues, social, cultural and economic background and additional adult perspectives on the relationship between young people and HIV/AIDS prevention.

I met with teachers, religious, NGO and community leaders as well as medical personnel. We discussed NGO and governmental programming and policy, schools curriculum, social, cultural and economic concerns, faith issues relevant to HIV/AIDS, experiences of working with young people relevant to HIV/AIDS, and medical experience of the epidemic.

While requesting access and permission to conduct the research in the different locations in 2008, I met with Regional Commissioners, Regional Immigration Officers, a District Commissioner, Divisional Secretaries, Ward Executive Officers, head teachers and other governmental and non-governmental workers. Very often, these meetings led to discussions of the research, their thoughts on strategies of HIV/AIDS prevention, sexuality and young people and related issues.

Paulo interviewed six adult informants of his acquaintance, and recorded the interviews. The material he obtained was fascinating: a demonstration of the advantages of the team approach.

In addition, the Research Assistants and I carried out four focus groups. The first was with professionals in one of the regional headquarters. The second and third were with teachers. The fourth was with Maasai men.

Due to considerations of anonymity, I cannot recognise by name those who supported, organized and contributed to these formal and informal discussions. I am indebted to all of the adult informants, and thank them.

For three of the groups, the research assistants and I took turns asking questions similar to those below, with some variations in each group.

1. What strategies can young people use to prevent HIV/AIDS?
2. What things can prevent young people from following their strategies?
3. Can young people overcome difficulties such as those named, through strategies?
4. In contrast to many people's opinions that poverty and poor education are associated with HIV infection, statistics show that many people who have money and education are infected. How can we reduce infection in this group?
5. As parents, how do you educate your families about HIV/AIDS?
6. Why do some people find it difficult to be faithful within marriages?
7. In our research, we try to understand the strategies of young people to prevent HIV/AIDS. What advice would you give us?

In the Maasai focus group, we discussed similar issues, with an emphasis on Maasai culture.

4.10 *Issues in Research with Young People*

In the past, many researchers did studies *on* rather than *with* young people. Young people's voices were often silenced or marginalised (France, 2004:177; Christensen and Prout, 2002; Oakley et al., 1995). Furthermore, many people who conducted research with children considered them as potential adults: as beings-in-the-making rather than beings-that-are.

Part of the function of social researchers is to question 'ways in which roles and relationships within societies are understood' (Kellett et al., 2004:33). The roles and relationships of children and young people with respect to research have come under this scrutiny.

Children, constructed without a present, are not studied in their own right. Accordingly, in order to understand children as active agents of culture, their presence and action in the immediate world must be acknowledged (Caputo, 1995:30)

In an emerging paradigm of research with children and young people, there have been developments in understandings of childhood as a social construction and about

responsible ways to carry out research with children. In the emerging paradigm, children and young people are more likely to be seen as ‘people to be studied in their own right’ (James and James, 2008:120; citing Hardman, 1973:85). At the same time, researchers are finding that young people would like to be better informed and ‘more involved in helping to solve problems’ (Bucknall, 2012:4).

International agreements have reflected developments in the rights of children and young people, ways that researchers perceive children and childhood, and the nature of participation of young people in research. The United Nations Convention on the Rights of the Child (UNCRC), for example, sanctions children’s freedom to formulate, have and express their thoughts (Woodhead, 2010:xx) and to ‘seek, receive and impart information and ideas’ (UN General Assembly, 1990). The African Charter on the Rights and Welfare of the Child sanctions children’s freedom of expression, association, thought, conscience and religion, privacy and right to education (ACERWC, 2011). Tanzania has ratified both.

In this study, I have considered the young people to be social actors, active social agents and research participants (Woodhead and Faulkner, 2008:35; James and Prout, 1997:142). I have explored whether young Tanzanians would be able to communicate their personal prevention strategies (Grover, 2004:84; Bell et al., 1988) and the extent to which participants’ knowledge of their own social worlds might enrich and provide context to other insights generated by the research (Hill, 1997:172).

Children’s voices are sometimes rare in debates about their best interests (John, 1996:7), though less so than they used to be. This study is not about ‘giving’ children voices (Duffy and Bailey, 2010) because they already have voices, but to explore ways to pay attention to their voices in order to learn from them. The young people have communicated the ‘data’. From that data, I have compiled my ‘evidence’, that is, my selection, interpretation and analytic construction of the data (James, 2012:5-6; citing Hammersley, 2010). I have tried to present as many verbatim communications as possible for the evidence of this thesis.

The young research participants did not have equal power in the research in comparison to the research assistants or me. They did not select the agenda, subject matter, research questions or the conduct of the research (Hill, 1997:171; Woodhead

and Faulkner, 2008:13). The young people were therefore research participants but not co-researchers.

Other researchers have suggested adaptations to address power imbalances, such as the researcher adopting an informal manner or style of dress (Phelan and Kinsella, 2013:85). This may be effective in some situations but I felt that in Tanzania, a certain degree of formality in conduct and dress confers and conveys respect. I dressed well and sought to be 'friendly but not too friendly' (Oakley, 1981) and respectful to the young people. Respect conveyed was an important way for us to show the young people that they had some power in the research. I was respectful, too, because that was the participants' due as human beings (Christensen, 2004:165) and as persons who had volunteered to collaborate in the research.

Punch (2002:329) noted that some researchers believe that research for children and young people ought to be fun or at least enjoyable enough for participants to be interested in engaging in it. Fraser (2004:25) noted the importance of research being participant-friendly. The write-and-draw exercise and focus groups turned out to be more participant-friendly than the interviews, with the ranking exercises and questionnaires somewhere in-between. In the individual interviews, many participants were often less communicative but they remained engaged throughout. Their commitment was helpful because the variety of research instruments helped us to explore 'multiple constructions of social reality' (Lambert et al., 2013:610).

Sexual behaviour is a sensitive subject. For young people, it is particularly sensitive. 'Knowledge about childhood is susceptible to moral regulation' (Qvortrup, 1994:2) and this is particularly likely to be the case for the knowledge of young people themselves. Innocence is the moral construction of a lack of sexual experience or knowledge. Many people assume that children and young people are innocent in thought and deed: in terms of sexuality, this can mean an ignorance of sexual matters as well as chastity. Individual young people who do not fit such a social construction of innocence can be considered as deficient, un-childlike, ill or immoral: in short, in some way as failures as children (James and Prout, 1995:79-80). As noted earlier, some researchers excluded young adolescents from otherwise excellent research studies about adolescents, citing their assumed inadequacies in terms of sexual knowledge and experience. Some people assume that younger adolescents are 'unreliable witnesses about their own lives' (Qvortrup, 1994:2). I tried not to make

assumptions about participants' sexual knowledge and sexual experience. I did assume that whatever participants knew and were willing to communicate about their lives was worth learning.

I was aware of the intrusive potential of threatening or embarrassing participants by enquiring about personal sexuality or sexual history. I attempted to keep such intrusiveness to a minimum (Social Research Association, 2003:25; Fombad, 2005:115). I used indirect and general questions rather than direct questions about personal sexuality or sexual history. Intrusive questions and research instruments were unlikely to generate reliable data in any case (Konde-Lule et al., 1993:683). We kept our questions and responses neutral, seeking to avoid giving participants the impression that members of the research team would perceive some answers to be more correct or truthful than others.

We tried to create a situation of trust. Often, the young people were willing to suspend or bend the normal laws of social interaction by speaking frankly to the research assistants. It helped that the research assistants were young themselves and that they listened to the participants in ways that were non-judgemental.

In HIV/AIDS research, failures rather than the successes are often emphasised.

‘There have been some genuine success stories in Africa and elsewhere, despite non-recognition by Western experts. The problem is that in these countries, Africans did not change behaviour in the expected, predicted and dictated way’ (Green, 2003:139).

I wanted to pay attention to any factors that might contribute to success or failure in HIV/AIDS prevention. Structures and contingencies as well as behaviours influence the chances of success or failure to prevent HIV/AIDS and to achieve other life objectives. This study explores the use of strategy as a tool to analyse and address the structural circumstances of young people's lives. Furthermore, it explores whether supporting young people to develop their prevention strategies might contribute to prevention success.

4.11 *Relationship of the Researcher to the Research*

As is often the custom in social sciences research, I would like to say a little bit about myself as the researcher in relation to the research. One of the objectives of this

practice is to support the process of revealing, to myself as well as to others, the nature and sources of any biases.

I came from a mixed working and middle class background in the United States of America. I lived in Washington State until I finished my BSc at Huxley College, Western Washington University. After teaching soils in an outdoor school in Oregon and working on an organic farm in New Jersey, I became a U.S. Peace Corps Volunteer, posted to the Kenyan Ministry of Agriculture and Livestock Development in 1982. I worked in Rural Women's Extension in Rift Valley Province for more than two years and then became an Energy Extension Officer in the Ministry of Energy and Regional Development, working with artisans in Nyanza and Western provinces to extend Kenya's manufacturing capability of the Kenya Ceramic Stove outside the capital.

The first time a Kenyan woman spoke to me directly about AIDS was 1985 or 1986. She told me that international truck drivers had brought AIDS to her village near Lake Victoria, and that many people were dying. About the same time, I crossed the border into Tanzania for the day with my housemate, Mario Amati. This was around the time of the end of the historical period of *Ujamaa*, which emphasized African Socialism. On the Kenyan side, as usual, markets and shops were busy and bright. We only encountered two shops on the Tanzanian side. One sold drinking glasses and the other sold coffee in jars. It was all very quiet.

After studying at Eastern Washington University for a short time and studying forestry at Yale School of Forestry and Environmental Studies, while studying Swahili at the Department of African Studies, I worked as a lecturer in forestry in Guyana. Later my first husband, John de Beer, and I went to live in Nepal, but he died from a fall near Sawadin. Some months later, I travelled in Kenya and Tanzania, and found Tanzania much changed. In the next few years, I came to England, stayed in Oxford for some months where I met my current husband, studied at Washington State University and returned to the UK to marry. I took a course from New Working Women in Leeds, and then worked for social and environmental NGOs in Leeds and Bradford. From 2000-2002, I worked in Botswana as a forester with the Ministry of Agriculture, recruited by Skillshare Africa. Botswana was peaceful and democratic and my colleagues were delightful. There was, however, much suffering there from HIV/AIDS.

In 2002, my husband and I travelled overland from Botswana to Tanzania for a holiday. Passing a Dar es Salaam print shop, I noticed a bill of services, with wedding stationery topping the bill. In Botswana, funeral stationery nearly always did. I became interested in the different experiences of the two countries of HIV/AIDS. After working for StudentForce in Britain from the end of 2002-2003, I made a fourth journey to Tanzania in the summer of 2003. In 2004, I began the PhD and Graduate Teaching Assistantship in Social Policy at the University of Hull.

My six years in southern and East Africa began before and at different times after the identification of HIV/AIDS as a medical condition. I speak Swahili fairly well. I have experienced what it is like to be a woman, even a young woman, in East Africa, although the issues I faced with regard to sexual mores and social relations were not exactly the same as those faced by Tanzanian women of African or other ethnicities. Therefore, I was not an insider in Tanzania, but not entirely an outsider, either.

As a foreigner and white person, I enjoyed privilege. In the young people's taxonomy, I was *Mzungu*, a European or white person or occasionally, *Merikani*, an American. I am female and Christian. I shared the last two characteristics with some of the research participants. During the research, research assistants and participants often addressed me as *Bibi*, which in Tanzania is an honorific term for a woman old enough to be a grandmother. That was useful, because it is often considered more culturally appropriate for young people to discuss sexual matters with their grandparents than with their parents (Prazak, 2000).

4.12 *Issues of Working in Tanzania*

I was correct in thinking that Tanzania would be a relatively easy place for me to do research. I am not alone in coming to this conclusion because Tanzania is full of researchers.

Tanzania was inexpensive for me. I spoke Swahili well, as do nearly all Tanzanians. Communication problems, war, civil strife and unrest were not confounding factors. There was a bureaucracy but within those structures, I found most Tanzanians to be flexible and to approach problem solving with common sense and humour.

Decision-making authority is centralised. Researchers go almost to the top, to the Regional Immigration Officers and Regional Commissioners, to get approval for

doing research in a region. The regional authorities then direct researchers to get permission from divisional, and then ward or town authorities. The actual problem solving, such as participant recruitment, begins only then. Those authorities knew about my presence and plans. The system was time consuming but straightforward. Many officials were friendly and generous with their time. Yes, my privilege as a Caucasian and foreigner probably eased my access to get the necessary permissions, but I also waited long hours to meet many officials.

Foreigners unable to keep a temperate demeanour in any but extreme circumstances are unlikely to have an easy life or accomplish much in Tanzania. A rude or officious person is likely to offend, so patience is necessary. Most Tanzanians do not rate a lengthy wait in a hallway, for example, as a reason to get angry or even perceptibly ruffled.

Despite having worked for some time in Eastern and southern Africa, I did not always know the correct behaviour and no doubt, I made mistakes. Sometime people corrected me. Paulo once told me to shut up when I gave backchat to a taxi driver. A teacher whom I had not met chided me for passing him in a busy corridor without a greeting. The conduct of the research would almost certainly have been more difficult had I not attempted to act according to the local regulations, culture, customs and courtesy and if others had not supported me in this.

4.13 *Ethical Considerations*

Research with humans entails obtaining the freely-given informed consent of research participants (Social Research Association, 2003:27).. This begins with fully informing participants about the research (Masson, 2004:50).

Having already obtained informed consent from parents (in the case of the pilot group), community leaders and heads of schools, at the beginning of each research day, we sought informed consent from the young research participants. I explained, with Paulo and Charlene's assistance, what the research was about and the concept of consent. We told the young people that they were free to refuse to participate. We read out the consent form, which participants could read themselves if they were literate, and gave participants the option to sign. Please see Appendix 3. All the participants signed. Van Reeuwijk (2010c:23) noted that in her experience, participants took a

‘wait-and-see’ attitude to consent, evaluating costs and benefits of participation in an ongoing way. When seeking informed consent, I emphasized that participants need not respond to any or all questions and that they might terminate their participation at any time. Many participants did pass on some of questions, often with the polite negative *hamna*, meaning, ‘There is nothing there’.

Confidentiality and privacy are important to research participants (Alderson and Morrow, 2004:43). I reminded participants not to discuss the research with others after the research day. I suggested that if anyone asked participants to discuss the research, they might do so in general terms. It is impossible to ensure complete confidentiality in group settings (Bowling, 1997:352), though, so order to minimise the chances of the young people divulging information of a personal nature, I drew up questions that concerned sex in general, rather than by asking specific questions about people’s individual sexuality or sexual history.

I had a duty of care for the well-being of the research assistants and the young research participants, ‘to design and carry out research, especially where this involves children, in a way that maximizes possible benefits and minimizes possible harms (Fombad, 2005:108). In addition to the COSTECH approval of my application, received late in 2007, our department’s ethics committee had approved my research proposal.

The duty of care entailed anticipation of harms and benefits. Travel probably presented the greatest physical danger. When a participant was unable to walk safely to or from the research site, for example, I made alternative arrangements.

Several head teachers questioned me specifically about the provision of a meal in order to ensure participants’ well-being. I organised a midday meal for each research day, except when a school or charitable organization was already providing it.

Where a detail might make a research participant identifiable in this thesis, I have eliminated the detail.

4.14 *Feedback*

We had feedback sessions with the research participants at the end of each research day.

I plan to send copies of the thesis to the Tanzanian research institute COSTECH and to the Tanzanian Department of Education. The research will be listed, I understand, in a database of the Institute of Commonwealth Studies (Larby, 2013). I hope to have the thesis digitised in the British Library ETHOS system, accessible to all with Internet access.

I presented an e-poster about young people's strategies of HIV/AIDS prevention to the international AIDS 2010 conference in Vienna.

I am considering other ways to support young people to communicate and develop their own HIV/AIDS strategies. Other researchers and practitioners may consider the potential of acknowledging and learning more about young people's personal HIV/AIDS prevention strategies, so that the voices of young people might be better heard 'outside the academy'. Such attempts may support young people to examine and address the structural conditions that make it difficult to prevent HIV/AIDS (James, 2007:262, 269-270).

4.15 Conclusion

In this chapter, I described the processes and issues considered and encountered in the preparatory and action stages of the research. I described the study design, the research day and the research instruments. I described how supplementary conversations, focus groups and adults supported me to gain insights into the young people's strategies. I described issues relevant to working with children, my relationship as researcher to the research, issues relevant to working in Tanzania, ethical issues and feedback of research results.

The following two chapters concern the research results. Chapter 5 emphasises the framework of the young people's strategies, such as knowledge, understanding, motivations and adult influences that are relevant to strategies. Chapter 6 emphasises the strategies themselves.

5 Frameworks of Participant Strategies

5.1 Introduction

This chapter explores the ways that the young people's HIV/AIDS prevention strategies came into being. The chapter provides results relevant to Research Question 1: 'What did the young Tanzanian research participants understand about HIV/AIDS?' and Research Question 5: 'How did advice, education and guidance influence participants' prevention strategies?'

Young people's knowledge, understanding, motives, values, objectives and priorities; and the advice, guidance and education that they receive from adults and others, contribute to the frameworks of their personal HIV/AIDS prevention strategies.

5.2 Research Question 1: What Did the Young Tanzanian Research Participants Understand about HIV/AIDS?

5.2.1 General Understandings about HIV/AIDS

Many young people answered the question, 'What is HIV/AIDS?' by stating the Swahili acronym, *UKIMWI*, in full: *Ukosefu wa Kinga Mwilini*, meaning a lack, shortage or failure of resistance in the body (The Kamusi Project, 2010). The English word 'virus' begins with the letters 'vi'. The prefix 'vi' in Swahili implies a plural noun, so for many Swahili speakers, *Virusi vya ukimwi* or its acronym, *VVU*, means the viruses of AIDS.

Many participants communicated their beliefs that HIV/AIDS was dangerous, fatal or incurable, with specific consequences for health and social life.

It is a dangerous disease, which can kill you and ruin you. It can ruin you by coming out with sores and making your hair fall out and dying. (Female, Babati focus group)

Some participants thought of HIV/AIDS as infectious and relentless.

You, if you get HIV/AIDS it will not agree to die. It must infect another there. Already it will have infected another. (Female, Compassion focus group)

Many participants described the social contexts that speed transmission.

A girl, for example, is with rich people or her friends. Her boyfriends have bought her shoes and Christmas clothes. Now her friend is poor and her place is dirty. Her friend tempts her, 'Look for a man. You will get... You will wear clothes like mine.' That girl will follow in that way and she will get HIV/AIDS like that.

(Male, Babati in-school focus group)

Most participants knew about HIV/AIDS but a few could express only vague ideas about its nature and prevention. This was consistent with an earlier survey finding that 4% of all mainland Tanzanians had not heard of AIDS (TACAIDS, 2004:3).

Some vague answers might have been partly due to shyness or inexperience in situations of question and answer with unknown adults or to a lack of knowledge.

Charlene: Do young people like you think that they can be infected or to infect others with HIV/AIDS?

Participant 1: Condom, I do not know.

Participant 2: (No response)

Participant 3: To be partners with men.

(Females, Lushoto out-of-school focus group)

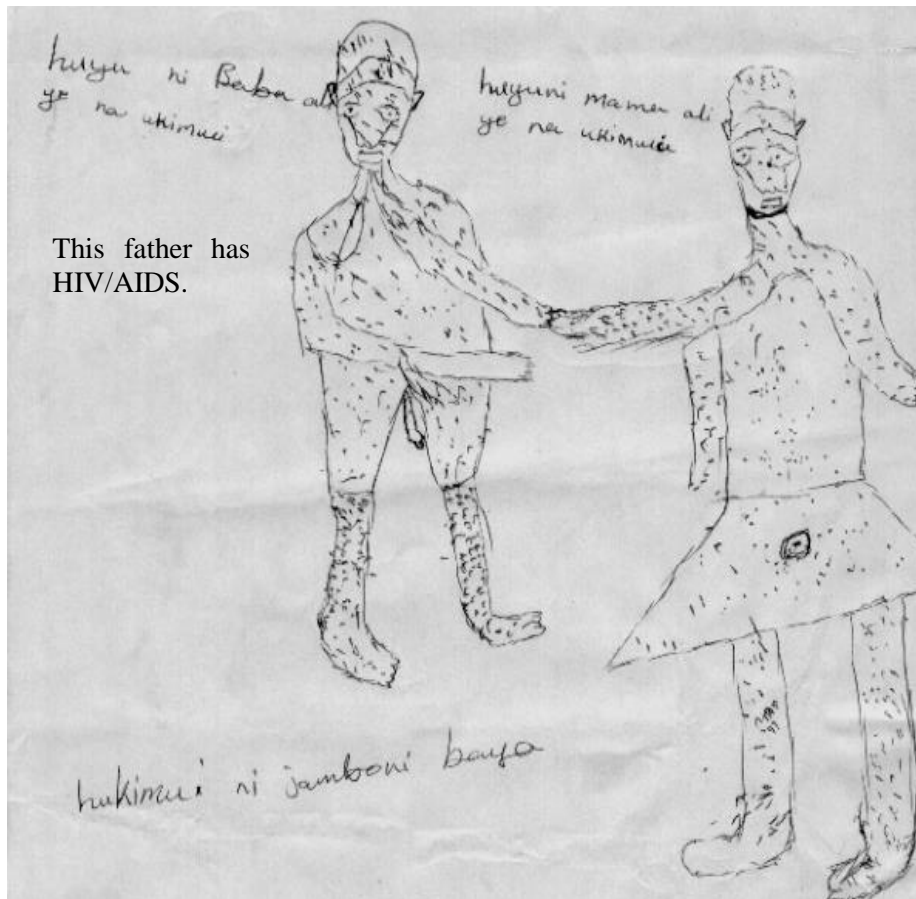
5.2.2 Knowledge and Understandings Related to Infection

In some of the write-and-draw exercises, a few young people drew speckles to indicate HIV/AIDS infection. The use of speckles to represent people infected with HIV/AIDS occurred sporadically in several groups but was common among the 'street children'. The young people represented contagion with speckles, showing them spreading from one person to another, sometimes showing the harm increasing in bodies by increasing the density of speckling in successive pictures of the same body. In a few drawings of (especially) the 'street children' were explicit representations of genitals. Some participants represented PLWHA as distorted. The 'street children' who drew genitals and acts of sex did so partly for their own amusement, judging from the giggles coming from them when they were drawing.

Their drawings showed their assumptions that heterosexual relationships were the site of HIV transmission. In the drawing below, the young person refers to the two people as 'Mother' and 'Father' or as 'a mother' and 'a father'. None of the write-and-draw

exercises provided evidence that participants understood that there was an association between HIV/AIDS and penile-anal sex, although a few of the young people discussed this sex in focus groups and interviews.

Write-and-draw 5.1

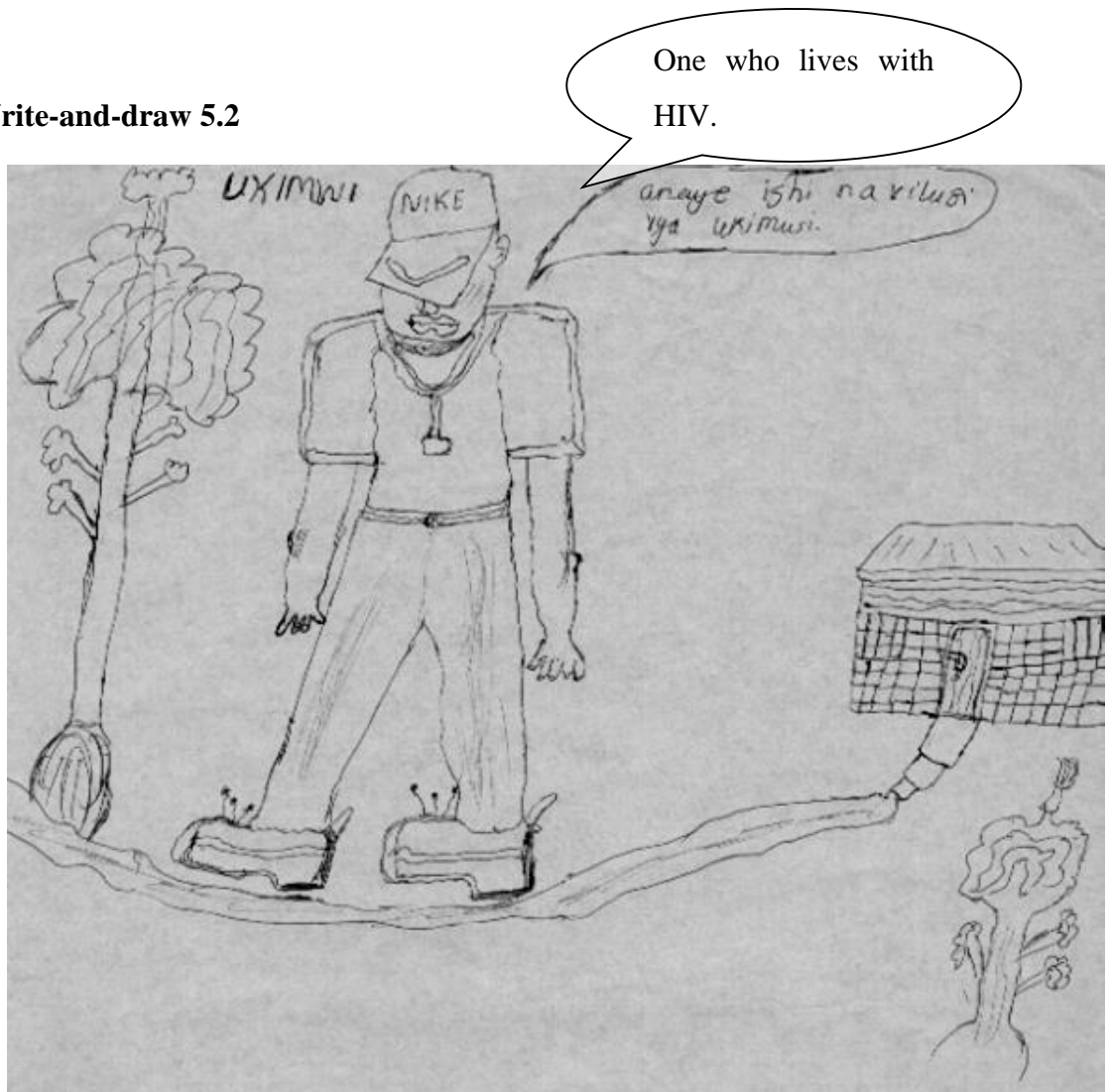


HIV/AIDS is a bad thing.

The story of my life: I need to marry one wife. I will not love the one whom I have not married. The story of my life is protection. (Male, 'street children')

The illustration below of a young man walking out of his house onto the road, passing trees with exposed roots, might be meant to communicate vulnerability, sadness, isolation, quiet bravado or cool.

Write-and-draw 5.2



HIV/AIDS (Male, Kyela in-school, excerpt)

One write-and-draw exercise showed a person living with HIV/AIDS in good health and cheer but the drawing below is ambiguous.

Write-and-draw 5.3



This person is infected. (Female, Mbeya in-school, excerpt)

Often, moral discourses were inherent in the terms participants used for sexually transmitted diseases, STD or infections, STI, including HIV/AIDS. Unlike some of the adult participants, the young participants tended not to use the neutral phrase *maradhi ya ngono*, meaning sexual diseases. The younger participants tended to favour two other terms to mean a sexually transmitted disease or infection: *ugonjwa wa uasherati* to mean the disease of a profligate, adulterous or immoral person (Johnson, 1981:19) or *ugonjwa wa zinaa* to mean the disease of adultery or fornication (Johnson, 1981:543). These terms mislead and stigmatize because moral persons and persons exclusively in sanctioned sexual relationships can contract sexually transmitted diseases and infections.

The participants described HIV/AIDS infection with a number of verbs meaning penetration. The most frequently used was *-choma*, meaning pierce, stab, prick, thrust

into, or burn (Johnson, 1981:59). Participants of both sexes used *-choma* mainly in contexts of non-sexual transmission, to describe the action of sharp, pointed things such as razor blades, injecting and sewing needles.

Participants used the verbs *-penya* to describe how HIV enters the body in sexual or asexual transmission or through barriers such as condoms. There was some conflation of the penetration of the virus and penetration in the sexual act.

If you wear a condom, those viruses will not be able to penetrate where that condom is. That is, if I do not wear a condom those viruses would penetrate. Therefore, we must use condoms so that we do not get HIV (Male, Babati in-school focus group)

Using condoms when making love, if a hole is bored and another person has HIV/AIDS, the person can get HIV/AIDS. It can bore in and another person can get HIV/AIDS. (Male, Babati in-school focus group)

One participant used the verb *-pandia*, to climb in.

To be with a person who has HIV/AIDS, you do not know anything. You find HIV/AIDS has just suddenly climbed in. (Male, 'street children' focus group)

The vulgar verb *-tomba* referred to the act of sex, specifically the action of the male.

Even if you have intercourse there with a woman, you find that a person does not get the feeling. You have intercourse finding that the condom has torn. You remove that condom. You start to have sex 'dry'. If the woman has HIV/AIDS you have already been infected. Now, there are even those who wear six condoms (Laughter). (Male, 'street children' focus group)

Kufirwa referred to receptive anal intercourse (Johnson, 1981:97).

(Someone) has anal intercourse with him every day at (place nearby). He has it done to him and he does it, himself. Every day it is done to him, every day, until he bleeds. Lie, truth? (Male, 'street children' focus group)

5.2.3 Knowledge and Understanding of Structure and Agency

Participants did not use the sociological terms 'agency' or 'structure', but many demonstrated considerable knowledge and understanding of how structural considerations such as family relationships, sex roles, gender inequality and the effects of poverty were related to agency.

The participant in the following excerpt described how structures of moral discourses and family relationships might discourage a young person from taking advantage of HIV tests.

For example, a person does not follow that way. In the beginning, it can be a person's parents. For example, if I give the person education like that little girl there, if I tell her, 'Maria, go test for HIV/AIDS now', she may rush to go. Because life these days, if you do things in your own way, you cannot without informing your parents. Now if she informs her parents they will start to add their doubts, (In the strained, anxious voice of a parent) 'You, girl, what has going on? Have you had the test for HIV/AIDS? Even your parents have not been tested for HIV/AIDS!' and I do not know what all. 'You tested for HIV/AIDS, a little girl like you? Well, you, your way is not good.' They will fill her with fear. You see! And she knows herself that 'I have not had sex yet,' therefore those parents of hers can cause her to enter into temptations, that she does not go to test because she is a child, a little child and she is totally used to having sex. Therefore, I see that it starts with the parents, yes, who stop you from going to test, because [you] cannot know if somebody has HIV/AIDS by looking at them, you must go to test now. Her parents will not allow her to do that, they will say 'Woe is me, we see you going to test' and I do not know what all, therefore those parents are not happy with that business of going to test.

(Male, Mbeya in-school focus group)

Some participants demonstrated that they understood the economic structures that motivated females to take sexual risks.

Participant: Negligence, the desire....

Charlene: The desire for what?

Participant: The desire for money. The person is, has no other way to...and chooses to have sex in order to get money. (Laughs)

(Female, Kyela mixed focus group)

The following write-and-draw exercise touches on structural issues such as poverty, gender inequality and family hierarchies in discussing the problem of parents who put pressure on daughters to have transactional sex.

Write-and-draw 5.4



I protect myself from the disease of HIV/AIDS. I ask my associates to test in order to know their health, and I ask them not to cheat with sweets, sodas, groundnuts and other things. Some parents tempt their children to sell themselves in order to get money for food. I ask them very much not to do that to their children and not to send them at night or at midnight. The time to send them is the morning.

(Female, Kyela in-school, excerpt)

A few of the females discussed the improbability of fair treatment from some powerful men.

On the other hand, maybe for the poverty that we have, a person can find that you go to a certain place and you ask for work or you even go to the ward office. You say 'I am asking for work' and you find the boss. He likes the little ones (laughter). Now that boss is a man and tells you, 'Come, let us do the marital act first and then I will give you work'. Now you can find you have marital relations with him. Then he does not give you that work. Then if you have HIV/AIDS he will have already infected you and he did not give you work, but he gave you HIV/AIDS.

(Female, in-school focus group)

5.2.4 Knowledge and Understanding of Risk and Strategy

Appadurai (2004:64) referring to Douglas and Wildavsky (1982), wrote that people ‘operate through cultural designs of risk reduction and anticipation.’ In the present research, participants considered *mikakati*, strategies (Mdee et al., 2000:784) to be both individual and collective endeavours. To many informants, strategies involved communication, usually in the form of discussing questions or problems to arrive at answers or solutions.

To stay and discuss about something and in the end, to get to an answer

(Female, Compassion focus group)

Strategy entailed planning for a purpose, exercising agency and making choices.

Strategies are as if you have planned to have...you can plan that I cannot get HIV/AIDS until death. You can plan so that I am not ruined.

(Female, Compassion focus group)

Strategies’ purposes were often the satisfaction of needs and motives and the achievement of aspirations, objectives and goals.

Drawing up a strategy for myself of life goals helps me to protect myself from HIV for the following reasons. Any person who wants to draw up goals for himself or herself in life - or especially me, myself - those goals help the person not to be infected with HIV because the person will fear ruining his dreams about life which he has planned himself in his life. For example, I am a student and I know that HIV/AIDS kills, so I will do my very best not to contract an HIV infection.

(Male, Kyela in-school write-and-draw exercise)

Participants sometimes provided additional details or gave examples. Many participants made the same sort of comments about strategies, including the fundamentals of individuals and groups of people communicating, planning, setting out and achieving aims and objectives.

Strategies are plans which a person has had planned in order to be able to resolve a certain problem. For example, the person decides that, perhaps advises me here, not to do prostitution or another person says ‘I, here, give myself orders to myself: I do not do prostitution’, maybe in order to save (or be saved), so that the person avoids those temptations. Yes, that is the end. (Male, Kyela in-school focus group)

Not all young people were willing or able to articulate an understanding of strategies at the beginning of the research day but after discussion of the concept, nearly all young people were able to use the word in such a way that demonstrated that they had understood it.

5.2.5 Priorities, Values, and Objectives

Values and objectives are crucial in the framework of young people's strategies. The ranking exercise was an attempt to assess the young person's priorities among their values and objectives. The majority ranked no category higher than HIV/AIDS prevention. That was unsurprising, given the theme of the day. Otherwise, the young people prioritized religious and educational values and objectives.

Table 5.1 Results of the Ranking Exercise

Value or objective	Number and percentage of participants out of total who ranked the value or objective as more important than HIV/AIDS prevention	Ranking overall
My religion	74/150 (49%)	First
Studying with effort	59/150 (39%)	Second
Doing well in school	54/150 (36%)	Third (2-way tie)
My religious faith	54/150 (36%)	Third (2-way tie)
Having good work	37/150 (25%)	Fourth (3-way tie)
Having children	37/150 (25%)	Fourth (3-way tie)
My civilization and culture	37/150 (25%)	Fourth (3-way tie)
To marry or be married	33/150 (22%)	Fifth
To do well at games	33/150 (22%)	Sixth
My friends	22/150 (15%)	Seventh (2-way tie)
Having money	22/150 (15%)	Seventh (2-way tie)
To be loved	10/116 (9%)	Eighth
To be good looking	9/150 (6%)	Ninth
To make love	8/150 (5%)	Tenth

5.2.6 Motives for HIV/AIDS Prevention

Participants communicated various motives for the prevention of HIV/AIDS. Understanding the importance of prevention was the first motive. Many participants said that they had understood the importance of prevention from ages of five to fourteen, with ten as the age most often named. Other young people answered in years (such as ‘since 2003’), in the number of a class in school, or in non-numerical answers.

I have seen the importance for a long time. I do not remember for exactly how long.
(Male, Kyela In-school interview)

Some young people said that they had understood the importance of prevention from the time of an educational session.

Yes. Since when I heard at school that HIV/AIDS is a disease where there is no treatment and when you do not go to the hospital to test and you will be or it will bring you problems. (Female, Kyela in-school interview)

Some young people had personal reference points.

Since I saw that many people were infected with HIV. They go to take medicine and lengthen their life a little and then they die. Therefore, I have seen the importance of self-protection. (Female, Babati In-school interview)

After understanding the importance of preventing HIV/AIDS, a second motive was protection of self and to a lesser extent, others. In more than a quarter of the write-and-draw exercises and in many of the speech events in focus groups and interviews, the strategies included variations on the phrase ‘self-protection’ such as: *zuia*, prevent; *linda*, protect; *tunza*, to take care of; and *kinga*, to ward off or block. The young people often prefaced these verbs with the Swahili reflexive prefix *ji-*, such as *jilinda*, to protect self (Johnson, 1981:154). Self-protection relates to the offensive and defensive aspects of war. Many young people expressed the motivation to fight the good fight. That was evidence that they believed, at least to some extent, in their agency to prevent HIV/AIDS. Many believed in themselves enough to be willing to teach others to prevent HIV/AIDS and to help those affected.

Sometimes self-protection and related terms referred to condoms. Sometimes it did not, and sometimes it was impossible to tell.

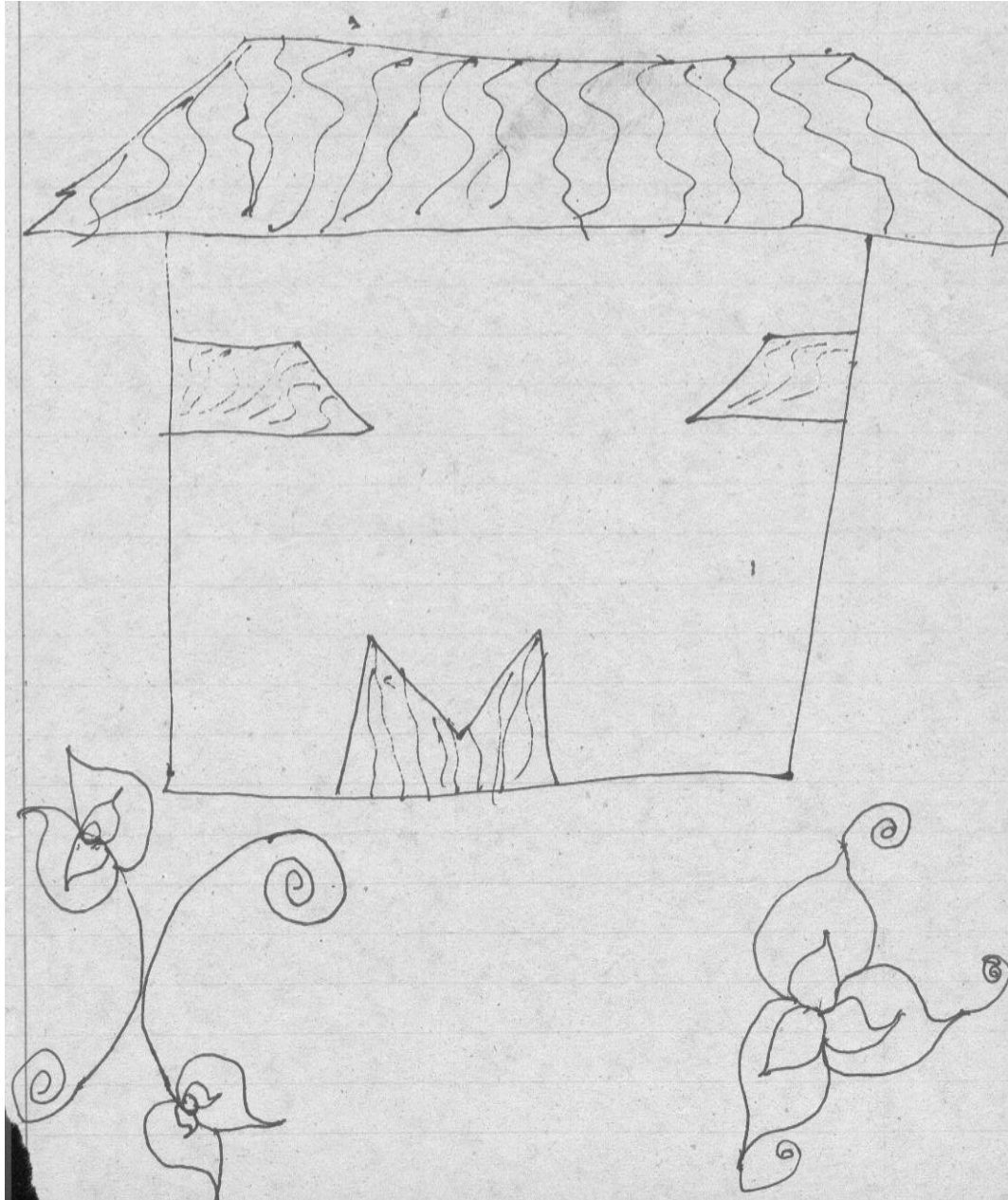
(Laughing at first, growing more serious toward the end) Concerning these affairs of strategy, the question of affairs of protecting yourself against HIV/AIDS, I protect myself and preventing myself, and these questions of prostitution, I will be preventing

it myself. It has to be. That is, I will seek my own woman and I will test so that I know she does not have it. Even if we test but that woman does not have that condition of HIV/AIDS, even if we make love, we make love with certainty. Would it not be that you took a woman, you made love with uncertainty. That woman would have HIV/AIDS. Right? That woman maybe will have some disease or another. This woman that I make love with today, tomorrow I go to test and I see...Now at that time you have already made love with that woman, then you went 'dry old man' (had sex without a condom) and the woman herself is pretty and she has nice hips. If you check her out, you would say that she does not have HIV/AIDS. Have you seen, man? At that time, you have already done it. Tomorrow you go, you test and you are told that you have HIV/AIDS. You can suppose now, if you have wealth, that you will start to eat the wealth. That is, you know, 'I in my life, this world will stay. I am defeated, for I will die anytime.' Hmmm. (Male, 'street children' focus group)

Like...temptations, because I protect myself...having casual sex or sharing things of inside, like underclothes...that have not been washed (*The other research participants murmur and laugh a bit.*) (Male, Lushoto in-school focus group)

The respondent who made the following write-and-draw exercise linked self-protection with avoiding death.

Write-and-draw 5.5



If we do not protect ourselves from HIV/AIDS, we will die and if you get HIV/AIDS, you will die. (Female, Lushoto out-of-school).

Many young people expressed awareness of the importance of self-protection in terms of individual and communal well-being.

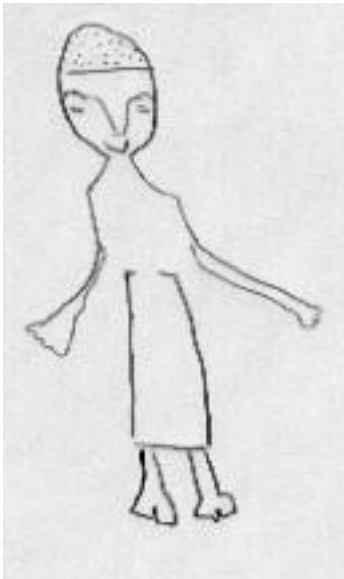
For the way I see it, all Tanzania, be it wherever, Burundi, wherever. You do not have a person who does not know that there is a disease called HIV/AIDS. For this disease is a disease of the first importance. If not treated, you will step out with...you will play with prostitutes, your money...but where? You do not have medicine that you will get...So therefore, now I see every person knows that this Tanzania has many diseases. It has HIV/AIDS...It has the meaning that all persons now protect themselves concerning diseases of HIV/AIDS that you cannot see. Now a person that makes love with a woman, it is suitable that with every usage, that they use a condom now. This is what I see, man. Now.

(Male, 'street children' focus group)

A third motive was self-belief. Some participants were motivated to prevent HIV/AIDS because they believed that they could, and they believed that in theory at least, their friends could, too. Fewer believed that their peers thought about health outcomes when having sex, though.

In a study of 15-24 year olds in Northern Tanzania, the researchers found a correlation between low self-efficacy and sexual experience (Njau et al., 2007). Many participants in the present study seemed to feel that their efficacy in preventing HIV/AIDS depended on their staying away from sex altogether. The young woman who made the following write-and-draw exercise was emphatic:

Write-and-draw 5.6



My strategies are that I do not want to get accustomed to men.

My strategies are that I do not want to get accustomed to a man.

Me, it is that I do not want to get HIV/AIDS or to make love with a man.

Me, it is that I do not want to become accustomed to men.

(Female, Babati)

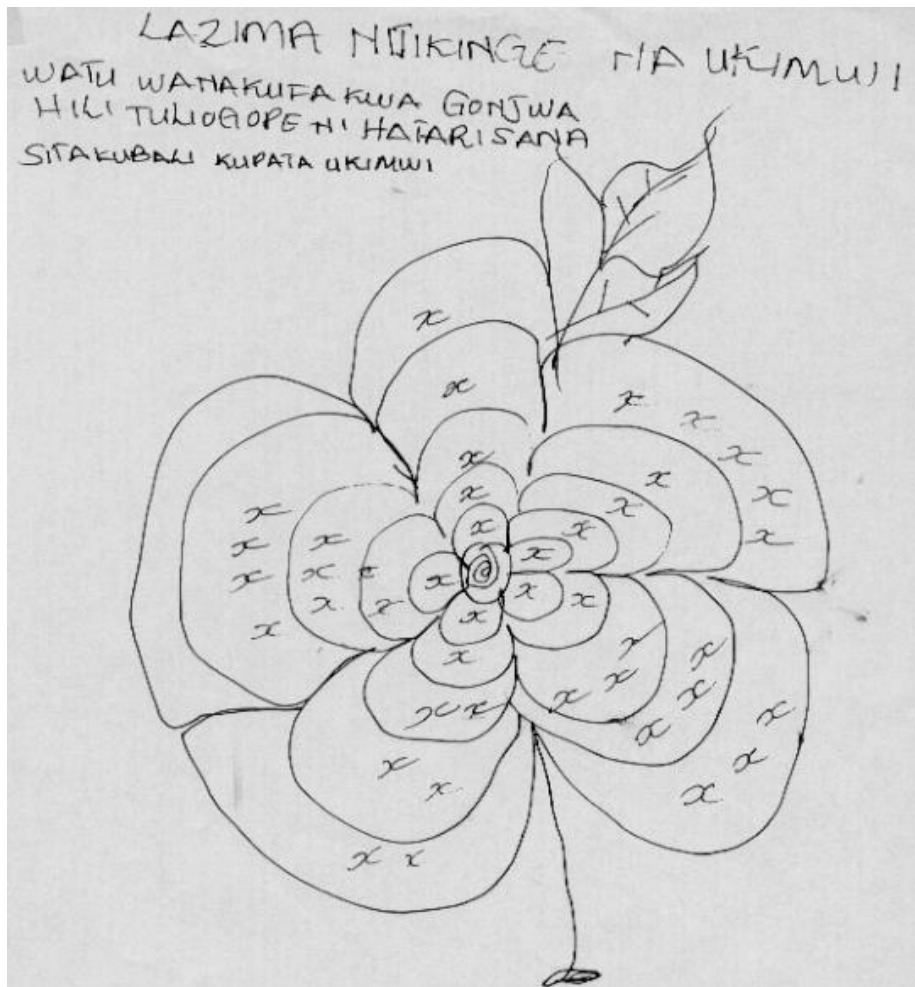
A fourth motive was fear of illness and dying. Examples were plentiful.

It is a dangerous disease, which can kill you and ruin you. It can ruin you by coming out with sores and making your hair fall out and dying. (Female, Babati focus group)

HIV/AIDS is a very dangerous disease. It kills children and pregnant women. (Male, 'street children' focus group)

HIV/AIDS is a disease, which takes away people from the world, and HIV/AIDS has no mercy. (Male, 'street children' focus group)

Write-and-draw 5.7



Let me protect myself from HIV/AIDS. People die from this disease. We should fear it. It is very dangerous. I will not agree to get HIV/AIDS.

(Female, Lushoto out-of-school, excerpt)

Although fear was an important motivation to prevent HIV/AIDS, fear can also prevent people from engaging with HIV/AIDS prevention, such as by avoiding HIV testing (Ostermann et al., 2011:268).

A fifth motivation was real or imagined regret. Some participants imagined their future sadness and regret if they or others they knew contracted HIV/AIDS, and regretted past choices made.

For example, me, here, I offer education in the streets. I can meet people who smoke marijuana on street corners. The things that they have and the alcohol that they want to drink are not good. [I can say] ‘You can get the disease of HIV/AIDS.’

He can listen to me but because his intelligence is imperfect, he will go to his or her friends [and say] “Hey there is a person who told me thus and so, that “I should stop this stuff.””

They will say, ‘It is not an issue, my friend, even if we fuck that one, it is not a problem,’ and I do not know what all. [They will say] ‘Just have lots of lovers, as is the fashion. Condoms do exist, my friend.’

Therefore, the way he will be, I mean, he sees if those who are on the street corners... Yes, that is what they have agreed to. People have told him what brings the necessities in life. He prefers to listen to those people on the street corners, so he will lack understanding. Later he will feel regret for his life.

(Male, Mbeya in-school focus group)

Some young people reflected on the possible consequences of different actions. In the following write-and-draw exercise, the participant considered four scenarios.

Write-and-draw 5.8

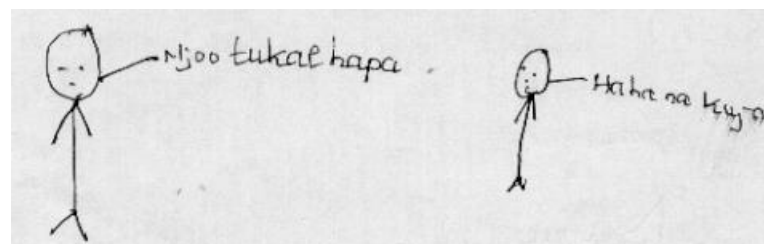


He: Thamina, I love you and I want you to become my girlfriend.

She: Me, I do not want that. I am going to tell Mother.

He: You, child, come here and take a sweetie.

She: ~~I am not~~
All right. I am coming.

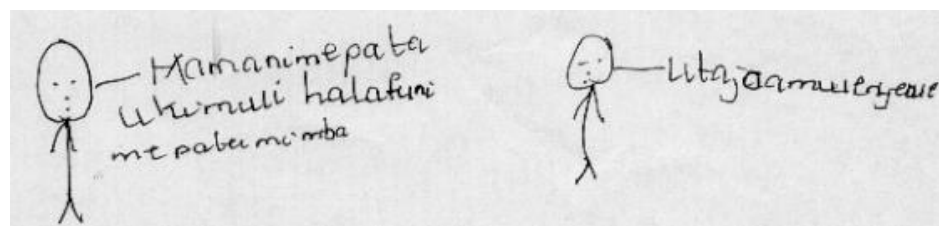


He: Come let us sit down here.

She: Ha, ha, I am coming.

She: Mama, I have gotten HIV/AIDS then I have gotten pregnant.

Mama: You will know it yourself.



In order to prevent HIV/AIDS in my life, I will not have bad habits. I will not stay in the alleyways, nor have bad habits with any person before testing. I will make efforts in my education so that no person can tempt me.

I will not have the desire to be given anything from anyone. Nor will I be tempted, as I have drawn.

(Female, Lushoto in-school)

A sixth motive for prevention was the desire for love and approval from family, peers and the wider society, and the fear of stigma and isolation.

Whether with your male or female friends, you plan good strategies which are to build the foundations of your lives. (Male, Upendo Focus Group)

Participants recognized that they might have to overcome the desire for love and approval, and the fear of social stigma and isolation, to be effective in preventing HIV/AIDS.

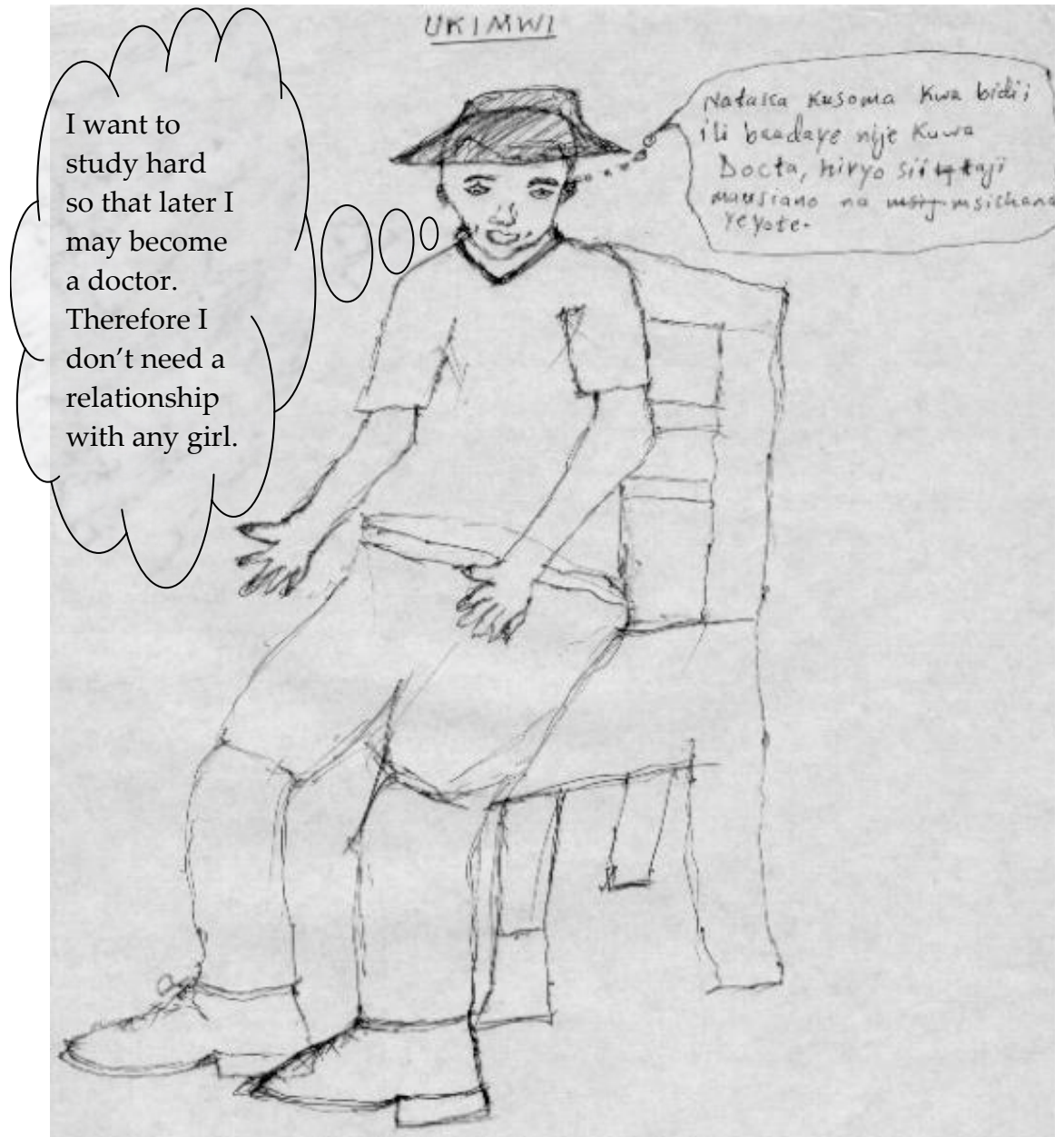
It's like being with your friend and they advise you 'Yes, my brother, yes, go have sex, so that you may do it, go and have intercourse with this girl again don't be scared of her, why you are even afraid of HIV/AIDS? Why, I have had already had intercourse with her and I didn't get it.' You see how he has advised you and you... that devil passes in to you with that left-hand power, it tells you 'Don't go to the right' it tells you 'Go with that Satan'. It tells you to go with her and it continues to advise you. Another power holds you back, but you are told, 'Go!' Now it is there when you begin to go, yes, when you go, wearing your strategies, to lay down your strategy. (Male, 'Street Children' Focus Group)

A seventh motive was the achievement of aspirations and avoidance of failure. Many participants considered that aspiration and HIV/AIDS prevention were compatible. The young people placed considerable emphasis on the importance of agency to make a better life, often with the particular goal of escaping poverty.

Strategies are things, which can...A thing, which can make your strategy not prosper...is that in Tanzania, our country Tanzania, I see poverty. Because a person, if you resolve completely in your heart that 'Me, I need to study. Later, let me come to have a particular work, so that I can have a better life.' With all that, you say, 'Let me study first', you avoid HIV/AIDS. You have been keeping yourself busy by studying. You see. (Male, Kyela in-school focus group)

Some young people explained that sex in the short term was not necessary to their aspirations. Waiting until later to have sex would enable them to keep the focus on doing the work that would maximise their chances of achieving their aspirations.

Write-and-draw 5.9



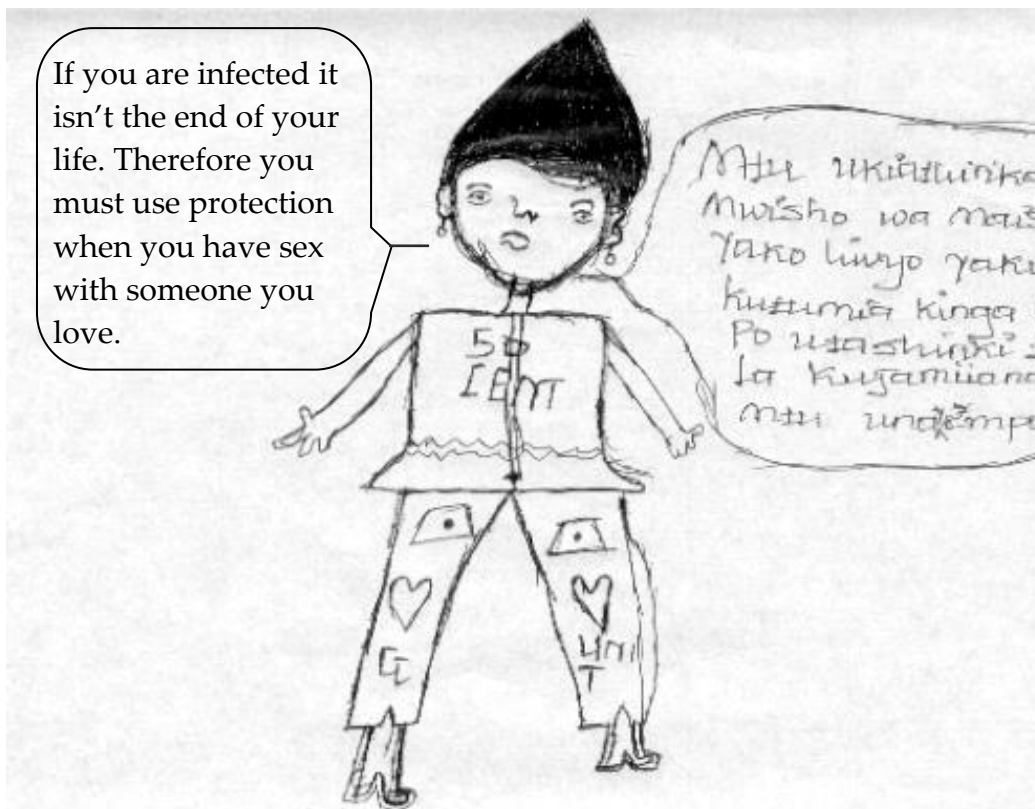
(Male, Kyela in-school, excerpt)

An eighth motive was to hold on to hope and avoid despair. The young people were aware that if they learned that they were HIV positive, their lives would change. They referred at times to despair. Some wished to avoid HIV infection in order to avoid that feeling of despair.

For example, right now a person studies and goes to test, and is told they have HIV. The person was saying that they would study hard, go to secondary school and beyond. If the person knows they have HIV/AIDS, they despair until they leave school. (Female, Babati in-school focus group)

Participants, however, advised infected persons not to give in to that despair or harm others through onward transmission.

Write-and-draw 5.10



(Female, Kyela in-school)

A ninth motive was relevant to religious identification and faith. Religion and faith rated high in the ranking exercises. In the focus groups, a few participants mentioned religious leaders or teachings. Sometimes, as with the third example that follows, it is unclear whether participants were referring to specific religious teachings.

I will follow the advice of the honourable (or legal or permissible) path, (The young person used the word *halali*, halal) and if I follow that, I know I shall protect myself: the whole community, people at home, doctors and health centres.

(Male, Compassion focus group)

For another way to pass on the word of God, that is, as I have said that the word of God is the words of the Bible. Go to church. You will know in church, there are pastors that educate you or pass on verses of the Bible. They say that a person may go and read in order not to have bad actions and then to be sinning against your God. Yes. It is so. The Bible teaches us in order that we may be able to protect ourselves and another person.

(Male, Kyela in-school focus group)

People need to use trustworthy protection, called a condom! If you both have intercourse you both feel happiness but you block the seeds of Subuana wa Ta'ala (Almighty Allah)...You have to do it dry (without a condom) but first you should test, yes, you should use dry. You fill until the baby will grow. It will become a baby. Yes, you give them a baby with intercourse! (Male, 'street children' focus group)

5.2.7 Adults' Understandings of Young People and HIV/AIDS Prevention

This section briefly explores adults' understandings of young people and HIV/AIDS prevention. Many of the adults we spoke to tended to associate HIV/AIDS prevention among young people with young people's morals, character and obedience, with specific reference to their refraining from sex.

Really, my own little children are still very young. I mean, even if you tell them whatever, they do not understand. They still have so little understanding. I will be staying with them and explaining the true state of affairs. I will explain how you get HIV/AIDS, such as through having sex, using sharp things and blood transfusions, and how to avoid that: for example, to avoid sex, because little children are simply not allowed to have sex. It comes from our society's being perverted, yes, you find a child getting into things like this but children are not allowed to get into sexual things. (Female adult, Babati teacher focus group)

Many adults referred to divine laws and authority in relation to morals, character and obedience.

One adult participant suggested that moral failings were part of the explanation for HIV/AIDS. He discussed punitive actions that society could bring against *wazinifu*, those immoral or adulterous.

The Lord God has already brought the whole question of HIV/AIDS to us in this earth and in laying out his boundaries. Now, for the sake of transgressing the boundaries of the Lord God, yes, the Lord God is being harsh to us with this disease of HIV/AIDS. In order for us to avoid that disease of HIV/AIDS, we must look back to where we have been slipping, in order to be get back to the place where we slipped. I mean, if a person falls down many times, shouldn't the person look at where they fell? The person fell here. Should the person look? 'I have stumbled; where have I fallen? I fell here, and I fell over there.' Now there is this whole question of HIV/AIDS. We have stumbled because we have left the justice and authority of the Lord God. You...He has told us that a married adulterer should be beaten until death and the Lord God makes an immoral person who has not married feeble, meaning that the person should be beaten with 100 strokes but people do not make room for this law. Yes, it comes to the point where...a person just does it, because this question is clear, and God who sets it out, it will be a very great miracle if we were just to be at peace with a disease like this. If it were to be, we get it as if we were to go with the justice and authority of the Lord God, as He set it out.

(Male adult, Lushoto interview)

More than one participant suggested that flouting divine laws brought predictable consequences.

I think that HIV/AIDS occurs because of what God himself has said...do not go near to it. You see, man. There is a saying that fornication brings destitution.

(Male adult, Lushoto interview)

Others did not hold the view that HIV/AIDS was a specific punishment for sin.

It is a sin like other sins but God said that he will be with the things which are signs at the end of the world...When the end arrives, it will be with this sign and this sign and this sign. You can say that a person on the side of a creed can say that HIV/AIDS is one of those signs of the last days, that can be, but not a punishment of God. God has no punishments for human beings. Uh-uh. No. God destroys by water and by fire. Sodom and Gomorrah, only that. To begin with, he said, no, he would not do that. Uh-uh. He will not do that to a human being.

(Male adult, Lushoto interview)

One adult said that although there was moral education, there was not enough education about HIV/AIDS at church.

Often they talk about things concerning God together with the Ten Commandments of God, without providing HIV/AIDS education. HIV/AIDS education is not discussed during church, so children miss education from church.

(Male adult, Lushoto interview)

Some adults did not associate HIV/AIDS with moral or religious discourses.

I do not like to talk about matters of faith and religion very much because I am uncertain about them but many diseases have already emerged, such as Ebola; therefore, it is just the same as the other diseases.

(Male adult, Lushoto interview)

Many adults did not only see morals as the sole responsibility of young people, but criticised sugar daddies, neglectful or abusive parents, and the corrupting effects of *teknolojia*, technology, such as television and films. More than one adult and some of the young people protested the corrupting influence of sexually explicit material, but such material was widely available to rent and sometimes unavoidable, for example, if explicit or suggestive material was shown on public buses.

From the evidence of the write-and-draw exercises, many of the young people had limited enthusiasm for condoms. Lukewarm as their attitudes were, many of the young people had more positive attitudes toward condoms than did many of the adults. Most adults thought that young adolescents should not be having sex, so they objected to condoms for this age group.

Now we are talking about young people from 11-14. If they start to have sex because that has defeated us, something is missing and that is morality. Now if you tell a person from 11-14 to use a condom, if you agree with that, you will be defeated. Therefore, what we need to do is to give them education about good morals and look at what we need for these young people so that they refrain from the desire of going to see pictures and magazines about sex. Now we need to give them something to do so that they will not have the time to do those things that lead them to have sex, yes, appropriate things to give the young people but if we say putting down strategies to give those young people condoms, it means that we have been defeated.

(Male adult, Babati community leaders' focus group)

One adult said that young people were not ready to learn about sex. Another felt that condoms were for family planning, not HIV/AIDS prevention. One told a story about

a boy in Class 3 who complained that he had to use a balloon because adult condoms were too large.

Some adults mistrusted condom promotion for young people because they assumed that young people were unfamiliar with the technical limitations of condoms. Some adults seemed to compare the risks of the technical limitations of condoms relative to not having sex at all, rather than relative to having sex and not using condoms.

Now if another person discusses the question of condoms, doesn't the child understand that 'So, if I do this...' if he wears a condom, 'I can't get HIV/AIDS.'

He doesn't know that there is a tear in it. He can get HIV/AIDS.

(Female adult, Mbeya teacher's focus group)

If a teacher saw the value of educating young people about condoms, which no doubt many do, the teacher may feel economic or social pressure not to discuss condoms openly, especially if a head teacher, other teachers, or parents might disapprove of in-depth education about sex, relationships, reproductive health and especially, about condoms. Unfortunately, teachers may be under pressure to avoid the subject of condoms at just the age when the children are ready and interested to learn about them. By the time that adults finally decide the children are old enough to hear, the 'children' might be too old to listen.

One teacher referred to the difficulty of trying to talk to her older children about HIV/AIDS prevention.

All my children are big and they have already been married...They have just come on holiday. Now, talking with them: 'What plans do you have about this disease, a big, young person, like you?' What do you think they will answer you? The young person will just laugh and laugh. 'Now, I tell you that even if you have sex, then you should use a condom. If you don't do that you can lose your life very quickly.'

(Female, Babati teachers' focus group)

The adult below linked the number of orphans in a district with high prevalence with his belief that infection came from condoms themselves.

[Name of district] has children, yes, they bear children and yes, they care for the children now. They will increase. They have already died. Yes, I said it looks as though it increases. Accordingly, as we say, 'Let us use condoms.' It is a personal business, and I am trying to ask... That the condoms that come from there carry HIV/AIDS but who is sure where they make them? People have done evaluations of condoms that they took, opened and hung in the sun. Later they started melting and the microbes appeared inside. It gets warm when people perform the marital act, too. Well. The microbes come out, yes, which block or multiply in there.

(Male adult, teachers' focus group)

One of the young people had said something similar, but that person made it clear that he thought it was funny.

You find a brother there, at a place that we go to buy condoms. You find that they have been in the store. There is this soldier (laughing) who came there, and they said if you take that condom, if you test with that microscope they have you see little germs, therefore, those condoms damage us at our place. You wear even three big plastic bags because then they don't split when you push your load in. (Laughter).

(Male, 'Street children' focus group)

In the Maasai adult focus group, an older man said that hardly anybody used condoms. Another said that younger men were more likely to use them if they had been to school or if they were having sex with *Swahili*, meaning non-Maasai Africans. The men agreed that condom use was stigmatised in many Maasai relationships. If a man wore a condom without the agreement of his wife or girlfriend, she might go home and complain to her parents. They might reproach the man, and it could lead to trouble. Some people were afraid that condoms could slip off and end up in the woman's *tumbo*, abdomen or womb. Many people considered condoms unfamiliar or worthless. Condoms were free and available in the participants' home village, though. One man said that they were probably popular there: 'Unless they used condoms, they'd have a lot of children.' Condoms were freely available in the village church and village health centre but the men said that people collected water with them and that children used them as toys.

There was no universal agreement among Tanzanian adults about whether condoms were an acceptable technology for young people. It did seem in the present study as

though most adults felt that condoms were inappropriate to distribute to primary school aged children. Many adults also objected to promoting the use of condoms or in some cases even to talking about condoms with this age group.

If outsiders were to look only at posters and other advertisements sponsored by the main HIV/AIDS organisations in Tanzania, often supported at least in part by international foundations and foreign governments, they would probably be unlikely to recognise the extent of societal distrust of condoms. International organizations such as PSI can afford to sponsor large posters on billboards, while local organizations can often afford to advertise only on a smaller scale. The posters funded by international organisations usually promote condom use as at least one of the valid methods of HIV/AIDS prevention. Sometimes in these posters, condom use is the main theme of the poster. For example, a poster in Dar es Salaam showed a smiling man resting in a giant condom as though it was a hammock.

The billboard that follows appeared next to a busy road in Dar-es-Salaam during my stay. The local branch of the international NGO, Human Life International, had erected it on the grounds of a Catholic School. The billboard's English caption next to the skeleton was in the third person: 'FAITHFUL CONDOM USER'. The Swahili version was in the first person. It drove home a more personal message. 'I used condoms faithfully.'

Poster 5.1 ‘I Used Condoms Faithfully’



(Athumani, 2008:2)

The poster provided evidence that some individuals and groups, officially and unofficially, were continuing to promote anti-condom messages in Tanzania. The

Auxiliary Catholic Bishop of Dar es Salaam, Methodium Kilaini, said, ‘The Pro-life organization [Human Life International] is a private body that has no direct link to the Roman Catholic Church. They, however, promote Christian teachings on abstinence and faithfulness’ (Athumani, 2008:2). The Tanzania Commission for AIDS (TACAIDS) said that the poster was illegal, and called for its removal.

5.2.8 Summary

The strategic framework on which young people base their HIV/AIDS prevention strategies is composed of their knowledge and understanding, values, objectives, priorities, motives and the advice, education and guidance of adults and others in their midst. Adults in the research relied on moral and religious discourses that emphasised that young people should be obedient and abstinent in primary school. Many adults did not consider that condoms were appropriate for young people of primary school age.

The following chapter explores young people’s strategies in more detail.

6 The Young People's Strategies: Results

6.1 *Introduction*

The previous chapter presents evidence relevant to Research Questions 1 and 5. This chapter largely concerns results relevant to Research Questions 2, 3, and 4, concerning whether participants had personal HIV/AIDS prevention strategies, characteristics of strategies, where they existed, and whether strategies were common to demographic groups or specific to individuals.

Much of the chapter presents results based mainly on data gathered in the focus groups, interviews and write-and-draw exercises. The latter part of the chapter presents results based mainly on data gathered from the questionnaires. Further discussion and analysis of the research results follow in the next chapter.

6.2 *Evidence of Personal Strategies of HIV/AIDS Prevention*

The results of the study indicated that most participants had personal HIV/AIDS prevention strategies.

The first and most important piece of evidence that young people had strategies was that nearly all were able to communicate their personal strategies for HIV/AIDS prevention in the focus groups, interviews, and write-and-draw exercises when asked to do so. An example follows.

MY STRATEGIES ARE TO DRIVE HIV/AIDS AWAY FROM PEOPLE

What I want to be is a doctor. My strategy is preventing AIDS, and I have three main strategies. The first one is playing football in order to avoid other people's bad counsel. Another strategy is to drive people away about HIV, so that they can stop sticking the needles of intoxicating drugs into each other. And I advise people to drive the children of the citizenry away from looking at pornography, for those pictures only make a person stop thinking about studying and playing and so on but only thinking about making love and so on. Again, I would like to advise that people not agree to receive untested blood donations and my other strategy is to advise people not to have unprotected sex, because you cannot recognise whether your partner is infected, and that person might have been born with AIDS from the person's mother. My other strategy is to enjoy playing football to strengthen my health, to avoid other diseases. Avoid staying in gangs, receiving advice to have sex. Another strategy I like is to advise and educate my mates about this disease of HIV/AIDS and even to drive away the mamas who force boys to have sex and to drive away the fathers who tempt the sisters to have sex, giving them money.

1 The advantage of things that I like with the strategy is (a) to play ball to avoid temptations (b) Avoiding pricks with needles of intoxicating drugs (c) and avoid untested blood.

2 Some people can be defeated because (a) the disadvantage will be to not play ball, you will get diseases of the body. You will not get bodily resistance. (b) Some people are defeated to follow strategy from lacking the prevention education from their parents.

3 Things which are pleasing about my strategies are a) to play football or other games in order to avoid bad temptations.

(Male, Lushoto in-school write-and-draw exercise, excerpt)

Many of the young people, especially those who had not been much in school, did not lack strategies, but often they did lack the means to communicate their strategies through writing and drawing. Some were able to draw simple objects such as flowers, houses, cars or poultry or write a short sentence such as 'HIV/AIDS is bad', but were not able to express their ideas through either writing or drawing. In the early research groups, it ended there. Later, I began to ask those who apparently had difficulties with writing or drawing if they would like to narrate their strategies while one of the research assistants or I would write them down. All or nearly all of the young people whom we asked took up this option. The tactic would probably have worked with many of those in the earlier groups, too, if I had thought of it at the time.

The 'street children' had no problems in communicating their ideas through the write-and-draw exercises. Probably, many of them had attended formal school before the circumstances arose that led to their becoming 'street children'. Their write-and-draw exercises were different from most of the others. Many of their

exercises contained more explicit sexual imagery and more frightening images of infection.

The following table shows the results of an analysis of the write-and-draw exercises of those participants who had completed the questionnaire. Overall 12% communicated no strategy, 3% communicated an objective or statement about HIV/AIDS only, and 85% communicated at least one tactic of HIV/AIDS prevention.

Table 6.1 Strategic Content of the Write-and-Draw Exercises

Content of the Write-and-draw Exercises	Males		Females		All	
	N	%	N	%	N	%
Exercise contained no objective, statement or strategy	13	15	5	8	18	12
Exercise contained objective such as 'Protect myself' or statement about HIV/AIDS such as 'HIV/AIDS is bad' but no tactics of prevention	2	2	3	5	5	3
Exercise communicated one or more tactics to prevent HIV/AIDS	72	83	56	88	128	85
Total	87	100	64	100	151	100

In addition, all of the write-and-draw exercises in the Dar es Salaam in-school research group included at least one tactic of HIV/AIDS prevention.

Some young people communicated numerous tactics in their write-and-draw exercises.

Write-and-draw 6.1



I am a very small girl. My strategy is to finish my primary school later on and if I pass, secondary education. My strategy is that I do not want to have a relationship while I am small and still at school. Even when I have finished secondary school, I will go on to college and study various subjects. As I said above, I do not want to have a relationship while I am small and still studying. I do not want to have several relationships because then I can get this dangerous disease. When I have found a faithful man, before we get together, I will advise that we go and get a test. If the test proves we are not infected then I will tell him he can marry me. We will get married and have children, and we will teach our children about this life in the world. I do not want my child to be hanging about on the streets. My family will have peace, love and joy. This is the end of my strategy.

MY STRATEGY IS THAT I DO NOT WANT TO GET THIS DANGEROUS DISEASE OF AIDS. TANZANIA WITHOUT AIDS IS POSSIBLE. GO TO BE TESTED.

(Female, Dar es Salaam in-school)

The second piece of evidence that young people had strategies was that they situated their strategies in realistic contexts. In the first example below, the participant discussed how people might address a constraint. In the second example, the participant discussed a realistic threat to strategies.

That is, to calm down, me, in my life, like that. Even if you are calm, you must desire money, very much, therefore, so! I say that, I do that...You are calm with a certain business, you are calm with your business: me, if I do this, it will bring me this benefit here. If I do this, I will be like this but not to get money in another place. Perhaps to be calm, to think about the work, and the work that you are doing....do different kinds of work until you are looking at that work which will bring me a benefit.

(Female, Kyela mixed group interview)

For me, here, the thing that I want to talk about is on the side of friends. You can find you have your friends, you stay with them, you talk with them, you stay in a group...now those individual friends of yours...you will have your strategies. That is, I do not come to be with any man! Now you find those friends of yours...that is, there are individuals here and there, rebels. That is, they are hooligans and therefore you can have talked with them. If you have already been talking to them now and you can see some friends of mine, they see me...go...therefore they themselves are bad. They can tempt you to do certain things or they can say, 'Me, I have a friend', I do not know, 'He loves you', that is, you are tempted. It is better, that is, your objective or the strategy you planned, temptation from your friends can destroy it.

(Female, Kyela in-school focus group)

The third piece of evidence that participants had strategies of HIV/AIDS prevention was that most participants were able to refer to a time in the past when they began to understand the importance of HIV/AIDS. This suggests that in the intervening time, they had thought about what they were going to do about HIV/AIDS.

'Yes, I saw the importance of protecting myself from AIDS since I was ten. I knew how HIV/AIDS was spread and how to block HIV/AIDS from myself.'

(Female, Compassion interview)

A fourth piece of evidence is that the participants themselves claimed they had strategies. For example, when asked if he had a strategy, one male participant said,

'Yes, to go to the hospital. Like me, I have HIV/AIDS and to give me medicine, if you do not have it, let me go to ask for it from any person who announces themselves on the, on the televisions, of how they will help me.' (Male, Mbeya in-school interview)

6.3 *Tactics in Strategies*

As discussed in the previous chapter, strategies often contained motives, objectives and emotions; such as the motive to protect self, the objective to pursue a good life and the emotion of fear. Strategies contained knowledge and understanding of HIV/AIDS and HIV/AIDS prevention.

The presence of tactics was a key characteristic of participants' strategies. A tactic is 'an action or strategy carefully planned to achieve a specific end' (Oxford University Press, 2012). In English, then, there is no clear distinction between tactics and strategies.

In Tanzania, the research team and young people used just the one word, *mkakati*, to refer to the following:

- a) A person's strategy to achieve an objective or objectives,
- b) Tactics or measures taken to support the strategy, or
- c) Other elements, such as motivations and objectives.

I use the word 'tactic' in the examples that follow to mean a specific measure intended to support a strategy of HIV/AIDS prevention. While each of the tactics described was different enough from the others to stand apart, there was naturally considerable overlap between categories, such as between 'Avoiding unwanted sex' and 'Refraining from sex'.

Participants' strategies usually involved one or more tactic. The participant interviewed below referred mainly to two different tactics, taking advice and working to achieve an aspiration to have a viable livelihood.

Yes....Very, very much so...When I was in Class 7, there was a thing, and these particular nurses came from outside. In addition, parents came and contributed. I that I saw the importance of protecting myself and exerting myself to learn any work. For a person without any work is without any way of protecting self. Therefore, the person has desire and that is the origin of contracting HIV/AIDS.

(Female, Kyela in school interview)

The table following provides results of an analysis of some of the main tactics mentioned in the write-and-draw exercises.

Table 6.2 Motives or Tactics Mentioned in the Write-and-draw Exercises

Motivation or Tactic	Percent of Males' Exercises (n=74)	Percent of Females' Exercises (n=59)	Total Exercises (n=133)
Be faithful	64%	64%	64%
Avoid blood-borne transmission	48%	64%	55%
Refrain from sex	53%	48%	50%
Avoid temptations	38%	42%	40%
Test for HIV	28%	49%	38%
Self-protect	34%	36%	35%
Achieve aspirations, aspire to the good life	23%	12%	28%
Use condoms	31%	10%	22%
Avoid dangerous places and times	15%	25%	20%
Avoid transactional sex*	4%	19%	11%
Support others by educating, treating or caring	11%	9%	10%
Avoid sexual violence if possible**	3%	17%	9%
Refrain from sex (specifically) with PLWHA	3%	3%	3%
Deal with sexual harassment	0%	2%	1%

* Significant difference by gender at $p \leq .01$

** This category includes suggestions to avoid places where gangs hang out, back streets, lonely places and night-time errands but did not include warnings against intravenous drug use, however, which are captured in the category, 'Avoid blood-borne transmission'.

6.3.1 Being Faithful to a Lover or Partner, and Partner Selection

Both males and females were committed to the idea of being faithful to a lover or spouse within consensual relationships. Faithfulness was the most often mentioned tactic in the write-and-draw exercises.

I said they should be faithful. It means that men will be faithful and you, the woman, will be faithful, not to say that you cannot trust him personally. The man will decide to protect himself from HIV/AIDS, and must be faithful, and you, if you decide to protect yourself from HIV/AIDS, you will be faithful.

(Female, Mbeya in-school focus group)

Participants sometimes discussed faithfulness with confidence, such as when they warned against *zinaa*, adultery, fornication or debauchery: or *ngono zembe* and *ngono ovyo*, casual, random or negligent sex. They did sometimes illustrate this concept.

Many participants mentioned faithfulness in passing. Participants rarely illustrated the concept of being faithful as opposed to not being faithful. When participants discussed faithfulness in the focus groups, interviews or write-and-draw exercises, they were uncertain about it.

Some discussed the importance of fidelity in marriage.

Together with our sisters, they should stop casual sex too, and I advise them that they will ruin their lives. And you sometimes find a person has her husband. Her husband does not have anything or she meets a person who pleases her with money. She leaves her husband and follows him. Therefore, she will be with a lover outside of her marriage. And she will certainly get HIV/AIDS.

(Male, 'street children' interview)

Many expressed specific doubts about the effectiveness of faithfulness to prevent HIV/AIDS.

Indeed, I will not understand her habits. I understand them but her affairs, I cannot understand what she has done there: whether my lover cannot protect herself or not, for she is not with me every hour.

(Male, Babati in-school focus group)

While young people acknowledged that trust is important in establishing relationships, several young people communicated feelings of vulnerability. Both males and females

doubted the faithfulness of partners. Several said things such as, ‘You can only trust yourself.’

For example, I have a lover. I cannot trust my lover one hundred per cent. I only trust myself because I know if he goes somewhere else he can get another lover.

(Female, Mbeya in-school focus group)

Nevertheless, many young people said things like ‘I will not have sex with an infected person’ or ‘I will marry someone faithful’ as though they were unaware that their personal appraisal of the character or HIV status of a person was unlikely to be adequate as a tactic of HIV/AIDS prevention.

6.3.2 Refraining from Sex

Many young people mentioned the tactic of refraining from sex in their strategies, regardless of whether their strategies included preventing HIV/AIDS in a sexual relationship.

Participants usually used the phrase *kuacha ngono* to mean refraining from sex. I could have translated the phrase as ‘abstinence’ to be consistent with the commonly-used word in HIV/AIDS prevention campaigns, but ‘refraining from sex’ is more accurate. *Kuacha ngono* means leaving off or passing up sex in the sense that *kuacha upuzi* means to leave off doing something foolish (Johnson, 1981:1). *Kuacha ngono* is different from the word abstinence because it provides no information as to whether an individual has ever had sex before. The phrase therefore makes no distinction between primary and secondary abstinence and protects the privacy of the speakers when they use it in reference to themselves.

Refraining from sex, as far as the young people were concerned, did not necessarily seem to mean not having sex at all but not having sex until some desirable circumstance or circumstances occurred, such as the right partner coming along. Nevertheless, many males and females felt that the sexual debut and becoming used to having sex were important thresholds. Many believed that once they became used to sex, that they might find it difficult to stop again.

A man is not become accustomed to making love at birth but if a person has gone to taste it, he will get used to it. He can't stop. Like a person who has gotten used to beer, you tell him stop drinking beer and he will see that someone is just telling a tale. This is what it means: if a person has become used to it, he can't stop.

(Male, Babati in-school focus group)

The young people may have over-emphasized the tactic of refraining from sex in their strategies because they considered it, unlike some other tactics, to be socially acceptable. As another research team in Tanzania found,

As is true in much of the world, sexual behaviour is rarely talked about openly with friends and loved ones in rural Mwanza, let alone with slightly older, more educated, and urban interviewers. School pupils are not accustomed to speaking at length to people in authority on any topic, and they are usually severely punished if they are found to have had sex (Plummer, Mary L. et al., 2004).

6.3.3 Pursuing Aspirations

Many participants mentally linked the objective of HIV/AIDS prevention with educational, livelihood and family objectives to which they aspired. Aspirations included personal maturation in the forms of good character, good judgements, good habits, good health, and courage. In the following exercise, the participant describes how parents can support young people in forming and achieving their aspirations.

Write-and-draw 6.2

THESE ARE MY AIMS OR STRATEGIES IN LIFE REGARDING HIV/AIDS

HAYANI MALONGO YADUHU SHU ANIKAKATI KATIKA MAJISHA KIHUSU UKIMWI.

My child, what are your aims in life?

Mother, my aim in life is to study with effort until reaching the age to be married.

My son, study with effort, until the end of education when you reach the time of marriage, and then you will marry, my son.

All right, Father, I will study until the end of education to plan work for myself.

MY ASSOCIATES, STUDY WITH EFFORT. AVOID HAVING SEX WITH EACH OTHER.

• NDUGU YADUHU SOMA KWA BUDI EPU KANA WA KUOZO.

MY MAJOR AIMS ARE THE FOLLOWING

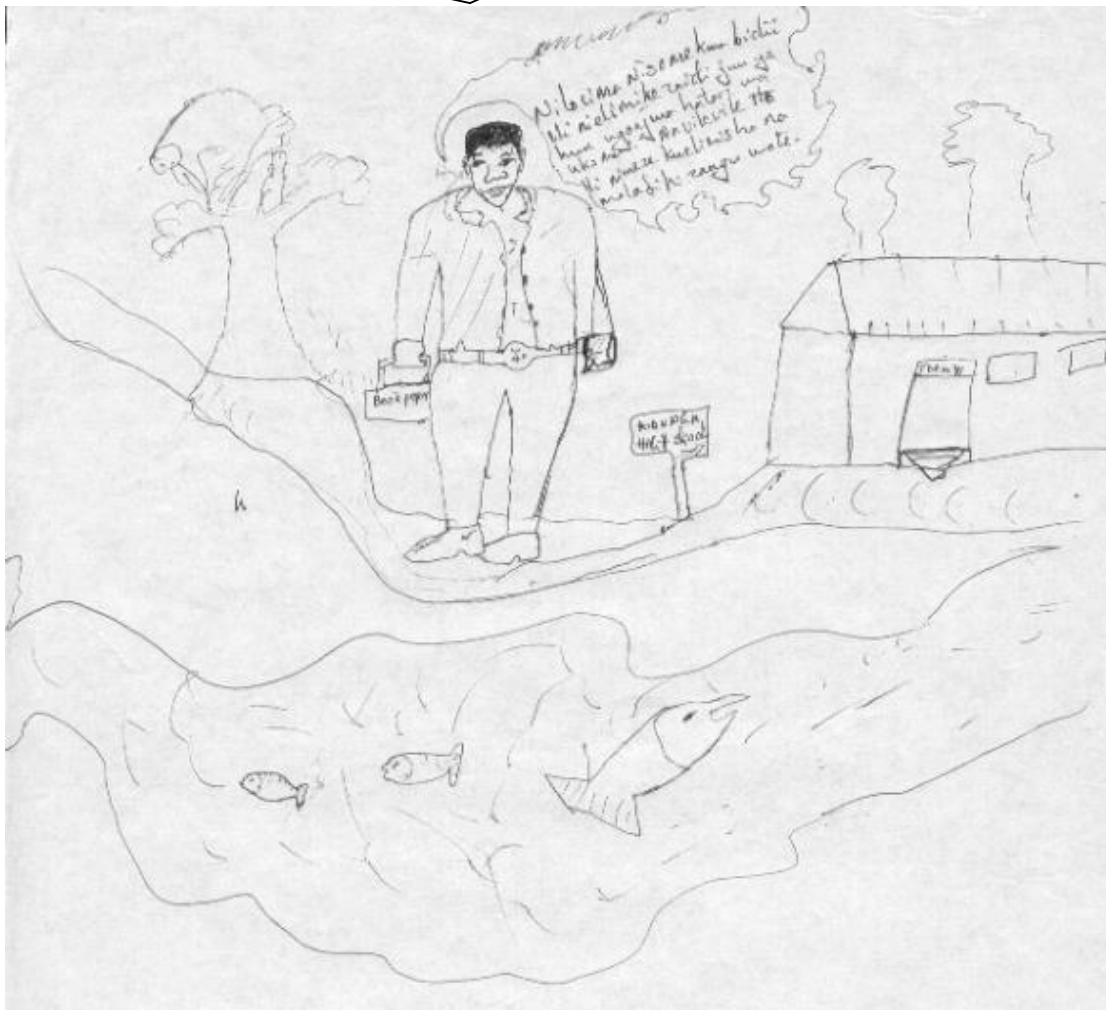
First, my opinion: I ask young people who are having sex too much. Well, if you have your lover, both of you, try to know your own health and the result. If you have known that result, then yes, first plan your strategies of life to marry. My strategies, especially, are to study hard until I finish my studies. If I have already finished my studies, well, if I get work, then I will marry. These are my goals.

(Male, Babati in-school)

In the following exercise, the participant emphasized the aspiration of getting a good education.

Write-and-draw 6.3

It is necessary that I study with effort, in order to be better educated about this dangerous disease of HIV/AIDS and likewise, so that I can be educated with all of my friends.



THE STRATEGY I HAVE PLANNED IN MY LIFE

The satchel is entitled 'Book paper'. The sign says 'Kidunga High School' and on the lintel of the classroom, 'Form VI', the highest class of upper secondary school.

(Write and Draw 6.3, continued)

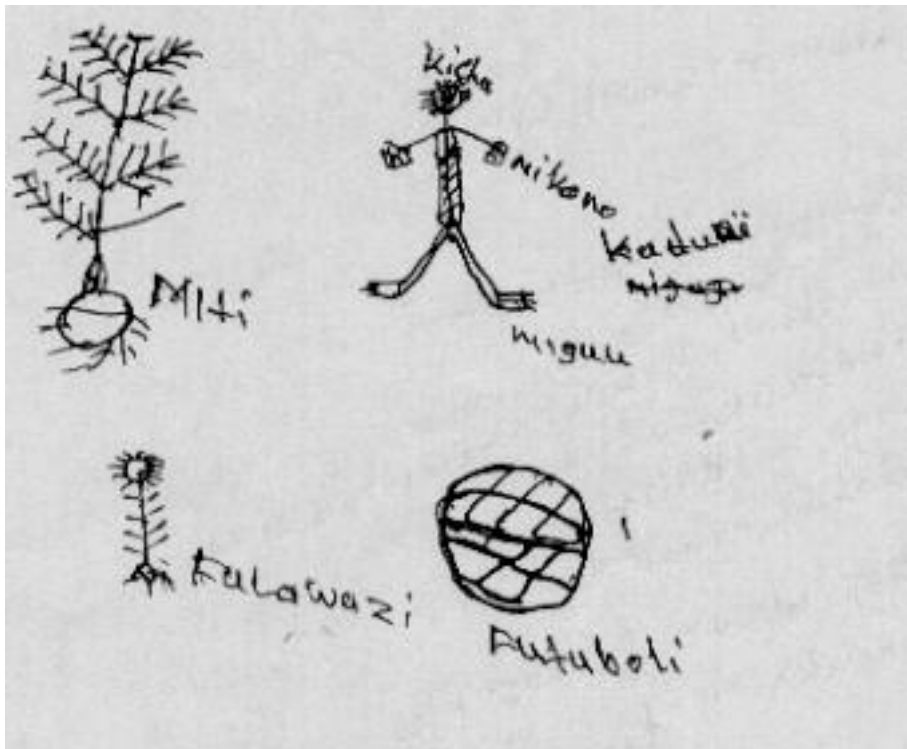
First, my strategy is to study with effort so that I can be better educated about the disease of HIV/AIDS and to be careful in that way. Before you and the woman have seen each other, it is necessary that you should test in order for us to know our health, in order for everyone to know that their partners are completely safe, and let us live happily. Before I have married, I must use protection. In human life, caution is necessary and much used. Another thing that can cause this disease is to avoid the temptations, for example, of groups: maybe a group that talks to you about wanting sexual things, therefore they can tempt you until you agree with those thoughts of theirs.

Another strategy is not to drink beer to excess. For there are people that drink beer until they forget themselves, what they did yesterday. As it is so, well, you do not know yourself that it might be possible that yesterday you seduced a woman who had the disease of HIV/AIDS and now your drunkenness has shared with you the infections of HIV/AIDS.

(Male, Kyela in-school)

Some participants perceived that opportunities to achieve life aspirations were more likely to come from their own labour and enterprise than from formal education and employment.

Write-and-draw 6.4



Tree, 'Katuni' cartoon man with head, hands and feet labelled, flower and football

Let me work on the farm and get money. I will build a house. I will take care against the disease of HIV/AIDS. If you are partners with someone with HIV/AIDS, you will be infected with HIV/AIDS. Also, if a person with sores touches you, the person infects you with HIV/AIDS. In addition, just do not like to have sex with people who have HIV/AIDS. Do not like to sex with someone who has HIV, and do not like to hold with the virus of HIV/AIDS.

(Male, Lushoto out-of-school)

In the write-and-draw exercises, more than one-quarter of the participants mentioned aspirations of education, employment or family. Some of the write-and-draw exercises as well as the responses in interviews and focus groups mentioned pursuing goals while refraining from sex.

I like the strategy of laying down objectives for the future. For if a person, if you have done some particular business, you must lay down objectives. For if you are concerned with a particular thing, when you will lay down objectives, you have the heart to be able to make something happen, that is, your dream or plans. Therefore, for example...if a person lays down objectives, you have the yearning to fulfil your dream and when you are with yearnings....I do not think that you will have the need of other things like this HIV/AIDS. You know completely 'to have sex can be causing me to get HIV/AIDS'. Therefore, you will try to avoid things like that.

(Male, Kyela in-school interview)

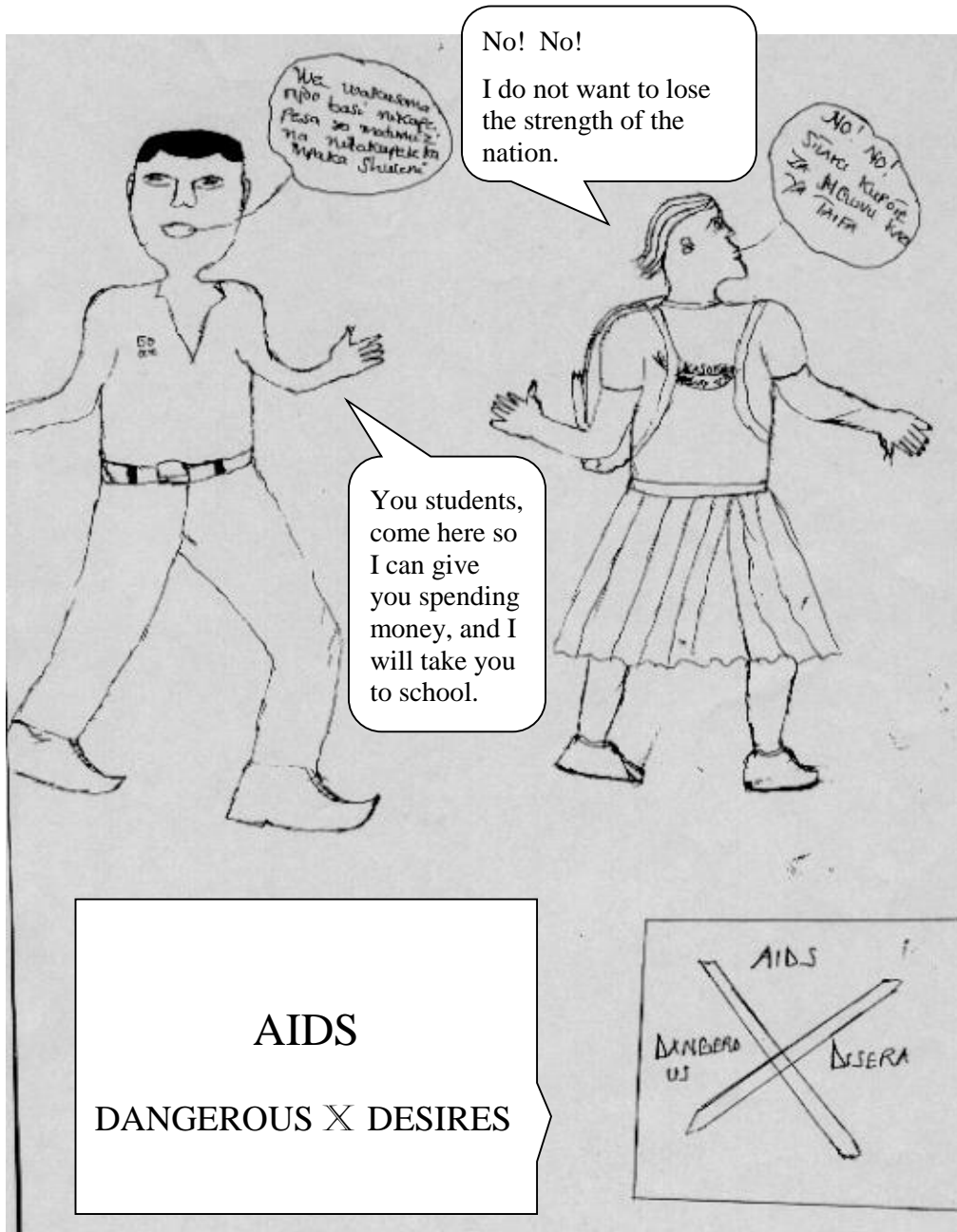
Participants often saw education as the first step or key to the achievement of other aspirations.

Education. For example me, myself, I was enjoying my study very much. But leaving my place, not to study, I had problems. I liked to study but in the school there, where I was studying in Class 7, certain diseases came out there, there at school. Now in those people and me, when I was there, yes, every day, if I went to school, I was compelled to fail. Yes, it caused me to be left here. Maybe yes, I would know that some help which will come from, perhaps....If God himself cares for me I will be able to get...I want to make myself go on, that a person herself, to make myself to go on with things at home, a question of....agriculture gives some great earnings, many things but many things come out of education.

(Female, Kyela mixed group interview)

The young people did not always view the importance of a good future as only a personal matter. Very often, aspirations involved the good of the larger society such as the community or nation as well as the welfare of the individual.

Write-and-draw 6.5



THE STRATEGY OF PROTECTING YOURSELF AGAINST HIV/AIDS INFECTION

- 1) To avoid the desire for wealth or money: I can do that by concerning myself with business or learning a trade in order to get money to have enough for needs.
- 2) To avoid random sex and to take a stand
- 3) To provide education for those who do not know what HIV/AIDS is, and how it infects this generation of the nation.
- 4) If I am unable to wait until marriage, I need to protect the one I love (have one lover).

(Female, Kyela mixed group)

Many young people felt that their aspirations took precedence over sex. Therefore, they said or wrote that the right time for sex was *after* the achievement of their aspirations.

Females discussed leaving or being encouraged to leave formal education in order to have a sexual relationship, or for other reasons. Some participants seemed to see leaving school and having sex as two aspects of the same thing. After leaving school, a young female can no longer use her status as a pupil to clarify or justify to others that she is not ready to have sex.

If you are misled to leave school but you should continue with school, because if you leave school at a young age, you will get yourself into matters of sex, and your life will become bad, and when you are told to leave school and you should make love, refuse.

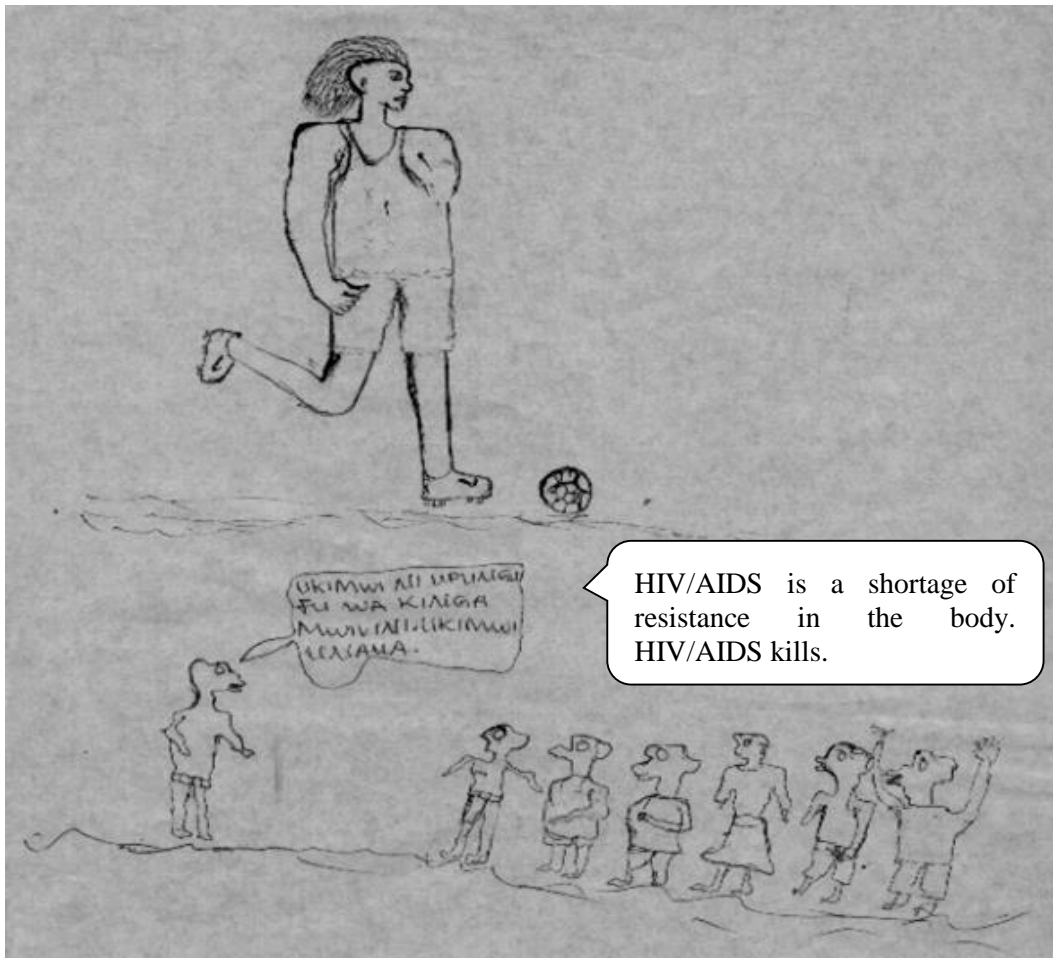
(Female, Upendo interview)

The pursuit of aspirations and the good life often emerged as a tactic in itself. The pursuit of aspirations was often but not always accompanied by other tactics, especially refraining from sex, and to a lesser extent, tactics of HIV/AIDS prevention that involved sexual relationships such as faithfulness, condoms and getting an HIV/AIDS test.

6.3.4 Playing Football and Other Sports and Games

Several participants, especially males, cited playing football and other sports and games as part of their HIV prevention strategies. Participants claimed that football and other sports and games kept them busy, kept their minds off sex and improved their physical condition, making them less vulnerable to infection. In the following cartoon, the player is keeping his mind off sex and improving his physical condition. Someone on the sidelines is educating the fans.

Write-and-draw 6.6



My strategy to protect myself from HIV is to take part in sports. This strategy helps to remove the state of little thoughts about the whole question of making love. This strategy is good because it removes thoughts about girls. This strategy helps strengthen the joints in the body, too. Therefore, the question of strategy of sports greatly reduces the spread of HIV. Therefore this strategy helps a great deal to reduce the longing of wanting to participate in temptations that can take me to, that can lead me to concern myself with questions of love affairs. In that way, this strategy can have various advantages. For example, employment by various sports clubs can bring money to me and those who are so employed but the central advantage of protecting oneself from this HIV is that you can live many years without having doubts about the disease, which you have gotten if you engage with the sports strategy.

Another strategy to protect oneself from HIV is to study. If a person studies, they will have education about how to prevent HIV/AIDS, how to recognize the signs of a person infected by HIV and ways to prevent HIV/AIDS. That person can educate his or her community about the signs, spread, prevention and effects of HIV. That education is very important for educating community members.

(Male, Kyela in-school write-and-draw exercise)

6.3.5 Resisting Temptation and Managing Desire

Participants sometimes associated temptations and risk with sexual transgressions and non-sanctioned sex, and sometimes with unprotected sex. When asked which strategy or strategies in the focus groups she did not like, one participant mentioned having sex ‘too young’ and having unprotected sex.

It is that one of listening to temptations of the street, like that of deciding to leave school, to make love and to make love at a young age, and to make love without using protection.

(Female, Upendo interview)

For males, resisting temptation often entailed managing sexual desires and refraining from sex. Like many of the adults, the participant below wrote that for both males and females to resist temptation, it helped to avoid sexually explicit imagery.

It is that a young man like me thinks about preventing himself from being HIV infected or infected but preventing himself from infecting another person with HIV/AIDS. If I look around, I love to talk about this place, our place, that many young people do not have this prayer, the prayer of saying that ‘let me prevent myself so that I may not be infected by HIV’...Why? I say this. (Clears throat) Here at our place, people have already....They have begun the part which, they have just been set in motion the intention that they can get income, and allows money to enter. That, here at our place, there are many places that show videos. A person decides to look for fifty shillings and looks at that video, and there, where they go to see the videos, they go to meet with a lot of stuff, they show X rated pictures, they show other pictures, those which, I mean they lack respect, for example, the ones, we have said are X rated. Now a person, when the person leaves that X rated picture, there are two because around here it is not monitored. It is the boy and girl themselves. ‘Let’s go to those X rated pictures’ they look at its happenings there, and already there is a temptation which tempts that boy and that girl, which there they look at that video there, they leave so they can have an experiment from what they had seen there. Therefore, I see that for a young person like me, to think how to control myself concerning HIV in order that it is there, because why? Of how these temptations are, you see?

(Male, Kyela in-school focus group)

Some males spoke of self-control as an important part of their masculine identity.

It is important to prevent, to protect your health so that there is no problem. That is, do not have desire, that is, matters of women, matters of going who-knows-where. [If] you go out, you engage in prostitution, you go and make love with girls there...If you have your woman at home here, and you are not satisfied with the love of your wife, you go to take....to engage in prostitution outside. Again, these things are not good. Later you can get a disease and then you come and you will have infected the one inside, who has nothing.

(Male, 'street children' interview)

One participant described masturbation as a way to manage sexual desire.

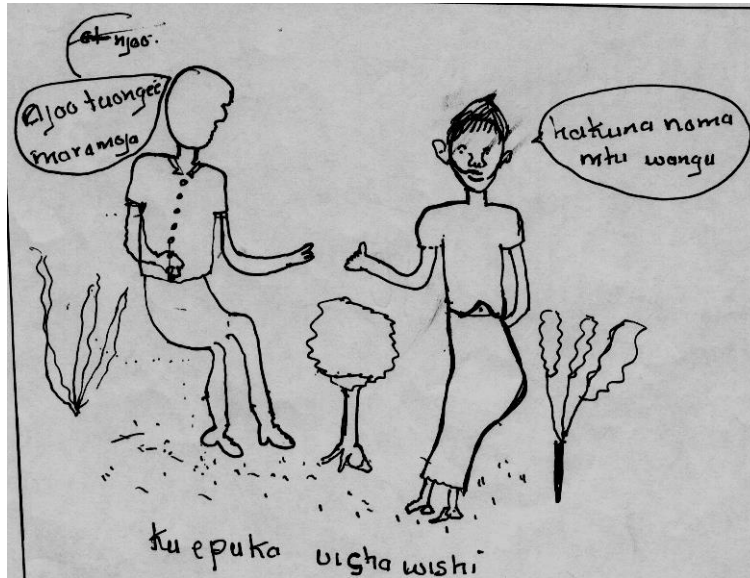
Write-and-draw 6.7



If you feel longing, it is better to masturbate. It is better to block HIV/AIDS from yourself. (Male, 'street children' group)

For females, resisting temptation entailed not letting one's guard down around men and resisting the material benefits that males offered them in exchange for sex.

Write-and-draw 6.8



Avoiding Temptation

Male: Come. Come, let us talk this once.

Female: No problem, my man.

(Female, Lushoto in-school write-and-draw exercise)

The second drawing by the same participant showed a young person listening to her mother's warning about dangers at night.

Write-and-draw 6.9



Listening to Mother's advice

Mother: My own, do not walk at night. There are hippopotami at this time.

Daughter: All right, Mother.

1. Writing my personal strategy which I will use to prevent HIV/AIDS

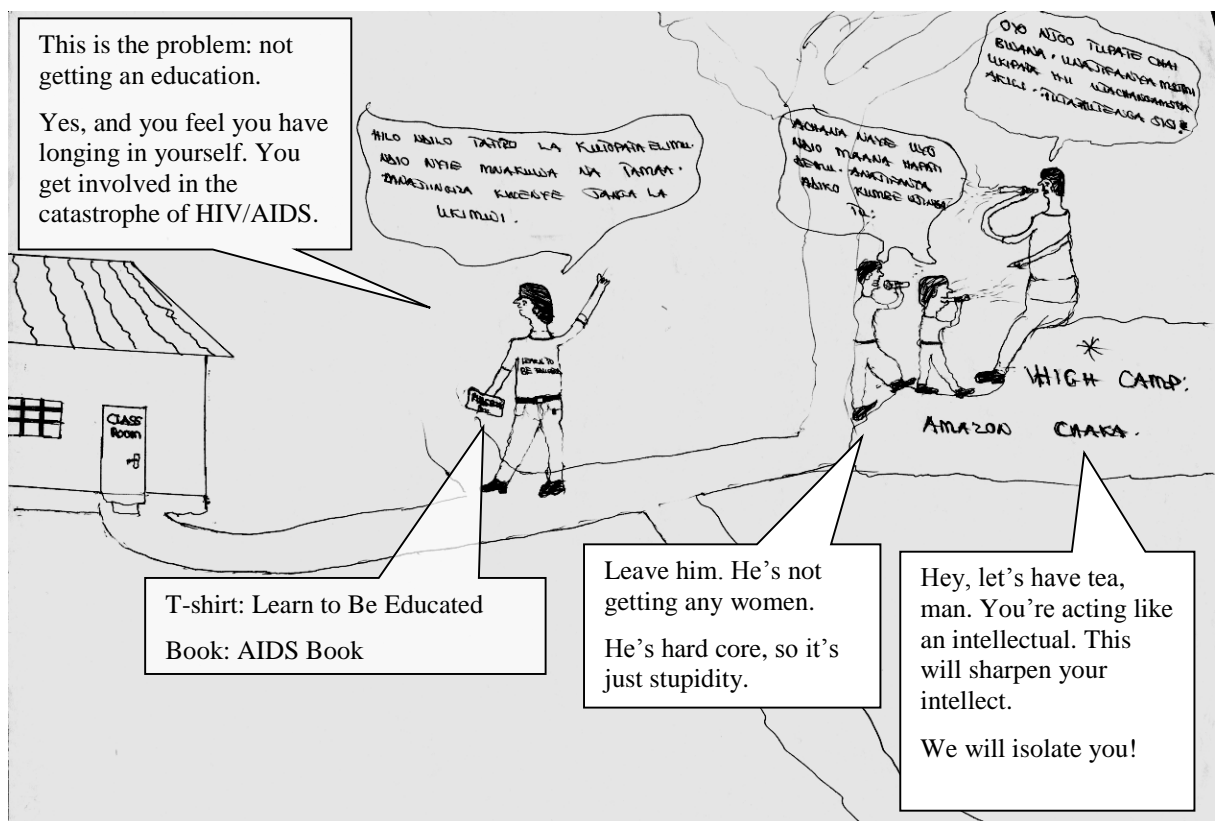
- i. I will refrain from random sex
- ii. I will refrain from staying in dangerous environments
- iii. I will refrain from sharing sharp things like
- iv. Blades, pins, needles
- v. I will listen to the doctor's advice
- vi. I will go to test and to get advice from the doctor
- vii. I will listen to the advice of parents and teachers
- viii. I will avoid temptations

(Female, Lushoto in-school write-and-draw exercise)

6.3.6 Avoiding Drugs, Alcohol, Gangs, and Dangerous Places

Males and females both warned against drugs and alcohol because of the probable impairment of intelligence and judgement that some considered could or would lead to increased sexual risk-taking and rape. Many warned against gangs and gangsters because of their association with alcohol and drugs. They warned against gang hangouts and other places perceived as dangerous like back streets, alleyways lonely places in the country, and times such as night, when and where the chances of sexual violence increased. Participants warned against wasting personal resources of time and attention on drugs, alcohol, gangs and gangsters, because these personal resources were scarce and better devoted to the achievement of personal aspirations.

Write-and-draw 6.10



1. Avoiding bad groups of people: because a person can be tempted to bypass his associates, how they were, for example, women missing their associates that do not have, they will tempt their associates so that with them they can enter into bad habits like drunkenness, smoking marijuana and so on.

(Male, Kyela in-school, excerpt)

6.3.7 Avoiding Transactional Sex

In Tanzania as in many other places, respectable courtship relationships often entail gifts from males to females. Nearly all the young people considered that having sex solely for the sake of material benefits was risky and wrong and no research participants argued that exchanges of sex for material benefits were desirable if other aspects of an authentic relationship were not in place.

Some participants acknowledged that some people had transactional sex in order to earn a living.

Habits always cause trouble because you find a person whose work is to have sex, it gets money for food and the person can live by that, even if you tell them to stop selling themselves they cannot agree.

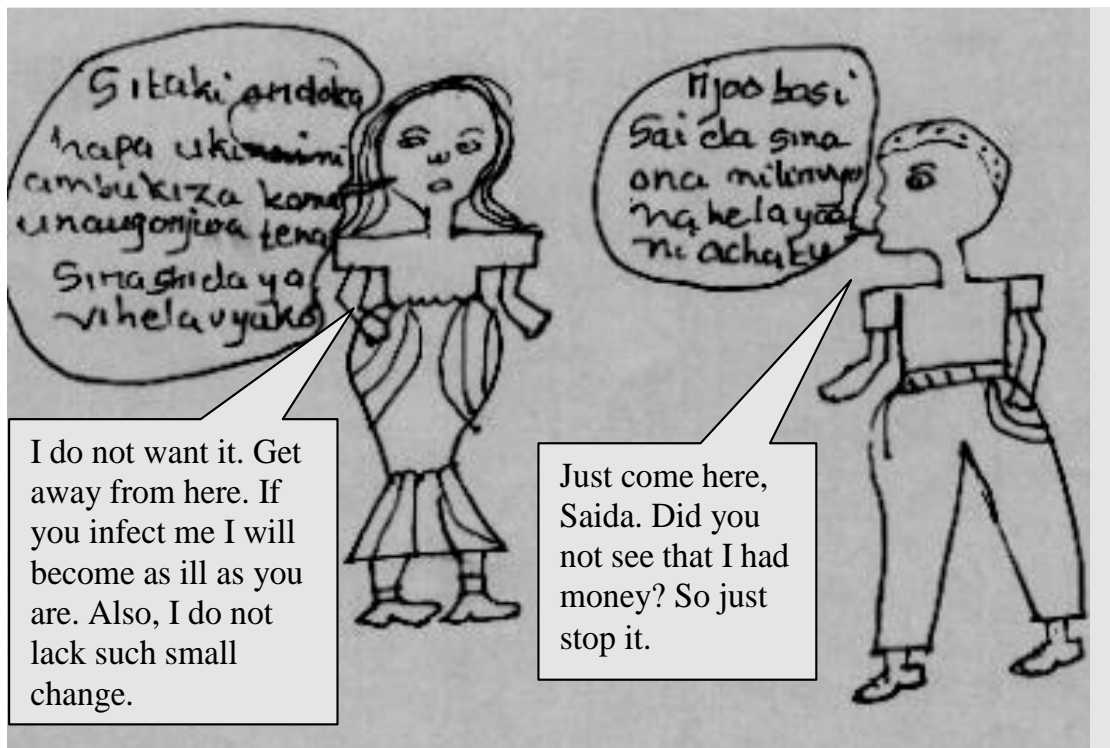
(Male, Babati in-school focus group)

Participants did not see transactional sex as a possible career for themselves, much less a desirable career. Implicitly, they treated transactional sex as a livelihood of last resort. For example, a few females said that they would earn enough money how they would manage their lives so that they would not need to get money elsewhere.

That is to relax, me in my life, like that, Even if you relax, you must desire money, therefore, so! If I do this, I will be like this but not to get money in another place. Perhaps to relax, to think about the work and the work that you are doing ...do different kinds of work until you are looking to that work which will bring me a benefit (Female, Kyela mixed group interview).

Female participants occasionally condemned the offerings of men for sex as trivial. Possibly, though, any discussion of the amount of money or the nature of the benefit offered for sex might stimulate rather than discourage a male asking for sex. He might be encouraged by the thought that more money or a better gift might meet with success.

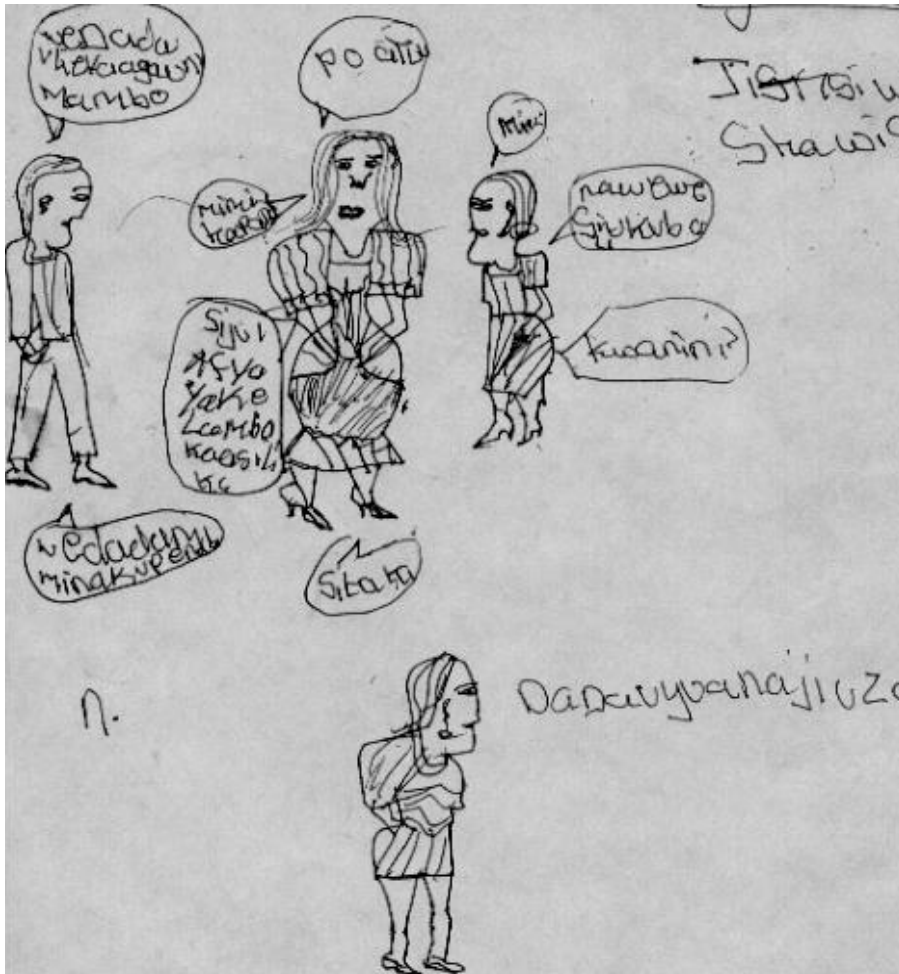
Write-and-draw 6.11



(Female, Lushoto in-school, excerpt)

Some females portrayed resisting the attempts of others to encourage them to engage in sex or transactional sex.

Write-and-draw 6.12



'How People Are Tempted'

Man: Hey sister, you in the dress, how are you doing?

Centre woman: Just chilling.

Man: I love you.

Centre woman: Me? No.

Woman at left: Why?

Centre woman: I do not want it.

Woman at left: Why not agree?

Centre woman: I do not know his health. Perhaps he is infected.

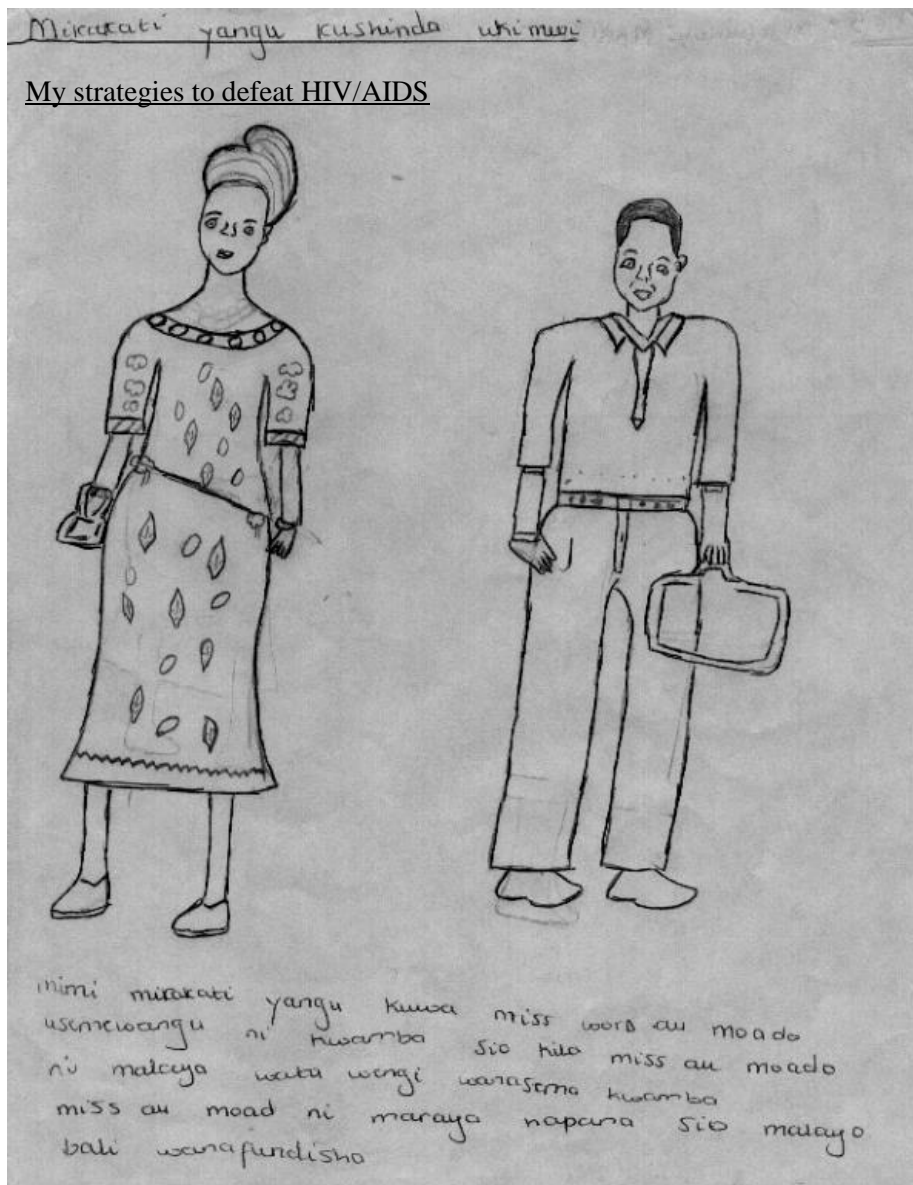
Woman in miniskirt: 'A sister who sells herself in the street'

My strategy is to protect myself from HIV, to avoid having sex with a person who has the virus and to advise my friends not to tempt men.

(Female, Mbeya in-school)

The exercise below contains a protest against disrespect and stigmatising stereotypes associating successful or glamorous women with transactional sex.

Write-and-draw 6.13



Me, my strategies are to be a Miss World or a model. What I say is that not every miss or model is a prostitute. Many people say that misses or models are prostitutes. No, they are not prostitutes. On the contrary, they teach.

While the illustrations about transactional sex did not always make an age difference explicit, the young people often spoke, wrote or drew about transactional sex as intergenerational sex, usually with an older male and a younger female. Some participants' responses suggested that some people were too young or naïve to understand what the transaction was really about or to assess probable risks and costs. In the write-and-draw exercises, the older people illustrated were vague or silent about the nature of the transaction itself, alluding only to the promised benefits, not, of course, the transactions' possible costs to the younger person such as becoming pregnant, contracting a sexual disease, or losing a good reputation.

Participants described most of the sorts of benefits promised as trivial in the long term but attractive in the short term, such as lifts to school, biscuits, sweets or eggs and chips. An adult, in an individual interview, told me that eggs and chips, the cheapest full meal served by many cafes, has a specific association with transactional sex.

Wamoyi (2010:12-13) found that gifts given in the context of transactional sex tended to be larger in the beginning to ensure the commencement of a sexual relationship and that the value of the benefits might dwindle promptly thereafter. If the starting price of the enticements is the cost of sweets or biscuits, however, the subsequent offer is soon likely to approach zero.

Female participants warned against becoming too fond of money. Many expressed limited sympathy for the financial motives of transactional sex, indicating that they believed that often, transactional sex was driven by the love of money rather than the need for it.

A person who loves money very much can get the infection. If she really likes men's money, they will seduce her and give her that money. They go to sleep, then they do not use protection. Then, yes, later on, they infect each other with HIV/AIDS in that way.

(Female, Babati out-of-school focus group)

Many of the females' write-and-draw exercises concerned refusing promises of material benefits for sex. In the following, the female actively pursues the benefits.

We must stop asking for sweets, biscuits, chicken and chips, etc., from people we do not know. (Female, Dar es Salaam, in-school)

The participant below discussed risks of extramarital transactional sex from the point of view of a cuckolded husband. While the participant did not criticise the morals, behaviour or motives of either the males or females, he alluded to the HIV/AIDS risk.

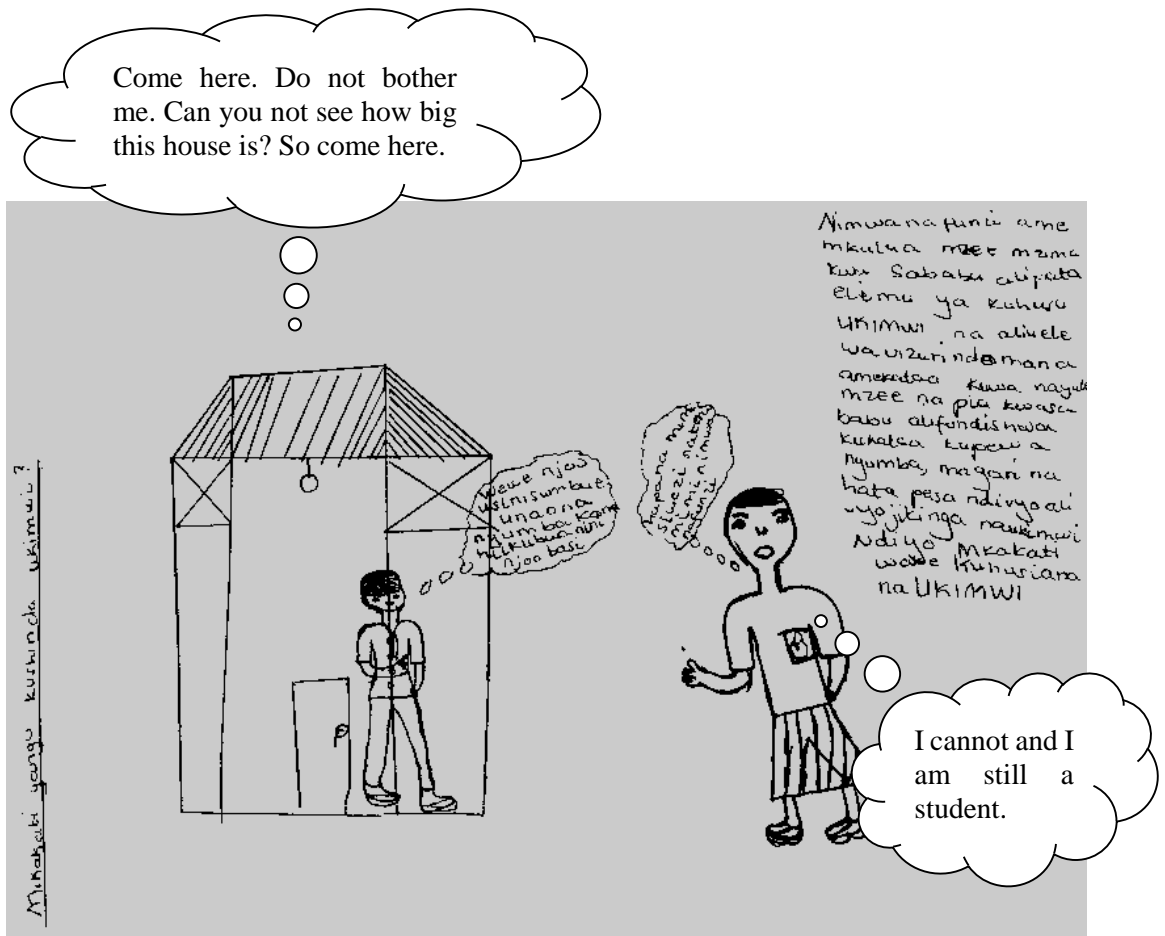
Other girls are somebody's wives. Now, somebody's wife sees a wealthy person and sees that '[It is] better that I make love with this person.' Now this person has HIV. Now if they make love, he will infect her with HIV/AIDS. Now her husband, if she makes love with her husband, she will infect him with HIV/AIDS. In the end, her husband or whoever can die. Now, it is there, if she goes to be tested, she will find she has HIV/AIDS there. It will be harms again. Me, I keep beseeching my associates to stop HIV.

(Male, 'street children' focus group)

6.3.8 Avoiding Beguilement

Participants warned for females especially to guard against the possibility of *kudanganywa*, cheating or beguilement. The man illustrated in the exercise following tried to bamboozle the girl with his imperious manner and to play on her socialisation as a female to be biddable. He tried to dazzle her with his actual or pretended wealth, though he did not offer to share any of it. She did not fall for it.

Write-and-draw 6.15



My strategies to defeat HIV/AIDS?

The student has refused the old man because she has had education about HIV/AIDS and has understood well. That is why she has refused to be with that old man and because she was taught to refuse to be given things like houses, cars and even money. That is how she has protected herself from HIV/AIDS. That is her strategy regarding HIV/AIDS. (Female, Dar es Salaam in-school)

There were different forms of beguilement. For example, a man might behave as though he thinks a female has accepted him. Another is behaving as though the female is being rude or poorly behaved if she refuses to get involved in a trap he has set. The females recommended avoiding and outsmarting beguilement.

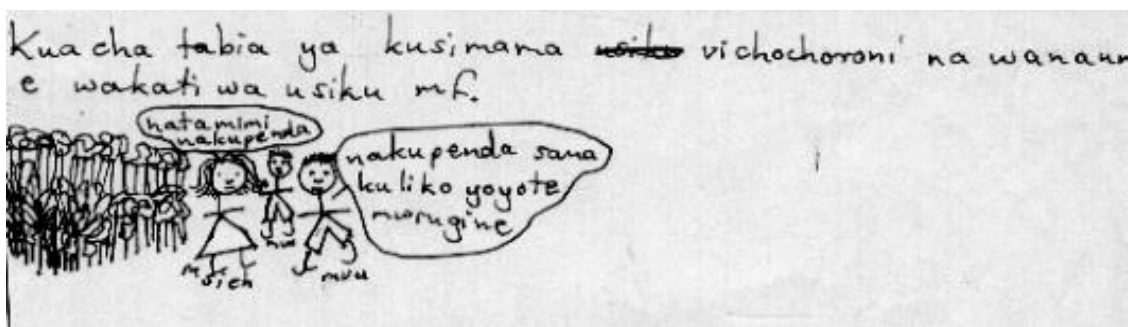
I shall follow the advice of mother or father or sister or my brother. They say, 'My little one, do not go walking carelessly around, don't get HIV/AIDS. If a person calls, say "No"'. 'Refuse if they say something like, "Go in there and draw some drinking water"'.
'.

(Female, Kyela in-school focus group)

6.3.9 Avoiding Unwanted Sex

Many of the female write-and-draw exercises concerned the avoidance of unwanted sex. One way was to avoid being in the wrong place at the wrong time. A frequent television commercial promoting the idea of talking to children about HIV/AIDS showed a mother advising her pre-adolescent daughter not to go out at night. The exercise below had a similar message.

Write-and-draw 6.16



Quitting the habit of standing in the back alleys with men at night

Labelled from left: girl, boy and boy

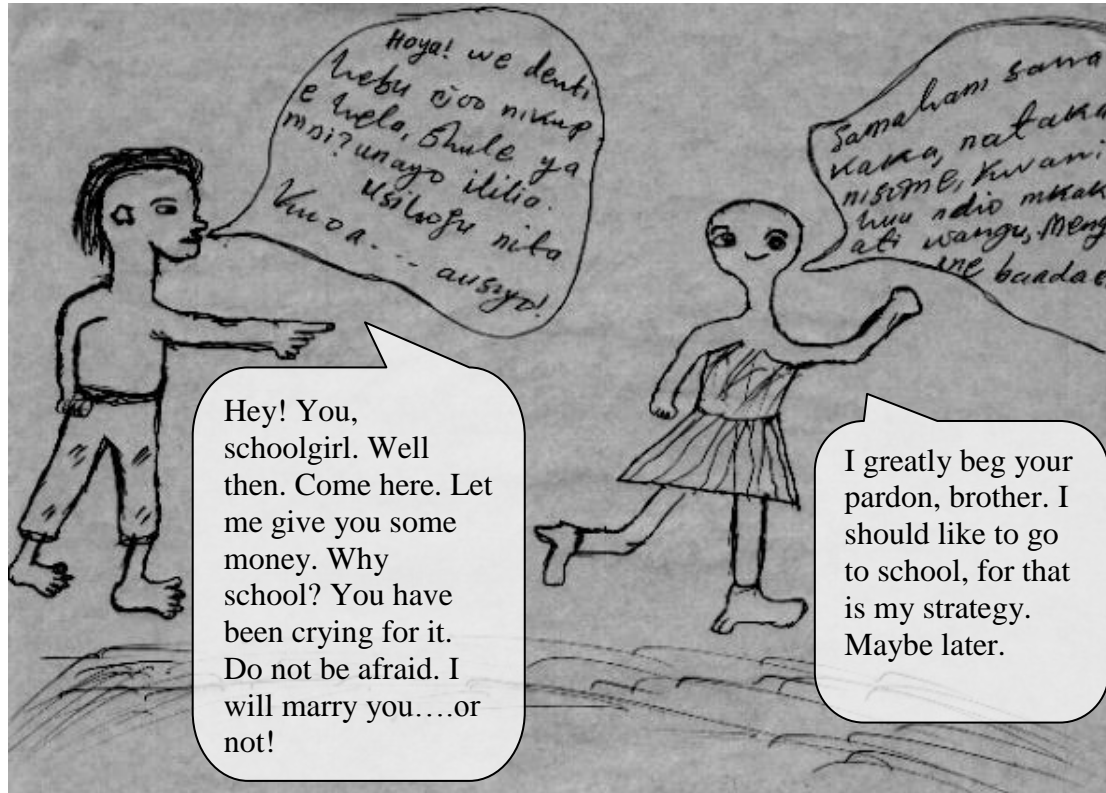
Boy: I love you better than anyone else.

Girl: Even me, I love you.

(Female, Lushoto in-school, excerpt)

A male participant drew the illustration below of a suitor who was undesirable from most points of view. The student illustrated was polite to the man although he was dirty and offensive. She met the requirements of courtesy and handily evaded the sexual encounter, hardly pausing in her quick trot to school.

Write-and-Draw 6.17



HIV/AIDS STRATEGY: EDUCATION FIRST

(Male, Kyela in-school, excerpt)

Females usually treated propositions with deference and respect. The following was unusually direct.

Male: You girl, come here, ride in my car. You are getting covered in dust. How long will you go on walking? Come to us big men with money and cars. We will make you happy!

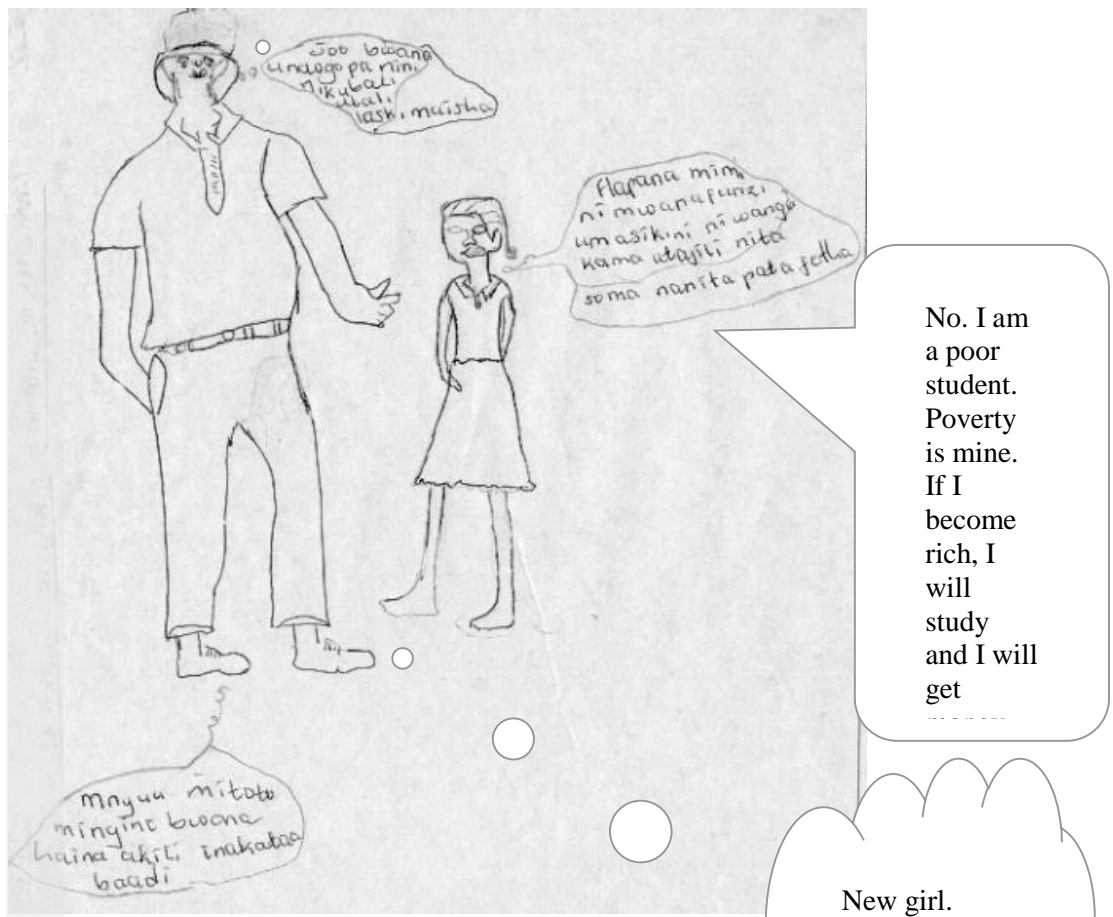
Female: Ho! I will walk on foot until I finish school. Please leave me alone to go on with my journey. Stop this. Are you not a father, a grown man? I am afraid of HIV/AIDS. Your car does not enchant me.

(Female, Dar es Salaam, write-and-draw exercise).

In the following drawing, the male was larger but not necessarily smarter. The female illustrated has a dilemma, though. She is poor and believes that an education will help her to get money, but that she needs money to get the education.

Come on, man. You, little one, what are you afraid of? Agree to me at the risk of your life.

Write-and-draw 6.18



The man wants the new little girl and she is refusing him.
 I will not be involved in this in my life even for one day.
 (Female, Dar es Salaam in-school)

No. I am a poor student. Poverty is mine. If I become rich, I will study and I will get

New girl. Some little children, man, they have no sense at all. Some of them

Some participants believed that some people infected others intentionally as a form of revenge or a response to despair or loneliness. This was an important category of unwanted sex to avoid. While none of the young people wanted to be infected, a few research participants empathised with the behaviour of people who intentionally infected others. Some participants considered how they would feel if they were infected, and whether their infection would make them want to infect others. Answering the question, ‘Do young people like you think that they can be infected or infect others with HIV/AIDS?’ one male responded,

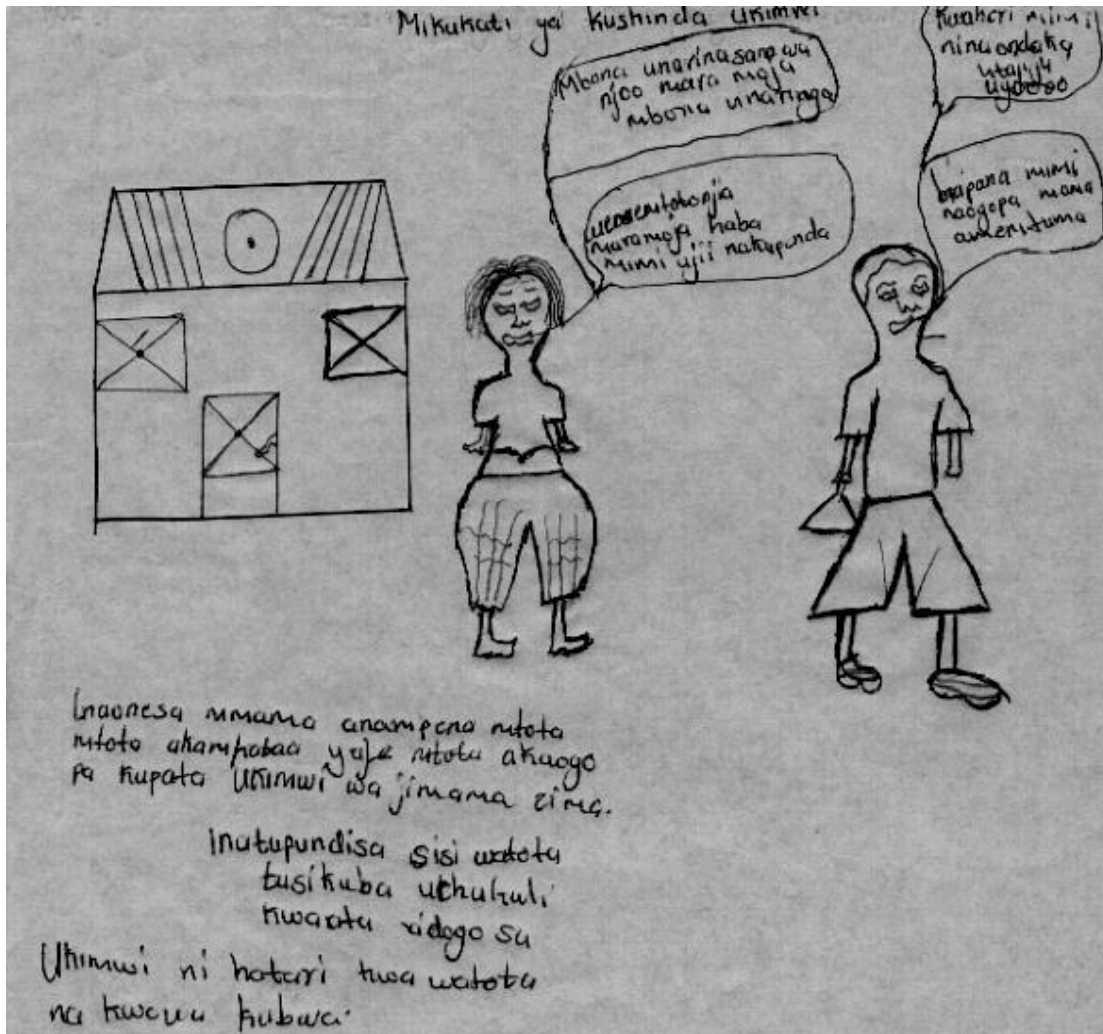
Some think about it. You find your partner has HIV/AIDS, then that person’s partner... For example, I have HIV/AIDS. Then my partner does not. Now how will it be that I have HIV/AIDS and the partner does not? I must infect the partner because I can lie and lie to the person. I will buy the person things. I must infect the person. Let us both have HIV/AIDS. Yes, the person can become part of the large society of people who have HIV/AIDS.

(Male, Babati in-school focus group)

There were a few mentions of unwanted sex with older women from the point of view of younger males. Males usually portrayed themselves and other males as being more or less in control of whether they had sex or not. Assuming that they had their own desire under control, they could take sex or leave it.

A female research participant's write-and-draw exercise illustrated an older woman tempting a younger male, who refused.

Write-and-draw 6.19



Woman: Why do you ignore me? Come here. Why are you putting on airs?

Boy: Goodbye. I am going. You will understand yourself.

Woman: You boy, come here. Do you not know I love you?

Boy: No. I am afraid and my mother has asked me to go somewhere.

It shows that the mother loves her child. She forbade the child and the child is afraid of getting HIV/AIDS from the adult woman. This teaches us children not to agree to fierce sexual desires. HIV/AIDS is dangerous to children and adults.

(Female, Dar es Salaam in-school)

Males apparently felt that refraining from unwanted sex was largely a matter of their own self-control over desire. For most of the young males, having sex with females was a matter of negotiation, but not having sex was a personal decision. The sex that they did not want was not due to a lack of desire but because they felt that it was morally wrong in terms of their standards of character or because the sex might result in harm. In the following, the young man believed in keeping busy, refraining from sex and having a good character.

Yes, I can. Because if you have your strategy, that is, you do not need to get HIV/AIDS, be in a bad life. For you, like you leave school, you go home, you rest a bit, you study and you finish there. You have built study habits for yourself but if you stay at home, you should avoid that disease. Because if you go and meet other people...if you meet girls, they will tempt you but if you are home, if you teach yourself, if you relax, have a bath, study, help mother with work here and there, you will avoid the disease and you will have a brave heart, a resolute heart.

(Male, Babati in-school interview)

Only one young male apart from the 'street children' discussed transactional and coercive MSM sex.

For a child or like me, let's say a young person like me, they can...tempt, like...let...that is, to let you stay there, that is, to have sex...and you see there you are forced...you know, there are even adults, too, like that get HIV/AIDS, that can force with temptations and money. Not only men but also men...to keep living by money, they give them, the children know, they are infected, a young person like me, a child like me, advising their mate, leave things like that, avoid it...danger for his life.

(Male, Lushoto in-school focus group)

6.3.10 Avoiding Early Marriage

A few females expressed fears of unwanted and coercive sex in their strategies in the context of forced and early marriages.

There is a time that it can happen that I will not be able to prevent but for me myself I will be able to prevent by not being with bad friends who tempt me to have sex. For example, if parents force me to marry and that person is older than me then he has AIDS and he has money, I won't agree to be married. I will be a diligent student at school that I may know how to prevent AIDS and I will explain more to my parents that they will understand more about AIDS.

(Female, Compassion interview).

The female illustrated in the exercise that follows was concerned about early marriage. It was rare for females to admit sexual desire or wanting sex for any other reason. Like others, the female communicated the belief that her bravery could help her to overcome HIV/AIDS.

Write-and-draw 6.20



My strategies to defeat HIV/AIDS!

- 1) My strategy to defeat HIV/AIDS: I need to be a brave person.
- 2) I must not agree to bad temptations.
- 3) I must be patient.
- 4) I must not be in a hurry to get married.
- 5) I am thirteen years old this year.
- 6) And now I look forward to becoming engaged.
- 7) I have passed puberty and now it is necessary to have sex.
- 8) I need advice and I am in standard 6. I am afraid of HIV/AIDS and pregnancy, too, but what can I do?

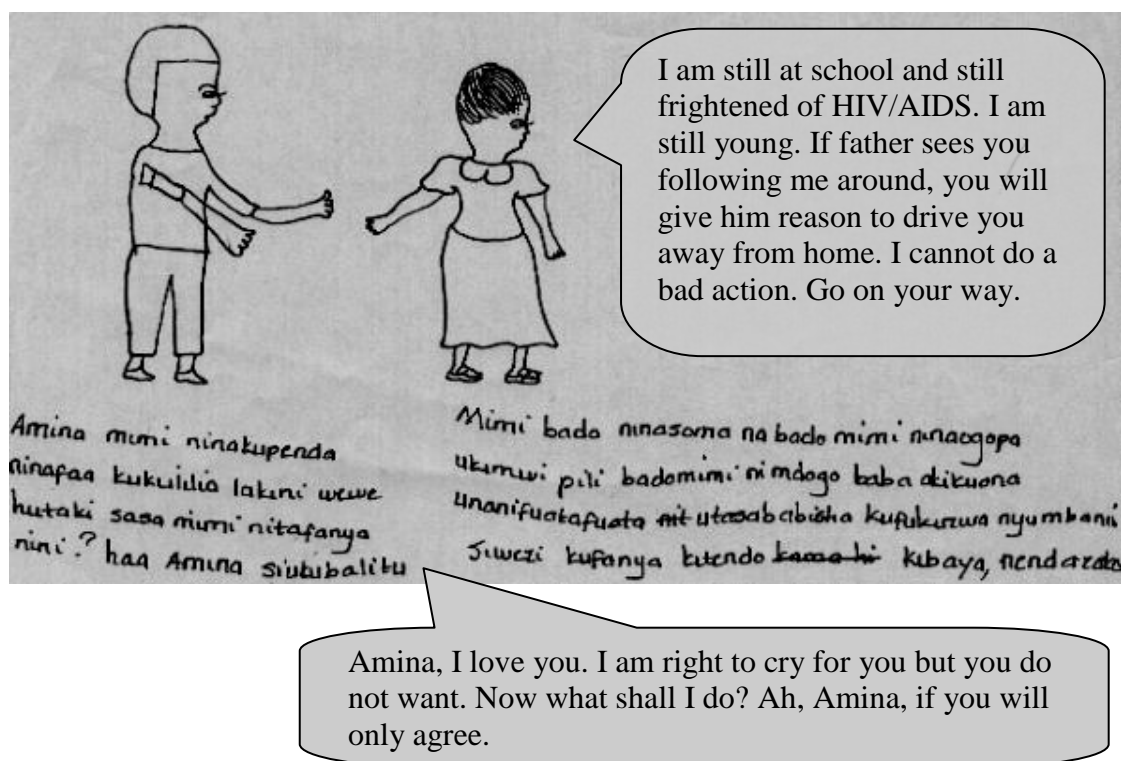
When I want to control myself, I cannot but I will try to be brave.

(Female, Dar es Salaam in-school)

6.3.11 Dealing with Sexual Harassment

The young people spoke of sexual harassment in terms of an older or more powerful person harassing a younger or less powerful person by requesting sex in exchange either for offered benefits or to threatened detriments. Sexual harassment was seen variously as transactional sex, unwanted sex or a temptation to resist. Below, a female participant illustrated rejecting an ordinary suitor with a calm and reasonably firm gesture.

Write-and-draw 6.21

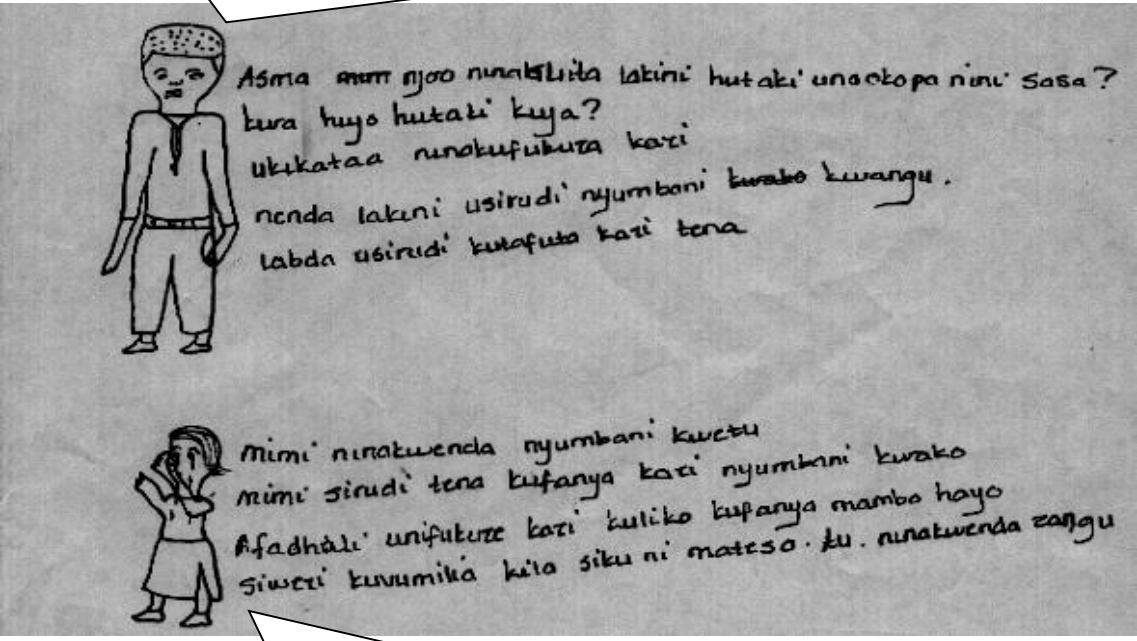


(Female, Lushoto in-school)

In a second drawing by the same participant, the female stood her ground, but because her livelihood was involved, she paid a higher price for her refusal.

Write-and-draw 6.22

Asma, come here. I am calling you but you do not want. What are you afraid of now? Therefore, do you not want to come? If you refuse, I will chase you away from work. Go home. Do not come back to my home. Maybe, do not return to look for work again.



I am going home. I am not coming back to do work at your home. It is better that you drive me away from work than to do those things. I cannot persevere every day. It is suffering (or persecution or harassment). I am going home.

These strategies are to refrain from temptations.

(Female, Lushoto in-school, excerpt)

6.3.12 Avoiding Rape

Rape is an HIV/AIDS risk for victims and rapists alike. Participants realized that they could try to avoid rape but that they might fail. Female participants discussed rape and gang rape as a possible consequence of saying 'No' to a male.

If one of your friends at school has HIV/AIDS, if he forces you to have sex with him then you will refuse, then they plan a secret meeting when he is on your way where you pass they hold you tight against a wall until you have sex with him, there you have broken your strategy. (Female, Compassion Focus Group)

Many females were aware that certain places and situations, such as being outside at night, made them more vulnerable to rape.

Write-and-draw 6.23



This girl has stayed in the dark while the boys are approaching to rape her.

(Female, Lushoto in-school, excerpt)

Similar to discussions of beguilement earlier in the chapter, a female participant described the risk of rape that might accompany complying with a man's instructions.

From my side, me I can say this. If a person has called me, saying, 'You child, come here, that you may take this money and buy me even cigarettes there, if you have taken the cigarettes, if you take to him and he tells you that I can put them inside his place then if you take them he will enter in the back, in the back. He will close the door. He will start to commit anal rape (Female, Kyela in-school focus group, excerpt).

Some of the male participants discussed their own vulnerability to rape.

Participant 1: Look again, brother, these children who you see one, two, three with their mates, these children have no place to sleep. Meaning, that here they do not go to school, then they are filling each other with anal sex, they have anal sex with each other, they have sex it is true. They do not tear each other's clothing, others come, if they find them have been passed around and they are completely sleepy. They take off their clothes and begin to do it to him.... Yes, I say this. You have found that we have been sleeping, many of us sleeping if you arrive in the night. That is, a drunken person comes and has come there and has come to abuse us verbally. He starts to say 'Wait, let me sleep here' then night arrives. You are startled. He starts to take off somebody's clothes. He starts to abuse others....

Participant 2: 'Say that he does anal intercourse with us!'

Participant 1: They do anal intercourse with each other, brother.

(Males, 'street children' focus group)

The practice of males having sex with other males (MSM) is stigmatised and illegal in Tanzania. Some of the male 'street children' discussed MSM and anal sex, sometimes as the victims of rape, occasionally as the perpetrators of rape (of males or females), and sometimes as consensual partners. The males sometimes framed their discussions with within the contexts of their marginal economic and social status.

Participant 1: I have done anal intercourse to Male A many times.

Paulo: Did you use a condom?

Participant 1: Yes. Yes, it is true, I used and again at the rubbish tip.

Participant 2: I have already done anal intercourse but to girls.

Paulo: How many?

Participant 2: Three: we who sleep with them in one room, we had anal intercourse with them and there is one fellow named Male B, my friend in our group. He slit that girl (laughter) in her off-side, slitting her and she yelled and we were caught by the watchman. Now, being caught by the watchman, our names were written up, the day after, he looked at every action. Now there, let's say...and Female C left forever, she was afraid to say because he slit that girl's reproductive organs (Male, 'street children' focus group).

The 'street children' sometimes referred to the need for somewhere safe to sleep.

I want to say about us, like prostitutes, we stay in a bad area, you find those people who smoke marijuana, they come there, they meet the children who are shaken, are sleeping, that is, they sleep, even if a person is shaken they do not wake, you find that he....

Charlene: So they smoke marijuana and commit anal rape.

YP: Yes, if you come you stay, you stay, it's every day they do you like their wife, that is, it is like practice and you, he does you, your wife, totally, you don't know, you come to get diseases.

Charlene: So something like that has happened to your associates.

YP: Yes.

Charlene: Lots of them, or...

It has already happened to lots of them.

Charlene: Do you have anything you would like to say? Maybe this time you talked about and...would you like to add anything, perhaps?

What I would like to add is we ask our teachers to help us to get a place to sleep, and here, when we leave there, we go to the streets to wander around, night falls, we go to sleep, we go to sleep in a completely unsuitable place.

Charlene: that is, to sleep is the important thing. Yes.

(Male 'street children', interview)

6.3.13 Giving and Taking Advice

Some young people emphasized prevention in terms of how they would persuade or advise others to modify their own behaviours. To an extent, these tactics were publically-spirited or appropriate to the roles they aspired to as individuals, professionals and community leaders. The name 'Neema', used below, means 'Grace'.

Write-and-draw 6.24



Upper drawing: Neema at the health centre

Lower drawing: Neema advising her mate who has been affected.

(Mbeya, Female in-school)

Many young people recommended taking other people's advice, especially from parents, other older family members, health workers and teachers.

While young people did not usually consider peers as reliable sources of advice, it was common for them to wish to advise others as part of their HIV/AIDS prevention strategy. The young female in the excerpt that follows, for example, believed that HIV/AIDS was a community issue, and that she could contribute to educating others.

I like best the strategy of educating my companions about the problem of HIV/AIDS, because HIV/AIDS is a dangerous disease for which there is no medical treatment or medicine. Another thing, I like to educate them because people die with this very disease for no reason.

(Female, Kyela in-school interview)

6.3.14 Using Condoms

Of all the participants who did write-and-draw exercises, about one quarter mentioned condom usage either explicitly or with euphemisms such as ‘protection’.

Some people considered that condoms were a tool to prevent pregnancy rather than to prevent HIV/AIDS.

Some protect themselves but what they are looking at is about getting somebody pregnant and they do not look at whether they could be infected by HIV/AIDS.

(Male, Lushoto in-school)

The participant below confirmed that he was talking about condoms.

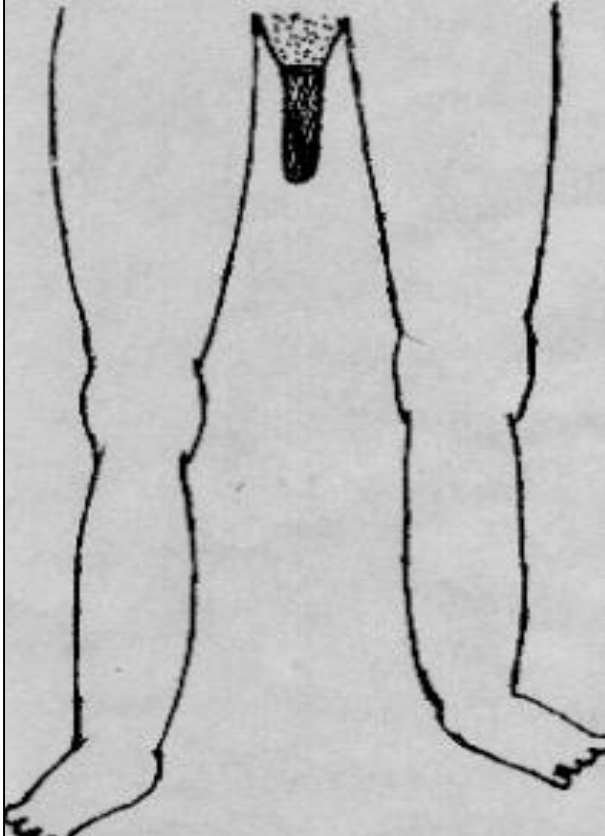
Participant: That plan? That plan....some are not using protection. Others are using protection intentionally, in order not to spread that disease.

Paulo: Which protection?

Participant: Like these condoms, yes, protection that is safe. Therefore, there are others using without protection. Therefore, there, HIV/AIDS is very easy to get. (Male, Kyela mixed focus group)

It was unusual for condom use and negotiation to be the main tactic of a strategy in the write-and-draw exercises. The exercise following was an exception.

Write-and-draw 6.25

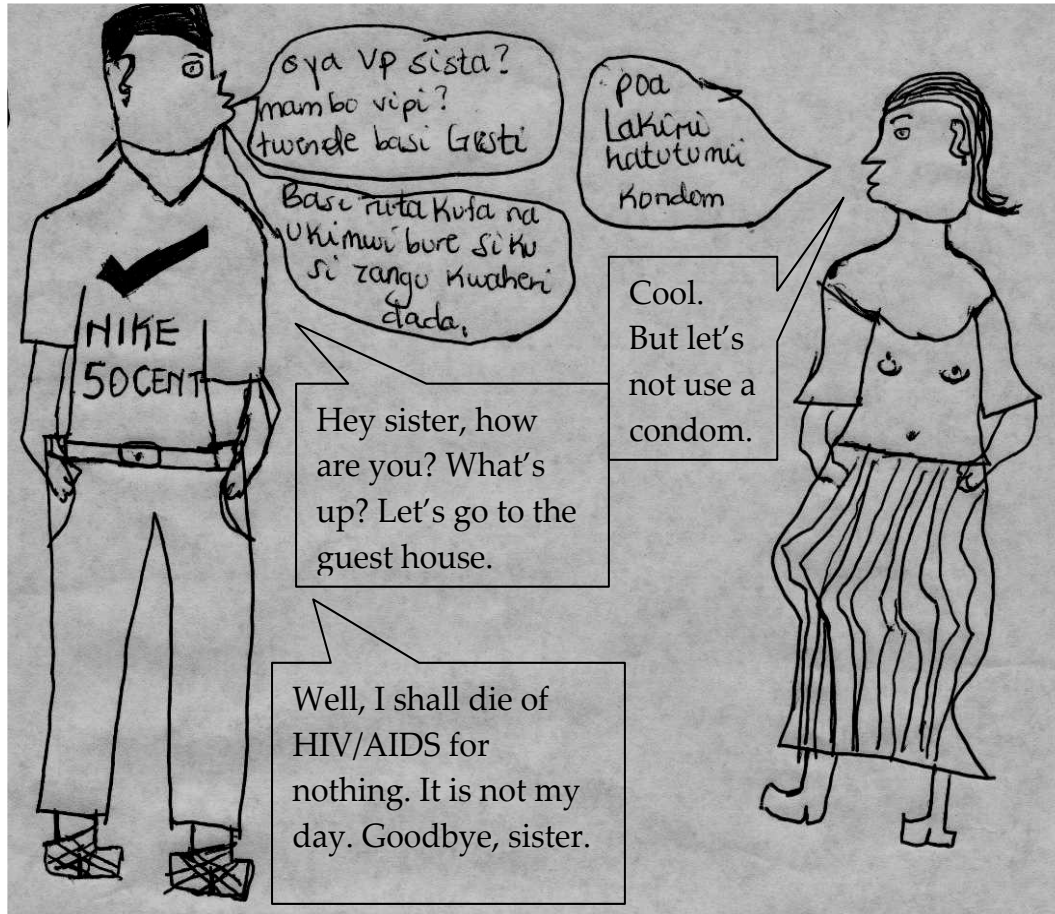
<p>MY STRATEGIES CONCERNING HIV/AIDS</p> <p>I will make sure to use a condom when having sex in order to prevent the disease of HIV/AIDS and I will explain to my lover about the condom.</p> <p>IT IS JUST LIKE THAT:</p>	
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(Male, Mbeya in-school)

In the previous drawing, the author does not anticipate negotiating with partners about condoms, but he does anticipate explaining about condoms to them. No participant illustrated females negotiating condom usage with males.

In the following write-and-draw exercise, the female illustrated tried to negotiate not using condoms. The negotiation ends when the man decides not to have sex.

Write-and-draw 6.26



My strategies to defeat HIV/AIDS are

- Not to agree to temptations
- Not to share blades, needles or blood transfusions with an affected person
- Not to agree to gifts for the sake of having sex
- Not to go to rest places
- Not to stay in the back streets at night

These indeed are the strategies to overcome HIV/AIDS.

TANZANIA WITHOUT HIV/AIDS IS POSSIBLE! TEST! Bye.

(Female, Dar es Salaam in-school)

Another participant in the same group had more reservations about condoms.

My strategy is to use a condom. A condom, for example me, my penis, I have HIV/AIDS. My penis, when I have sex without a condom and I push those things and when I spill semen, that semen, that semen will not be safe. Now if I use a condom it will me, that penis of mine, its skin, in having sex, to push Mr. Swelling when I will be pushing there, if I am near to spilling that semen, it will be left inside the condom. Therefore, it is that strategy of the condom that is most important, that is, that semen can stay there inside, therefore for me, the condom is important. It will be more in getting pregnant, it is important for that strategy of the condom, how it is like that, however it is necessary to be careful in wearing it, you can wear it and lo and behold there, it can split. It will be a calamity now.

(Male, Mbeya in-school focus group)

There were a few statements that condoms were unreliable and therefore that they were drivers of HIV. Moreover, some participants believed that condoms somehow carried or transmitted HIV, such that condom use was undesirable.

To use a condom, that behind that, I was hearing that some condoms, yes....that condoms of these days....yes....Many people use condoms but they are found in HIV/AIDS. Very many people use condoms but in HIV/AIDS....The people are there in them and it gets there. They were using condoms. You hear somebody has it. Even many students use condoms but they get HIV/AIDS. I do not like, because condoms bring harm.

(Female, Kyela mixed group interview)

6.3.15 Avoiding Sexually Transmitted Diseases

Generally, when participants discussed the avoidance of sexually transmitted diseases, they discussed them in similar ways to preventing the sexual transmission of HIV.

My strategy, like the way I am here I can protect myself and say I do not want a woman because I know there are many diseases spreading around here within this city, there is gonorrhoea. You go do it with a female lover. You can be getting ill with gonorrhoea or HIV/AIDS. Gonorrhoea comes from a woman and you the man if you have gonorrhoea, if you go with a woman to make love with her she will not get it. But very much the absolutely most frightening disease, because you can get better with the disease of gonorrhoea; you can't get better from HIV/AIDS and you do not even have any medicine. I would like my friends to stop having sex. If you have your woman, both go to get tested, don't have sex.

(Male, 'Street Children' Focus Group)

The young people did not discuss the biomedical understanding that transmission is more likely to the HIV negative partner if the HIV positive partner has another sexual disease, but their conversation did suggest that they understood that other diseases, such as gonorrhoea and syphilis, were sexually transmitted.

Yes. I will use the strategy of not having sex without protection, the strategy of not sharing sharp things or clothing. Because that strategy helps in your life and so I do not get diseases...sexual diseases like gonorrhoea and syphilis and HIV/AIDS.

(Female, Upendo focus group)

6.3.16 HIV Testing

As described above, some participants communicated that supplementary tactics should accompany faithfulness. Although many apparently felt that faithfulness was an important ideal, they acknowledged that faithfulness was difficult to ensure or monitor. HIV tests were useful because of the difficulty of knowing about the sexual past of others.

For example, in today's world, boys from our height and older can start to have lovers. There are, I do not know, prostitutes. For example, a girl can enjoy being with more than three boys. For me, for example me, I have already discovered that of my lover. I can tell her, 'Me, here, on my side, I went to test my clean health, so, have you already gone to test?' and if she says that she hasn't already gone to test first, I will go to test with her so that we will be safe. I will tell her the ways that are dangerous for HIV/AIDS. That is, I will have already protected myself from HIV/AIDS. The health of my friend, my lover, I could not know. If I want to test, if I find she does not have HIV/AIDS, I will tell her the ways to avoid HIV/AIDS, for example, 'Don't be a stinky weasel', to go with many other lovers more than me. That is, let us lay down an environment where having sex is something we do together.

(Male, Mbeya in-school focus group)

Many participants saw testing and disclosure for both members of a couple to be useful.

That is, to be lovers, first, it is necessary to go to the hospital and you both are tested in order for each person to know the health of the other.

(Female, Babati in-school focus group)

The majority of participants were generally positive about HIV/AIDS tests, at least in theory.

You can advise him or her that if he or she wants to have sex and a person who he or she knows is his girlfriend or boyfriend until they are first tested, so that they know neither has HIV/AIDS then they have sex.

(Female, Compassion Focus Group)

Occasionally, participants discussed the advisability of testing prior to marriage.

You can protect yourself. Because of this: that is maybe I have HIV/AIDS. I can protect myself. For example, a person has his wife. They could not have sex until they go to test. Yes, they should be faithful to each other or one has HIV/AIDS and the other does not, that man can chase her away or stay behind without becoming her lover so that the one who has HIV/AIDS can get protection.

(Male, Babati in-school focus group)

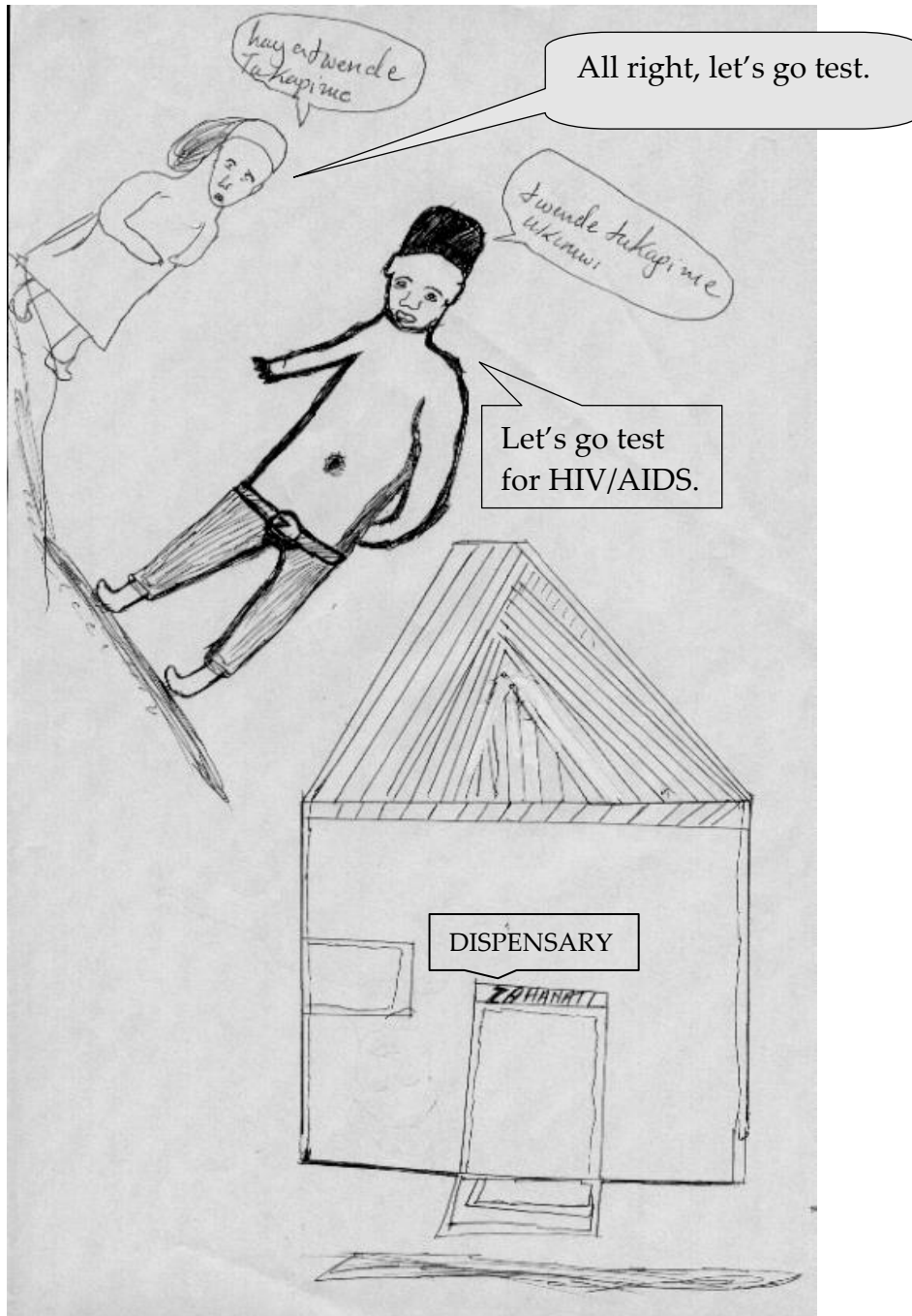
Some young people recognised the value of repeated testing. Usually only one test was mentioned, though. While some young people saw testing as a necessary preliminary step to a sexual relationship, there was little evidence that they thought of testing as a regular feature in a committed relationship. The few participants recommending an interval between tests or additional tests after the first one did not seem to know what the appropriate interval might be. One hazarded daily intervals between tests, for example. The participant quoted below was unusual in that he had a more definite idea of how to use periodic testing (or at least a follow-up test) in a strategy.

Yes. To have one lover and to test after three months: you do not see any better strategies. You test. And you make sure.

(Male, Babati out-of-school interview)

In the following write-and-draw exercise, the male took the initiative to suggest an HIV test and the female agreed.

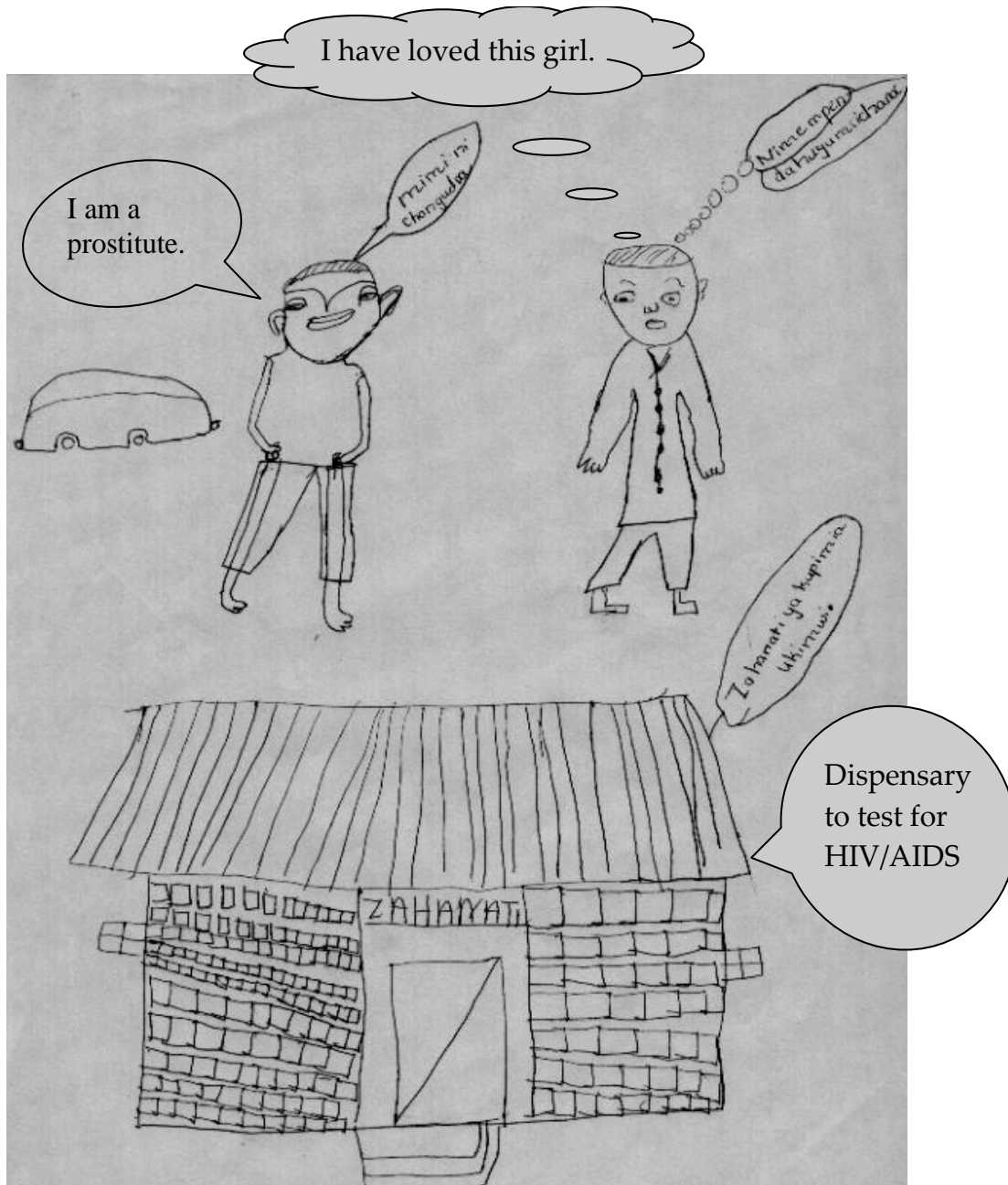
Write-and-draw 6.27



(Male, Upendo Group)

It is difficult to know whether the male pictured below was alarmed, smitten, or both. In any case, the write-and-draw exercise showed that testing was available for sex workers, clients and their other sexual partners.

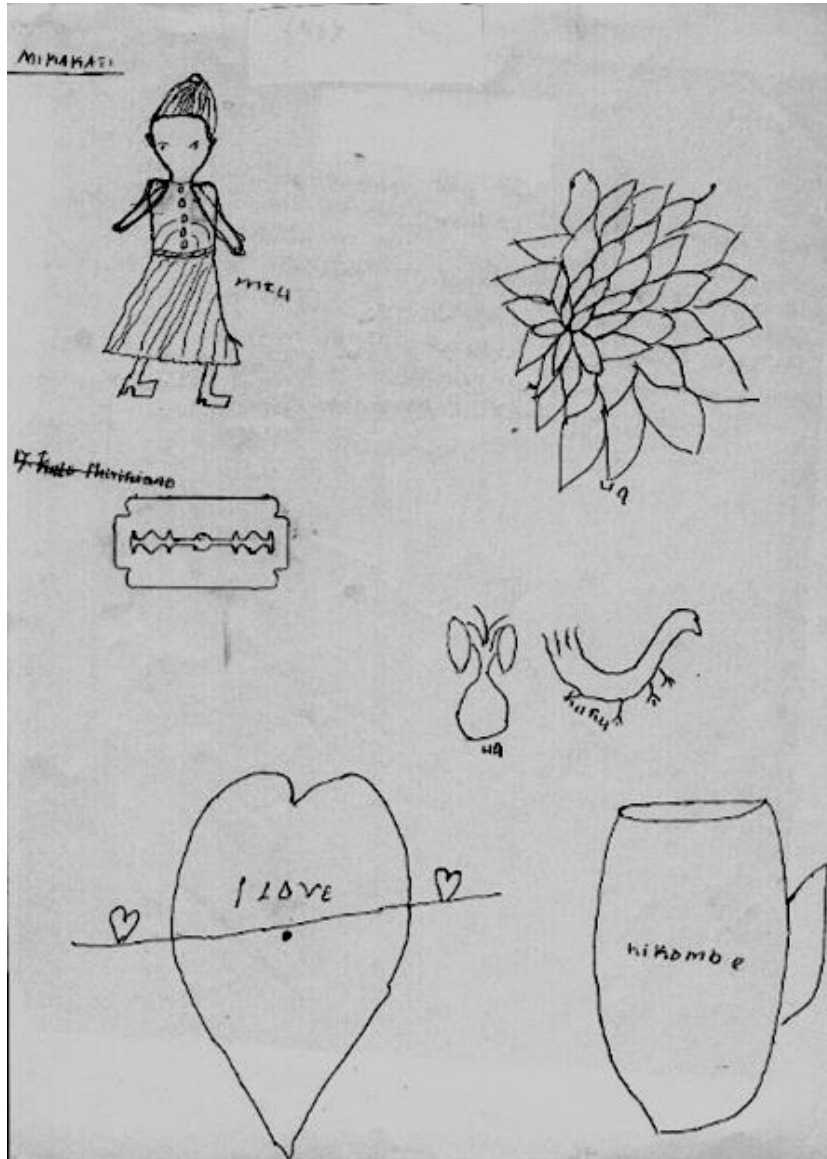
Write-and-draw 6.28



(Male, Upendo Group)

A few participants, however, considered that an HIV/AIDS testing clinic was a possible place to get HIV.

Write-and-draw 6.29



STRATEGIES

Pictured: person, flowers, razor blade, chicken, cup, hearts and “I love”

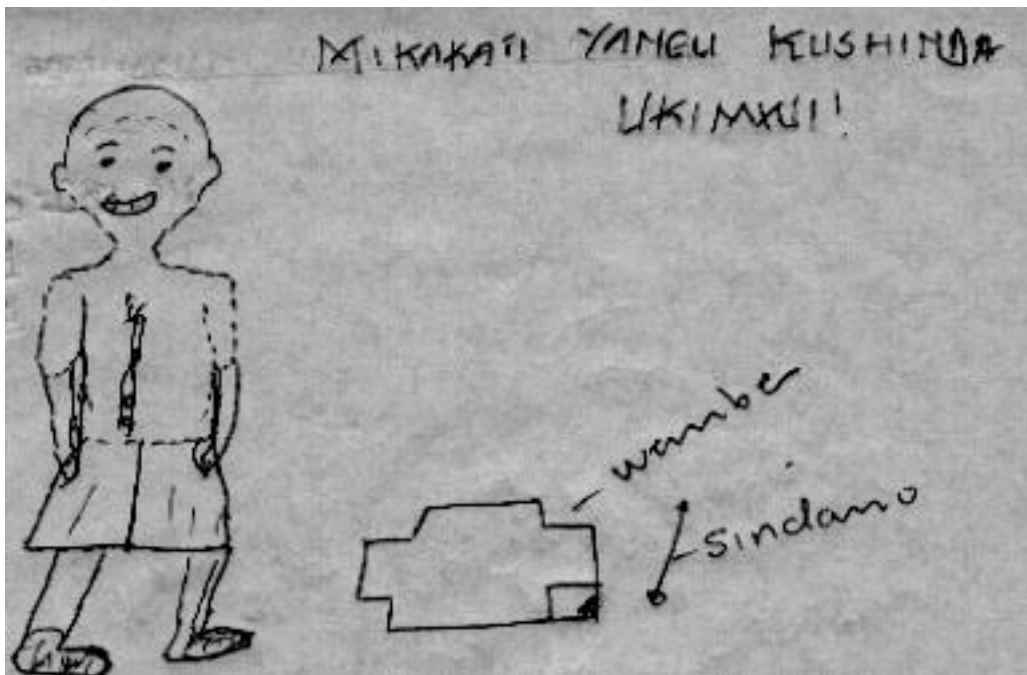
I will not share sharp things or have sex with someone with HIV/AIDS and if you have sex with them, they will infect you. For example, you have gone to the hospital. Your mate was pricked with that needle and you, you were going to be tested. You will surely get HIV/AIDS because first they should have boiled that needle. You could be having HIV/AIDS. You tempted a lover to have sex. You will give the lover HIV/AIDS.

(Female, Compassion Group)

6.3.17 Avoiding Blood-borne Transmission

As discussed in the previous chapter, many young people's strategies included the tactic of avoiding sharp things. Some strategies, however, such as the one illustrated in the write-and-draw exercise below, did not include tactics involving sexual transmission, not even the tactic of refraining from sex.

Write-and-draw 6.30



MY STRATEGIES TO PREVENT HIV/AIDS! (Labelled: needle and razor blade)

Me, as a male in gender, I would not like to share sharp things such as razor blades or needles (and so on) which anyone else has used, because right now there is the catastrophe of HIV/AIDS. Remember as a person, as a living creature, if you use sharp pointed things and you, if you come to use such sharp pointed things, you can be infected with HIV/AIDS. Remember HIV/AIDS is dangerous and again, HIV/AIDS kills and has no cure. This is my strategy for defeating AIDS!

(Male, Dar es Salaam in-school)

Cutting nails with razor blades was a particular area of concern.

The most suitable strategy is that in which you find discarded blades. Do not pick them up and start cutting your nails. People should not throw sharp things in the road or a child can stay and walk and a person can pick them up or a person can walk in his or her shoes if a needle can penetrate like this in the shoe and pierce the person.

(Female, Upendo focus group)

Participants mentioned brushes, especially toothbrushes, as 'sharp things', possibly because of the possibility of catching HIV/AIDS from mouth sores or bleeding gums.

Refrain from using sharp things like blades and needles, refrain from brushing your teeth with two people, refrain from having sex with each other.

(Male, Compassion interview)

Young people had many concerns about catching HIV/AIDS in health settings. Some of their concern could lead to an increase in overall risks to health, if fear of health care were to discourage them from getting HIV/AIDS tests, for example.

If your associate goes to the hospital and gets tested for HIV/AIDS, and the needle is not boiled and if you get that needle you can get infected.

(Female, Compassion focus group)

Several young people mentioned the specific danger of blood transfusions of untested blood.

If a person wants to give a sick person their blood, they need to go test first, if there is no HIV. Yes, he may get permission to give the sick person the blood, so that you may not infect him.

(Male, Upendo focus group)

6.3.18 Preventing Mother-to-child Transmission

A few young people were concerned with issues of mother-to-child transmission.

For an infected, pregnant mother, when she conceives she has...to go to the doctor in order to get advice to protect that baby which is in the stomach, so that they do not get the disease of HIV/AIDS. With the disease of HIV/AIDS, let us not isolate them but help them as we help other sick people. That is it.

(Female, Babati in-school interview)

One male participant considered what it would be like, as a young adolescent, to have been born with HIV.

It is as he said. Some do get it from the wombs of their mothers. He or she knows that 'My mother died with the disease of HIV/AIDS', when they are still growing, even if they have not been tested. He or she knows, 'I can infect my friend' so they cannot think 'I cannot infect,' so they have those thoughts because they have received it, HIV/AIDS, from the wombs of their mothers.

(Male, Mbeya in-school focus group)

Both males and females discussed how infected mothers could avoid transmission to their infants when breastfeeding. A few participants recommended that infected mothers not breastfeed their infants.

For example, say you find a mother who has had a baby. She is told not to breastfeed that child. The outcome of her not stopping the breastfeeding of that child is that she continues to breast feed. Therefore, that child can get the viral infection.

(Female, Mbeya in-school focus group)

6.3.19 Preventing HIV/AIDS in Caring

A few young people discussed ways of protecting self, such as the use of gloves when caring for infected persons.

Let us not share, or if there is any comrade of mine who is infected, I can help him or her a lot if I wash them or feed him or her. Let me use gloves.

(Male, Compassion Focus Group)

Participants worried about the possibility of infection.

Maybe at home we have a sick person with HIV/AIDS, then I must serve him or her and he or she has sores and I don't have the equipment now, he or she gives me clothes to wash for him and me, I have a little sore, I will already have HIV/AIDS.

(Female, Compassion Focus Group)

Below, a male described a situation of a male asking a female relative to wash him.

Yes, there is an importance... For a long time, because HIV/AIDS did not start today, it was a long time ago that we did not have that thing. I have seen with my brothers who are my brothers, the one who goes out a lot, who pleases himself very much at the disco, where there are prostitutes. If you tell him, he abuses you. Well, he stays, and he suffers, and he suffers... now people will be collecting money in order to cure because he is sick. Now he has received care, he has received care. One day, a child of his paternal aunts comes, so, he takes her and he tells her, 'Wash me with these things', and mother tells her this: 'Do not agree to wash [him] with those things.' [She said to him], 'Wash yourself.' Therefore, he is washing himself and applying other things. So, recently he was going to die. Maybe I advise my young associates to leave the ladies, to give up casual sex, because it kills, it menaces. Yes, that is it.

(Male, 'street children' interview)

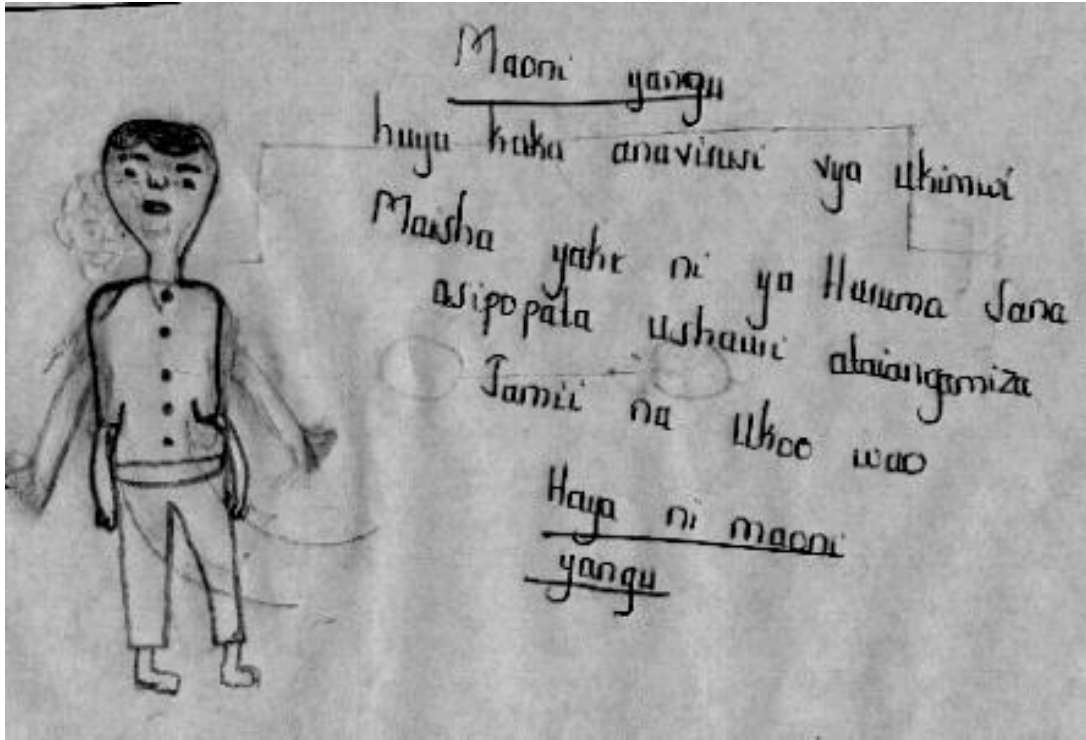
In the context of discussions about caring, some of the young people conflated methods of HIV transmission with the prevention of other diseases such as tuberculosis. Given that diseases such as tuberculosis commonly accompany HIV/AIDS and can exacerbate HIV/AIDS morbidity and mortality, it is not surprising that such confluations occurred.

For example, a person who has HIV/AIDS then is coughing, those germs, then you are nearby him, then he is coughing without shutting his mouth, he will be infecting you with HIV/AIDS because those germs will be jumping on you. For example, if a person with HIV/AIDS starts to hurt, then you care for him or her. You need to wash his clothes by using gloves, because unless, what, with those gloves perhaps if you have washed the clothes you need to throw them away. It is not appropriate to use them again.

(Female, Upendo Group focus group)

Some participants recommended an attitude of love and care toward infected persons.

Write-and-draw 6.31



My opinion

This brother has the HIV/AIDS virus

His life is of great compassion or mercy (or) His life is a great pity.

If he does not get advice, he will destroy the community and their household.

This is my opinion

(Female, Dar es Salaam in-school)

6.3.20 Circumcision

Only one group of young people mentioned circumcision in any context. The speakers in the focus group discussion below are all labelled YP, for young person.

YP 1: My big brother, up until now, he has not had his foreskin removed. But me, his little brother, I have been circumcised. He is in a shop and he has money. He gets more things than he knows what to do with. He even has a bicycle with gears but he still has his foreskin.

Paulo: How old is he?

YP 1: 16 years.

Paulo: So how many of you have not been circumcised?

YP: I have a foreskin!

YP 1: Because look at me brother, because that brother of mine, if I look at him sometimes...I'm not abusing my brother but he says, 'If I cut this foreskin, I will be having a lot of sex with women'. He says it is just better. 'Let me stop this until the day when I am an adult, when I will decide on my woman...' (laughs a bit) '...Then let me remove this dirty thing.' If he has a foreskin, you are afraid of women, because the woman gives it to you, she is looking at you pulling down your foreskin and what kind of layers of dirt are there? (Appreciative chuckles from the others).

Paulo: How many have not been circumcised yet?

(A jumble of voices). 'Me, here, I haven't had my foreskin removed yet', 'I haven't had it removed', 'Me, I haven't had it removed', 'I haven't been circumcised'.

Paulo: How many have a foreskin? Fingers up? (Counts) Nine. And how many have started to make love? (The voices are excited.)

(Paulo said later that nearly all of those who had foreskins had indicated that they had started to have sex.)

YP: Me here, I have already started to make love, I have had intercourse on the farm. (Proudly) No joking.

YP: Me, here, I have had intercourse with my foreskin. (Mischievously) We are pressing on! (Paulo had earlier asked them to 'Press on', meaning to carry on in the focus group a bit longer).

YP: Me, I have had anal intercourse with him until he bled, in that way, without being circumcised. I broke everything.

Paulo begins to ask the next question and is interrupted:

YP: He means that if you have a foreskin you will pull it back like this....this thing it has been shaped in there if it is just entered if it enters until the individual feels happy, the individual woman says 'Aah'... (Happily) ...I tell her to press on.

YP: I would like to offer my opinion. I want a person who cuts foreskins – we are really suffering with these foreskins.

YP: If my lady looks at me like this she will run away from me.

YP: Therefore me, I can't make love because I have a foreskin.

YP: This one here has even been given money to be circumcised but he's just been negligent, brother.

YP: Tell your father to cut you.

YP: Don't be so stupid.

Paulo: One at a time. Raise your finger if you want to talk. Are you finished?

(Males, 'street children' focus group)

6.4 Questionnaire Results

This section contains details concerning the data gathered in the questionnaire.

6.4.1 Participant Demographics

To determine questionnaire participants' religious affiliation, age and the number of school classes completed, I asked direct questions, whereas data on gender, location and current schooling status were assessed by the research group participants attended.

Questionnaire participants were recruited from Lushoto, Babati, Mbeya and Kyela. In addition to in-school and out-of-school groups, there were male and female research groups of 'street children', young people who had been recruited by Compassion, an international sponsorship organization, and young people recruited by Upendo, (meaning 'Love'), an organization working with families affected by HIV/AIDS. There were more males than females in two research groups and therefore more males in the total sample of participants. There were about twice as many Christians as Muslims.

Of questionnaire participants, 94% were 10-15 years. The mean age was 12.9. Over half of the participants were aged 9-13 and the rest were aged 14-19.

About two-thirds (66%) were currently in-school, 25% were out-of-school and 9% had ambiguous or unknown schooling status.

Mean class completion was 4.2 school classes. About half of the participants had completed no primary school, kindergarten only or primary classes 1-4. The other half of participants had completed primary classes 5 -7 or secondary forms 1-2.

Table 6.3 Demographic Categories of the Questionnaire Participants

Category	Variables	Number (N = 151)	Percent
Gender	Males	85	56
	Females	66	44
Q47 Religious Affiliation	Christian	103	68
	Muslim	47	31
	Unknown or Undeclared	1	1
Location	Lushoto	33	22
	Babati	71	47
	Mbeya	17	11
	Kyela	30	20
Q42 Age Groups	13 and Younger	81	54
	14 and Older	70	46
Q43 Class Completion Groups	Primary Class 0-4	73	48
	Primary Class 5-7 or Secondary Form 1-2	78	52
Current Schooling Status	In-School	101	67
	Out-of-school	37	25
	Unknown or Ambiguous	13	9
Total		151	100

6.4.2 Current Work

The questionnaire included a single question about their participation in work. Some participants were more willing to describe their labour contribution as ‘helping’ rather than ‘working’, perhaps because many of them tended to associate the word ‘work’ with paid employment. Sourcing, collecting and carrying firewood and water, washing, cleaning, cooking and caring for children were all included under ‘Helping out at home’. Individual participants listened while a member of the research team read out a list of different kinds of work, beginning with ‘Helping out at home, cultivating, herding, doing business, helping out in someone else’s home...’ and so on. Participants assented if they participated in that kind of work or remained silent. Some let us know that they did not participate in any of the categories named. Some participants said *Yote*, ‘Everything’, spontaneously while listening to the list. This was not a category on the list. If participants said ‘Everything’, we recorded that response but did not list any of the other kinds of work. Participants added to the list by naming kinds of work that they did that were not yet on the list so the list grew longer as the research progressed.

The following charts break down participation in occupations by gender, current school attendance and location. Females and out-of-school participants named relatively more kinds of work than males, in-school participants and those of unknown or ambiguous schooling status.

This analysis did not enquire into hours per week worked or the difficulty of occupations.

Table 6.4 Frequencies, Q45: ‘What work do you do now?’ by Gender

Q45	Males N=85		Females N=66		All N=151	
	N	%	N	%	N	%
Home	40	47	43	65	83	55
Farming crops	24	28	16	24	40	27
Herding and other livestock care	16	19	17	26	33	22
Business	6	7	11	17	17	11
‘Helping out’ in the homes of others	7	8	4	6	11	7
Porterage – rice, rocks and sand, luggage and ‘other’	2	2	5	8	7	5
Quarrying	1	1	0	0	1	1
Tailoring	1	1	2	3	3	2
‘Everything’-spontaneous response when listening to list of occupations	7	8	15	23	22	15
Total occupations named	104		113		217	
Kinds of work named per participant (including ‘Everything’)	1.2		1.7		1.4	
No work reported	12	14	4	6	16	11

Table 6.5 Frequencies, Q45: ‘What work do you do now?’ by Current Schooling Status

Q45	In-School N=101		Out-of- school N=37		Unknown Schooling Status N=13		Total N=151	
	N	%	N	%	N	%	N	%
Home	54	54	27	73	2	15	83	55
Farming crops	19	19	21	57	0	0	40	27
Herding and other livestock care	18	18	14	38	1	8	33	22
‘Everything’- Business	16	16	3	8	3	23	22	15
‘Helping out’ in the homes of others	8	8	8	22	1	8	17	11
‘Helping out’ in the homes of others	9	9	2	5	0	0	11	7
Porterage – rice, rocks and sand, luggage and ‘other’	5	5	0	0	2	15	7	5
Tailoring and Dressmaking	0	0	2	5%	1	8	3	2
Quarrying	1	1	0	0	0	0	1	1
Total kinds of worked named	130		77		10		217	
Kinds of work named per participant (including ‘Everything’)	1.3		2.1		0.8		1.4	
No work reported	7	7	5	13	4	31	16	11

Table 6.6 Frequencies, Question 45: ‘What work do you do now?’ by Location

Q45 Kind of Work Named	Lushoto N=33		Babati N=71		Mbeya N=17		Kyela N=30		Total N=151	
	N	%	N	%	N	%	N	%	N	%
Home	29	88	31	44	7	41	16	53	83	55
Farming crops	18	55	3	4	6	35	13	43	40	27
Herding and other livestock care	10	30	5	7	4	24	14	47	33	22
Business	0	0	3	4	1	6	13	43	17	11
‘Helping out’ in the homes of others	0	0	7	10	0	0	4	13	11	7
Porterage – rice, rocks and sand, luggage and ‘other’	0	0	2	3	0	0	5	17	7	5
Quarrying	0	0	1	1	0	0	0	0	1	1
Tailoring	0	0	1	1	0	0	2	7	3	2
‘Everything’-	0	0	15	21	5	29	2	7	22	100
Total kinds of worked named	57		68		23		69		216	
Kinds of work named per participant including ‘Everything’		1.7		1.0		1.4		2.3		1.3
No work reported	0	0	12	17	3	18	1	29	16	11

The differences in work by location were due in part to the physical and social environments of the different locations, and in part to whether participants were reporting their labour contribution during the school term or holiday. Two research days occurred during the school term and two occurred during a break between terms.

There were fewer differences in work that participants named by the demographic categories of religion, age group and class group.

6.4.3 Beliefs and Attitudes about Methods or Tactics of HIV/AIDS Prevention

Participants answered six questions about their attitudes towards tactics of HIV/AIDS prevention. The first three questions concerned abstinence, partner reduction and condom use. The research assistants and I asked participants whether each of these was a 'good way' to prevent HIV/AIDS or to protect oneself against the disease. The fourth and fifth questions concerned whether it is all right for a female to ask a male to take an HIV test before having sex and whether it is all right for a male to ask a female to take an HIV test before having sex. These two questions did not concern attitudes of participants toward testing in general but specifically about the practice of testing to support a safer transition to a sexual relationship.

The sixth question concerned attitudes, knowledge and beliefs about the possibility of knowing a person's HIV status from their appearance. Overall results are presented in the tables following by percentage and number of 'Yes' responses compared to all 'Yes' and 'No' responses.

Most participants had positive attitudes toward five of the six methods or tactics of supporting HIV/AIDS prevention listed in the questionnaire. Only 39% of participants agreed with the statement that it was possible to know HIV status from a person's appearance. There were more answers indicating uncertainty about this question than the other five questions.

I used SPSS and Excel to support the analyses. For analyses of categorical variables by gender, religious affiliation, location, age groups and class groups, I carried out frequency and Chi-square tests. For questions 33-36 and 38-41 involving continuous variables, the Kolmogorov-Smirnov significance value violated the assumption of normal distribution. For analyses of comparisons of means and medians by gender, religious affiliation, age groups and class groups, I used Mann-Whitney U tests. For analyses of comparisons of means and medians involving location, I used Kruskal-Wallis tests.

The analyses of religious affiliation omitted the responses of the single participant who had not declared a religious affiliation.

The tables below summarise the similarities and differences by demographic groups for the six questionnaire questions about attitudes toward common tactics of HIV/AIDS prevention. There were more similarities than differences.

For Question 23, ‘Is waiting until you are older a good way to protect self from HIV/AIDS infection?’ a larger proportion of more-schooled participants answered ‘Yes’ than less-schooled participants.

Table 6.7 Chi Square Analyses, Q23: ‘Is waiting until you are older a good way to protect self from HIV/AIDS infection?’

Q23 N=151	Variable	Yes		No		Uncertain		Total		<i>p</i> value, (shown if at least 80% of expected cell counts are ≥5)
		N	%	N	%	N	%	N	%	
Gender	Males	61	72	18	21	6	7	85	100	.31
	Females	54	82	8	12	4	6	66	100	
Religious Affiliation N=150	Christianity	80	78	17	17	6	6	103	100	.91
	Islam	35	75	9	19	3	6	47	100	
Location	Lushoto	23	70	3	9	7	21	33	100	--
	Babati	58	82	11	16	2	3	71	100	
	Mbeya	13	77	4	24	0	0	17	100	
	Kyela	21	70	8	27	1	3	30	100	
Age	13 and younger	57	70	17	21	7	9	81	100	.19
	14 and older	58	83	9	13	3	4	70	100	
Class Completion	0-4	50	69	15	21	8	11	73	100	.049*
	5-9	65	83	11	14	2	3	78	100	
All		115	76	26	17	10	7	151	100	

*Significant at $p < .05$

For Question 24, a larger proportion of the more-schooled participants answered ‘Yes’, and a smaller proportion gave answers indicating uncertainty.

Table 6.8 Chi Square Analyses, Q24: ‘Does reducing the number of people that you have sex with in your life help to protect self from HIV/AIDS infection?’

Q24 N=151	Variable	Yes		No		Uncertain		Total		<i>p</i> (shown if at least 80% of expected cell counts are ≥5)
		N	%	N	%	N	%	N	%	
Gender	Males	47	55	32	38	6	7	85	100	.26
	Females	45	68	17	26	4	6	66	100	
Religious Affiliation (N=150)	Christianity	65	63	32	31	6	6	103	100	.80
	Islam	27	57	17	36	3	6	47	100	
Location	Lushoto	14	42	12	36	7	21	33	100	--
	Babati	44	62	25	35	2	3	70	100	
	Mbeya	11	65	5	30	1	6	17	100	
	Kyela	23	77	7	23	0	0	30	100	
Age Groups	13 and younger	50	62	23	28	8	10	81	100	.16
	14 and older	42	60	26	37	2	3	70	100	
Class Completion Groups	0-4	41	56	23	32	9	13	73	100	.02*
	5-9	51	66	26	33	1	1	78	100	
All		92	61	49	33	10	7	151	100	

*Significant at $p < .05$

For Question 25, there were no statistically significant differences by demographic group. From 70 to 87% of participants in all categories said ‘Yes’ to the question about whether using a condom was a good way to protect self from HIV/AIDS infection.

Table 6.9 Chi Square Analyses, Q25: ‘Is using a condom a good way to protect self from HIV/AIDS infection?’

Q25	Variable	Yes		No		Uncertain		Total		<i>p</i> (shown if at least 80% of expected cell counts are ≥ 5)
		N	%	N	%	N	%	N	%	
Gender	Males	68	80	9	11	8	9	85	100	.86
	Females	51	77	7	11	8	12	66	100	
Religious Affiliation (N=150)	Christianity	78	76	13	13	12	12	103	100	.27
	Islam	41	87	3	6	3	6	47	100	
Location	Lushoto	25	76	4	12	4	12	33	100	--
	Babati	59	83	9	13	3	4	71	100	
	Mbeya	14	82	1	6	2	12	17	100	
	Kyela	21	70	2	7	7	23	30	100	
Age Groups	13 and younger	66	82	7	9	8	10	81	100	.65
	14 and older	53	76	9	13	8	11	70	100	
Class Completion Groups	0-4	58	80	8	11	7	10	73	100	.92
	5-9	61	78	8	10	9	12	78	100	
All		119	79	16	11	16	10	151	100	

For Question 30, there were no statistically significant differences by demographic group. From 82-94% of participants in all categories said ‘Yes.’

Table 6.10 Chi-square Analyses, Q30: ‘Is it all right for a female to ask a male to get an HIV/AIDS test before they have sex?’

Q30	Variable	Yes		No		Uncertain		Total		<i>p</i> (shown if at least 80% of expected cell counts are ≥ 5)
		N	%	N	%	N	%	N	%	
Gender	Males	70	82	11	13	4	5	85	100	.08
	Females	59	89	2	3	5	8	66	100	
Religious Affiliation (N=150)	Christianity	86	84	11	11	6	6	103	100	--
	Islam	43	92	2	4	2	4	47	100	
Location	Lushoto	28	85	2	6	3	9	33	100	--
	Babati	60	85	8	11	3	4	71	100	
	Mbeya	16	94	1	6	0	0	17	100	
	Kyela	25	83	2	7	3	10	30	100	
Age Groups	13 and younger	69	85	6	7	6	7	81	100	--
	14 and older	60	86	7	10	3	4	70	100	
Class Completion Groups	0-4	64	88	5	7	4	6	73	100	--
	5-9	65	83	8	10	5	6	78	100	
All		129	85	13	9	9	6	151	100	

For Question 31, there were no statistically significant differences by demographic categories. From 86-94% of participants in all categories said ‘Yes’ to the question, ‘Is it all right for a male to ask a female to get an HIV/AIDS test before they have sex?’

Table 6.11 Chi-square Analyses, Q31: ‘Is it all right for a male to ask a female to get an HIV/AIDS test before they have sex?’

Q31	Variable	Yes		No		Uncertain		Total		<i>p</i> (shown if at least 80% of expected cell counts are ≥ 5)
		N	%	N	%	N	%	N	%	
Gender	Males	76	89	6	7	3	4	85	100	--
	Females	58	88	5	8	3	5	66	100	
Religious Affiliation (N=150)	Christianity	92	89	6	6	5	5	103	100	--
	Islam	42	89	5	11	0	0	47	100	
Location	Lushoto	29	88	1	3	3	9	33	100	--
	Babati	61	86	8	11	2	3	71	100	
	Mbeya	16	94	1	6	0	0	17	100	
	Kyela	28	93	1	3	1	3	30	100	
Age Groups	13 and younger	73	90	5	6	3	4	81	100	--
	14 and older	61	87	6	9	3	4	70	100	
Class Completion Groups	0-4	66	90	4	6	3	4	73	100	--
	5-9	68	87	7	9	3	4	78	100	
All		134	89	11	7	6	4	151	100	

For Question 32, there were no statistically significant differences between demographic groups. From 23-47% of participants in all categories said ‘Yes’ to the question, ‘Can you know whether a particular person has HIV from their appearance?’

Table 6.12 Chi-square Analyses, Q32: ‘Can a person know whether a particular person has been infected with HIV by their appearance?’

Q32	Variable	Yes		No		Uncertain		Total		<i>p</i> value (shown if at least 80% of expected cell counts are ≥5)
		N	%	N	%	N	%	N	%	
Gender	Males	32	38	44	52	9	11	85	100	.45
	Females	19	29	37	56	10	15	66	100	
Religious Affiliation (N=150)	Christianity	40	39	51	50	12	12	103	100	.17
	Islam	11	23	30	64	6	13	47	100	
Location	Lushoto	10	30	15	46	8	24	33	100	--
	Babati	21	30	43	61	7	10	71	100	
	Mbeya	6	35	10	59	1	6	17	100	
	Kyela	14	47	13	43	3	10	30	100	
Age Groups	13 and younger	25	31	44	54	12	15	81	100	.56
	14 and older	26	37	37	53	7	10	70	100	
Class Completion Groups	0-4	29	40	33	45	11	15	73	100	.13
	5-9	22	28	48	62	8	10	78	100	
All		51	34	81	54	19	13	151	100	

6.4.4 Beliefs about Suitable Ages for Boys and Girls to Start to Have Sex

The age that a young person considers suitable to begin to have sex provides an important point of reference. In responding to questions about suitable ages for boys and girls to begin to have sex, females were more likely to give non-numerical answers such as 'I don't know' or 'It depends'. When asked about a suitable age for boys to start to have sex, 81% of males gave valid answers but only 55% of females did. Some of the females' answers related to life events such as marriage, employment, maturity or in one disquieting instance, rape. Mbeya participants had a higher proportion of answers indicating uncertainty, compared to the other locations.

The overall median of Q35, concerning a suitable age for a male to start to have sex, was 18. The overall mean was 20. There were no statistically significant differences by demographic group.

Table 6.13 Mann-Whitney U and Kruskal-Wallis Tests, Q35: ‘What age is suitable for boys to start to have sex?’

Q35	Variable	N	Valid N	Percent Valid	Median	Mean	<i>p</i> value (shown if at least 80% of expected cell counts are ≥ 5)
Gender	Males	85	69	81	18	19.6	.20
	Females	66	36	55	20	20.2	
Religious Affiliation	Christianity	103	72	70	18	19.8	.77
	Islam	47	33	70	20	19.8	
Location	Lushoto	33	21	63	18	18.4	.12
	Babati	71	53	75	20	20.7	
	Mbeya	17	9	53	18	18.4	
	Kyela	30	22	73	18	19.6	
Age Groups	13 and younger	81	55	68	20	20.3	.34
	14 and older	70	50	71	18	19.8	
Class Completion Groups	0-4	73	51	70	19	19.6	.73
	5-9	78	54	69	18	19.8	
Total		151	105	70	18	20	

For Question 36, ‘What age is suitable for girls to start to have sex?’ more females gave answers that expressed uncertainty. In a statistically significant difference by age group, older participants named a mean of 17.9 and younger participants named a mean of 19.9.

In a borderline statistically significant difference by gender, the median male response was 18 and the median female response was 20. The mean for males was 18.5 and for females, 19.8.

Table 6.14 Mann-Whitney U and Kruskal-Wallis Tests, Q36: ‘What age is suitable for girls to start to have sex?’

Q36	Variable	N	Valid N	Percent Valid	Median	Mean	<i>p</i> value (shown if at least 80% of expected cell counts are ≥ 5)
Gender	Males	85	66	78	18	18.5	.06
	Females	66	38	58	20	19.8	
Religious Affiliation	Christianity	103	70	68	18	19.1	.76
	Islam	47	34	72	18	19.0	
Location	Lushoto	33	22	67	19	19	.18
	Babati	71	51	72	20	20	
	Mbeya	17	10	59	18	19	
	Kyela	30	21	70	18	18	
Age Groups	13 and younger	81	55	68	19	19.9	.03*
	14 and older	70	49	70	18	17.9	
Class Completion Groups	0-4	73	48	66	19	20	.15
	5-9	78	56	72	18	18	
Total		151	104	69	18	19	

*Significant at $p < .05$

6.4.5 Beliefs about Peers' Approaches to Sexuality and HIV/AIDS Prevention

Participants responded to four questions about their beliefs concerning peers' approaches to sex and HIV/AIDS prevention of their peers. Responses were tallied and the Chi-square tests identified statistically significant differences. There were many invalid answers such as 'I don't know', 'It depends' and 'I'm not sure' for these questions, probably because of their speculative nature.

For Question 26, 50% of participants said that many young people of their age had had sex. There were no statistically significant differences by demographic group.

Table 6.15 Chi-square Analyses, Q26: 'Do many young people of your age have sex?'

Q26	Variable	Yes		No		Uncertain		Total		<i>p</i> value (shown if at least 80% of expected cell counts ≥5)
		N	%	N	%	N	%	N	%	
Gender	Males	48	57	21	25	16	19	85	100	.19
	Females	28	42	19	29	19	29	66	100	
Religious Affiliation (N=150)	Christianity	55	53	29	28	19	18	103	100	.18
	Islam	21	45	11	23	15	32	47	100	
Location	Lushoto	13	39	11	33	9	27	33	100	--
	Babati	40	56	13	18	18	25	71	100	
	Mbeya	7	41	8	47	2	12	17	100	
	Kyela	16	53	8	27	6	20	30	100	
Age Groups	13 and younger	43	53	20	25	18	22	81	100	.76
	14 and older	33	47	20	29	17	24	70	100	
Class Completion Groups	0-4	40	55	18	25	15	21	73	100	.56
	5-9	36	46	22	28	20	26	78	100	
All		76	50	40	27	35	23	151	100	

In a difference of borderline statistical significance, ($p=.056$), a higher proportion of females (35%) than males (20%) said that many young people of their age thought about health outcomes when having sex.

Table 6.16 Chi-square Analyses, Q27: ‘Do many young people at your age think of outcomes to their health when they are having sex?’

Q27	Variable	Yes		No		Uncertain		Total		<i>p</i> value (shown if at least 80% of expected cell counts ≥5)
		N	%	N	%	N	%	N	%	
Gender	Males	17	20	49	58	19	22	85	100	.056
	Females	23	35	26	39	17	26	66	100	
Religious Affiliation (N=150)	Christianity	29	28	51	50	23	22	103	100	.80
	Islam	11	23	24	51	12	26	47	100	
Location	Lushoto	10	30	16	49	7	21	33	100	.63
	Babati	18	25	39	55	14	20	71	100	
	Mbeya	6	35	6	35	5	29	17	100	
	Kyela	6	20	14	47	10	33	30	100	
Age Groups	13 and younger	22	27	36	44	23	28	81	100	.29
	14 and older	18	26	39	56	13	19	70	100	
Class Completion Groups	0-4	20	27	34	46	19	26	73	100	.74
	5-9	20	26	41	53	17	22	78	100	
All		40	27	75	50	36	24	151	100	

About two out of three participants agreed that their friends knew how to protect themselves from HIV/AIDS. There were no statistically significant differences by demographic group.

Table 6.17 Chi-square Analyses, Q28: ‘Do many of your friends know how to protect themselves from HIV/AIDS infection?’

Q28	Variable	Yes		No		Uncertain		Total		<i>p</i> value (shown if at least 80% of expected cell counts ≥5)
		N	%	N	%	N	%	N	%	
Gender	Males	51	60	19	22	15	18	85	100	.16
	Females	45	68	7	11	14	21	66	100	
Religious Affiliation (N=150)	Christianity	64	62	21	20	18	18	103	100	.33
	Islam	32	68	5	11	10	21	47	100	
Location	Lushoto	22	67	4	12	7	21	33	100	.81
	Babati	46	65	11	16	14	20	71	100	
	Mbeya	10	60	5	29	2	12	17	100	
	Kyela	18	60	6	20	6	20	30	100	
Age Groups	13 and younger	53	65	10	12	18	22	81	100	.19
	14 and older	43	61	16	23	11	16	70	100	
Class Completion Groups	0-4	45	62	15	21	13	18	73	100	.57
	5-9	51	66	11	14	15	21	78	100	
All		96	64	26	17	29	19	151	100	

About seven out of ten participants said that young people like themselves could protect themselves from HIV/AIDS infection. There were no statistically significant differences by demographic group.

Table 6.18 Chi-square Analyses, Q29: ‘Can young people like you protect themselves from HIV/AIDS infection?’

Q29	Variable	Yes		No		Uncertain		Total		<i>p</i> value (shown if at least 80% of expected cell counts ≥5)
		N	%	N	%	N	%	N	%	
Gender	Males	57	67	15	18	13	15	85	100	.19
	Females	50	76	5	8	11	17	66	100	
Religious Affiliation (N=150)	Christianity	71	69	13	13	19	18	103	100	.29
	Islam	36	77	7	15	4	9	47	100	
Location	Lushoto	21	64	4	12	8	24	33	100	--
	Babati	53	75	9	13	9	13	71	100	
	Mbeya	12	71	2	12	3	18	17	100	
	Kyela	21	70	5	17	4	13	30	100	
Age Groups	13 and younger	55	68	11	14	15	19	81	100	.61
	14 and older	52	74	9	13	9	13	70	100	
Class Completion Groups	0-4	47	64	13	18	13	18	73	100	.18
	5-9	60	77	7	9	11	14	78	100	
All		107	71	20	13	24	16	151	100	

6.4.6 Knowledge about National and District HIV Prevalence

In pilot research groups, I asked participants to estimate the national and district HIV prevalence rates with the questions, ‘Of 100 people aged 15-49 in this country, how many do you think are infected with HIV/AIDS right now?’ and, ‘Of 100 people aged 15-49 in this district, how many do you think are infected with HIV/AIDS right now?’

Only about one third of the pilot group participants ventured to answer the question with a number. The numerical answers for the two questions ranged from 1 to 500. Overall median responses were 30 for national prevalence and 39 for district prevalence. Overall mean responses were 55 for national prevalence and 87 for district prevalence. Both medians and means were much higher than a survey showing national prevalence of about 6% and regional prevalence of about 5% (TACAIDS, 2008:xviii, 116).

The responses to these two questions did not indicate that the young people in the pilot study were familiar with the concept of prevalence rates or that they knew the percentages related to national or local prevalence rates. I dropped the questions about national and district prevalence rates after the pilot study.

Table 6.19 Mann-Whitney U Tests, Pilot Question 33: ‘Of 100 people aged 15-49 in this country, how many do you think are infected with HIV/AIDS right now?’

Pilot Question 33	Variable	N	Valid N	Median	Mean	<i>p</i> value (shown if at least 80% of expected cell counts ≥ 5)
Gender	Males	16	8	20	62	.48 ^a
	Females	17	3	30	37	
Religious Affiliation	Christianity	23	7	15	70	.93 ^a
	Islam	9	4	30	27	
Location	Lushoto	33	11	30	55	--
	Babati	0	0	(Question was dropped after the pilot study)		
	Mbeya	0	0			
	Kyela	0	0			
Age Groups	13 and younger	20	4	20	27	.65 ^a
	14 and older	13	7	30	70	
Class Completion Groups	0-4	12	7	9	70	.79 ^a
	5-9	21	4	30	29	
Total		33	11	30	55	

a. Not corrected for ties

Table 6.20 Mann-Whitney U Tests, Pilot Question 34: ‘Of 100 people aged 15-49 in this district, how many do you think are infected with HIV/AIDS right now?’

Pilot Question 34	Variable	N	Valid N	Median	Mean	<i>p</i> value (shown if at least 80% of expected cell counts ≥ 5)
Gender	Males	16	8	42	112	.93 ^a
	Females	17	4	35	36	
Religious Affiliation	Christianity	23	8	24	103	.57 ^a
	Islam	9	4	58	54	
Location	Lushoto	33	12	39	87	--
	Babati	0	0	Question was dropped after the pilot study		
	Mbeya	0	0			
	Kyela	0	0			
Age Groups	13 and younger	20	5	20	29	.34 ^a
	14 and older	13	7	55	127	
Class Completion Groups	0-4	12	8	24	102	.46 ^a
	5-9	21	4	58	55	
Total		33	12	39	87	

a. Not corrected for ties

6.4.7 Educational, Career and Family Aspirations

Most participants had high educational aspirations. Nearly two out of three participants wished to complete higher education.

Table 6.21 Frequencies, Q44: ‘What stage of school do you eventually want to complete?’

Q44 by Gender	Males N = 85		Females N = 66		Total N = 151	
	N	Valid Percent	N	Valid Percent	N	Valid Percent
Primary School	5	6	1	2	6	4
Lower Secondary School	9	11	10	15	19	13
Upper Secondary School	11	13	9	14	20	13
University	54	64	41	62	95	63
Nursing School	0	0	1	2	1	1
Other Responses	3	4	4	6	7	5
Missing	3	4	0	0	3	2
Total	85	100	66	100	151	100

The table following shows the male career aspirations. The most common career aspiration for both males and females was to become a teacher. Other common aspirations involved law enforcement, the military, the automotive and aeronautical industries, medicine, agriculture and the skilled trades. Several males aspired to prestigious careers, such as president, judge or government minister.

Table 6.22 Frequencies, Q46: ‘What sort of work do you want to do when you are grown?’ Males

Q46, Male	Number (N=85)	Percent
Business	1	1
Community Leader	1	1
Football Player	1	1
Government Minister	1	1
Journalist	1	1
Judge	1	1
Office of Education	1	1
President	1	1
Professor	1	1
Scientist	1	1
Secretary (Can be a government post)	1	1
Tourism	1	1
Lawyer	2	2
Mechanic	4	5
Artisan/Skilled Manual Worker	5	6
Farmer	5	6
Pilot	5	6
Army, Soldier or Guard	7	8
Doctor	7	8
Driver	8	9
Police	9	11
Teacher	13	15
Uncertain	6	7
Missing	2	2
Total	85	100%

The career aspirations of the female participants are in the table that follows. Apart from teaching, other popular female aspirations were medicine, journalism, and business. Fewer females than males aspired to high-prestige jobs. Only one female aspired to stay at home as a career, and no female aspired to do agricultural work.

Table 6.23 Frequencies, Q46: ‘What sort of work do you want to do when you are grown?’ Females

Q46, Female	Number (Valid N=65)	Percent
Artisan/Skilled Manual Worker	1	2%
Home	1	2%
Lawyer	1	2%
Soldier or Guard	1	2%
Tailor	1	2%
Accountant	2	3%
Banker	2	3%
Hotelier	2	3%
Administrator or Secretary (such as in a government post)	2	3%
Member of Parliament or ‘Politician’	2	3%
Police	2	3%
Business	3	5%
Doctor	3	5%
Journalist	4	6%
Nurse (includes 1 ‘Sista’ who might be a nun or a nurse)	8	12%
Teacher	25	38%
Uncertain	4	6%
Missing	1	2%
Total	65	100%

Turning to the question of aspirations for for family, my research assistants and I asked male participants whether they needed to marry, and female participants whether they needed to be married. In the Swahili language, males marry, *-oa* and females are married, *-olewa*.

In a statistically significant difference by gender, 86% of males said that they needed to marry, compared to 55% of females who said that they needed to be married.

In a result of borderline statistical significance, young people 14 and older were more likely to say that they needed to marry than young people 13 and younger.

In a non-significant result, a smaller proportion of participants from Kyela (50%) said that they needed to marry or be married compared to the other locations (67%-83%).

Table 6.24 Chi-square Analyses, Q37: ‘Do you need to marry or be married in your life?’

Q37	Variable	Yes		No		Uncertain		Total		<i>p</i> value (shown if at least 80% of expected cell counts ≥5)
		N	%	N	%	N	%	N	%	
Gender	Males	73	86	8	9	4	5	85	100	.001
	Females	36	55	15	23	15	23	66	100	
Religious Affiliation (N=150)	Christianity	70	68	20	19	13	13	103	100	.12
	Islam	38	81	3	6	6	13	47	100	
Location	Lushoto	22	67	6	18	5	15	33	100	--
	Babati	59	83	5	7	7	10	71	100	
	Mbeya	13	77	1	6	3	18	17	100	
	Kyela	15	50	11	37	4	13	30	100	
Age Groups	13 and younger	54	67	12	15	15	19	81	100	.06
	14 and older	55	79	11	16	4	6	70	100	
Class Completion Groups	0-4	51	70	13	18	9	12	73	100	.70
	5-9	58	74	10	13	10	13	78	100	
All		109	72	23	15	19	13	151	100	

**Significant at $p \leq .001$

The second question about marriage concerned age at first marriage: ‘What age do you want to be when you marry, if you marry?’ 67-100% of participants in all categories gave a valid answer. Mean desired age at the time of marriage was 25. There was a statistically significant difference by location. Mbeya participants wanted to marry at the earliest ages, mean 22 and median 20. Babati participants wanted to marry at later ages, median 27.5 and mean 29. Participants from the other locations responded with means and medians between those extremes.

Table 6.25 Mann-Whitney U and Kruskal-Wallis Tests, Q38: ‘If you marry or are married, at what age would you like to be?’

Q38	Variable	N	Valid N	Percent Valid	Median	Mean	<i>p</i> value (shown if at least 80% of expected cell counts ≥ 5)
Gender	Males	85	68	80	25	25.7	.18
	Females	66	47	71	24	24.2	
Religious Affiliation	Christianity	103	74	72	25	24.6	.36
	Islam	47	40	85	25	26.1	
Location	Lushoto	33	22	67	27.5	29.0	.019*
	Babati	71	61	86	25.0	24.8	
	Mbeya	17	12	71	20.0	21.8	
	Kyela	30	20	67	23.5	24.2	
Age Groups	13 and younger	81	58	72	25	25.9	.31
	14 and older	70	57	81	25	24.4	
Class Completion Groups	0-4	73	53	73	25	26.0	.38
	5-9	78	62	79	25	24.4	
Total		151	115	76	25	25	

*Significant at $p > .05$

For Q39, the third question about marriage, I asked participants if they would prefer a monogynous or polygynous marriage. The question was, 'Do you want to have (or be) one wife or (be one of) more than one wives?'

Two male participants preferred polygynous marriage. The males were from different locations, both in the older age group and the more-schooled class group. One was Christian and one was Muslim. One wanted three wives and the other wanted four. All of the other participants stated a preference for monogynous marriage.

For Q40, the first question about children, I asked participants at what age they wanted to have children, if they wanted to have them. There were 73-92% valid responses in all categories. Overall, the mean desired age at the time of the beginning of childbearing was 27.4. There was a statistically significant difference by gender: 28.5 for males and 25.8 for females.

Table 6.26 Mann-Whitney U and Kruskal-Wallis Tests, Q40: ‘If you want to have children, at what age do you want to start to have children?’

Q40	Variable	N	Valid N	Percent Valid	Median	Mean	<i>p</i> value (shown if at least 80% of expected cell counts ≥ 5)
Gender	Males	85	72	85	28	28.5	.02*
	Females	66	51	77	25	25.8	
Religious Affiliation	Christianity	103	81	79	27	27.1	.89
	Islam	47	42	89	26	27.9	
Location	Lushoto	33	24	73	27.5	30.1	.27
	Babati	71	65	92	27.0	26.9	
	Mbeya	17	13	76	24.0	24.5	
	Kyela	30	21	70	28.0	27.4	
Age Groups	13 and younger	81	61	75	27	28.0	.48
	14 and older	70	62	89	26	26.8	
Class Completion Groups	0-4	73	59	81	28	27.8	.75
	5-9	78	64	82	27	27.0	
Total		151	123	81	27	27.4	

*Significant at $p < .05$

For the second question about children, participants responded to a question about the number of children that they would like to have. With 76%-91% valid responses, the mean overall was 3.1. There was a statistically significant difference by gender at $p < .001$: Males wanted a mean of 3.6 children and females wanted a mean of 2.5 children.

Table 6.27 Mann-Whitney U and Kruskal-Wallis Tests, Q41: ‘How many children will you like to have?’

Q41	Variable	N	Valid N	Percent Valid	Median	Mean	<i>p</i> value (shown if at least 80% of expected cell counts ≥ 5)
Gender	Males	85	73	86	3.0	3.6	.000**
	Females	66	58	88	2.0	2.5	
Religious Affiliation	Christianity	103	90	87	3.0	3.1	.63
	Islam	47	41	87	3.0	3.2	
Location	Lushoto	33	28	85	2.5	2.8	.50
	Babati	71	64	90	3.0	3.3	
	Mbeya	17	13	76	3.0	2.9	
	Kyela	30	26	87	3.0	3.2	
Age Groups	13 and younger	81	67	83	3	3.0	.39
	14 and older	70	64	91	3	3.2	
Class Completion Groups	0-4	73	64	88	3	3.2	.75
	5-9	78	67	86	3	3.1	
Total		151	131	87	3	3.1	

**Significant at $p < .001$

6.5 *Summary*

This chapter concerned the results of the explorative study of young Tanzanian's strategies of HIV/AIDS prevention. The evidence suggested that most participants had personal HIV/AIDS prevention strategies. Participants mentioned many tactics in their strategies. The relative number of mentions of any particular tactic depended on the research method employed. In the focus groups and interviews, the top three tactics were refraining from sex, using condoms and avoiding blood-borne infections. In the questionnaire, 'waiting until you are older', using condoms and asking a partner of either sex to get an HIV test before sex were favoured as good ways to prevent HIV/AIDS, at least in theory, by more than four out of five participants who gave valid responses.

In the write-and-draw exercises, the top three tactics mentioned were faithfulness, avoiding blood-borne infection and refraining from sex. Often, participants discussed tactics such as avoiding unwanted sex at length, and illustrated the tactics in detail. While males and females frequently mentioned faithfulness in the write-and-draw exercises, they often did so briefly. When participants did discuss the tactic of being faithful in depth, many considered that they would not know whether their partners would be faithful.

Participants had high educational, career and family aspirations. They associated the tactic of refraining from sex both with achieving their aspirations and with avoiding HIV/AIDS. They seemed to assume that refraining from sex would support them to achieve both objectives.

Of the valid responses in write-and-draw exercises, 77% named at least one tactic (faithfulness, condom usage or HIV testing) to prevent HIV/AIDS in the context of sexual relationships. Compared to the tactics related to refraining from sex, however, the tactics concerning how participants would prevent the transmission of HIV/AIDS with sexual relationships seemed less specific and well thought out. This was noteworthy, because two-thirds of participants who gave valid responses in the questionnaire speculated that many people of their age had begun to have sex. Participants thought that their friends knew how and were able to protect themselves, but only about one-third of the females and one-fifth of the males believed that their peers thought about health outcomes when they were having sex.

In the questionnaire, there were more similarities than differences among participants. The most frequent statistically significant variation was by gender. There were a few statistically significant differences according to the amount of schooling, in terms of school classes participants had completed, and the ages of participants. There were relatively few statistically significant variations in the questionnaire results by religion or location.

Further discussion and analysis of the research results is in the next chapter.

7 Discussion and Analysis

The purpose of this chapter is to discuss and analyse the results of the study. The chapter is organised around Research Questions 1-6, concerning research participants' knowledge and understanding of HIV/AIDS, existence and characteristics of strategies, similarities and differences in strategies between members of demographic groups; advice, education and guidance influencing participants' strategies, and ability of participants to be reflexive toward their own strategies.

Chapter 8 addresses Research Question 7, concerning the policy implications of strategies, and makes recommendations for further research.

7.1 *Research Question 1: What Did the Young Tanzanian Research Participants Understand about HIV/AIDS?*

Most participants expressed knowledge and understanding of HIV/AIDS that was consistent with biomedical understandings in many ways. For example, many participants knew that the Swahili acronym for HIV/AIDS: *UKIMWI* means a shortage of bodily resistance. Most participants understood that HIV spreads through sexual intercourse and contaminated blood. While few participants had understandings that directly contradicted the biomedical model, some had only vague understandings of HIV/AIDS, or understandings that were at odds with the biomedical view.

Most of the young participants were aware of promoted methods of HIV/AIDS prevention. In the questionnaire, participants agreed that refraining from sex (76%), being faithful (61%) and using condoms (79%) were good ways to prevent HIV/AIDS. In addition, most, around 89% of participants, had positive attitudes toward asking a male asking a prospective female partner to go for an HIV test prior to having sex, and 85% had positive attitudes toward a female asking a male.

Participants communicated understandings about interactions between structure and agency with relationship to HIV/AIDS infection and prevention. While participants were not familiar with the sociological concepts of 'structure' and 'agency' and did not use that vocabulary, many of them did communicate considerable knowledge and understanding concerning the structural influences such as education, poverty, and imbalances of power related to gender and age, on HIV infection and prevention.

Many participants communicated their belief that their agency was necessary to prevent HIV/AIDS. Some participants noted how structural constraints might hinder agency to pursue life objectives, such as when employers asked employees for sex as a condition of employment or continued employment. Many participants displayed knowledge and understanding of specific sexual risks, such as intentional infection, transactional sex and intergenerational sex. They described environments and situations that could make persons vulnerable to coercion, beguilement and rape.

While participants' knowledge and understanding was largely consistent with biomedical understandings, the range and depth of participants' biomedical knowledge was limited. For example, pilot group participants did not know about local or national statistics of HIV prevalence. Their awareness of the role of such factors as malnutrition, sexually transmitted infections and other diseases in relation to HIV/AIDS seemed limited. Although mother-to-child infection is a very important area of prevention in Tanzania, few participants referred to it.

The knowledge and understanding of some participants differed from biomedical understandings in several important ways.

1. The biomedical model tends to locate risk in *not* using condoms in acts of penetrative sex, especially high-risk sex. Biomedical studies have concerned slippage, leakage, distribution, inconsistent or inexperienced usage, the ability of women to negotiate condom use and the difficulty of monitoring impact (Green, 2003:93-122). While most research participants were in favour of condoms in theory, a minority of research participants located HIV risk in *using* condoms. They were concerned about condom quality, provenance and the possibility that the condoms themselves were infected. They were more sympathetic to the aims of risk avoidance through refraining from unsanctioned sex than risk reduction through condom use.

2. While the biomedical model places more emphasis on sexual transmission, some participants placed more emphasis on non-sexual, blood-borne transmission through the sharing of 'sharp things' such as razor blades and needles. Some participants did not refer to sexual transmission in their strategies at all. Instead of the ABC of abstinence, faithfulness and condom use, it was as though many participants were more committed to refraining from sex, being faithful and avoiding blood-borne transmission by avoiding the shared use of sharp things.

3. When participants did discuss the sexual transmission of HIV/AIDS, they almost invariably discussed heterosexual, penile-vaginal sex. Although other studies have indicated that young Tanzanian heterosexual and MSM couples engage in penile-anal sex, few participants discussed it. No participant communicated the knowledge that penile-anal sex, whether in same-sex or heterosexual relationships, is associated with a higher risk of HIV transmission than penile-vaginal sex.

4. In only one group of research participants, the 'street children' males, was there any discussion of circumcision in relation to HIV/AIDS prevention. In that group, many described circumcision as desirable but difficult to obtain. No participant communicated a belief that circumcision could support the aims of HIV/AIDS prevention. Their understandings and practices in relation to circumcision, in that sense, were not consistent with the biomedical model.

'There is compelling evidence that male circumcision reduces the risk of heterosexually acquired HIV infection in men by approximately 60%. Three randomized controlled trials have shown that male circumcision provided by well-trained health professionals in properly equipped settings is safe. WHO/UNAIDS recommendations emphasize that male circumcision should be considered an efficacious intervention for HIV prevention in countries and regions with heterosexual epidemics, high HIV and low male circumcision prevalence.

Male circumcision provides only partial protection, and therefore should be only one element of a comprehensive HIV prevention package which includes: the provision of HIV testing and counselling services; treatment for sexually transmitted infections; the promotion of safer sex practices; the provision of male and female condoms and promotion of their correct and consistent use' (WHO, 2013b).

Several of the 'street children' males did express a wish to undergo circumcision, but not for the purposes of HIV/AIDS prevention.

5. There were few write-and-draw exercises representing people living with HIV/AIDS (PLWHA). That in itself was unsurprising, because we asked the young people for their personal strategies of prevention, not to discuss the experiences of PLWHA. Most of the illustrations of PLWHA, created in the write-and-draw exercises, showed physical abnormalities, sadness and vulnerability, with fewer representations of cheerful, healthy-looking people. Humans and in one case, a goat, were speckled or distorted to represent HIV infection or the attempt to avoid HIV/AIDS. Some participants' write-and-draw exercises, particularly those of the male 'street children', showed sexual organs or acts depicting heterosexual

transmission of HIV/AIDS, and AIDS-related illnesses and deaths, rather than measures to prevent HIV/AIDS.

6. Like many others in Tanzania, participants used morally-laden terminology such as *magonjwa ya zinaa* or *magonjwa ya uasherati* to signify sexually transmitted infections (STI) and diseases (STD). No young participant used the relatively neutral term *maradhi ya ngono*, the ‘diseases of sex’, during the research, though some of the adults did. I cannot say whether this is simply colloquial use of language or whether the young people intended to suggest an association between STI and STD and immorality, but the terms are misleading because persons can easily contract sexually transmitted infections in sanctioned sexual relationships and avoid them in unsanctioned ones.

In short, participants had significant knowledge and understanding of HIV/AIDS prevention, but some of their knowledge and understanding differed from the biomedical model. As such, they emphasised different risks and remedies.

7.2 Research Question 2: Did the Research Participants Have HIV/AIDS Prevention Strategies?

In the previous chapter, I provided evidence that most young people had prevention strategies.

Most participants said that they understood the importance of HIV/AIDS prevention. Most believed that they had strategies and were able to communicate them. A few respondents had only the objective to prevent HIV/AIDS but most participant strategies included measures of prevention. Strategies communicated through the write-and-draw exercises often differed from those communicated through the other research methods. If I had framed the discussion in terms of knowledge and attitudes alone, data gathered from the focus groups, interviews and write-and-draw exercises would have been very similar. There was a difference, however, between tactics the young people accepted in theory and those that they were able to think of themselves doing in practice. The write-and-draw exercises tended to contain a smaller array of tactics than those discussed in focus groups and interviews or considered acceptable in theory in the questionnaires. That difference adds to the evidence that many participants had pre-existing strategies of HIV/AIDS prevention and that there are

important differences between their knowledge and understanding about HIV/AIDS, the measures that they find acceptable in theory to prevent HIV/AIDS, and the measures that are present in their actual strategies to prevent HIV/AIDS.

7.3 *Research Question 3: Where Strategies Existed, What Were Their Characteristics?*

7.3.1 Motives

Participants communicated several motives for HIV/AIDS prevention.

The most common motive was the desire to protect self against HIV/AIDS. A related motive was the will to remain healthy and live, coupled with the fear of illness and death. These motives grew from participants' realization of the danger of HIV/AIDS and an understanding of the importance of prevention. Participants might have gained an understanding of the importance of prevention through personal experience, advice or education, or simply through a growing awareness, arising for many reasons, over time. The motivation of many participants depended on their belief that they had the means and power to prevent HIV/AIDS. For many, this self-belief largely depended on their refraining from sex. This finding was consistent with that of a study of 15-24 year olds in Northern Tanzania, where researchers found a correlation between low self-efficacy and sexual experience (Njau et al., 2007). The females, especially, did not seem to believe that they would have as much power to prevent HIV/AIDS once they embarked on sexual relationships.

The second motive for HIV/AIDS prevention was the association that participants made between refraining from sex, HIV/AIDS prevention and the achievement of aspirations. Participants seemed to believe that 'A sustainable strategic position requires trade-offs' (Porter, 1996:68) and that postponing sex in the present was an acceptable trade-off for a good life in the future, in terms of the achievement of educational, livelihood and family aspirations. Many participants believed that the same actions, especially refraining from sex, would support the achievement of both their HIV/AIDS prevention aspirations and their other educational, livelihood and social aspirations. The association is apparently logical, since refraining from sex is associated with lower HIV/AIDS risk and fewer social, medical and economic complications that might hinder the achievement of aspirations. Many participants,

however, indicated that many young people such as themselves were already having sex. Many sexually active young people are likely to wish to pursue the same aspirations as young people who are not yet sexually active, and are probably, in many cases, as likely to wish to reduce their HIV/AIDS-related risks.

It is desirable to encourage young adolescents to refrain from sex as a default position. At the same time, it is desirable to acknowledge that not all of them do refrain from sex. Some are having sex now or soon will have sex. These young people need to clarify, in their own mind, the measures that they will take against HIV/AIDS within the context of sexual relationships.

Participants' association between HIV/AIDS prevention and the achievement of other life objectives is problematic in some ways. While it may be desirable to achieve multiple objectives, it does not follow that the means to support the achievement of some will necessarily support the achievement of others. It is equally important that young people understand that the non-achievement of life objectives is often unrelated to the non-achievement of HIV/AIDS prevention. Participants seemed unaware, for example, that HIV/AIDS risk was often higher for better educated, employed, wealthy and urban-dwelling Tanzanians (TACAIDS, 2008; Magadi, 2013), who are living the kind of lives to which the participants aspired.

In contrast to participants' apparent beliefs, furthermore, studies do not show a clear correlation between academic achievement and ability to prevent HIV/AIDS (TACAIDS, 2008:116; Wamoyi et al., 2010:14). In Tanzania as in many other countries, there is a great, unmet demand for affordable educational opportunities that are expected to lead to remunerative careers. There was a large discrepancy between participants' educational aspirations and their likely prospects. Tanzanians aged 15-49 have completed a median 6.5 years of schooling (TACAIDS, 2013:31). For example, one-third of all participants in the present study were not even attending school at the time of the research, yet two-thirds of them aspired to university-level education.

Tanzania has one of the lowest secondary enrolment ratios in the world, and the majority of places at public secondary schools are taken by families from the richer end of society. Under the current level of provision, education provides very few of the poor with a viable pathway out of poverty (Wedgwood, 2005:4).

It is unfortunate, given the shortage of affordable educational opportunities, that so many Tanzanians may feel that they have 'failed' to achieve their educational

objectives, because this is a structural constraint rather than a personal failing. There are not enough funded places. Only those who do the very best on their exams, or who have parents who could finance their education, can attend. It would be doubly unfortunate if young adolescents felt that this ‘failure’ somehow predisposes them to fail to achieve their objective to prevent HIV/AIDS.

Participants’ association between HIV/AIDS prevention and their livelihood objectives presents a different sort of picture. Most of the participants currently worked. Most participants hoped to leave current forms of labour, particularly agricultural pursuits, behind. They hoped to obtain better-paid work, often in the professions or skilled trades. Similar factors have probably contributed to the 6-23% growth in the ratio of urban to national population in Tanzania between 1967 and 2002 (National Bureau of Statistics, 2011:20). Agriculture currently employs about 80% of the Tanzanian workforce (CIA, 2013) and employment rates are higher in rural areas. An individual adult informant said that while many Tanzanians migrate to urban areas hoping to obtain better work and opportunities, many are unable to enter into the professions and trades to which they aspire, and that many find it difficult to find any work in the cities, at all.

The discrepancy between aspirations and reality may contribute to higher rates of HIV/AIDS in urban areas, especially among women. Although transactional sex and sex work occur in both rural and urban areas, urban women are more likely to be simultaneously unemployed and facing a higher cost of living than women living in rural areas (Research International, 2009). Married, single and divorced or widowed women are more likely to pursue transactional sex or sex work if they need money for food, rent, medical needs, career-related expenses, school fees or other family expenses or to keep up with their social group. The pursuit of other livelihood objectives may entail transactional sex and its corresponding HIV/AIDS risks.

Some kinds of transactional sex do not involve cash. Rather, a male in power may make a promise to favour a person with benefits, or threaten to deny the benefit, such as employment, if the female does not have sex.

The women who practice transactional sex and commercial sex have similar aspirations to the males and females in the present study: to have a good job or to start a good business, to become a teacher or to make some other contribution to society

(Research International, 2009). So while participants associated the achievement of life and livelihood aspirations with HIV/AIDS prevention, some people run a high HIV/AIDS risk in order to achieve those aspirations, especially women who live or migrate to urban areas.

The achievement of aspirations to form stable relationships and family units did not necessarily correlate with lowered HIV/AIDS risk. Studies have challenged assumptions that there is likely to be less HIV risk in committed relationships such as engagement and marriage. In the present study, only 55% of the females compared to 86% of the males felt that they needed to marry, given that the females often felt that they had little power to carry out an HIV/AIDS strategy once they had entered into sexual relationships, whether committed or uncommitted. A Kenyan study of 18-24 year olds found more HIV risk in committed than uncommitted relationships, partly due to disregard of safe-sex messages of abstinence, faithfulness and consistent condom use in committed relationships. The same study found that six times as many pregnancies occurred in relationships transitioning to marriage, indicating that there was more unprotected sex in committed relationships. Furthermore, men had nearly as many concurrent partners in committed relationships as in those that were merely ongoing (Clark et al., 2010:81, 87). A Dar es Salaam study showed that some new fathers believed that they needed to have sex, yet they did not believe that they should have sex with their wives when their children were young. Their resultant affairs were likely to increase HIV risk to young families (Mbekenga et al., 2011).

A third motive for HIV/AIDS prevention was hope. Participants associated the technology and behaviours around testing with the emotions of hope and despair because people learn their HIV/AIDS status in a context of testing and counselling. Participants wanted to feel hope, mainly by not being or becoming infected. They recommended hope for those infected, too, though, not least to avoid the despair that might lead to not taking care of themselves, having casual sex or intentionally infecting others. At the time of the study, an estimated 27% of male and 37% of female 15-49 year olds in Tanzania had ever been tested and received results in their lifetime (TACAIDS, 2008) but only a fraction of infected persons had been treated with drugs to treat HIV/AIDS (IRIN, 2007b). Since the technologies to support improvements in health for infected persons were not in place in 2008, the year of the study, many of

the participants who referred to hope for infected persons were not specific about for what they wanted people to hope.

A fourth motive to prevent HIV/AIDS was care and concern for others, coupled with the desire to demonstrate competence, status and maturity. Many apparently felt called to support others to prevent HIV/AIDS as educators and health workers, for example.

7.3.2 Priorities

The relative importance of other values and objectives influenced participants' strategies of HIV/AIDS prevention. Over half of the participants ranked HIV/AIDS prevention as more important than every other category of value or objective named in the ranking exercise. That HIV prevention was the theme of the day probably influenced the high priority the participants bestowed on it, so while this result is interesting, the high ranking of the other values and objectives, such as 'My religion', 'My faith', 'Studying with effort' and 'Doing well in school', is probably more significant. Participants seldom referred to religion or faith when communicating their HIV/AIDS strategies, however. Humans do not necessarily know just how their identities and values influence their behaviour. Religion may be difficult to discuss as an influence rather than as a fundamental aspect of decision-making or identity.

At every decisive moment, of which there will be great many within the total decision, we range ahead and back and sideways...and anyone who has ever taken a complicated decision knows this (Beer, 1975:294; cited in Zeleny, 1981).

While the results of the ranking exercise make it reasonable to assume that religion and faith probably influenced the existence and formation of some participants' HIV/AIDS prevention strategies, the data generated by the other research methods shed little light on how religion influenced strategies. This is likely to be an appropriate subject for future investigation.

The smallest number of ranking exercise participants ranked 'To make love' above HIV/AIDS prevention. While the low priority participants attached to this objective may seem reassuring to those concerned about young people having sex, a study demonstrated that college students who were not sexually aroused were unable to predict or remember the nature of their sexual decision-making when aroused. For them, keeping condoms 'just in case' was likely to be a better strategy than 'Just say

no' because when aroused, they were much less likely to 'Just say no' than they thought they would be (Ariely and Loewenstein, 2005).

7.3.3 Preventing HIV/AIDS by Avoiding Blood-borne Transmission

A commonly-mentioned tactic in the focus groups, interviews and write-and-draw exercises was the avoidance of blood-borne transmission by not sharing 'sharp things' such as sewing and medical needles and razor blades.

First, participants described wishing to avoid blood-borne transmission in everyday life, such as by not sharing razor blades to cut nails, not sharing toothbrushes and not sharing agricultural implements such as machetes. They warned against blood contact in the contexts of injury or accident, mother-to-child transmission and transmission via caring for people with HIV/AIDS. Lugalla et al. (2004) found similar concerns amongst other Tanzanians, who for example no longer shared razor blades when they shaved for mourning.

Second, participants advised avoidance of intravenous drug users and intravenous drugs. HIV prevalence was very high in a study of Dar es Salaam injection drug users (Williams et al., 2009).

Third, participants were concerned about blood exposure in medial settings. Some were wary of blood transfusions, medical injections, and even HIV tests. Although it is generally acknowledged that sexual transmission is the main mode of HIV transmission, blood-borne transmission has probably contributed to the epidemic (Gisselquist et al., 2003; Hauri et al., 2004). 'There is ample and growing evidence that blood exposures in unhygienic medical and dental care, cosmetic care and rituals are linked to HIV transmission throughout sub-Saharan Africa' (Potterat et al., 2011:249). In Tanzania, there are complaints of corrupt dealings in medical drugs and supplies (Kimboy, 2011) and there are, at times, shortages of supplies to test for HIV in donated blood (Azzah, 2011). Many injections given in Tanzania are unnecessary and the issue of iatrogenic infection through injection has not yet been adequately addressed and the concerns put to rest (Nsimba et al., 2011). In this context, whatever the extent of any actual problem with reference to blood exposure, it is unsurprising that suspicion abounds. While technological advances may make it easier for health workers to work in safe ways, the challenges are ongoing. It is necessary to secure and

maintain adequate supplies of the technologies and the equipment to make the technologies work properly, such as reliable electric or solar refrigeration, for example. It is necessary to ensure that health workers have incentives to work safely, rather than the reverse.

However high their level of awareness, however, young people are not as powerful as adults are. While many participants had concerns about transmission in health settings, their concerns met with no immediate mechanism of correction. In medical settings, patients are less powerful than health workers are. The young people's power to stop fraudulent or poor practices was limited, because people in the health system who behave corruptly or work in less than hygienic ways are unlikely to advertise the fact. It is difficult if not impossible for young people to monitor or force adults to handle 'sharp things' safely, whether in a circumcision or female genital mutilation (FGM) rite, a barbershop or health centre. Nevertheless, some young people may have more power to stop poor health practices if they become health practitioners themselves. Likewise, it is likely to be useful for all citizens to be aware of potential points of failure in health systems in both public and private settings, in order to apply pressure to address and correct any faults in a systematic matter.

7.3.4 Preventing HIV/AIDS by Refraining from Sex

The most common HIV/AIDS prevention in the participants' strategies, as represented in the write-and-draw exercises, was refraining from sex. Participants discussed refraining from heterosexual, penile-vaginal sex. While participants occasionally discussed penile-anal sex and rape among heterosexual and MSM couples, they did not tend to discuss refraining from that kind of sex.

Since socially-held notions of morality influence perceptions of risk (Douglas, 1985), the prohibitions against primary school students or other young adolescents having sex may reinforce perceptions that sex itself is inherently risky (Van Reeuwijk, 2010a:57; Wight et al., 2006:990). The participants commonly associated HIV risk with having sex. They were considerably less likely to associate HIV risk with having unprotected sex or with having sex without knowing their own HIV status or that of a partner or partners. Therefore, the tactics that they discussed and illustrated in the most detail were relevant to refraining from sex rather than to refraining from unprotected sex.

Gender had a great influence on the strategies that involved refraining from sex. For male and female tactics of refraining from sex, please see Section 7.4.

7.3.5 Preventing HIV/AIDS in the Context of Sexual Relationships

Compared to the many write-and-draw exercises that discussed refraining from sex in some detail, relatively few exercises contained details concerning measures that would support prevention within sexual relationships. Female participants hardly ever indicated that they wanted to have sex, so were more likely to feel comfortable recommending measures that were consistent with abstinence. Males and females may have felt that the illustration of some methods of prevention was likely to be embarrassing, dull or difficult to draw. Condom pictures might have been too explicit, while long-term fidelity might have been too abstract to draw.

Fewer participants made any provision for HIV/AIDS prevention within sexual relationships apart from mentions of faithfulness. Mentions rather than illustrations of fidelity were frequent in the focus groups, interviews and write-and-draw exercises but compared to refraining from sex, there was a lack of detail and very little illustration. Participants apparently considered fidelity to be an attractive ideal but an elusive objective. Many recommended fidelity or warned against immorality or casual sex. Many participants wanted to be faithful and wanted their partners to be faithful but they struggled with the concept of faithfulness as a tactic of HIV/AIDS prevention, because they doubted that they would be able to trust their partners. Many did not feel that they had sufficient means to monitor or enforce the fidelity of their partners. As they often said, 'I can only trust myself.' They could not as easily envisage how this tactic would support their HIV/AIDS prevention strategies, compared to refraining from sex.

Though they were generally in favour of faithfulness, many participants seemed to struggle with the concept of partner reduction. In the questionnaire, partner reduction received a lower percentage of 'Yes' answers than refraining from sex or condom use. Since the wording that they most often chose for themselves concerning faithfulness was along the lines of being faithful to a single partner, they may have wondered, 'Is it not better to have sex with only one person in the first place, rather than to reduce the number of sexual partners overall?' More-schooled participants were more likely to agree with the concept of partner reduction, perhaps because they had heard it or

something similar explained in the past and were therefore better able to grasp the concept. Very few participants discussed the concept of faithfulness in the context of a succession of relationships or concurrent partnerships.

Many people, in Tanzania and elsewhere, realize the difficulty of learning the truth about anyone's sexual history or habits. Nevertheless, some participants indicated that part of their strategies would include the tactic of selecting a partner based on their assumptions of whether the partner would be likely to be faithful and uninfected. It is common to hope that a prospective partner is uninfected at present and will be faithful in future. It is normal and advisable to attempt to choose a person who seems likely to be faithful as a sexual partner. As an HIV/AIDS prevention tactic practiced in isolation, however, hope is not enough. Neither appearance nor reputation confers a guarantee of fidelity or negative HIV status. Furthermore, for females, the choice may not be theirs. If the family expect a female to marry, with the benefit that it will improve her family's financial status, the choice of sexual partner might have more to do with the hoped-for transfer of wealth than other considerations.

HIV/AIDS messages currently say that you cannot know a person's HIV infection status from their appearance. Perhaps more can be made of the corollary of this message, that hoping to select a partner who looks HIV negative and who looks as though he or she will be faithful, is by itself an inadequate tactic of prevention.

After faithfulness, participants' main tactic of HIV/AIDS prevention within sexual relationships involved condoms. In the questionnaire, most young people agreed with the statement, 'Condoms are a good way to prevent HIV/AIDS.' Indications from the focus groups and interviews suggested that most but certainly not all young people had reasonably positive attitudes towards condoms. In the write-and-draw exercises, however, relatively few participants mentioned condoms.

No participant produced a write-and-draw exercise of a female asking a male to use a condom. This was a noteworthy omission, because many programmes in the past have promoted the idea of females asking males to use condoms, without having fully appraised, perhaps, whether this is a realistic expectation for most women. Only one participant, a female, illustrated a condom negotiation in a write-and-draw exercise. That was of a female trying to convince a man *not* to use a condom. The negotiation ended when the man decided not to have sex. Not one person in the present study made

the assumption that females might influence males to use condoms, or even that they might wish to do so.

Most adults in the study seemed to think that education about condoms and access or provision of condoms would be likely to corrupt young adolescents by giving young people ideas about sex, thus contributing to premature sexual experimentation and inconsistent condom use. While early sexualisation is a valid concern, a study of the evidence of 41 adolescent, reproductive health interventions around the world suggested that sex education does not lead to an increase in sex-related risks.

“...no evidence of increased sexual risk-taking behaviours was found in any of the studies reviewed...It denies ammunition to those who contend that providing sexual reproductive health information and services to youth results in increased levels of sexual activity” (Speizer et al., 2003).

Adults can harm young people by denying the validity of young people’s maturing sexual identity and by failing to make ‘an appropriate and sensitive response to the various problems involved in a child’s maturing personally, socially and sexually’ (Bettelheim, 1976:192-193). Many young people are sexually active or soon will be. It is not possible or reasonable to withhold education or condoms from young people until the first time they have sex. The young people will not be able or willing to tell adults when that day is coming and often will not know it themselves. A young person does not stay at an age but soon changes into somebody older. Ignorance is not bliss for persons who need information, support and access to technologies in primary school, so that they can adapt their strategies to prevent HIV/AIDS and achieve other objectives, now and in the future.

According to the United Nations, about 10-20% of Tanzanians never complete primary school. About 75% do not attend secondary school (UNICEF, 2012). These attendance figures suggest that more young people will receive in-depth education, including information about condoms, testing, and refraining from sex before and after the sexual debut, if all students are able to benefit from such education by the middle years of primary school. Otherwise, many students will miss it altogether.

Perhaps because of the difficulty of being certain about anyone’s sexual past or present, the young research participants were interested in the potential of testing as a means of prevention in consensual or committed sexual relationships. They were positively disposed to the idea of partners asking each other to get an HIV test at the

beginning of relationships. Some participants' write-and-draw exercises showed partners agreeing to get an HIV test. Few participants objected to testing on moral or technical grounds, as they sometimes objected to condoms. A few were concerned about getting HIV from unclean needles. In the questionnaire, most participants mainly agreed that it was all right for a male to ask a female to go to get an HIV test before having sex and for a female to ask a male.

There are societal precedents for testing at the beginning of relationships. For example, an adult interviewee, who worked in a leadership role at a Dar es Salaam mosque, said that HIV tests were routinely required as part of the process of preparation for marriage. Determining HIV status in the beginning of relationships is not currently the usual reason for testing, however. The usual reason is diagnosis or confirmation of suspected positive status, or the illness or death of a sexual partner. There is some untapped potential for testing in the beginning of relationships. Further research in this area is likely to bear fruit.

7.3.6 Public-spirited Tactics and Strategies

Some tactics and strategies were not personal but public-spirited. It was not clear whether those research participants who drew images of themselves giving public talks on HIV/AIDS felt that their own personal strategies were in such good order that they did not need to mention them, or that they were so knowledgeable or powerful that they did not need personal strategies. Many or all probably had a genuine desire to help others. Some may have wished to illustrate themselves preventing HIV/AIDS in the context of aspirations of adulthood, status and power.

7.3.7 Tactics Not Mentioned in Strategies

Newer technologies for HIV/AIDS prevention were almost completely absent from the participants' strategies. No participant mentioned the value of male circumcision or female condoms in risk reduction, or the potential of an HIV/AIDS vaccine, except to assert that it did not exist. They evidently had not heard of these in 2008.

Participants seldom discussed prevention in the context of penile-anal sex. Van Reeuwijk (2010b) found that her research participants 'did not give accounts of...anal or oral sex and...condemned such forms of sex as "dirty". A Tanzanian study of unmarried adolescents, mean age 15, found that 8% of participants reported

experience with anal sex (Kazaura and Masatu, 2009). Some heterosexual Tanzanian couples, including young couples, practice anal sex for pleasure, to avoid pregnancy and preserve virginity, without knowing that penile-anal sex is riskier per act of sex than penile-vaginal sex (IRIN PlusNews, 2011). In an interview in the present study, a young adult male said some males had heterosexual penile-anal sex to reinforce status and domination in relationships, and to heighten reputations among male peers. Research participants discussed unprotected penile-vaginal sex as the main HIV/AIDS risk. Participants did sometimes discuss having or potentially having MSM and heterosexual anal sex. No one mentioned that unprotected penile-anal sex was more dangerous than unprotected penile-vaginal sex. They probably discussed the dangers of coughs, sharing clothes, picking up razor blades from the ground and

sucking on other people's tongues more often they discussed the HIV/AIDS risk of penile-anal sex. Underplaying the dangers of penile-anal sex is, of course, inconsistent with the biomedical viewpoint of HIV/AIDS prevention. For example, the risk per act of sex to the female of contracting HIV through unprotected receptive anal sex has been estimated as more than four times that of unprotected penile-vaginal sex (Boily et al., 2009).

Few people discuss anal sex because it is so stigmatised. Participants hardly seemed to be aware that there was a risk of unprotected penile-anal sex, much less that the risk of contracting HIV was greater than that of unprotected penile-vaginal sex (IRIN PlusNews, 2011). As a result, MSM and heterosexual couples may overlook the HIV risk of unprotected anal sex, and fail to take measures to avoid or reduce risk.

7.4 Research Question 4: Were Strategies or Lack of Strategies Common to Demographic Groups or Specific to Individuals?

There were more commonalities than differences to strategies between individuals and demographic groups. Gender was the main reason for differences.

7.4.1 Gender Differences in Strategies

Both females and males appeared to believe that they had at least some agency and power to prevent HIV/AIDS as long as they were willing and able to refrain from sex. Many participants expressed the wish to avoid sex, apparently perceiving that their chances of HIV/AIDS prevention were highest when they were not in sexual relationships. Females communicated that they felt their powers to prevent HIV/AIDS would be limited in sexual relationships. The responses of many females suggested that they assumed that they would lose the power to prevent HIV/AIDS in relationships or that their power to prevent HIV/AIDS would transfer to the male and thereafter depend on his decisions.

Males generally construed the temptation to have sex as originating from their own sexual desire. Except when discussing MSM rape, males discussed refraining from sex as though they wanted to have sex. When males desired and decided to pursue sex with a woman, they initiated the negotiation, in which they might or might not be

successful. Males portrayed themselves mostly as in control of their sexual destinies. Their sense of control, (and of self-control, if they decided not to have sex), was an important part of their masculine identities. If they decided not to have sex, they could walk away.

The males saw nothing wrong with their own desire, but believed that refraining from sex demanded that they manage their desires and not inflame them. Males discussed and pictured themselves avoiding visual representations of sex such as pornography and significant places such as hotels and discotheques, where casual sex was likely to be on offer. Males discussed and illustrated themselves keeping busy all day, playing sports, helping parents, sleeping, bathing, working and studying in order to help them avoid thinking about or pursuing females. Males recommended avoiding intoxicating substances in order to stay sharp and sensible in their sexual decision-making. Although males portrayed themselves as being under pressure to demonstrate their masculinity or maturity through having sex, males often considered themselves as calmly resolute and able to overcome peer pressure from other males, whom they often portrayed as ignorant, workshy, intoxicated gang members. Males described themselves refraining from sex in ways that required positive attributes of character such as courage and determination. They often drew themselves pursuing strategies of HIV/AIDS prevention in solitude, evidently believing it easier to control temptation if females were at a distance. In short, both males and females construed sexual temptation as the management of male but not female sexual desire.

Females and males occasionally discussed how females were to avoid tempting men.

Clothing, too, can promote the spread of HIV/AIDS because if there's a boy or man who has seen you, a girl or a girl child wearing a mini or other short clothing, they must want to enter your body and there between you one of you will be affected by HIV/AIDS without using protection.

(Female, Babati in-school write-and-draw exercise, excerpt)

Not wearing miniskirts was a wholly inadequate response to the problem of male temptation, however, not least because typically, Tanzanian females dress very modestly. Female participants alternately pictured themselves looking adorned and beautiful or simply respectable, tidy and clean. Their drawings indicated that they felt that males were enticed by their very existence rather than by their particular appearance or adornment.

The females construed sexual temptation in terms of material incentives that men offered in exchange for sex, rather than in terms of sexual desire itself. They also construed it as avoiding harms that might threaten if they refused sex. Female participants expressed no need for a 'keep busy' strategy to fill their day with activities to avoid thinking about sex. They did not report themselves to be thinking about sex. They did not need to fill their days with additional activities to keep busy, possibly because they already had enough to do. Although the questionnaire question on work was open-ended, making it somewhat difficult to compare responses, it is worth remembering that a higher proportion of females said that they worked, and a higher proportion spontaneously gave the response 'Everything' when we read off the list of occupations, than males. Females also named more occupations, on average, than males.

Many Tanzanians consider the labour of children and adolescents to be part of young people's upbringing, in terms of gender roles, training, and informal education. The young people's work is necessary in many cases for household survival. Many Tanzanians only consider child labour to be problematic when it involves immorality, hazardous substances or the prevention of normal growth and development, such as through preventing young people from attending school (Law Reform Commission of Tanzania, 2001). Even when these standards are violated, sanctions do not seem to be systematically applied to employers (Human Rights Watch, 2013) or parents. Primary school students may suffer punishment for instances of 'misbehaviour' such as poor attendance, tardiness or a dirty or dishevelled appearance, all of which may be related to the students' labour (Tao, n.d.:10). Unsurprisingly, some primary students may find it difficult or impossible to continue at school.

Child labour often contributes to the family livelihood. Young workers do not necessarily receive direct compensation. More females in the present study reported engagement in this kind of labour, and were engaged in more categories of work, on average, than the males. It is perhaps unsurprising that many female participants perceived that exchanging sex for money and other resources was an authentic temptation. The females did not portray themselves as being impressed with gifts promised in exchange for sex, though. They derided them as trivial or if substantial, illusory. While female participants did not portray themselves as being entirely indifferent to the inducements of transactional sex, they did portray themselves as

being able to resist relationships that were purely about sex for the males and material benefits for the females. In this, they were in agreement with Bettelheim (1976:162,164) that children, including poor children, needed to exchange wish-fulfilling oral fantasy for 'goal-directed behaviour based on intelligent assessment of the situation' in order to achieve independence of thought and action. They appreciated that while the inducements offered were likely to be small, the costs of sex, such as the risk of pregnancy, infection and damage to reputation, were likely to be high.

In other studies, participants did not necessarily think of transactional sex relationships as abnormal or immoral, but in some cases, desirable and acceptable, especially if they entailed features of authentic relationships such as the presence of love or the possibility of permanence. A transactional sex relationship was more desirable if the man was eligible for marriage (Wamoyi et al., 2011:6, 9, 11; Poulin, 2007). Many females considered transactional sexual relationships more empowering than relationships without transactions, which were likened to prostitution (Wamoyi et al., 2011).

In the present study, female participants showed little sympathy with females who practiced transactional sex for material considerations alone. A few participants, both males and females, indicated that they understood that some women engaged in transactional sex to earn all or part of their livelihoods. Females were more likely to make implicit rather than explicit allusion to this state of affairs, by communicating that they would work hard to succeed financially, so that they would not need to engage in 'other ways' of living to survive.

A few participants discussed or illustrated situations where the boundaries between transactional sex and sexual harassment blurred, such as when males in positions of power blocked females' access to employment after the females had rebuffed them when they asked or repeatedly asked the females for sex. Even then, the female participants illustrated not giving in to the temptation. While males occasionally discussed situations of woman pressuring them to have sex, no male referred to a situation with a female sexually harassing a male.

Both males and females felt that unwanted sex was a threat to their HIV/AIDS strategies. There were similarities in how males and females described unwanted sex,

including rape. Members of both sexes felt that there was a danger of peer pressure drawing them into situations involving unwanted sex.

Males and females both wished to avoid gangs, because of peer pressure to engage in sex. The high risk of unclean injecting equipment presented itself in gang situations, not to mention the befuddling effects of the substances themselves and the peer pressure of the gang on rational judgement. Females wanted to avoid gangs for all the same reasons that males did and to avoid being the victims of rape.

A few of the male 'street children' and at least one other male communicated that they were not always able to walk away from unwanted sexual advances, because of MSM rape. They often associated their vulnerability with having nowhere safe to sleep. It might be difficult or impossible to avoid gang membership as a 'street child'. That does not necessarily mean that unwanted sex was irrelevant for any of the other male participants. They may have been too embarrassed to discuss it. In a study of Tanzanian university students, nearly as many males (9%) as females (11%) reported incidents of unwanted sex in their pasts (McCraan et al., 2006). For Ugandan university students, early sexual coercion was correlated with higher-risk behaviours such as early sexual debut and multiple partners later in life (Agardh et al., 2011:9).

Females alluded to many variations on the theme of unwanted sex and to many different tactics to avoid it. First, females discussed and illustrated practices of gracefully eluding and rejecting potential suitors with the use of formal, courteous language. In the write-and-draw exercises, gentle words helped the suitors to lose the negotiations to have sex, yet enable all concerned to hold on to their dignity and proper gender roles.

This particular use of language was apparently intended to support females to succeed not only in physically escaping sex but in 'cooling the mark out' (Goffman, 1952). In the write-and-draw exercises, the practice helped would-be suitors to lose the transaction (that is, not to have sex) gracefully, without forcing them to lose face. Perhaps for the females, 'cooling the mark out' helped them to prevent violence or other acts of retribution from the males. The females and males played the game differently than the games Goffman described, where in-the-know males cheated other male passers-by with the help of fellow male conspirators. In Tanzania, males initiate the game by trying to make the females the 'marks' that is, the ones who will lose. As

soon as the female becomes aware that the game is in play, however, the male becomes her 'mark', too, and she hopes to help him lose gracefully. Both females and males are probably socialised to play the game. Males want sex and respectable females do not. Males approach and females respectfully decline. An adult interviewee maintained that females might not be as respectful if the males approaching are young. Males may believe that their masculinity correlates to their ability to play and win by getting a female to agree to sex. As one young male said, 'The smart ones always say "No" ' (Van Reeuwijk, 2010a:4).' Females know that winning, that is, not having unwanted casual sex, contributes to their status as respectable females. Males may be stimulated rather than discouraged by rejection, because some females are more difficult to seduce. It is not respectable for a female to express a genuine interest in getting a boyfriend or having a sexual relationship, except perhaps by the subtlest of indications. Males may doubt females who indicate that they are not interested in a tryst. Males may redouble their efforts with stronger declarations of love or bigger promises of material inducements. A male who is unsuccessful with one female may try again with another who is poorer, more interested in the gift offered, or simply not confident enough to say 'No', and get the message across.

Females sometimes alluded to their parents when speaking to potential suitors, perhaps reminding them that a more powerful adult or adults who had an interest in their well-being. In-school females drew suitors' attention to their status as pupils as a reminder that they were not available for sex. Wight et al. (2006:991) found, 'One of the most fundamental sexual norms, at least amongst adults, is that young people should not have sex until they have left school.' The protection that school time afforded was limited, however, because some people, including some of the school-leavers themselves, believed that females were available for sex from the day they finished primary school. In some communities, females expected to celebrate their school-leaving days with propositions and sometimes participant in transactional sex (Wight et al., 2006).

Females often discussed beguilement as another form of unwanted sex. Beguilement represented an array of misrepresentations, some related to the propositions that females receive from men trying to seduce them: lust misrepresented as love, the search for casual sex misrepresented as a search for a life partner and imaginary or paltry benefits misrepresented as authentic and substantial ones. Sometimes

beguilement entailed sexual coercion and violence, such as tricking females into situations in which they could be raped or pretending that females had given consent when they had not.

Below, I discuss male and female aspirations for sexual relationships, including marriage and family relationships, and compare them to prevailing conditions in Tanzanian society. The evidence shows that according to current norms of Tanzanian society, the male participants were more likely to achieve their aspirations for sexual relationships, marriage and family, than the females.

Male participants named a mean age of 19.6 as suitable for the male sexual debut. The actual mean age for Tanzanian males was 19.8, about the same. Female participants named a mean age of 19.8 as suitable for their sexual debut. The actual mean age for Tanzanian females was 18, 1.8 years younger, but similar to the age that males thought suitable for the female sexual debut, 18.5 (TACAIDS, 2013:48).

Male participants were significantly more likely (85%) to say that they 'needed' to marry than females (55%) but in actuality, more Tanzanian females (63%) aged 15-49 were married or in union than males (53%) (TACAIDS, 2013:29). Some of the surveyed persons may marry later, so it is not possible to know whether males or females are more likely to achieve their aspirations, ultimately.

Male participants aspired to marry at a median age of 25.7. For males, this aspiration was about one year later than the actual median age of 24.5. Female participants aspired to marry at a mean age of 24.2. In actuality Tanzanian females were 20 at the age of their first union (TACAIDS, 2013:45). While the terms 'union' and 'marriage' admittedly do not convey the same thing, there is no doubt a larger gap between the female aspiration and the reality.

With respect to the preference for monogyny over polygyny, all female participants and all but two male participants preferred to be in a monogynous relationship. In Tanzanian society, 11% of married males and 22% of married female Tanzanians are in polygynous unions (TACAIDS, 2013:42). It is difficult know whether the practice of polygyny will become more or less common in the future, or about the same, and what the implications will be for HIV/AIDS prevention.

With respect to the age deemed suitable to have a child, males named a mean age of 28.5 and females named 25.8. In Tanzania, the median age range for males to have a

child is between 24.5 and 28.5 (TACAIDS, 2013:46). Females were an average of 19.5 years, at the birth of their first child (Tanzania National Bureau of Statistics and ICF Macro, 2011:4) Males were from zero to four years younger than the age they aspired to be at the birth of their first child, while females were more than six years younger.

Male participants wanted a mean of 3.6 children and female participants wanted a mean of 2.5 children. Tanzanian women now have an average of 5.4 children (Tanzania National Bureau of Statistics and ICF Macro, 2011:3), so if current trends continue, male participants were more likely than female participants to have the number of children that they want.

Turning to caring, females more often discussed caring for people with HIV/AIDS in both the practical and emotional senses of the word. Both males and females discussed the risk of infection in care, but neither males nor females discussed care and safety for carers very often.

Both males and females had patriotic and community-spirited strategies for preventing HIV/AIDS. They revealed gender differences in their descriptions or illustrations of their strategies. For example, more than one male illustrated himself as a dignitary, addressing the citizenry, telling them to avoid HIV/AIDS. In contrast, a female illustrated herself as a nurse, treating, advising and being kind to an affected person.

The evidence suggested that gender made a difference not only in young people's strategies but also in the likelihood that they would be able to achieve their aspirations, at least with respect to marriage and family.

7.4.2 Other Demographic Differences in Strategies

There were fewer differences in the strategies of other demographic groups. There were some differences between more-schooled and less-schooled young people (and male 'street children', as a group). There were fewer differences still by religion, location and age.

Often the strategies of out-of-school young people were less well-developed than those of their in-school counterparts. Young people who had been longer in school were often better able to communicate their meanings in all of the research methods. Strategies from the less-schooled tended to have less content. Even with the support

of the research team members writing down oral narratives, the write-and-draw exercises of less-schooled participants tended to be shorter and simpler, presumably at least in part due to the limited experience of the out-of-school young people in expressing themselves. The strategies of the less schooled were sometimes less grounded in biomedical knowledge. For example, they were more likely to articulate false contagion beliefs such as that condoms have HIV in them or that a cough can spread HIV/AIDS. Some of these contagion beliefs may have been more or less correct for other diseases but they were not consistent with current biomedical understandings of HIV/AIDS infection. For example, in a non-significant result, the less-schooled young people were more likely to agree (40%) than more schooled participants (28%) that it was possible to know from a person's appearance, whether they were infected with HIV. These findings were consistent with those of another study of Tanzania primary students, which found a correlation between literacy and knowledge of HIV/AIDS (Vavrus, 2006).

The 'street children' were able to communicate through writing, drawing and discussing. The content of what they communicated was different from the other participants, though. There was more explicit and frightening sexual content and imagery of infection. Although this group discussed penile-anal sex, like other participants, they associated HIV/AIDS risk with heterosexual, penile-vaginal sex.

By religion, there was one noticeable variation in strategies. In the write-and-draw exercises, about four out of ten participants affiliated with Christianity communicated some aspect of refraining from sex in their HIV/AIDS prevention strategy, compared to about six out of ten participants affiliated with Islam.

By location, a relatively smaller proportion of the members of Kyela participants, compared to participants in the other locations, indicated that they wanted to marry.

By age, the younger age group (13 and younger) named a mean of 19.9 years and the older age group (14 and older) named a mean of 17.9 years as suitable for a female to begin making love. Perhaps as adolescents aged, they wished for the age of sexual debut to hasten, for themselves and for others.

7.5 *Research Question 5: What Sources of Advice, Education and Guidance Do Young People Receive?*

Young people most often named parents and other family members as their most important and trusted source of advice, education and guidance, followed by health workers, teachers and the media. While young people were somewhat aware and knowledgeable of global discourses of HIV/AIDS prevention, many tended to base their strategies on local rather than global sources of advice, education and guidance. They often seemed to select tactics which were likely to have been acceptable to the significant adults in their midst. As such, many of their strategies were more or less consistent with the prevailing, conservative moral frameworks and religious teachings in Tanzania, encouraging young people to refrain from sex.

The young people seldom explicitly discussed their strategies in terms of moral or religious discourses, however. Unlike the participants in the adult focus groups and interviews, the young people tended not to dwell on morality, religion or their obedience to adults as either helps or hindrances to their strategies of HIV/AIDS prevention. In this, they seemed to be more single-minded and pragmatic in their focus on how to prevent HIV/AIDS than the adults were. Though the young people clearly respected their religious and moral education and the advice and guidance of their parents and other significant adults, including religious authorities, they seldom spoke of HIV/AIDS prevention as though its success was a function of their religion, religious faith, morality or obedience to their elders.

7.6 *Research Question 6: To What Extent Could Young People Be Reflexive about Their Personal HIV/AIDS Prevention Strategies?*

Participants had thought about their personal HIV/AIDS prevention strategies in the context of real-life concerns. Many participants were able to realistically describe and analyse structural constraints in their strategies such as poverty and gender inequalities. Most young people were reflexive in that they considered that their tactics could address some constraints but not others. For example, females thought that they could avoid having sex with males who asked them for sex but they considered that

their strategies to prevent HIV/AIDS might not be successful if they were raped. In that way, their strategies were reflexive.

In another way, many of the strategies were not reflexive enough. The structural constraint that participants were least likely to address was the passage of time. Participants said that they thought that many young people like themselves were having sex and that most participants would be having sex in the future, yet many strategies lacked tactics to prevent HIV/AIDS in the context of sexual relationships. Instead, many strategies conformed to societal ideals of young people as pre-sexual beings. In most of the write-and-draw exercises, research participants pictured themselves as young, single and childless. Some strategies discussed future relationships, marriage, child bearing and rearing, but many did not. The best strategists devise measures to address an array of foreseeable scenarios, not just a single scenario, which does not envisage the near future. In this case, most of the strategies did not take into account that most young people would become older, form sexual relationships, and have children.

Although the tactic of refraining from sex is of fundamental importance to all HIV/AIDS prevention strategies, young people need additional tactics. Specifically, young people may wish to consider in more detail how their strategies will prevent HIV/AIDS in the context of embarking upon and maintaining sexual relationships.

8 Conclusions

This chapter begins by briefly reviewing the aim and conduct of the research. It addresses Research Question 7, concerning social policy implications of the present study, and concludes with recommendations for future research.

8.1 *Summary of the Aim, Design and Conduct of the Research*

The aim of the research was to explore the personal HIV/AIDS prevention strategies of young adolescents in Tanzania. The research team conducted the research with 209 research participants, including young people in-school, out-of-school and 'street children', most aged 10-15, in five Tanzanian research locations. There were preliminary and supplementary conversations, interviews and focus groups with key adult informants. The research assistants and I conducted the research, transcribed the data, and translated the data from Swahili into English. The multiple-method study explored the nature of participants' strategies using the research instruments of focus groups, individual interviews, questionnaires, ranking exercises and write-and-draw exercises. The study emphasised emic or insider views on HIV/AIDS prevention, primarily exploring the knowledge and understandings of the young people themselves, rather than those externally imposed.

8.2 *Research Question 7: What Are the Social Policy Implications of the Research Findings?*

The research findings suggested ten implications for social policy.

1. Teachers, policy makers and programme designers can design and deliver better HIV/AIDS policies and interventions by taking the easy and pleasant first step of learning about young people's personal HIV/AIDS prevention strategies.

The efforts of committed adults are likely to be better rewarded if the adults make the assumption that young Tanzanians are actively engaged in an ongoing processes of HIV/AIDS strategy development as part of their human role to be 'active producers of their own culture' (Caputo, 1995:31). The efforts of adults in asking young people to communicate their strategies through discussion or write-and-draw exercises can provide adults with insight into culture and youth culture, social structures, physical environments and majority and dissenting points of view. Young people have voices, and it pays to listen.

2. Educators are likely to have more rewarding and enjoyable work in promoting HIV/AIDS education if programme and policy designers stop asking them to deliver the false message that HIV/AIDS prevention is as easy as ABC.

The present study demonstrated that most participants had a basic grasp of the ABC of HIV/AIDS prevention. Few, however, had a good or excellent grasp of many other relevant issues, even though many of them were obviously intelligent and eager to learn more about HIV/AIDS. Adults can consider how best to increase the range of relevant topics that young people can learn. New educational topics are appropriate because they are likely to stimulate young people and support them to develop better prevention strategies. Furthermore, new topics are likely to support young people to learn about research, new technologies and practices in HIV/AIDS prevention in Tanzania and around the world.

(Social Policy Implications, continued)

This challenge comes in several parts. It would probably engage the best efforts of funders, linguists, scholars and educators.

- a) Select important and relevant research findings.
- b) Rewrite the findings in clear and accurate Swahili, or English and Swahili, while referring to the original studies, in case the young people would like to do further research or verify findings.
- c) Set up a periodic distribution system of educational reading materials appropriate to all the reading levels of students in primary schools. A model from my own childhood, the SRA reading programme, distributed educational materials to schools long before the age of computers (McGraw-Hill, 2012). The mechanism of distribution can stimulate reading and support young people in reading not only about HIV/AIDS prevention but about managing a farm, developing a business, becoming a mechanic, health professional, teacher or parent, or creating a loving and stable home.

3. Policy makers are likely to find that primary school is the best venue for full and detailed education in sexual relationships and reproductive health, including education about HIV/AIDS prevention in the context of sexual relationships.

In spite of the efforts of educators, other adults, and the young people themselves, not all Tanzanians finish primary school. The majority of Tanzanian young people do not go on to enrol in secondary school (UNICEF, 2011). To reach the largest number of Tanzanian young people before they leave school, there is a need for national provision of a complete HIV/AIDS educational curriculum by the mid-primary school years at the latest, when children are about 10-13 years of age. Some young people are having sex at this age, even though they know that parents and teachers do not want them to. Others will soon begin. The best way to ensure that the majority of Tanzanians receive full and detailed education about sexual relationships and reproductive health before they begin to have sex is to provide it at the age when most of them are still in primary school. 'Saving' such education until secondary school will only ensure that the majority of Tanzanians do not enjoy such in-depth education at all, because a majority of Tanzanians do not enrol in secondary school. Even for those who do go on to secondary school, 'saving' education on sexual relationships and reproductive health until secondary school may only ensure that many scholars begin such education after they have formed patterns and habits of sexual relationships.

(Social Policy Implications, continued)

Some adults are concerned that education about measures of HIV/AIDS prevention, such as condoms and HIV/AIDS test, may lead to premature sexual experimentation and activity, leading to heightened risk of HIV/AIDS. Researchers have conducted many studies to examine the issue. One study, presenting evidence of 41 adolescent reproductive health interventions in developing countries, found no evidence of increased sexual risk-taking in any of the 41 interventions reviewed (Speizer et al., 2003).

After reaching as many young Tanzanians as possible with a full and detailed HIV/AIDS educational programme, including prevention methods suitable for whenever young people have sex, beginning in the mid-primary school years, educators can arrange for the latter years of primary and secondary school to be devoted to reviewing, consolidating and presenting more detailed and advanced material.

4. Adults can support young people to develop HIV/AIDS strategies based on foreseeable scenarios of maturation and relationship formation rather than on false assumptions that they will refrain from sex indefinitely.

Teachers, educational authorities and others in Tanzania and others who work with young people may wish to encourage young people to think about the contexts in which they will be preventing HIV/AIDS as they go through the life course. That way, there would be an explicit expectation for young people to identify methods most appropriate to different contexts, different relationships and different times of life. This might support young people to think about their personal strategies of HIV/AIDS prevention in more systematic and effective ways.

(Social Policy Implications, continued)

Adults may support young people not only to refrain from sex, but to adapt personal strategies to include any and all tactics likely to be appropriate and useful at different times in their lifetimes. Suggested tactics include, but are not limited, to the following.

a) Refrain from sex

This aspect of strategy begins in childhood, of course, but the understandings and behaviours related to refraining from sex will also support young people to enjoy faithful sexual relationships as they mature.

b) Prevent HIV/AIDS at the beginning and in the midst of sexual relationships, including sanctioned relationships such as engagement and marriage, unsanctioned and informal ongoing relationships and temporary or one-off relationships, if and as they occur.

In the present research, young people were aware of the tactics of HIV/AIDS prevention strategy, such as being faithful, using condoms and going with a prospective partner to get HIV/AIDS tests, but most young people did not seem to have a very clear idea about the details and contexts of implementation in a variety of situations. The young people did tend to have very clear ideas concerning the details and contexts of implementation of refraining from sex. If young Tanzanians were to develop a similar clarity of understanding of how, when where and why to implement measures of prevention within sexual relationships, they would probably be much better equipped to prevent HIV/AIDS.

c) Prevent HIV/AIDS by avoiding blood-borne transmission in health care and other settings

Research participants had a good awareness of the dangers of blood-borne transmission in the present study, but would be likely to benefit by more education about how to work to reduce this kind of danger in the community.

d) Prevent HIV transmission to newborns and infants

Participants occasionally mentioned HIV transmission to newborns and infants, although it was an important area of prevention in Tanzania.

e) Prevent HIV transmission when caring for people who are ill and may be infected

Again, participants did not discuss this element of transmission very often. It is probably a minor avenue of transmission in Tanzania, but it is worthwhile for young people to learn when care is advisable or necessary, how to provide good care, and how to reduce the risk of infection when caring for those affected.

(Social Policy Implications, continued)

While the five tactics above provide a good foundation, there are many other contexts and situations in which people prevent HIV/AIDS, such as when taking special precautions among couples known to be discordant. Therefore, all education concerning strategies will ideally concern an element of encouraging young people to be alert to new developments in HIV/AIDS prevention and to adapt their strategies to new technologies and realities as they mature, form one or more relationships, and have children through the life course.

5. Ensure that young people have safe places to sleep.

The 'street children' in the present study indicated that their lack of a safe place to sleep made them vulnerable to rape. Concerned adults can ask that some of the funding that is earmarked for orphans be devoted to the establishment of a system of safe and supervised night dormitories, or ideally, homes for 'street children', so that at the very least, they might have somewhere safe to sleep.

Having somewhere safe to sleep is not only a problem for the most vulnerable children. Secondary students living away from home in dormitories, for example, may find that the dormitories have no supervisors, or that the supervisors are lax in their duties, such that men are always hanging around, for instance. Interested adults might choose to establish and regulate a system of matrons and masters with powers, supervisory responsibilities and monitoring. That might help to ensure that boarding students, whether in school-administered dormitories, privately run dormitories or other accommodation, enjoy the freedom to pursue their studies in peace without continually being interrupted and importuned by those who would urge the possibility of casual sex on them or present an actual physical danger in their midst.

(Social Policy Implications, continued)

6. Consider and act to better support out-of-school young people and ‘street children’ to develop HIV/AIDS prevention strategies, and address other relevant issues in their lives, through outreach, education, and structural improvements.

All young people, whether in-school, out-of-school or ‘street children’ need HIV/AIDS interventions that address their needs and current circumstances. Encouraging young people to articulate and discuss their strategies is likely to support those who would develop programmes with them, and tailor those programmes that address their particular circumstances.

7. Work to ensure that campaigns and other educational efforts appeal to the most powerful motivation of HIV/AIDS prevention, especially to self-interest and public spiritedness.

In the present study, self-protection was the most important motivation for HIV/AIDS prevention. Self-protection was of more interest to participants than the protection of others.

Nevertheless, campaigns and interventions very often support appeals to people’s interest in the well-being of others, rather than the well-being of themselves. Possibly, some campaigns are popular because they are heart-warming to the workers and donors of the international organizations who design and sponsor many of them, who may assume that they are effective because they are (perceived to be) charming. The message of such campaigns and interventions is to avoid contracting HIV/AIDS so that you do not transmit it to others. This sometimes results in campaigns such as ‘If you love her, you will protect her’. Such campaigns are somewhat unclear in terms of what they are suggesting that people do. The lack of clarity may encourage men to adopt or maintain behaviours that do not prevent HIV/AIDS. In any case, such campaigns miss the opportunity to appeal to one of humanity’s most powerful motivations, self-interest. Self-interest is ‘basic to utilitarian philosophy, and to economic analysis’ (Douglas, 1994:xi).

(Social Policy Implications, continued)

Happily, that suggests that many people who design campaigns and interventions have the potential to be more effective.

It may be particularly worthwhile to appeal to the self-interested motivations of males, because according to the implicit communications of participants in this study, males make most of the decisions, once a heterosexual couple begins a sexual relationship. An effective campaign might inform males of the risks of unprotected casual sex or early marriage with young females, for example, without preliminary HIV tests and full, mutual disclosure of the test results. Such a campaign might lead some men to question assumptions that young girls are low risk prospects for marriage or unprotected casual sex.

Appealing to the self-interested motivations of males might even influence the incidence of sexual violence. One of the research participants joked: 'Let us not rape each other carelessly. Let us use a condom'. His joke makes for uncomfortable reading, but perhaps he was being honest about his motivations. Education and advertising campaigns can emphasise that male perpetrators of sexual violence run a great risk of contracting HIV/AIDS, not just the victims. Engagement of a potential rapist's self-interested motives may serve as a better deterrent than an appeal to his motives to prevent HIV/AIDS in others. The welfare of others is unlikely to be high on a rapist's list of concerns.

Another powerful motive for participants in the present study was public-spiritedness and a wish to make a mature contribution to their communities. Creativity is required to consider mechanisms to deploy the motivation for the greater good. For example, the 'Pledge 25' programme in Botswana asks young people to donate blood 25 times. Of course, they can only donate if they stay HIV negative. The young people are recognised for their contribution (Government of Botswana, n.d.).

A second way to put the motivation of public spiritedness to good use might be to make the concepts and statistics of regional and national prevalence rates more generally known and to encourage people to work together to reduce the rates.

(Social Policy Implications, continued)

A third way to deploy the public-spirited motivation of Tanzanians is to support some of them to be health specialists or lay people in community health organizations. They may receive training and support to consider and work, for example, for increased accessibility and take-up of ARV treatment, and to reduce the unnecessary use of antibiotics, especially injected ones.

8. Work for HIV couples testing prior to the beginning of relationships, with mutual disclosure of results, to become a more normal and routine part of relationship formation.

For the most part, most research participants did not display the mixed feelings toward couples testing that they did show for condoms and faithfulness. Policy-makers and programme designers can put this enthusiasm to good use by considering ways to encourage routine testing prior to the beginning of formal relationships such as engagement and marriage as well as before less formal and shorter-term sexual relationships.

9. Alter commonly used language concerning sexually transmitted diseases and infections, including HIV/AIDS.

Designers of media campaigns, health workers and teachers may wish to consider taking steps to further phase out the terms *ugonjwa wa zinaa* and *ugonjwa wa uasherati*, often used as proxies for the terms ‘sexually transmitted diseases’ and ‘sexually transmitted infections’. Literally, the terms mean the diseases of adultery or immorality. As such, they imply that an STD or STI is evidence of guilt. That implication is not necessarily true and is stigmatising. A more neutral phrase that simply translates as STI or STD is *maradhi ya ngono*. For some reason, in the current study, adults tended to use the neutral term and the young people tended to use the morally judgemental ones. The terms are equally understandable. Promoting the more widespread use of the term *maradhi ya ngono* may contribute, at least in a small way, to better take-up of testing and treatment for HIV and STI services.

(Social Policy Implications, continued)

Other phrases, which some participants recited as truisms, are problematic. For example, some participants said things such as *UKIMWI hauna dawa au tiba*. That could mean, ‘There is no medicine or treatment for HIV/AIDS.’ Likewise, *UKIMWI hauna chanzo au kinga* could mean, ‘There is no needle or way to block HIV/AIDS’. Probably the original intention of such phrases was to convey the seriousness of the disease and to let people know that there was no cure for it. The continued use of such phrases, however, might suggest to people that there is no medicine, treatment, needle or ways to prevent HIV/AIDS. Professionals may wish to consider and discuss how to encourage young people to stop using such phrases.

10. Tanzanians may wish to consider how better to support their daughters to become more financially self-sustaining and to have more power over their own lives and health in relationships.

Many of the young adolescent females in this study did not show that they expected to have much control over HIV/AIDS prevention when they entered sexual relationships, including or perhaps especially in marriage. Furthermore, although none of them saw transactional sex as a career, much less a desirable career, they often alluded to the desirability of being able to earn their own money as an important part of their HIV/AIDS strategies. I know that readers are likely to be concerned with these issues and their solutions. I make three suggestions.

a) Support females, through legal and customary mechanisms, to become more financially independent. Support them to own and inherit property, businesses and other resources that can help them to be financially independent. Overturn laws and practices that dispossess women and orphans after widowhood or relationship breakdown.

b) Ensure that sons share family workloads fairly with daughters, such that both sons and daughters have enough time and family support to pursue personal fundraising and educational opportunities.

c) Make the legal minimum age of marriage for females equal to the age of sexual consent for females, (currently 18) and enforce it.

8.3 Recommendations for Further Research

The recommendations for further research follow.

1. Conduct further research with young people, using discussions and write-and-draw exercises, especially, in developing and communicating personal strategies.

In this research, the focus groups, interviews, questionnaires and ranking exercises were useful in providing information about knowledge and attitudes toward various methods of HIV/AIDS prevention. The write-and-draw method complemented these research methods by providing illustrations of the measures that the young people were likely to include in their personal prevention strategies.

Discussions and write-and-draw exercises of personal HIV/AIDS prevention strategies are likely to complement other ways of monitoring and evaluating behavioural interventions.

2. Investigate whether the use of ‘anchors’ can encourage young people to define and achieve aspirations for relationships and family formation. The anchoring effect:

...occurs when people consider a particular value for an unknown quantity before estimating that quantity. What happens is one of the most reliable and robust results of experimental psychology: the estimates stay close to the number that people considered – hence the image of an anchor (Kahneman, 2011:119).

The theory would predict, for example, that young people who have considered, discussed and generally agreed that an appropriate age to begin to have sex is about 18, as opposed to when they are finished with school for instance, the current anchor for some, are less likely to have sex before the age of 18. Their expectations would then be more likely to be anchored to the age of 18 rather than to the current school-leaving age of about 14.

Researchers might generate relevant anchors with questions like the following, many of which were present in the present study

How old should a male be before having sex/becoming engaged/marrying/having the first child?

How old should a female be before having sex/becoming engaged/marrying/having the first child?

Do you prefer to be in a marriage where there is one wife or more than one wives?

How many children should a couple have?

How many sexual partners do you think a person should have in total, in a lifetime?

How many sexual partners do you think a person should have in any one year?

How should people prevent HIV/AIDS if a relationship breaks up and they begin a relationship with a new partner?

Should a couple decide what method to use to prevent HIV/AIDS before the first time they have sex? What steps should they take at this time?

Should a couple decide what method to use to prevent HIV/AIDS when they are having regular sex or should they stop using any method of prevention?

How should engaged couples handle HIV/AIDS prevention in the time before and during the process of marriage?

Should a female resist if her family members pressure her to marry someone before she is ready? Why is that? (If yes) What are good ways for her to avoid being married at that time?

Should a female resist if her family pressure her to marry someone that she does not wish to marry? Why is that? (If yes) What are good ways for her to avoid being married at that time?

How many children should a couple have?

Researchers can test the anchoring theory's applicability to HIV/AIDS prevention, in order to learn whether young people supported to consider and discuss these questions are more likely to experience a reduced incidence of HIV, using reasonable behavioural biomarkers of unprotected sex such as incidence of pregnancy and STI, in a longitudinal study of control and experimental groups.

3. Build on this exploratory study by gathering evidence to test whether supporting young people to develop and continually adapt HIV/AIDS prevention strategies helps them to prevent HIV/AIDS in their lives. Monitor and evaluate the study with appropriate biomarkers of risk behaviour such as incidences of STI and pregnancy in control and experimental groups.

Readers may have their own ideas and plans for research with young people, HIV/AIDS prevention and personal strategy. I hope that they may use their ingenuity and commitment to take their research further.

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Appendix 1 Pilot and Post-Pilot Research Questions

Pilot Focus Groups	Post-pilot Focus Groups	Changes
	Q0.1. What is HIV/AIDS?	Added
	Q0.2 What is a strategy?	Added
P1. Do girls or women / boys or men like you think that you can be infected or infect others with HIV/AIDS?	Q1. Do young people like you think that they can be infected or infect others with HIV/AIDS?	Made age and gender neutral
P2. Explain to me about dangerous things, times or conditions associated with being infected or infecting others with HIV/AIDS.	Q2. Explain to me the actions, times and things that are most dangerous in terms of being infected or infecting others with HIV/AIDS.	Changed wording slightly
P3. Say, how do you see it? Do boys/girls like you think about how to protect yourselves from HIV/AIDS or how to protect another person from being infected with HIV/AIDS?	Q3. Say, how do you see it? Do young people like you think about how to protect themselves or others from HIV/AIDS infection?	Simplified, made gender neutral
P4. Which strategies or plans can be used by boys and girls to protect themselves or to protect others from HIV/AIDS infection? Please explain any strategies that you know, those that you agree with as well as those you do not agree with.	Q4. Name the strategies or plans that can be used by young people to protect themselves or others from being infected with HIV/AIDS.	Simplified
P5. Give your opinions to explain about the best strategies or plans to protect self or protect other people from HIV/AIDS.	Q5. Same	Unchanged

P6. Name the benefits or things that you like and the advantages of each strategy.	Q6. Which strategy is most suitable?	Simplified
P7. Name the losses or things that you do not like about each strategy, and name the reasons that some people can be defeated in using each plan or strategy.	Q7. How does your strategy help to prevent HIV/AIDS?	Queried mechanism rather than disadvantages or barriers
P8. Explain the things which interest you about each strategy.	Q8. What things can prevent a person from following your selected strategy?	Queried barriers rather than interesting points to slightly resemble P7
P9. Do older people or young people around here think any of the strategies are appropriate or inappropriate? Good habits or not? Respectful or not? Who says this? Neighbours? People from the church or mosque? Parents? Teachers? Other young people? Friends? Grandmother? Grandfather? Radio? Television? Signs (billboards)?	Q9. Will people from your community agree with your strategy?	Simplified, left question open
P10. From whom have you yourself heard information or advice about HIV/AIDS? From neighbours? People from the church or mosque? Parents? Teachers? Other young people? Friends? Grandmother? Grandfather? Radio? Television? Signs (billboards)?	Q10. Where or from whom have you heard information about HIV/AIDS?	Simplified, left question open
P11. From whom do you think you will see the most advice and information at the time if you make your strategies or plans to protect self or to protect other people from HIV/AIDS?	Q11. Whose advice and information will you follow the most when you make your HIV/AIDS prevention strategy?	Simplified, left question open
P12. What do people need to know most about in order that they may evaluate HIV/AIDS and to get the results which are wanted?	Q12. What do people need to know more about in order to prevent HIV/AIDS?	Simplified, objective more specific to prevention

Pilot Interviews	Post-pilot Interviews	Changes
P13. Which things have you agreed with in the focus group? Why?	Q13. We named the following strategies (Leader names strategies mentioned in the focus group). Which strategy or strategies do you like best, and why?	Strategies and tactics that had been mentioned in the focus group were read out.
P14. What things have you disagreed with in the focus group? Why?	Q14. Which strategy or strategies do you not like, and why?	Changed. What strategies did you dislike? rather than what things did you disagree with in the focus group?
P15. Which things were not discussed in the focus group?	Q15. What things did we not discuss in the group?	Wording slightly changed
P16. What would you like to add to what was said in the focus group?	Q16. What would you like to add to what was said in the group?	Unchanged
P17. Is your strategy, or are your strategies the same or different from the strategies mentioned in the focus group?	Q17. Do you think you will use a strategy or strategies to prevent HIV/AIDS in your life? If yes, which strategy or strategies will use use? If no, why not?	Whether participant plans to use strategies to prevent HIV/AIDS, and if so, which, rather than whether their personal strategies are the same or different as the ones in the focus group
	Q18. Do you see the importance of protecting self from HIV/AIDS in your life? (If yes) Since when or at what age did you see the importance of starting to protect your self from HIV/AIDS?	Ranking exercise P19.5 moved to Interview Q18

Pilot Ranking Exercise (Game of Importance)	Post-pilot Ranking exercise	Changes
<p>P18. Explain the importance to you of preventing HIV/AIDS, compared to other things in your life</p> <ol style="list-style-type: none"> 1. My religion 2. My friends 3. To marry or be married 4. To do well in school 5. My faith 6. To have good work 7. To be good-looking 8. To have money 9. To have children 10. My culture 11. Doing well in games 12. Making love 	<p>Q18. Added two values or objectives:</p> <ol style="list-style-type: none"> 13. To study with effort 14. To be loved. 	<p>The question was unchanged but two objectives were added.</p>
<p>P19. Why do you put HIV/AIDS where you have put it?</p>		<p>The question was dropped.</p>
<p>P19.5. Since when or at what age did you see the importance of starting to protect self from HIV/AIDS? Or did you not see the importance in your life?</p>		<p>Became part of Q18 in post-pilot interview</p>




Pilot Write-and-draw Exercise	Post-pilot Write-and-draw Exercise	Changes
P20. Please write or draw about your strategy to prevent HIV/AIDS. If you do not think you have a strategy to prevent HIV/AIDS, write about your strategy to do something else.	Q20. On the first paper, please draw a picture to explain your strategy. If you like, you can put words in that picture to explain more. If you have no strategy, you can draw something else.	Unnumbered introduction to write-and-draw exercise incorporated into new Q20 and Q21
P20. Explain the advantages or things you like and benefits of your strategy	Q21. On the second paper, please write something that explains your strategy. But if you don't want to write, just draw another picture.	Original Q20 dropped and new Q20 requests a drawing from participants
P21. Explain the disadvantages or things you do not like about your strategy, and name reasons that some people can be defeated in using that plan or strategy.	Q21. On the second paper, please write something that explains your strategy. But if you don't want to write, just draw another picture.	Original Q21 dropped and new Q21 requests writing or a second drawing from participants
P22. Explain things that interest you about your strategy.		Q22 Dropped

Pilot Questionnaire	Post-pilot Questionnaire	Changes
P23. Is waiting until you are older a good way to protect self from HIV/AIDS infection?	Q23. Same	Unchanged
P24. Does reducing the number of people that you have sex with in your life help to protect self from HIV/AIDS infection?	Q24. Same	Unchanged
P25. Is using a condom a good way to protect self from HIV/AIDS infection?	Q25. Same	Unchanged
P26. Do many young people of your age have sex?	Q26. Same	Unchanged
P27. Do you think boys/girls (of your same sex) of your age think about health outcomes, when they are making love?	Q27. Do young people at your age think of outcomes to their health when they are having sex?	Made gender neutral

P28. Do many of your friends know how to protect themselves from HIV/AIDS infection?	Q28. Same	Unchanged
P29. Are boys/girls like you able to protect themselves from HIV/AIDS infection?	Q29. Can young people like you protect themselves from HIV/AIDS infection?	Made gender neutral
P30. Is it all right for girls or women to ask boys or men to go to test for HIV/AIDS before making love?	Q30. Is it all right for a female to ask a male to get an HIV/AIDS test before they have sex?	Made age neutral
P31. Is it all right for boys or men to ask girls or women to go to test for HIV/AIDS before making love?	Q31. Is it all right for a male to ask a female to get an HIV/AIDS test before they have sex?	Made age neutral
P32. Can a person know whether a particular person has been infected with HIV by their appearance?	Q32. Same	Unchanged
P33. Of 100 people of age 15-49 in this country, how many do you think are infected with HIV/AIDS right now?	Q33. Same	Dropped because few or no participants understood the concept or knew the statistics
P34. Of 100 people aged 15-49 in this district, how many do you think are infected with HIV/AIDS now?	Q34. Same	Dropped because few or no participants understood the concept or knew the statistics
P35. What age is suitable for a boy to start to have sex?	Q35. Same	Unchanged
P36. What age is suitable for a girl to start to have sex?	Q36. Same	Unchanged
P37. Do you want to marry in your life?	Q37. Do you want to marry or be married in your life?	Made grammatical in Swahili: men marry but women are married
P38. If you will marry, at what age do you want to marry?	Q38. If you marry or are married, at what age would you like to marry?	Made grammatical in Swahili: men marry but women are married
P39. If you will marry, do you want one wife or more wives? (Females were asked, do you want to be the only wife or do you want to be one of how many wives?)	P39. Same	Unchanged

Pilot Questionnaire (continued)	Post-pilot Questionnaire	Changes
P40. If you would like to have a child, what age would you like to be?	Q40. If you want to have children, at what age do you want to start to have children?	Minor change in wording
P41. How many children would you like to have?	Q41. Same	Unchanged
P42. What age are you now?	Q42. Same	Unchanged
P43. What class are you in now?	Q43. What is the last class in school that you have completed?	Reworded in order to gather data for out-of-school young people
P44. What stage of schooling would you like to finish?	Q44. What stage of school do you eventually want to complete? E.g. primary school, secondary school, university, vocational training, etc. (Specify)	Provided examples of stages of schooling
P45. What work do you do now? Examples are ...or perhaps you have no work	Q45 What work do you do now? For example, do you help at home, cultivate, herd, do business...	Occupation list expanded as participants named new occupations
P46. What sort of work do you want to do when you are grown up? (Specify)	Q46. Same	Unchanged
P47 What is your religion?	Q47. Same	Unchanged

Appendix 2: Research Permit for Tanzania Commission for Science and Technology (COSTECH)

TANZANIA COMMISSION FOR SCIENCE AND TECHNOLOGY (COSTECH)		
Telegrams: COSTECH Telephones: (255 - 22) 2700745-6 Director General: (255 -22) 2700750 & Fax: (255 - 22) 2775313 Telex: 41177 UTAFITI E-M: Relearance@costech.or.tz		Ali Hassan Mwinyi Road P.O. Box 4302 Dar es Salaam Tanzania
RESEARCH PERMIT		
No. 2008 -52-NA-2006-155		Date 10th March 2008
1. Name :	Laurie Lynn Kelly	
2. Nationality :	American	
3. Title :	Steering an AIDS-Free Course: Successful Strategies for Young Men and Women in Southern Africa	
4. Research shall be confined to the following region(s):	Manyara, Arusha, Mbeya, Tanga and Dar es salaam	
5. Permit validity	10th March 2008 to 9th March 2009.	
6. Local Contact/collaborator:	Prof. M. T. Leshabari, Behavioral Sciences Department, P.O. Box 65015 Muhimbili University of Health and Allied Sciences	
7. Researcher is required to submit progress report on quarterly basis and submit all Publications made after research.		
 M. Mushi for: DIRECTOR GENERAL		

Appendix 3: Participant Consent Form

(translation)

Consent to Participation

I agree to participate in this research.

I understand that I can say, at any time, that I do not wish to participate any more or I do not want to answer any question, whether in a group or by myself.

I agree to tell the truth as I understand it.

I understand that the things I say, the writings I write, and the drawings I draw can be used in this research. I understand that the researchers plan to record my voice with voice recorders.

I understand, too, that my name will not be used anywhere in this research. I agree not to tell other people the things discussed in this research, in order to protect the names, opinions and identities of each person who takes part in this research.

Signature

Date

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____