FACTORS ASSOCIATED WITH UTILIZATION OF VOLUNTARY COUNSELING AND TESTING FOR HIV-SERO STATUS AMONG SOLDIERS IN NATIONAL SERVICE

By

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CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by the University of Dar es Salaam a dissertation entitled: *"Factors associated with utilization of voluntary counseling and testing for HIV-sero status among soldiers in National Service"*, in partial fulfillment of the requirements for the Degree of Master of Public Health.

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DECLARATION

I, Ngunduly Abdallah Sobbo, declare that this dissertation is my original work, and that it has not been presented and will not be presented to any other University for similar or any other degree awards.

CANDIDATE'S SIGNATURE: .....

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DATE: 27.10.2004

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DEDICATION

This work is dedicated to my beloved wife Neema Mohamed, my loving children Ngonday, Kassoro and Hadija.

ABSTRACT

Voluntary counseling and testing (VCT) is a HIV/AIDS prevention method which has been found to be one of the cost effective methods and a powerful tool to induce behaviour change, and reduce the HIV infection. However, the VCT service has not effectively been utilized in the National Service.

The main objective of this study was to identify obstacles which contributes to the low usage of voluntary counseling and testing (VCT) service among the soldiers in National Service.

Cross-sectional survey was conducted in National Service camps during June – July 2004 to explore factors associated with utilization of voluntary counseling and testing (VCT) for HIV-sero status among the soldiers in National Services. A total of 240 soldiers of different ranks were interviewed.

Results of this study indicate that 89.2% of the respondent were aware of HIV/AIDS transmission. Separation of soldiers from their families was cited by 75.8% as contributing to HIV infection among the soldiers. However, only 65.0% of the respondents were aware of the package of the VCT services.

Lack of confidentiality contribute to low utilization of VCR service run by the National Service by 33.8% leading to preference of VCT service offered elsewhere.

Stigma accompanied by discrimination for the HIV positive soldiers make them shy away from using VCT services. This problem was cited by 16.3% of the respondents interviewed.

These results show that something has to be done to improve the utilization of VCT services. The actions needed include: Promotion of HIV/AIDS education in the army to address the problem of stigma; discrimination; create conducive environment; preferential treatment of HIV positive soldiers; and their families and ensure quality assurance of VCT services.

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	-	Acquired Immunodeficiency Syndrome
ECOWAS	-	Economical Organization of West African States
FTR	-	Failure to Return
HIV	-	Human Immunodeficiency Virus
NGOs	-	Non Government Organization
NACP	-	National AIDS Control Programme
NS	-	National Service
STI	-	Sexual Transmitted Infection
TACAIDS	-	Tanzania AIDS Commission
TASO	-	The AIDS Support Organization
TCMA	-	Tanzania Civil Military Alliance
TPDF	-	Tanzania People Defense Force
UN	-	United Nation
UNAIDS	-	United Nations Acquired Immunodeficiency Syndrome
UNDP	-	united Nation Development Programme
US	-	United States
VCT	-	Voluntary Counseling and Testing
WHO	-	World Health Organization

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CHAPTER 1:

1.0. INTRODUCTION

Globally, 40 millions people are estimated to be living with HIV/AIDS at the end of 2001 (Nyblande et. al., 2003). HIV/AIDS is estimated to have killed 3.8 million, children and orphaned 13 million more. In many parts of Africa, HIV/AIDS is now the main threat to human survival: 18.8 million people have already died of AIDS and in a number of the worst affected countries it is estimated that up to half of all today's 15 years olds will die from AIDS (IRIN, 2001).

Sub-Saharan Africa is the mostly worst affected region. It is estimated to have 28.5 millions people living with HIV/AIDS in 2001. It accounts for more than 70% of all HIV/AIDS cases in the world. It is the main cause of death in sub-Saharan. Over 2 million of the 3 million death in 2001 occurred in sub-Saharan Africa. It is the cause of drop in life expectance in the region from 62 year to 47 year (Nyblande et. al., 2003). In Asia people living with HIV/AIDS accounts to be 20% of all cases in the world (UNAIDS/WHO, 1999).

The armed forces through out the world are known to be among the most vulnerable groups to HIV infection through their involvement in local conflict, wars, and in peace keeping. Studies done in many African countries revealed a high prevalence of HIV/AIDS among the armed forces members compared to the general population (Nel

van Beelen, 2003). In Angola the prevalence of HIV/AIDS in the army was between 40 – 60% compared to 2.8% in the general population, while in Congo Brazzaville's armed forces the prevalence was between 10 – 25% compared general population were 6.4%, in Tanzania in armed forces were 15 – 35% while in to the general population (8.1%) (Panos, 1990). In Mozambique, the prevalence in the armed forces was about 39% compare to 15% in general population (Nel van Beelen, 2003).

The Zimbabwe report, claimed that the prevalence in the armed forces far exceeded the general population infection rate of 24.6% (IRIN, 2004). In Malawi, it was predicted that between 25 – 50% of men and women Malawi defence forces may die of AIDS by the year 2005 (UNAIDS, 2003). In the Democratic Republic of Congo, the prevalence in armed forces were three to four times more than in the general population (Rob Walker, 2003). According to Economical Organization of West African States (ECOWAS) top military commander meeting in Accra, Ghana, the prevalence of HIV/AIDS in West African armed forces could be similar to that in Southern African, between three to five times that of the general population (IRIN, 2004).

According to the Kenyan Army official, 50 to 60 percent of beds at Forces Memorial Hospital in Nairobi were occupied by HIV/AIDS sufferers (2003). Kenya armed forces were reported to loose between 6 – 10 soldiers weekly (Nel van Beelen, 2003 – 2).

While HIV infection rates are rising in most of African armies, they have been dropping dramatically in Uganda from over 25% in 1990 to about 13 – 14% in mid 1990s to below 8% by 2001 (Lougren, 2001).

The first HIV/AIDS case in East Africa was reported at Rakai District in 1982 in Uganda (TASO, 1990). One year later, the first three HIV/AIDS cases were reported in Kagera region in Tanzania. During this time the Tanzania People Defense Force (TPDF) including National Service were serving in Uganda after Tanzania – Uganda war (1979 – 1980). Because of the presence of the armed forces in an area where HIV infection was known to have originated, they could be regarded as among the first Tanzanians to be exposed to HIV infection.

Currently, it is estimated that more than 2.2 million Tanzanians are living with HIV/AIDS. And, on December 1999, the President of United Republic of Tanzania, Honorable Benjamin W. Mkapa officially announced HIV/AIDS as a national disaster (TACAIDS, 2003).

The National Service being a department of the Tanzania people's Defense Force (TPDF) is among the high risk groups for HIV/AIDS infection. Despite of its contribution to Tanzania – Uganda war, the nature of the job exposes them to risk because most of the time they are away from their families. Also apart from being away they engage in unprotective sex because of the influence of alcohol.

Preventive measures against the spread of HIV/AIDS, which include voluntary counseling and testing in the general population, started long time ago (Sullivan et. al., 2004). However, according to the nature of the army's operation such measures were not easily adopted in the army. For as creation of a smooth cooperation among the security forces, the Government established the Tanzania Civil Military Alliance (TCMA) to fight against HIV/AIDS in the army and security forces in 1998 (TCMA Annual Report, 2002). One of the strategies of Tanzania Civil Military alliance against HIV/AIDS is to train counselors and to establish voluntary counseling and testing centers. So far, more than 50 counselors have been trained and 16 voluntary counseling and testing centers opened. Also 100 clinical officers have been trained on syndromic approach on STI management. National Service officially had started providing voluntary counseling and testing (VCT) service January 2000. For the duration of 3 years (2000 – 2002) the recorded attendance of 113 clients only (Mgulani Hospital Annual Report, 2003).

1.1. Research Question

Why is there a poor seeking behaviour in related to voluntary counseling and testing (VCT) service among soldiers in National Service?

1.2. Problem Statement

Voluntary counseling and testing (VCT) service has been found to be one of the cost effective method and powerful tools to induce behaviour change and slowlying down

HIV infection (NACP, 2002). However, the VCT service, has not effectively been utilized in the general population as well as in the armed forces. The National Service's soldiers have not been spared in the problem low utilization of VCT service despite the location of centers in National Service camps. Since year 2000 when the VCT centre was established, only 133 soldiers out of 700 have attended and registered at the Mgulani VCT centre (Mgulani Hospital – Annual Report, 2003).

The National Service soldiers are allowed to attend VCT centers owned by other public institutions and NGOs, however, despite this freeway, no soldier has ever reported to have attended in such services. Factors contributing to low utilization of VCT services among soldiers have not been explored in Tanzania. However, such factors have been explored among general population. The most important factors that have been documented to contribute towards poor utilization of VCT services associated with accessibility, affordability, confidentiality, stigma and discrimination (Kuzinza et. al., 2002).

Besides of the low attendance reported, according to Mgulani Hospital Annual Report 2003, the reason for such result are not yet known. We assumed that either the low utilization of VCT service may be due to the lack of knowledge or other factor. This study is aiming at exploring the knowledge of the officers and soldiers, and factors that associate to low utilization of VCT services among National Service soldiers. The study

would help to identify reasons contributing to poor attendance and explore opportunities for improving the VCT services in National Service.

1.3. Rationale

It is important to conduct this study so as to understand the factors affecting the utilization of voluntary counseling and testing among soldiers in National Service. The results will help for the administration (health Department) of National Service to identify factors that could help to designing message to encourage many soldiers to seek VCT services, to set up more friendly care and support systems and to plan intervention strategies focusing to HIV/AIDS prevention and control.

1.4. BROAD OBJECTIVE

To determine factors associated with the utilization of voluntary counseling and testing services for HIV-sero status among soldiers in National Service Department.

1.5. SPECIFIC OBJECTIVES

1. To assess knowledge in HIV infection among the soldiers.

2. To assess knowledge on voluntary counseling and testing for HIV/AIDS among the soldiers.

3. To determine proportion of soldiers who are ready to test HIV voluntarily.

4. To identify work environment which can influence the utilization of army VCT Centres.

5. To identify family related factors which can influence the utilization of VCT Centres.

6. To identify the context in which soldiers would be willing to go for voluntary testing for HIV sero status.

7. To determine the proportional of soldiers willing to attend a VCT outside the National Service camps and bring results to the administration.

8. To identify VCT centers related factors that would hinder soldiers not to seek for the services.

CHAPTER 2

2.0. LITERATURE REVIEW

Counseling has both prevention and care as its objectives. It concentrates on emotional, behavioural and social issues related to possible or actual infection with HIV. Counseling is a confidential dialogue between a client and counselor aimed to enabling client to cope with stress and take personal decisions related to HIV/AIDS (NACP, 2002).

Voluntary counseling is a combination of two activities, counseling and testing into a service that amplifies the benefits of both. Because the voluntary counseling and testing is adaptable to client's needs it can be done for individuals and couples, for the people of all ages and of all backgrounds (UNDP – 2004).

Many studies done in the army focused on incidence and prevalence which shows to be higher than in general population (Panos, 1990). Many countries have tried to reduce the prevalence in their armed forces by implementing different policies. From 1982 to 1991 US Navy expelled 13,000 troops identified as homosexual (Winsbury, 1992). Many African countries have been found to control the prevalence of HIV/AIDS in their armed forces by screening of new soldiers during recruitment (Panos, 1990). Others imposed mandatory testing and for those tested HIV positive they dismissed (UNAIDS, 1995).

Ghana is the only African country which has been found to have a low prevalence of HIV/AIDS in the army then in general population; currently stands at 3.8% (IRIN, 2004). Ghana being a major contributor to United Nation (UN) and Economical Organization of West African States (ECOWAS) imposed a policy of mandatory testing of soldier who wants to join peacekeeping force and those tested HIV positive are not selected. This policy contravening the UN declaration on selection peacekeeping personnel (Jurgen, 2002).

Many studies conducted in various places in Tanzania revealed a poor usage of voluntary counseling and testing services have been associated with accessibility, affordability fear due to stigma and discrimination. Most of the VCT centers are in the urban areas where only 20% of the population live, and they have to pay for the service (Tanzania Health Research, 2002). However, in National Service soldiers are guarantee a free services.

According to the studies done in Tanzania, Zambia and Ethiopia, stigma and discrimination still remain the most significant challenges in developing countries for HIV/AIDS programme. People fear to be identified with HIV positive status because they will be isolated from friends, family and even to lose their jobs (Mbwana et. al., 2003). However, this could not be the case in National Service where soldiers expected to be care free takers and observed of employment.

A study to examine the feasibility, the demand and the effect of integrating primary health care service with HIV voluntary counseling and testing was done in Haiti between 1985 – 2000. The results showed the number of new people seeking for voluntary counseling and testing increasing from 142 in 1985 to 8,175 in 1999 (Peek et. al., 2003). However, Tanzania can copy and integrate VCT service to reproductive health, to TB and leprosy or other programmes to see if such result could be obtained.

Voluntary counseling and testing is an important strategy for HIV prevention. For optimal impact, however, clients must return for HIV test results and counseling (Sullivan et. al., 2004). Study conducted in seven states in US 2000 to document the frequency of self reported failure to return for HIV test results (FTR) and associated reasons among persons at high risk for HIV infection. FTR was commonly reported among 2,241 respondents 10% of men who have sex with men (MSM), 20% of high risk heterosexual (HRH) and 27% of Injection drug user (IDUs) reported FTR at least once. Result showed that FTR was more common among those with high perceived risk of HIV infection and less common among HRHs who had completed more than high school or were employed part-time.

The rates barriers and outcome of HIV sero-status disclosure to sexual partner are described for 245 female voluntary counseling and testing (VCT) clients in Dar es Salaam, Tanzania (Mamans et. al., 2003). VCT clients were surveyed 3 months after HIV testing to describe their HIV sero-status disclosure experience. Sixty percent of

HIV positive women and 79.5% of HIV negative women reported that they had shared HIV test results with their partners. Among women who did not disclose, 52% reported the reasons as fear of their partner reaction. Both 81.9% of HIV negative women and 48.9% of HIV positive women reported that their partner reacted positively to disclosure. Less than 5% of women reported any negative reaction following disclosure. However, the study did not include men, in order to assess the husband knowledge on HIV and reasons for reaction.

Study to examine factors affecting the readiness for HIV related voluntary confidential counseling and testing (VCT) were conducted in Zambia rural and urban areas. About 4,812 people of age 15 or more were selected by stratified and cluster sampling method. The participants were test for HIV and interviewed about previous HIV experience and if they wished to be counseled and tested for HIV. In the rural area VCT was provided by personnel brought in from outside the local community, whereas in urban areas it was provided by local recruited staff (Fylkesnes., et al. 1999). The results showed the overall HIV test rate was 6.5% but rates appeared to be considerable biased towards high educational groups. The proportion initially willing was 37% while 3.6% actually came for counseling and were tested (9.3% of those initially willing) of which 47% returned for the result. Actual use was four to five times higher in the rural compared to urban areas. Self perceived risk and high risk behaviour were positively associated with initial willingness but not with actual use. A similar study done by Van Dyk et. al. (2003) in South Africa to explore the service related barriers to voluntary HIV counseling and

testing (VCT). The study revealed that people were not opposing VCT in principle, but they needed confidentiality. People would like to go to the clinic where nobody know them.

A proper pre counseling is very important tool in order to prepare client to sustain mental stability and be ready to receive the testing results. Study done in South Africa by Day et. al. (2003) identified fear of testing HIV positive and potential consequences of the disease and death were a major barriers of the use of VCT services. Kalichman and Simbay (2003) conducted a study to examine relationship between HIV testing history attitudes toward testing and AIDS stigma by comparing people who had been tested with individuals who had not been tested for HIV. The result demonstrated significantly greater AIDS related stigma and negative testing attitudes in those not tested and those tested but who did not know their results. In Malawi, cross sectional study done to determine factors influencing voluntary counseling and premarital testing on HIV. The result showed that willingness to have premarital HIV counseling and testing was positively associated with increased age, urban residence and wish to keep ones own HIV testing result confidential (Misiri and Muula, 2004). These three studies shows the importance of voluntary counseling and testing on reducing fear.

CHAPTER 3:

3.0. METHODOLOGY

3.1. Study Area

There are a total of 24 National Service Camps. Out of those, the National Service headquarter camp with its detachments, Mgulani (831 BN) in Dar es Salaam, and Ruvu (832 BN) camp located at Mlandizi in Kibaha district were selected for the study.

The camps were conveniently and purposely selected because of budget constraint, time limit, distance and presence of adequate numbers of soldiers in these camps to satisfy the sample requirement. Secondly, voluntary counseling and testing services were readily available in these camps.

3.2. Study Population

The study population were all National Service officers and soldiers of all ranks and gender in the selected camps.

3.3. Study Design

A descriptive exploratory cross-sectional design using qualitative and quantitative methods was used.

3.4. Sample Size

The sample size is determined using proportional formula by Kish and Leslie, found in the statistics calculator programmed of EPI-Info 6.

$$N = \frac{Z^2P\,(100 - P)}{E^2}$$

When Z = 1.96 (corresponding to the confidence level at 95%

E = Absolute previous will be taken at 5.0%

P = Proportion of Expected frequency of new incidence 10%.

For stratified sampling

DE = Design effect = 1.5

Participation rate calculated at 80%

From this sample a total of 240 soldiers were included in the study.

3.5. Sampling Procedure

A random sampling procedure was employed to select study participants. The list of solders' name, in each battalion, were obtained from administration office. The selection was done from Battalion manpower list which show names and ranks. Stratification was done according to ranks i.e. commission officers, senior non-commission officers and junior non-commission officers. The stratification on rank was important because in the armed forces soldiers are treated differently according to their rank.

Because the number of soldiers in each rank was known proportions were calculated accordingly. We therefore arrived at a selecting 11 officers, 108 senior non-commission officers and 126 junior non-commission officers. A table of random numbers was used to select the soldiers to be included in the study in each rank accordingly.

The list of soldiers names in each battalion were obtained from administration office, then depending on total numbers of soldiers in the battalion, and the sample size needed from that battalion, the intervals were calculated. The first number in the list were randomly selected, then the interval added to selected number to get next candidate. The process continue until the end of the battalion manpower list.

Before candidates were selected for the interview, a battalion meeting was officially conducted for introduction and briefing on the study objectives and how candidates for the study would be selected. This was done as a military routine, and also as a way to avoid stigma and misinterpretation of the objectives of the study especially amongst those who were selected.

3.6. Pilot Testing

After selection of Research Assistants, the principal researcher and research assistants conducted the pilot testing were done at Kigamboni camp of 831 BN detachment before the data collection process started. Kigamboni camp was considered because it was near to the School of Public Health and was not to be included in the study.

3.7. Ethical Issues and Research clearance

Permission to conduct the study was obtained from the Director of Postgraduate Studies in Muhimbili University College of Health Sciences (MUCHS) and from the Chief of National Service. Before selection of the sample study population, officers and soldiers were called for battalion meeting, where briefed about study and how selection of would be done. This was done as military routine, also helped to avoid stigma participants and misinterpretation among those who were selected. They were informed that the participation is voluntary, nobody would be forced to participate in the study. Also, they were assured of confidentiality and anonymity. No participants' names appeared in the interview schedule. Before the interview a verbal consent was sought from the interviewee.

3.8. Limitation

The selection of camps situated in Dar es Salaam and Coast region was based on distance, time limit, adequate number for sample size requirements and availability of voluntary counseling and testing service in the camps and outside the camps.

The selection of participants were done from battalion manpower list, if it happened the selected candidate was not available for other working reasons like holiday, on military training, or on safari, another respondent was selected. The selected candidates from the list were selected by following the same procedure.

At Ruvu JKT camp (832 BN) the study was interrupted by the military exercise. Therefore, self administered interview were, thus, preferred in order to meet the limited time available for data collection. However, self administered interview has the implication to the quality of results obtained in terms of consistency and correctness of the given responses. For example, few respondents circled or selected Yes and No altogether where they were supposed to circle only one. To minimize the impact of the problem, questionnaires were checked for correctness upon return, and thereafter, clarifications were sought from the respective respondents to clarify on the matter.

CHAPTER 4

4.0. RESULTS

4.1. Socio-demographic characteristics of the study population

A total of 240 soldiers, both males and females, of different level of education and ranks, were interviewed. There were 11 commissioned officers, 108 senior non-commissioned officers and 121 junior non commissioned officers. Table 1 shows the summary of the characteristics of the sample. Among them, 174 (72.5%) were males and 66 (27.5%) were females. Regarding education, majority (69.2%) had finished primary education, 25% had ordinary secondary education, 2.1% had high level secondary education, 2.5% had College education and 1.3% were graduates. About 72.1% were married, 3.3% were single, 1.3% were separated or divorced and 3.3% were widows or widowers.

Table 1: Socio-demographic characteristics of the sample population

Ranks:	**Male (%)**	**Female (%)**	**Total (%)**
Officers	10 (90.9)	1 (9.1)	11 (4.6)
SrNCOs	80 (74.1)	28 (25.9)	108 (45.0)
JrNCOs	84 (69.4)	37 (30.6)	121 (50.4)
Total	174 (72.5)	66 (27.5)	240 (100.0)
Education:			
Primary Education	118 (71.1)	48 (28.9)	166 (69.2)
'O' Level (Secondary)	46 (76.7)	14 (23.3)	60 (25.0)
High level (Secondary)	5 (100.0)	0 (0.0)	5 (2.1)
College	2 (33.3)	4 (66.7)	6 (2.5)
University level	3 (100.0)	0 (0.0)	3 (1.2)
Total	174 (72.5)	6 (27.5)	240 (100.0)
Marital Status:			
Single	30 (54.5)	25 (45.5)	55 (22.9)
Married	138 (79.3)	36 (20.7)	174 (72.5)
Separate/divorced	1 (33.3)	2 (66.7)	3 (1.3)
Widow/Widowers	5 (62.5)	3 (37.5)	8 (3.3)
Total	174 (72.5)	66 (27.5)	240 (100.0)
Age:			
25 – 35	46 (61.3)	29 (38.7)	75 (31.7)
35 – 45	66 (68.8)	30 (31.2)	96 (40.3)
45 – 55	57 (89.1)	7 (10.9)	69 (26.9)
55+ or > 55	3 (100.0)	0 (0.0)	3 (1.5)
Total	172 (72.3)	66 (27.7)	238 (100.0)

4.2. Awareness of HIV infection and facilitating factors

To determine the knowledge of HIV/AIDS respondents were asked if they were aware of how HIV is transmitted. About 215 (89.2%) of the interviewed soldiers knew how HIV was transmitted and 25 (10.8%) were not aware. Respondents were asked to mention army related activities that could facilitate HIV infection. About 75.8% of the respondents mentioned the activities which separate soldiers from the families as such activities that could facilitate HIV infection. However, about 20% said they did not see any association between army activities and HIV infection, and 4.2% were not aware of any such activities.

Among 191 respondents who had experienced separation from their families for a special mission were more likely to have reported that such missions would be associated with the risk of HIV infection. Table 2 shows perceptions of respondents on the relationship of being away from the family and risk to HIV infection.

Table 2: Perception of respondents on the relationship between being away from family and risk to HIV infection

Opinion		Ever Stayed Away From Family		
		Yes (%)	No (%)	Total (%)
Perception being away as Risk of HIV Infection	Yes	62 (40.8)	90 (59.2)	152 (79.6)
	No	20 (51.3)	19 (48.7)	39 (20.4)
Total		82 (42.9)	109 (57.1)	191

4.3. Willingness to Use Voluntary Counseling and Testing (VCT) Service

Respondents were asked if they knew what type of services were provided by VCT centers, who was ready to test and who had already tested. Table 3 shows that 51.7% of respondents were ready to be tested and 47.9% were not ready to be tested and 0.8% could not make any decision. About 65% knew what services were provided by VCT centers, 35% were not aware of the services provided in VC T centers.

LIBRARY

Table 3: Proportion of soldiers willing to be tested by ranks

Ranks	Ready to be Tested			Total (%)
	Yes (%)	No (%)	No Decision	
Officers	9 (81.8)	2 (18.2)	0 (0.0)	11 (4.5)
SrNCOs	46 (42.6)	60 (55.6)	2 (0.8)	108 (44.5)
JrNCOs	68 (56.2)	53 (43.8)	0 (0.0)	121 (50.5)
Total	123 (61.3)	115 (47.9)	2 (0.8)	240 100.0)

Table 4 shows the reasons mentioned by respondents as to why soldiers would not be ready to test by ranks. Out of 240 soldiers interviewed, 115 (47.9%) were not willing to be tested. Respondents mention a number of reasons as to why they would not be ready to be tested. Most of them, 41.7% said that they knew that they were not infected, while about 25.2% reported testing for HIV was not an important endeavour, while 23.5% were afraid and 9.6% mentioned other reasons.

Table 4: Reasons why soldiers are not willing to test HIV-sero status by ranks.

Reason	Ranks			Total (%)
	Officers (%)	Snr NCOs (%)	Jnr NCOs (%)	
Not important	1 (3.5)	19 (65.5)	9 (31.0)	29 (25.2)
Fear	0 (0.0)	12 (44.4)	15 (55.6)	27 (23.5)
I am not infected	1 (2.1)	23 (47.9)	24 (50.0)	48 (41.7)
Others	0 (0.0)	6 (50.0)	5 (41.7)	11 (9.6)
Total	2 (1.7)	60 (52.2)	53 (46.1)	115

Table 5 shows the respondents who reported to have had tested for HIV virus and those willing to be tested. Among those who were willing to be tested, only 41 (33.3%) of the respondents had tested.

Table 5: Proportion of respondents willing to be tested and who tested by ranks

Ranks	Willing (%)	Tested (%)
Officers	9 (7.3)	1 (24)
SrNCOs	46 (37.4)	14 (34)
JrNCOs	68 (55.3)	26 (63.4)
Total	123	41

Table 6 shows the willingness to test declined with increasing age. The youngest soldiers (62.7%) were more willing to test compared to oldest group (33.3%).

Table 6: Respondents willingness to be tested by age.

Age (Years)	Willingness to be tested		Total (%)
	Yes (%)	No (%)	
25 – 35	47 (62.7)	28 (37.3)	75 (31.3)
36 – 45	52 (53.1)	46 (46.9)	98 (40.8)
46 – 55	24 (37.5)	40 (62.5)	64 (26.7)
Above 55	1 (33.3)	2 (66.7)	3 (1.3)
Total	123 (51.7)	115 (48.3)	240

Table 7 shows that only 17% of the respondents reported to have had tested for the HIV virus. The proportion who reported to had tested the virus decreased as age increased.

Table 7: Respondents who reported to have tested by age

Age (Years)	Tested		Total (%)
	Yes (%)	No (%)	
25 – 35	17 (22.7)	58 (77.3)	75 (31.3)
36 – 45	18 (18.4)	80 (81.6)	98 (40.8)
46 – 55	6 (9.4)	58 (90.6)	64 (26.7)
Above 55	0 (0.0)	3 (100.0)	3 (1.3)
Total	41 (17.1)	199 (82.9)	240 (100.0)

4.4. Revealing of results after testing

Respondents were asked if they would be ready to share a positive HIV sero-status (test results) with the administration. Table 8 indicates that more than 88.3% of respondents were ready to reveal their sero-status results to the administration for the various reasons. About 5% would do so for expectation of getting a help from the administration, 6.6% would just inform the administration, 17.0% would do so to seek for advice, 30.2% for medical assistance and 3.3%mentioned other reasons.

Table 8: Reasons for respondent to share the results with administration by ranks

Reasons	Ranks			Total (%)
	Officers (%)	SnrNCOs (%)	JrnNCOs (%)	
To get help	3 (3.3)	33 (36.3)	55 (60.4)	91 (42.9)
To inform the administration	1 (7.1)	7 (50.0)	6 (42.9)	14 (6.6)
To get advice	1 (2.8)	18 (50.0)	17 (47.2)	36 (17.0)
To get treatment	4 (6.3)	31 (48.4)	29 (45.3)	64 (30.2)
Other	0 (0.0)	2 (28.6)	5 (71.4)	7 (3.3)
Total	9 (4.3)	91 (42.9)	112 (52.8)	212 (100.0)

Table 9 shows the response as to why positive HIV test results would not be showed with the administration by ranks. About 12% of the respondent said that they would not be ready to share their positive HIV sero-status results with administration with varied reasons. About 7% of them were afraid loosing their job, while 28.6% were afraid of being tagged and isolated. Consequently, 10.7% did not see any benefit, 28.6% were skeptical of the confidentiality of the results. 25% did not see as to why they should share the results with the administration.

Table 9: Reasons for not being ready to share positive results with administration by ranks.

Reasons	Ranks			Total (%)
	Officers (%)	SnrNCOs (%)	JrnNCOs (%)	
To lose a job	0 (0.0)	0 (0.0)	2 (100)	2 (7.1)
Afraid of being earmarked and isolated	0 (0.0)	46 (50.0)	4 (50.0)	8 (28.6)
No benefit	1 (33.3)	2 (66.7)	0 (0.0)	3 (10.7)
Not aware of confidentiality	1 (12.5)	3 (37.5)	4 (50.0)	8 (28.6)
Do not see the reasons	0 (0.0)	4 (57.1)	3 (42.9)	7 (25.0)
Total	2 (7.2)	13 (46.4)	13 (46.4	28

4.5. Family Factors

Respondents who were not ready to share results with their spouses were asked to mention as to why they would not do so. Table 10 shows the reasons as to why they would not share the results with their spouses by ranks. About 28 (11.7%) of the respondents were, not ready to be open to their spouses, about 25% were afraid to be isolated from the family, while 28.6% thought that the family will be worried, and about 46.4% were not ready for other reasons.

Table 10: Why respondents would not like to share the results with their spouses by ranks

Ranks	Afraid to be Isolated from Family (%)	Family will be Worried (%)	Not Ready (%)	Total (%)
Officers	1 (50.0)	0 (0.0)	1 (50.0)	2 (7.1)
SnrNCO	2 (15.4)	3 (23.1)	8 (61.6)	13 (46.4)
JnrNCO	4 (30.8)	5 (38.5)	4 (30.8)	13 (46.4)
Total	7 (25)	8 (28.6)	13 (46.4)	28 (100.0)

Table 11 shows that among 28 soldiers who were not ready to disclose their positive sero-status to their spouses, 96.4% were married and only 3.6% were single.

Table 11: Why respondents would not like to share the positive HIV results with their spouses by marital status

Marital Status	Afraid to be Isolated (%)	Family will be Worried (%)	Not Ready (%)	Total (%)
Married	6 (22.2)	7 (25.9)	13 (51.9)	27 (96.4)
Single	1 (100.0)	0 (0.0)	0 (0.0)	1 (3.6)
Separate/Divorced	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Widow/Widower	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Total	7 (25.0)	7 (25.0)	13 (51.9)	28 (100.0)

4.6. Discrimination and stigmatization at workplace (work related factors)

Respondents were asked if they knew someone in the army who was infected and if they were aware of how the person would be treated by administrators. About 32.9% (79) reported to know soldiers who were infected. About 17.9% (43) of the respondents said that administrators stigmatise and discrimate HIV/AIDS infected in National Service. The stigmatization and discrimination were reported to individuals happen at different levels and were to be of different types. Respondents were asked to mention types of discrimination they knew. Out of 240 of soldiers interviewed about 43 (17.9%) reported that if one tested positive is likely to be discriminated. Table 12 shows types of administrative discrimination shown in National Service, which was mentioned to be occurring at a different level. About 7.0% said that someone could be removed from active service, 11.6% said that people are isolated from daily working routine, 7.1% reported missing cooperation with other soldiers, about 65.1% said people discuss infected people and 9.3% reported other reasons.

Table 12: Type of discrimination reported by ranks

Reasons	Ranks			Total (%)
	Officers (%)	SnrNCOs (%)	JrnNCOs (%)	
Removal from active service	0 (0.0)	2 (7.7)	1 (9.1)	3 (7.0)
Isolate from daily work	0 (0.0)	4 (15.4)	1 (9.1)	5 (11.6)
Lack of cooperation	0 (0.0)	3 (11.5)	0 (0.0)	3 (7.0)
People discussing about you	5 (83.3)	16 (61.5)	7 (63.6)	28 (65.1)
Others	1 (16.7)	1 (3.8)	2 (18.2)	4 (9.3)
Total	6 (14.0)	26 (60.6)	11 (25.6)	43 (100.0)

Table 13 shows the level at which the discrimination were been reported by ranks. More than 30.1% of the respondents who reported the existence of discrimination in National Service said to happen at the headquarters, 7.0% said it happens in battalions, 53.5% said it is there among soldiers themselves and 9.3% reported to exist in all levels.

Table 13: Where the discrimination is prominent as reported by respondents by ranks

Level	Ranks			Total (%)
	Officers (%)	SnrNCOs (%)	JrnNCOs (%)	
At headquarters	2 (15.4)	9 (69.2)	2 (15.4)	13 (30.2)
In battalions	1 (33.3)	1 (33.3)	1 (33.3)	3 (7.0)
Among the soldiers	3 (13.0)	14 (60.9)	6 (26.1)	23 (53.5)
At all level	0 (0.0)	2 (50.0)	2 (50.0)	4 (9.3)
Total	6 (14.0)	26 (60.6)	11 (25.6)	43 (100.0)

4.7. Location of VCT Centres

Table 14 shows the proportion of soldiers response to locations of the VCT centres. Respondents were asked about the location of the VCT centers and where did they prefer to go for HIV test. Out of 240 soldiers interviewed, 133 (55.4%) preferred to have a VCT centre in the camps and 82 (34.2%) preferred to have it outside the camp and 25 (10.4%) were indifferent (they can go for HIV test anywhere – outside or inside the camp).

Table 14: Proportion of soldiers response to different location of VCT centre

Location	Frequency	Percentage
Inside the camp	133	55.4
Outside the camp	82	34.2
Any location	25	10.4
Total	240	100.0

Table 15 indicates reasons given for the preference of VCT centers inside the camps. About 51.9% thought that they could be helped easily, 6.0% said could just for the administration to have data, and 42.1% reported it would be cheap for them.

Table 15: Reasons for respondents' preference of VCT centre to be inside the camps by ranks

Reasons	Ranks			Total (%)
	Officers (%)	SnrNCOs (%)	JrnNCOs(%)	
Administration to have data	1 (12.5)	5 (62.5)	2 (25.0)	8 (6.0)
To be helped easily	4 (5.8)	30 (43.5)	35 (50.7)	69 (51.9)
Less cost	3 (5.4)	25 (44.6)	28 (50.0)	56 (42.1)
Total	8 (6.0)	60 (45.1)	65 (48.9)	133

Table 16 shows why soldiers preferred to use VCT centres located outside the camp by ranks. About 34.2% of the soldiers preferred VCT centre to be located outside the camps, the main reasons given were 17.1% they were not preferred to be tested by someone who know them, they need to keep secret. About 78.0% and 4.9% believed that VCTs located outside give better services and reliable.

Table 16: Reason for respondent preference of VCT centre outside the camps by ranks

Reasons	Ranks			Total (%)
	Officers (%)	SnrNCOs (%)	JrnNCOs (%)	
To be tested by foreigner	1 (7.1)	7 (50.0)	6 (42.9)	14 (17.1)
To keep secret	2 (3.1)	29 (45.3)	33 (51.6)	64 (78.0)
More reliable	0 (0.0)	3 (75.0)	1 (25.0)	4 (4.9)
Total	3 (3.7)	39 (47.6)	40 (48.8)	82

4.8. Awareness of VCT service in the camp

Table 17 shows the proportion of soldiers reported to have ever used the VCT service in National Service by ranks. About 63.% of the respondents reported that there were voluntary counseling and testing services in the camps and 36.7% were not aware of

such services were available in the camps, and only 17.1% of the respondents reported to have had used the VCT services.

Table 17: Proportion of respondent who used the VCT services by ranks

Ranks	Used the Service		Total (%)
	Yes (%)	No (%)	
Officers	1 (9.1)	10 (90.0)	11 (4.6)
SnrNCOs	14 (13.0)	94 (87.0)	108 (45.0)
JnrNCOs	26 (21.5)	95 (78.5)	121 (50.4)
Total	41 (17.1)	199 (82.9)	240

Regarding the location of the VCT centre in the camp, only 3 (7.3%) out of 41 who reported to have used the facilities said the location was too open for VCT services.

4.9. Recommendations for improvement of VCT service in the camps

Respondents were asked the conditions that are necessary for improvement of the provision of VCT services in the camps. About 40.6%, suggested the imposition of regulations in order to improve voluntary counseling and testing service in the army. They claimed that soldiers always live under orders, so the army authority should order soldiers to go for HIV test before going to any other further military training.

CHAPTER 5

5.0. DISCUSSION

This study was conducted in National Service camps where the utilization of voluntary counseling and testing service is still very low. It was the first study to be conducted in the National Service to explore factors which contribute to the poor utilization of the voluntary counseling and testing service in the National Service. The study looked at factors which may contribute to the utilization of voluntary counseling and testing (VCT) service particularly those related to working environment, family and VCT facilities.

5.1. Education or Knowledge

The majority of the respondents were aware of how HIV/AIDS is transmitted, and most soldiers identified some of the army activities like peace-keeping participating in wars, detachment and transfers or any army activities, which separate soldiers from the family, to contribute or facilitate the transmission of HIV infection in the society. Therefore, soldiers are expected to be knowledgeable and ready to take preventive measures against HIV/AIDS infection. In practice, soldiers, even in Tanzania, have been found to have high HIV prevalence (Panos, 1990).

About half of the respondents in this study did not know the function of a VCT centre. This could be due to the fact that VCT services were recently introduced in the National Service camps compared to the civilian areas.

Secondly, there was inadequate sensitization on VCT service as one of the preventive measures against HIV/AIDS infection (TCMA Annual Report, 2002). Consequently, the soldiers were likely to lack of information did not see the importance of VCT service (Bakari et. al., 1999).

5.2. Willingness to use VCT service

Despite of knowledge and awareness on HIV/AIDS, only half of the respondents were willing to go for an HIV testing. The percentage of willingness to test declines as age goes up. Such results could be that aged soldiers could be more committed to their families or have a more psychological tension which could be negatively associated with positive HIV test results. Furthermore, positive HIV results are associated with promiscuity, which looks embarrassing to the elderly people. Aged soldiers are likely to have had exposed themselves more to risk behaviours before, which could lead to HIV infection, than younger soldiers, hence increasing probability of one being a HIV positive. For the younger soldiers, acceptance to test for HIV could be influenced by being exposed to information that could influence them to avoid high risk behaviours, hence being more willing to accept a test.

Education about the benefits of testing and perhaps more important as it results in reductions in stigmatizing attitudes towards people living with AIDS. Being aware or having knowledge on HIV transmission does not mean that someone would necessarily change behaviour. The National Service personnel showed a high level of awareness and enough basic knowledge on HIV/AIDS, but, the turn up for VCT service was still very low. Therefore, efforts are needed to promote VCT knowledge in National Service. Structural and social marketing interventions that aim at reducing stigma, will probably decrease resistance to seeking VCT services.

However, a study done in Thailand in 1992 on evaluation of HIV incidence after participants utilized voluntary counseling and testing (VCT) service, shows that very low incidence rate and change of risk behaviour among the participants were observed (Kawichai et. al., 2004).

5.3. Revealing Results After Testing

The findings of this study show that a good number of soldiers were not ready to reveal their positive results to the administration. The main reasons found in the study include fear of being tagged and lack of confidentiality, which may results into stigmatization and discrimination. Therefore, in such situation, people are not encouraged to seek VCT services, even for those who are ready to be tested would prefer to go outside the camp for VCT service where they are sure of the confidentiality. Also people who went

outside the camp for VCT service and tested positive, would not be ready to reveal their results to the administration.

5.4. Family factors related to utilization of VCT centre

Many soldiers reported that they were not ready to share their positive results with their spouses or partners. The reasons for fear of exposing the results slightly differ according to sex. Female are more vulnerable to expose the results to their spouses than man they are afraid harsh responses from their husbands. A study conducted in Dar es Salaam, Tanzania on barriers and outcome of HIV-sero status disclosure to sexual partners showed that, among the women who did not disclose, 52% reported fear of their partner reaction as the main reason of not disclosing the results (Maman et. al., 2003). According to these findings imply that married people may be more afraid to seek VCT services than unmarried people.

5.5. Work related factors associated with utilization of VCT services

The study showed that a good number of soldiers were not ready to reveal their positive results to the administration, and they would prefer to go outside the camp for VCT service than inside the camp. The main reasons found in the study include fear of being tagged and lack of confidentiality, which may result into stigmatization and discrimination. Many soldiers of different ranks said there are elements of stigmatization and discrimination in the National Service which were practiced at different levels. Stigma and discrimination results in people living with HIV/AIDS

treated differently by the administration. The most common forms of differential treatment are physical or social exclusion from the society or community and changes in care and support by family and the community. Stigmatization differs from one country to country, place to place and organization to organization. Secondly, there is no HIV/AIDS policy in the Tanzanian armed forces so far, therefore the National Service administration has not yet designed plan aimed at assisting the effected soldiers. Hence, many soldiers do not see as to why they should go for testing. These results show that immediately action is needed which will create conducive environment and supportive treatment of HIV positive soldiers and their families. The army should initiate programmes for HIV/AIDS care including access to ARV therapy.

5.6. Conditions for improvement of VCT services in National Service

Despite existence of voluntary counseling and testing (VCT) centre in their area few soldiers were used the voluntary counseling and testing (VCT) services among the soldiers in National Service. The reason behind the low utilization of VCT services in the National Service were identified to be a low awareness of existence of voluntary counseling and testing (VCT) service in their areas and low knowledge on VCT service. Many respondents proposed the enaction of bylaws to enforce HIV testing, especially when the soldier is supposed to go for military training or other mission. Ghana for instance, imposed mandatory for HIV-testing of soldiers who wanted to join the peacekeeping forces and those tested positive were not allowed to join the army (IRIN, 2004). By imposing this mandatory testing, Ghana has managed to maintain low

prevalence of 3.8% in its armed forces. However, the idea of compulsory HIV testing opposes the UN declaration on selection peacekeeping personnel (Jurgen, 2002). It is advisable, the idea of imposing bylaw on HIV testing among the soldiers in the army should go concurrently with health promotion and education on VCT services and the National Service administration should ensure quality assurance of VCT service.

5.7. VCT Centre related factors

The study findings on factors which associate with function of the VCT centre were not clear by mentioned by the respondents. It could due to the fact that only few people knew of the existence of the voluntary counseling and testing (VCT) in their areas However, the few who reported to have even used the VCT services expressed the concern on the location of the centers, it was reported that there was no confidentiality (not in hidden places).

Because HIV VCT is supposed to be a confidential dialogue, aimed at enabling the person to cope with the HIV/AIDS problem, and because the disease stigmatizes, it is important that such services should be extended to the centers located to places that are not in the open, for confidentiality reasons.

6.0. CONCLUSION

The study examined the factors which contribute to low utilization of voluntary counseling and testing (VCT) service among the soldiers in National Service. The findings indicate that:

- The study population has enough knowledge on HIV/AIDS transmission, but less knowledge on VCT services.

- Inspite of high basic level of respondents' knowledge on HIV/AIDS, stigma and discrimination were found as among factors that would hinder soldiers from testing for the HIV virus.

- Mostly of the soldiers are not aware of the presence of VCT services in their respective areas.

- Lack of confidentiality contributes to low utilization of VCT service among the soldiers.

7.0. RECOMMENDATIONS

1. The army should mount health education sessions in camps to improve the knowledge of HIV/AIDS.

2. Health promotion and education on VCT services among the soldiers should be strengthened to reduce stigma and encourage utilization of VCT services.

3. More VCT centers should be put in place.

8.0. SUGGESTION FOR FURTHER RESEARCH

The extent and level of stigmatization and discrimination among National Service soldiers.

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