

4.12. Data processing and analysis

Raw data collected were checked for completeness and internal consistency before entering it into a computer. Responses from open-ended questions were recorded as comments and later on they were categorized, coded and entered into a computer. Qualitative data from FGDs were used to emphasize on factors that provided an in depth comprehension of the determinants of the low prevalence rate of HIV/AIDS in Mwinilunga district. This also provided an in depth comprehension of the young people's experiences and perceptions. Qualitative research approaches are needed in order to provide contextual data to further our understanding of social phenomena, and the socio-behavioural aspect of HIV/AIDS (Power, 1998). Data was then analysed using the Statistical Package for Social Sciences (SPSS) computer soft ware. Associations were determined using the Chi-Squared (X^2) test and logistic regression analysis was used to adjust for confounding. Statistical significance was achieved if $P < 0.05$.

CHAPTER FIVE

5.0. PRESENTATION OF FINDINGS.

5.1. Introduction.

Two sets of data were collected from 250 students in the high schools of Mwinilunga and Solwezi districts in the Northwestern province of Zambia. The first set of data was collected from 130 students using a structured questionnaire. The other set of data was collected from 120 students using focus group discussions. Qualitative data from FGDs was used to validate quantitative data. The findings from the structured interview schedules are presented in Section A and Section B contains results from the focus group discussions.

SECTION A

5.2 Quantitative Data

Table 4 shows a comparison of socio-demographic characteristics of the respondents between Mwinilunga and Solwezi districts. The majority of the respondents were in the age group of 16-18 years, 35(53.8%) from Solwezi and 33(50.8%) were from Mwinilunga district. The sample comprised of 37(56.9%) males from Solwezi and 45(69.2%) males from Mwinilunga. The majority of the respondents in Mwinilunga were in grade 11(49.2%), and the majority of the respondents in Solwezi were in grade 12(50.8%). The distribution of these factors were not significantly different between the two study areas.

5.2.1: Table 4. Socio-demographic data
n = 65

| CHARACTERISTIC | MWINILUNGA | | SOLWEZI | | P-VALUE |
|-------------------------|-------------------|------------|----------------|------------|----------------|
| Sex | n | (%) | n | (%) | |
| Male | 45 | (69.2) | 37 | (56.9) | 0.146 |
| Female | 20 | (30.8) | 28 | (43.1) | |
| Age | | | | | |
| 16-18 years | 33 | (50.8) | 35 | (53.8) | 0.910 |
| 19-21 years | 27 | (41.5) | 26 | (40.0) | |
| 22- 24years | 5 | (7.7) | 4 | (6.2) | |
| Tribe | | | | | |
| Luvale | 5 | (7.7) | 7 | (10.8) | <0.001 |
| Lunda | 42 | (64.6) | 12 | (18.5) | |
| Kaonde | 5 | (7.7) | 13 | (20.0) | |
| Other tribes | 13 | (20.0) | 33 | (50.8) | |
| Residential area | | | | | |
| Low density | 10 | (15.4) | 12 | (18.5) | 0.006 |
| Medium density | 12 | (18.5) | 26 | (40.0) | |
| High density | 20 | (30.7) | 19 | (29.2) | |
| Rural setting | 23 | (35.4) | 8 | (12.3) | |
| Religion | | | | | |
| Catholic | 14 | (21.5) | 9 | (13.8) | <0.001 |
| CMML | 24 | (36.9) | 6 | (9.3) | |
| Pentecostal | 23 | (35.4) | 30 | (46.2) | |
| Evangelical | 1 | (1.5) | 11 | (16.9) | |
| SDA | 3 | (4.6) | 9 | (13.8) | |
| Education level | | | | | |
| Grade 12 | 31 | (47.7) | 33 | (50.7) | 0.938 |
| Grade 11 | 32 | (49.2) | 30 | (46.2) | |
| Grade 10 | 2 | (3.1) | 2 | (3.1) | |

Table 4 Cont'd.....

| Family's monthly income | | | | | |
|--------------------------------|----|--------|----|--------|-------|
| Below K150, 000 | 22 | (33.8) | 9 | (13.8) | 0.062 |
| K151, 000 – K300, 000 | 11 | (16.9) | 16 | (24.6) | |
| K301, 000 – K600, 000 | 17 | (26.2) | 20 | (30.8) | |
| Above K600, 000 | 15 | (23.1) | 20 | (30.8) | |

An analysis of the socio- demographic characteristics of the respondents was done. Table 4 shows that more people in Mwinilunga (35.4%) lived in a rural setting (in villages) than in Solwezi (12.3). The distribution of residential area was significantly different between the two districts ($\chi^2=12.62$, $df=3$, P-Value = 0.006). Table 4 also shows that the majority of respondents in Mwinilunga 42(64.6%) were Lunda by tribe. Meanwhile, the majority of the respondents in Solwezi 33(50.8) were from other tribes (Lozi, Bemba, Ngoni, Nyanja, etc). An analysis of this factor showed a statistically significant result ($\chi^2 = 29.25$, $df = 3$, P- Value <0.001).

Table 4 also provides an overview of the distribution of the respondent's religious denomination between the two towns. The data shows that the majority of the respondents in both Mwinilunga and Solwezi were Christians but belonged to different religious denominations. While the majority of the respondents in Mwinilunga were CMML by denomination (36.9%), most of the respondents in Solwezi belonged to Pentecostal churches (46.2%).The distribution of the respondents' religious denominations between the two towns was significantly different ($\chi^2 = 24.14$, $df =4$, P- Value <0.001).

5.2.2: Table 5

Cultural practices and beliefs.

n = 65

| CHARACTERISTIC | MWINILUNGA | | SOLWEZI | | P-VALUE |
|---|------------|--------|---------|--------|---------|
| | n | (%) | n | (%) | |
| Male circumcision | | | | | |
| Yes | 61 | (93.8) | 46 | (70.8) | <0.001 |
| No | 4 | (6.2) | 19 | (29.2) | |
| Restraining of illicit sex (e.g. no sex out side marriage) | | | | | |
| Yes | 13 | (20.0) | 29 | (44.6) | 0.003 |
| No | 52 | (80.0) | 36 | (55.4) | |
| Is male circumcision common? | | | | | |
| Common | 17 | (26.2) | 33 | (50.8) | <0.001 |
| Very common | 46 | (70.8) | 16 | (24.6) | |
| Not common | 0 | (0.0) | 14 | (21.5) | |
| Do not know | 2 | (3.1) | 2 | (3.1) | |
| Reasons why mc is common (a). (It's a tradition) | | | | | |
| Yes | 61 | (93.8) | 42 | (64.2) | <0.001 |
| No | 4 | (6.2) | 23 | (35.4) | |
| Reasons why mc is common (b). (For hygiene purposes) | | | | | |
| Yes | 18 | (27.7) | 24 | (36.9) | 0.260 |
| No | 47 | (72.3) | 41 | (63.1) | |
| Reasons why mc is common c). (To prevent STIs) | | | | | |
| Yes | 36 | (55.4) | 25 | (38.5) | 0.053 |
| No | 29 | (44.6) | 40 | (61.5) | |

Table 5 Cont'd.....

| | | | | | |
|---|----|--------|----|--------|--------|
| Who performs male circumcision? | | | | | |
| (a). (Elderly traditional men) | | | | | |
| Yes | 49 | (75.4) | 35 | (53.8) | 0.010 |
| No | 16 | (24.6) | 30 | (46.2) | |
| Who performs male circumcision? | | | | | |
| (b). (Medical Doctors) | | | | | |
| Yes | 22 | (33.8) | 34 | (52.3) | 0.034 |
| No | 43 | (66.2) | 31 | (47.7) | |
| Are you circumcised? | | | | | |
| Yes | 45 | (69.2) | 20 | (30.8) | <0.001 |
| No | 20 | (30.8) | 45 | (69.2) | |
| Is sexual cleansing common in this area? | | | | | |
| Very common | 10 | (15.4) | 8 | (12.3) | 0.733 |
| Common | 4 | (6.2) | 6 | (9.2) | |
| Not common | 51 | (78.5) | 51 | (78.5) | |
| Do young people go through initiation ceremonies? | | | | | |
| Yes | 59 | (90.8) | 40 | (61.5) | <0.001 |
| No | 6 | (9.2) | 25 | (38.5) | |
| Is HIV/AIDS education included in initiation ceremonies? | | | | | |
| Yes | 34 | (52.3) | 16 | (24.6) | <0.001 |
| No | 31 | (47.7) | 49 | (75.4) | |

An analysis of cultural characteristics was done. Table 5 provides an overview of the cultural practices that were done in the two districts. The data shows that the majority of the respondents said male circumcision was a cultural practice done, 61(93.8%) from Mwinilunga and 46(70.8%) from Solwezi districts. ($\chi^2=11.88$, $df=1$, P -value<0.001).

Table 5 also shows that the other cultural practice done was restraining of illicit sex (no sex before or outside marriage). The data show that the majority of the respondents in Solwezi (44.6%) said restraining of illicit sex was a cultural practice in the area and only 20 percent from Mwinilunga said the same ($\chi^2=9.01$, $df=1$, P -value=0.003).

An analysis was done on the number of respondents who were circumcised per district. The data show that the majority of the male respondents who said they were circumcised were from Mwinilunga district 45(69.02%) and only 20(30.8%) from Solwezi district ($\chi^2=19.23$, $df=1$, P -value<0.001).

Table 5 also provides an over view of the relationship between male circumcision as a tradition that might be preventing sexually transmitted infections and the low prevalence of HIV/AIDS. The majority of respondents 61(93.8%) from Mwinilunga and 42(64.2%) from Solwezi said male circumcision was done as a tradition and it was also able to prevent the spread of STI's ($\chi^2=16.87$, $df=1$, P -value<0.001).

5.2.3: Table 6

HIV/AIDS knowledge

n = 65

| CHARACTERISTIC | MWINILUNGA | | SOLWEZI | | P-VALUE |
|--|------------|--------|---------|--------|---------|
| | n | (%) | n | (%) | |
| Chances of getting HIV/AIDS if you are circumcised | | | | | |
| Low | 61 | (93.8) | 45 | (69.2) | <0.001 |
| High | 4 | (6.2) | 20 | (30.8) | |
| Reasons for low chances of getting HIV/AIDS | | | | | |
| Circumcised male | 60 | (92.3) | 32 | (49.2) | <0.001 |
| Abstain from sex | 5 | (7.7) | 33 | (50.8) | |
| Specific HIV/AIDS messages, educational campaigns in the area | | | | | |
| Yes | 20 | (30.8) | 17 | (26.2) | 0.560 |
| No | 45 | (69.2) | 48 | (73.8) | |
| Specific HIV/AIDS messages, youth programmes in the area | | | | | |
| Yes | 28 | (43.1) | 35 | (53.8) | 0.219 |
| No | 37 | (56.9) | 30 | (46.2) | |

Table 6 Cont'd.....

| | | | | | |
|---|----|--------|----|---------|--------|
| Specific HIV/AIDS activities, condom distribution in the area | | | | | |
| Yes | 25 | (38.5) | 9 | (13.8) | <0.001 |
| No | 40 | (61.5) | 56 | (86.2) | |
| Active HIV/AIDS committee in the area | | | | | |
| Very Active | 34 | (52.3) | 45 | (69.2) | 0.048 |
| Not Active at all | 31 | (47.7) | 20 | (30.8) | |
| Best practice recommended for HIV/AIDS prevention | | | | | |
| Abstinence from sex | 56 | (86.2) | 59 | (90.8) | 0.410 |
| Safe Sex | 9 | (13.8) | 6 | (9.2) | |
| Source of information about HIV/AIDS in the community | | | | | |
| Yes | 61 | (93.8) | 65 | (100.0) | 0.042 |
| No | 4 | (6.2) | 0 | (0.0) | |
| Specific source of HIV/AIDS information (e.g. Local radio Station; Youth Centre) | | | | | |
| Yes | 24 | (36.9) | 50 | (76.9) | <0.001 |
| No | 41 | (63.1) | 15 | (23.1) | |

An analysis was done to compare between the two study areas on the respondents' knowledge on the causes, prevention and consequences of HIV/AIDS. According to the data in table 6 more respondents from Mwinilunga (93.8%) than from Solwezi (62.2%) said the chance of getting HIV/AIDS are low if somebody was circumcised ($\chi^2= 13.08$, $df=1$, $P\text{-value} < 0.001$)

Table 6 also presents data on the specific practices done to prevent the spread of HIV/AIDS in the communities. The results show that Condom distribution as a way to prevent HIV/AIDS was done more in Mwinilunga 25(38.5%) than in Solwezi 9(13.8%) ($\chi^2=10.19$, $df=1$, $P\text{-value} < 0.001$).

The respondents were also asked if there were active HIV/AIDS Committees in the Communities. The data reveals that the majority of the respondents from Solwezi (89.2%) and Mwinilunga (52.3%) said there were active Committees that went out in the communities giving knowledge to people about HIV/AIDS ($\chi^2= 3.90$, $df=1$, $P\text{-value} = 0.048$).

Regarding the specific sources of HIV/AIDS information in the areas of concern, Table 6 further shows that the communities had specific sources of HIV/AIDS information. The majority of the respondents from Solwezi (76.9%) said they got more of the HIV/AIDS information from Youth Alive Centre and there was also a local radio station, while most respondents from Mwinilunga (36.9%) said they got HIV/AIDS information mainly from school, friends, youth meetings at church and from posters within the districts ($\chi^2=21.21$, $df=1$, $P\text{-value} < 0.001$).

5.2.4: Table 7

A comparison of attitude towards HIV/AIDS between Mwinilunga and Solwezi.
n = 65

| CHARACTERISTICS | MWINILUNGA | | SOLWEZI | | P-VALUE |
|--|------------|--------|---------|--------|---------|
| | n | (%) | n | (%) | |
| Will you join the campaign for HIV/AIDS prevention if we start today? | | | | | |
| Yes | 55 | (84.6) | 62 | (95.4) | 0.041 |
| No | 10 | (15.4) | 3 | (4.6) | |
| Do you discuss issues related to HIV/AIDS in your home? | | | | | |
| Yes | 45 | (69.2) | 48 | (73.8) | 0.516 |
| No | 20 | (30.8) | 17 | (26.2) | |
| Who is to prevent HIV/AIDS in this community? | | | | | |
| My own responsibility | 56 | (86.2) | 57 | (87.7) | 0.795 |
| For other people | 9 | (13.8) | 8 | (12.3) | |

An analysis of the respondents' attitude towards the prevention of HIV/AIDS was done. The data in Table 7 indicate that more respondents from Solwezi (95.4%) and from Mwinilunga (84.6%) stated that they would join the HIV/AIDS prevention campaign if it were started ($\chi^2=114.18$, $df=1$, $P\text{-value}=0.041$).

5.2.5 Table 8: Multivariate Analysis

| Factor | Odd Ratio | 95% C1 |
|---|------------------|----------------|
| Tribe | | |
| Lunda | 6.24 | (1.669, 23.30) |
| Other | referent | |
| Reason why MC is Common: | | |
| Tradition | 7.45 | (2.54,21.84) |
| Other | referent | |
| Reason why MC is Common: | | |
| Hygiene | 0.34 | (0.139, 0.819) |
| Other | referent | |
| Circumcised male | | |
| Yes | 5.47 | (2.21, 13.58) |
| No | referent | |
| Reason for low chances Of getting HIV/AIDS: | | |
| Circumcised | 5.93 | (2.26,15.61) |
| Other | referent | |
| Initiation Ceremonies | | |
| Yes | 3.16 | (1.137,8.76) |
| No | referent | |
| Inclusion of HIV/AIDS Education in initiation Ceremonies | | |
| Yes | 4.67 | (1.95,11.18) |
| No | referent | |
| Active HIV/AIDS Committees | | |
| Yes | 0.35 | (0.15,0.82) |
| No | referent | |
| Ready to join HIV/AIDS Prevention Campaign | | |
| Yes | 0.139 | (0.041, 0.472) |
| No | referent | |

Table 8 shows the results of the multivariate analysis using logistic regression to control for confounding factors that were significant between the two districts during the bivariate analyses. The results of the multivariate analysis shows the independent factors associated with Mwinilunga district, which had a lower prevalence rate of HIV/AIDS than Solwezi district.

According to Table 8, the respondents who were Lunda by tribe were 6.24 times more likely to have been from Mwinilunga than the respondents who were of other tribes.

Additionally, the respondents who said male circumcision was commonly done for hygienic purposes were 0.34 times less likely to have been from Mwinilunga district than those who gave reasons other than hygiene. Additionally, the respondents who said male circumcision was commonly done as a tradition were 7.45 times more likely to have been from Mwinilunga than those who gave reasons other than tradition.

As regards circumcision, the respondents who said they were circumcised were 5.47 times more likely to have been from Mwinilunga than those who said they were not circumcised.

As regards chances of getting HIV/AIDS, the respondents who said the chances of getting HIV/AIDS were low if somebody were circumcised were 5.93 times more likely to have been from Mwinilunga district than those who said the chances of getting HIV/AIDS were high if somebody were circumcised.

In relation to initiation ceremonies, the respondents who said young people in the district went through initiation ceremonies were 3.16 times more likely to have been from Mwinilunga than those who said that young people did not go through initiation ceremonies. Additionally, the respondents who said HIV/AIDS education was included during the initiation ceremonies were 4.67 times more likely to have been from Mwinilunga than those who said HIV/AIDS education was not included during the initiation ceremonies for young people.

Additionally, in relation to the presence of active HIV/AIDS committees in the areas of study, the respondents who said that there were active HIV/AIDS committees in their communities were 65 percent less likely to have been from Mwinilunga than the respondents who said there were no active HIV/AIDS committees in these communities.

In relation to joining an HIV/AIDS campaign towards the prevention of HIV/AIDS, the respondents who said they were ready to join the campaign were 86 percent less likely to have been from Mwinilunga than those who said they were not ready to join the HIV/AIDS prevention campaign at that moment.

SECTION B:

5. 3 Qualitative data.

5. 3. 1: Matrix 1. Description of qualitative data sample of FGDs by study sites.

| Study Population by Age | Solwezi | | | Mwinilunga | | Total |
|---------------------------------------|-------------------------------|---------------------|-------------------------|------------------------|-----------------------|-------|
| | Solwezi Technical High School | Kyawama High School | Solwezi Day High School | Mwinilunga High School | Lunga Day High School | |
| Females 16-24 years | 1 | 1 | - | 1 | 1 | 4 |
| Males 16-24 years | 1 | 1 | - | 1 | 1 | 4 |
| Mixed (Males and females) 16-24 years | - | - | 1 | 1 | - | 2 |
| Total | 2 | 2 | 1 | 3 | 2 | 10 |

Matrix 1 describes a sample of FGDS conducted in the different study sites. The study population for FGDs comprised of school going young adults in the high schools. These were males and females of similar characteristics. Each FGD comprised of twelve discussants. The FGDs were conducted separately for both males and females. The total number of participants in the FGDs was 120.

In each study site, five (5) FGDs were conducted with a distribution of one (1) FGD for females at Solwezi Technical High School and another FGD for females at Kyawama High School. One (1) FGD for males was conducted at Solwezi Technical High School, while the other one was at Kyawama high School. The FGD which comprised of males and females (mixed) was conducted at Solwezi Day High School. One (1) FGD of females only was conducted at Mwinilunga High School and the other one also was conducted at Lunga Day High School. The other FDGs which comprised of males were also conducted at Mwinilunga High School and Lunga day High School. The FGD which comprised of males and females (mixed) was conducted at Mwinilunga High School.

5.3.2 Matrix 2: Knowledge of HIV/AIDS by district.

| Age group of population by sex | Mwinilunga | | Solwezi | |
|---------------------------------------|---|--|---|--|
| | Cause | Signs | Cause | Signs |
| Males:16-24 years | AIDS is caused by HIV. It is transmitted mainly through sexual intercourse; blood transfusion; MTCT | Loss of body weight. Chronic diarrhoea | AIDS is caused by HIV. It is transmitted through sexual intercourse; using same sharps; Blood transfusion | Opportunistic infections such as tuberculosis. |
| Females: 16-24 years | AIDS is caused by HIV. It is transmitted mainly through sexual intercourse. | Opportunistic infections | AIDS is caused by HIV. It is transmitted through sexual intercourse; using same sharps; Blood transfusion | You cannot tell by looking, unless somebody is tested. |
| Males and Females (Mixed) 16-24 years | AIDS is caused by HIV. It is transmitted mainly through sexual intercourse; MTCT, sharing same sharps | You can not tell by looking, unless somebody is tested | AIDS is a chronic disease caused by HIV. It is transmitted through sexual intercourse; using same sharps; Blood transfusion | Extreme loss of weight. Coughing more than a month, chronic diarrhoea. |

Matrix 2 shows that the level of knowledge among the participants in the areas of study was generally high. The two study areas did not seem to differ on the cause of AIDS. On the signs of HIV/AIDS, some discussants said it was difficult to tell if somebody had HIV/AIDS unless they went for Voluntary Counselling and Testing. However, the two study areas seemed to differ on the ways of HIV/AIDS transmission. The discussants in Mwinilunga added Mother-To-Child-Transmission as another way of HIV/AIDS transmission unlike their Solwezi counterparts.

5.3.3 Matrix 3: Cultural practices and beliefs by District.

| Age group of population by sex | Mwinilunga | | Solwezi | |
|--------------------------------|--|--|--|--|
| | Cultural practice/Belief | Significance | Cultural practice/Belief | Significance |
| Males: 16-24 years | <p>Male circumcision is very common for identity as a man and also for full sexual satisfaction.</p> <p>It is also good for ethnic identification so that people can know that you are Lunda or Luvale by tribe. 'The tribe of the circumcised'.</p> <p>A man who is not circumcised is unclean.</p> <p>Female initiation ceremonies are very common because people in the area are advised not to marry a lady or a girl who was not initiated.</p> | <p>It is a traditional practice which every male should undergo in order to be called a man. It keeps the male's private part clean without any germs that can cause disease. It reduces the chance of getting STIs.</p> <p>Good morals are taught during the ceremony.</p> <p>A circumcised man can be said to have a natural condom.</p> <p>Girls are taught how to take care of themselves and how to behave in society.</p> <p>Good morals are taught.</p> | <p>Male circumcision is only common in the villages.</p> <p>Socially there is no difference between a circumcised man and a non-circumcised man. Infact a circumcised man is very traditional and backwards</p> <p>Female initiation ceremonies are not common because they are now old-fashioned traditional practices.</p> | <p>It is just a tradition.</p> <p>Meant to teach girls on how to take care of themselves when they reach menarche.</p> |

Matrix 3 cont'd.....

| Age group of population by sex | Mwinilunga | | Solwezi | |
|--------------------------------|--|--|---|---|
| | Cultural practice/Belief | Significance | Cultural practice/Belief | Significance |
| Females: 16-24 years | <p>Female initiation ceremonies are very common for a lady to be identified as a woman who can get married and satisfy a man.</p> <p>For a person to be called a woman, they have to be initiated traditionally.</p> <p>Male initiation ceremony is also important for ethnic identification.</p> <p>One cultural belief is restraining of illicit sexual intercourse.</p> | <p>To train young girls on how to portray good behaviour in society.</p> <p>To restrict young girls from sexual intercourse.</p> <p>To teach females on how to take care of themselves during menstruation periods.</p> <p>MC is meant to make a male clean so that they do not carry dirty around the private part. Otherwise the dirty can make a female sick after sexual intercourse. It also prevents diseases such as Phimosis, Paraphimosis and STIs.</p> <p>To help the people to remain virgins until they get married.</p> | <p>Female initiation ceremonies are not common except in villages.</p> <p>Modernization has already taken place, therefore, there is no need to stick to backward practices which have no benefit.</p> <p>Male circumcision is only practiced by some tribes.</p> | <p>To mould girls into adults.</p> <p>It is just a tradition for Lunda and Luvale people.</p> |

Matrix 3 cont'd.....

| Age group of population by sex | Mwinilunga | | Solwezi | |
|---------------------------------------|--|--|--|---|
| | Cultural practice/Belief | Significance | Cultural practice/Belief | Significance |
| Mixed males and females: 16-24 years. | Male circumcision is very common because of the fact that in this community, those who are not circumcised are labeled by a certain name and you feel so bad if you are called by that name. Girls laugh at you. | <p>It is a tradition which makes a male to be called a real man. It is meant to keep a man clean on the private part.</p> <p>It is meant to teach the boys on how to have good behaviour in society.</p> | Male circumcision is not common | It is just a tradition for some tribes such as Luvale and Lunda. |
| | Female initiation ceremonies are very common. | <p>To confine girls when they reach menarche so that they are taught good behaviour especially with regards to sexuality.</p> <p>To teach girls on how to take care of themselves during menstrual periods and how to dress in an acceptable way according to our tradition.</p> | Female initiation ceremonies are not common nowadays. A girl can be confined if they go to their grandmothers. | It is meant to teach girls on how to take care of themselves when they start their menstrual periods. |

Matrix 3 Cont'd.....

| Age group of population by sex | Mwinilunga | | Solwezi | |
|--------------------------------|---|--|--------------------------|--------------|
| | Cultural practice/Belief | Significance | Cultural practice/Belief | Significance |
| | There is a strong traditional belief of no sexual intercourse before or outside marriage. | It is meant to help young people to maintain their virginity and also for the married people to remain faithful to their spouses so that they do not get sick unnecessarily. | | |

Matrix 3 is showing the results of the FGDs on the cultural practices and beliefs in the areas of study. The findings show that the participants in Mwinilunga mentioned male circumcision, female initiation ceremonies and restraining of illicit sexual intercourse as cultural practices and beliefs that were very common in the area. However, their counterparts in Solwezi district said that male circumcision and female initiation ceremonies were traditional practices for people in the villages.

With regards male circumcision, most of the male participants in Mwinilunga said it was done for identity as a real man and also for full sexual satisfaction during marriage life. They also added that it gave ethnic identification so that you are identified as a Lunda. One (1) participant in Mwinilunga was for the view that a man who was not circumcised was unclean. The same participant also added that a circumcised man was like someone with a natural condom although he could not explain further as it was emotionally attached. Thus, closer analysis revealed that these seemingly diverse results did in fact, reflect the real perspectives of most of the male participants who were seemingly

circumcised. On the contrary, one (1) participant of the male focus group discussion in Solwezi who seemed to express the views of the other participants in the focus group discussion pointed out that there is no difference between a circumcised man and a non-circumcised man. He added that a circumcised man was very traditional and backward. Therefore, the two study regions seemed to differ on the significance of the traditional practices and beliefs with more discussants in Mwinilunga being for the idea of the practices than the Solwezi discussants.

The participants in Mwinilunga also mentioned that the cultural practices and beliefs could help in the prevention of HIV/AIDS and other sexually transmitted diseases. The two study sites seemed to differ on this idea.

5.3.4 Matrix 4: Attitude towards the prevention of HIV/AIDS by district.

| Age group of Population by sex | Mwinilunga | Solwezi |
|--------------------------------------|---|---|
| | Responsibility of Preventing HIV/AIDS | Responsibility of Preventing HIV/AIDS |
| Males: 16-24 years | <p>It is very important for us all to prevent HIV/AIDS.</p> <p>It is all our responsibility to prevent HIV/AIDS in the area because HIV/AIDS is robbing us of relatives and friends.</p> <p>We could all join a campaign for the prevention of HIV/AIDS if it were started.</p> | <p>It is of paramount importance for us to prevent HIV/AIDS.</p> <p>We should all take it as our responsibility to prevent HIV/AIDS.</p> <p>We are ready to join a campaign towards the prevention of HIV/AIDS.</p> |
| Females: 16-24 years | <p>It is important for everybody to prevent HIV/AIDS.</p> <p>HIV/AIDS prevention is the responsibility of everybody because this disease affects us all.</p> <p>Everybody is ready to join a campaign towards the prevention of HIV/AIDS so that we eliminate it if possible.</p> | <p>The prevention of HIV/AIDS is very important for us to control it.</p> <p>All of us are responsible for the prevention of HIV/AIDS.</p> <p>We can not join the campaign.</p> <p>We are ready to join an HIV/AIDS campaign especially when we are out of school so that we stop this HIV/AIDS.</p> |
| Males and females mixed: 16-24 years | <p>It is important for us to prevent HIV/AIDS.</p> <p>It is all our responsibility to prevent HIV/AIDS.</p> <p>We would want to join an HIV/AIDS prevention campaign if it were started, but as for now, we are at school. The campaign can be a means of reducing HIV/AIDS.</p> <p>We can not join the campaign because we are students.</p> | <p>It is really important that we prevent the transmission of HIV/AIDS.</p> <p>It is the responsibility of every one of us to prevent HIV/AIDS.</p> <p>We can all join a campaign towards the prevention of HIV/AIDS but for it to go on well, the school leavers who have all the time should be in the forefront so that HIV/AIDS can be no more.</p> |

Matrix 4 is showing the attitude of the discussants towards the prevention of HIV/AIDS in the areas of study. Almost all the participants said it was important for them to prevent HIV/AIDS. Both males and females acknowledged that the prevention of HIV/AIDS was everybody's responsibility. The two areas of study did not seem to differ on taking up the responsibility of preventing HIV/AIDS. Surprisingly, some of the female discussants in Solwezi did not agree with the idea of joining an HIV/AIDS prevention campaign if it were started. Some of the participants in the focus group discussion, which comprised of males and females, had the same view of not joining the campaign. The focus group discussions generally seemed to differ in their attitude towards the prevention of HIV/AIDS.

5.3.5 Matrix 5: Relationship between religion and HIV/AIDS by district.

| Age group of population by sex | Mwinilunga | | Solwezi | |
|--------------------------------|--|---|--|--|
| | Religion | Relationship between religion and HIV/AIDS | Religion | Relationship between religion and HIV/AIDS |
| Males: 16-24 years. | <p>Christianity with different denominations:</p> <ul style="list-style-type: none"> - Pentecostal - Evangelical - CMML - SDA - Catholic - etc | <p>In the religious denominations, we are taught not to commit adultery. Therefore, we respect this teaching from the church and in this case, we would not be troubled by HIV/AIDS.</p> <p>The Pastors in the churches are also teaching about HIV/AIDS and we take the message seriously because it is now coming from the Pastors who are God's anointed people.</p> | <p>Christianity with different denominations:</p> <ul style="list-style-type: none"> - Watchtower - Pentecostal - Evangelical - CMML - SDA - Catholic - etc | <p>When HIV/AIDS is discussed in churches by church elders, people will take the message to be very important and they will prevent it.</p> <p>There is practically no connection between religion and HIV/AIDS because HIV/AIDS is no respecter of persons. You can contract it whether Christian or not.</p> |

Matrix 5 cont'd.....

| Age group of population by sex | Mwinilunga | | Solwezi | |
|--------------------------------------|--|--|--|---|
| | Religion | Relationship between religion and HIV/AIDS | Religion | Relationship between religion and HIV/AIDS |
| Females: 16-24 years | <p>Christianity with different denominations:</p> <ul style="list-style-type: none"> - Watchtower - pentecostal - Evangelical - CMML - SDA - Catholic - etc | <p>True Christians can not have HIV/AIDS through sexual intercourse unless by other means. This is because true Christians are guided by the holy spirit, so they can not engage in risk behaviours to contract HIV/AIDS.</p> | <p>Christianity with different denominations:</p> <ul style="list-style-type: none"> - Watchtower - pentecostal - Evangelical - CMML - SDA - Catholic - etc | <p>True Christians are expected to be well behaved in all areas of life and living. Therefore, faithful religious people can not easily get HIV/AIDS.</p> |
| Mixed males and females: 16-24 years | <p>Christianity with different denominations:</p> <ul style="list-style-type: none"> - Pentecostal - Evangelical - CMML - SDA - Catholic - etc | <p>True Christians do not commit adultery, therefore, if everybody takes Christianity seriously, then HIV/AIDS will really be reduced.</p> <p>In Christianity, sex is only practiced during marriage and adultery is considered to be sin. Therefore, respecting such a biblical teaching can actually help in controlling HIV/AIDS.</p> | <p>Christianity with different denominations:</p> <ul style="list-style-type: none"> - Pentecostal - Evangelical - CMML - SDA - Catholic - Watchtower - etc | <p>If people spend more time in churches listening to the word of God, they will have less time to engage in risky behaviours for contracting HIV/AIDS.</p> <p>God heals all the diseases, therefore, God is healing even HIV/AIDS for everybody who believes in God's healing power.</p> |

Matrix 5 cont'd.....

| Age group of population by sex | Mwinilunga | | Solwezi | |
|---------------------------------------|------------|---|----------|--|
| | Religion | Relationship between religion and HIV/AIDS | Religion | Relationship between religion and HIV/AIDS |
| Mixed males and females: 16-24 years. | Muslim | <p>In Muslim religion, when a person commits adultery they have to be stoned to death. Therefore, Muslims obey this and they do not commit adultery.</p> <p>The Muslim religion also puts a lot of emphasis on descent dressing. Therefore, females do not wear clothes that can easily entice males into committing adultery. All these can help to reduce the prevalence of HIV/AIDS if followed.</p> | | |

Matrix 5 is showing the perceptions of the discussants on the relationship between religion and HIV/AIDS. The majority of the discussants were predominantly Christian by religion apart from only one male discussant who was a Muslim. Thus, in terms of religion, the two areas of study did not seem to differ significantly. However, some of the

male discussants in Solwezi were for the view that there was no relationship between HIV/AIDS and religion because HIV was no respecter of persons. In any case, some participants in the mixed focus group discussion in Mwinilunga had the view that Christianity can help to control HIV/AIDS although they could not explain further.

The general view of the discussants in the study sites was that Christianity as a religion teaches people not to commit adultery because it is a sin. The other view was that if pastors and church elders teach about HIV/AIDS, people would take the message seriously and they will not contract HIV/AIDS hence maintaining a low prevalence. The other view was that people should be spending time in churches learning from the word of God so that they have less time to engage in risky behaviours for contracting HIV/AIDS.

5.3.6 Matrix 6: Practices towards HIV/AIDS prevention by district

| Age group of population by sex | Mwinilunga | | Solwezi | |
|--------------------------------|---|---|---|--|
| | Activities to prevent spread of HIV/AIDS | Measures to help prevent spread of HIV/AIDS | Activities to prevent spread of HIV/AIDS | Measures to help prevent spread of HIV/AIDS |
| Males: 16-24 years | <p>Posters with HIV/AIDS information stuck in strategic places for people to read.</p> <p>Condoms easily obtained from health institutions.</p> <p>HIV/AIDS is now being taught in schools.</p> <p>Male circumcision.</p> | <p>All males should be circumcised.</p> <p>No sex before or outside marriage.</p> <p>All the people without faithful sexual partners need to abstain from sexual intercourse and if they cannot abstain, they should practice safe sex.</p> | <p>NGOs like UNFPA have youths who go around the community teaching people about HIV and its prevention.</p> <p>VCT services are available at the health institutions although not enough.</p> <p>ARVs are readily available at health institutions free of charge.</p> | <p>The best measures to prevent the spread of HIV/AIDS are abstinence and safe sex for those who find it difficult to abstain.</p> |

Matrix 6 cont'd.....

| Age group of population by sex | Mwinilunga | | Solwezi | |
|--------------------------------|---|---|--|--|
| | Activities to prevent spread of HIV/AIDS | Measures to help prevent spread of HIV/AIDS | Activities to prevent spread of HIV/AIDS | Measures to help prevent spread of HIV/AIDS |
| Females: 16-24 years | <p>HIV/AIDS taught in all the schools.</p> <p>People read from posters that are stuck around the place.</p> <p>Condoms can easily be obtained from health institutions and other strategic places.</p> <p>Female initiation ceremonies.</p> | <p>To abstain from sexual intercourse.</p> <p>To encourage and continue having initiation ceremonies for boys and girls. HIV/AIDS education should be included in the initiation ceremonies.</p> <p>To continue the cultural practice of restraining illicit sex.</p> | <p>A local radio station teaches about HIV/AIDS. NGOs are involved in teaching about HIV/AIDS and its prevention.</p> <p>T-Shirts are distributed bearing HIV/AIDS messages for people to read. A variety of posters are stuck with different HIV/AIDS messages.</p> | <p>Everyone to undergo VCT.</p> <p>To abstain from sexual intercourse.</p> <p>Practice safe sex.</p> |

Matrix 6 continued.....

| Age group of population by sex | Mwinilunga | | Solwezi | |
|--|---|---|--|--|
| | Activities to prevent spread of HIV/AIDS | Measures to help prevent spread of HIV/AIDS | Activities to prevent spread of HIV/AIDS | Measures to help prevent spread of HIV/AIDS |
| Males and females (mixed): 16-24 years | <p>A lot of activities are done during the world AIDS day.</p> <p>Condoms are easily obtained from health institutions and they are cheaply sold in the shops.</p> <p>Some churches teach about HIV/AIDS.</p> | <p>Abstaining from sexual intercourse.</p> <p>Sticking to one faithful sexual partner.</p> <p>Practicing safe sex.</p> <p>To circumcise all the males.</p> <p>To encourage female initiation ceremonies.</p> <p>To continue restraining illicit sexual intercourse.</p> <p>Churches to teach about HIV/AIDS</p> <p>To form youth clubs for entertainment and teaching youths about HIV/AIDS</p> | <p>There is an NGO called UNFPA which is spearheading the Youth Alive Center where youths learn about HIV/AIDS .</p> <p>T-Shirts are also distributed by other institutions to their workers with printed HIV/AIDS messages on them.</p> | <p>Abstain from sexual intercourse.</p> <p>Practice safe sex.</p> <p>To have many VCT centers so that the service is readily accessible to everyone.</p> <p>Schools should have HIV/AIDS debates within the schools.</p> <p>Condoms should readily be available at all the high schools.</p> |

Matrix 6 continued.....

| Age group of population by sex | Mwinilunga | | Solwezi | |
|--------------------------------|--|---|---|---|
| | Activities to prevent spread of HIV/AIDS | Measures to help prevent spread of HIV/AIDS | Activities to prevent spread of HIV/AIDS | Measures to help prevent spread of HIV/AIDS |
| | | | <p>There is a group of young adults who go out in the villages to teach about HIV/AIDS in form of drama.</p> <p>HIV/AIDS is now being taught in all the schools in Solwezi.</p> <p>Some NGOs come at the schools for VCT.</p> | |

Matrix 6 is showing the practices towards the prevention of HIV/AIDS in the two regions of study. It also shows the perceptions of the discussants on the best measures of preventing HIV/AIDS.

The male discussants in Mwinilunga mentioned that HIV/AIDS was taught in the schools. They also mentioned that HIV/AIDS posters were put in strategic places for people to read and that condoms were easily obtained from the health institutions. Male circumcision was also mentioned as an activity to prevent STDs. The male discussants in Solwezi mentioned that NGOs like UNFPA had some youths who went round the community to teach people about HIV/AIDS. They also said that VCT services were

available at the health institutions and that ARVs were also given to HIV positive people freely.

However, the female discussants in Mwinilunga had the same ideas about activities in the community to prevent HIV/AIDS as their male counterparts in Mwinilunga except that they added female initiation ceremonies as a prevention activity. The female discussants in Solwezi mentioned a local radio station in the area as an activity towards the prevention of HIV/AIDS. They also added that some NGOs were involved in teaching people about HIV/AIDS. They also mentioned the distribution of T-shirts bearing HIV/AIDS messages and posters as activities towards prevention of HIV/AIDS.

The mixed focus group of males and females in Mwinilunga mentioned that much of the activities were only seen during the World AIDS day. They also added that condoms could readily be obtained from health institutions and also some churches were teaching their members about HIV/AIDS.

It is worth noting that the two regions of study seemed to differ on some of the activities that are done to prevent the spread of HIV/AIDS. The Mwinilunga male discussants and their female counterparts added female and male initiation ceremonies, which were not mentioned by the discussants in Solwezi.

The two areas of study also seemed to differ on the best measures that could be recommended to help prevent the spread of HIV/AIDS. The female discussants in Mwinilunga added female initiation ceremonies as a preventive measure and the male discussants also added male circumcision as a preventive measure. This was not so with their Solwezi counter parts.

CHAPTER 6

6.0. DISCUSSION OF FINDINGS

6.1. Introduction

This chapter presents the discussion of the main findings from the study. The study identified some factors that might determine the low prevalence of HIV/AIDS in Mwinilunga and Solwezi districts of the North-Western province. The study was a cross sectional comparative survey of the determinants of the low prevalence of HIV/AIDS in Mwinilunga and Solwezi districts in North western province, Zambia.

The information obtained included socio-demographic data of young adults in the high schools, cultural practices and beliefs, knowledge about HIV/AIDS prevention, and the practices of HIV/AIDS prevention in the study areas. This data was collected through a structured interview schedule. Supplementary information from the young adults was obtained through focus group discussions. Focus group discussions were arranged separately for young men and women because it is anticipated that participants would express themselves differently according to who is present. By cultural convention in Zambia, young women are expected to keep silent in discussions when men are present, and men tend to take a paternalistic role claiming to represent the view of women and talking on their behalf. For comparative purposes, some focus group discussions were conducted with mixed groups. Then the common responses were grouped together for presentation. Focus group discussions helped to “collect data on norms and collective values, customs and practices” (Weir, 2003).

6.2 Limitations of the study

On the study population, the study was limited to school going students in the high schools only, thereby eliminating the out of school youths who would have provided additional comprehensive insights of the perspective views of low HIV/AIDS prevalence.

On the study design, the study was limited to a descriptive study. This is because a descriptive study is cheaper than the other study designs. A randomized clinical study or a field trial would have provided additional comprehensive insights of the perspective views of low prevalence of HIV/AIDS.

A comparative study could have been done between a province with a low prevalence of HIV/AIDS and a province with a high prevalence of HIV/AIDS, but this was not possible because of limited resources.

6.3 Socio-Demographic Profile of Respondents

It is very important to know the socio-demographic characteristics of the respondents because it helps to assess the representativeness of the sample. The other reason being that, this might have a bearing on how the study subjects responded to issues pertaining to HIV/AIDS.

The study revealed that the majority of the respondents fell in the age range of 16-18 years. There was very little difference between Solwezi (53.8%) and Mwinilunga (50.8%), in this age group. Well over half of all new infections are in people below 25 years of age (UNAIDS, 2004). The least age group was the respondents of an old age group 22-24 years with 6.2 percent from Solwezi district and 7.7 percent from Mwinilunga district.

The majority of the respondents were males with 69.2 percent from Mwinilunga and 56.9 percent from Solwezi. This could be attributed to the fact that in the rural settings of Zambia, male children are encouraged to continue with their education as compared to their female counterparts. However, this is not the same case in town where male students in the high schools are usually almost equal in number with the female students.

In terms of educational level attained, the majority of the respondents in the study were in grade twelve, 50.8 percent from Solwezi and 47.7 percent from Mwinilunga. All the respondents in the study were literate.

The study results show that the majority of the respondents were single, 96.9 percent from Solwezi and 95.4 percent from Mwinilunga. This could be attributed to the fact that the respondents were still in school. Usually in Zambia, a person in primary or secondary school is not supposed to be married.

The study shows that the majority of the respondents from Mwinilunga, 35.4 percent were residing in a rural setting while only 12.3 percent from Solwezi resided in rural settings. This can imply that cultural practices are adhered to in rural settings more than in urban settings. This might be the reason for the low prevalence of HIV/AIDS in Mwinilunga because the area is generally a rural setting as compared to Solwezi which is an urban area where different people of different tribes meet for their employment.

The study also revealed that the majority of the respondents, 64.6 percent were Lundas from Mwinilunga and only 18.5 percent were Lundas from Solwezi. This is attributed to the fact that Solwezi district is a cosmopolitan district, hence, the majority of other tribes (Bemba, Nyanja, Lamba, Tumbuka and Ngoni). An association was observed between tribe and low prevalence of HIV/AIDS. Mwinilunga consists mainly of Lunda speaking people. It is interesting to note that during the focus group discussions, almost all the Lundas invariably pointed out the importance of their cultural practices like initiation ceremonies for both males and females. This might be the reason for Mwinilunga having a moderately low prevalence of HIV/AIDS than Solwezi.

6.4 Relationship between religion and HIV/AIDS

In the study, the respondents were predominantly Christians although belonged to various religious denominations. The majority of the respondents from Solwezi (46.2%) were from Pentecostal circles and only 35.4 percent from Mwinilunga. However, the majority of the respondents (36.9%) in Mwinilunga belonged to the CMML denomination. Christianity also came up oftenly during the focus group discussions where some participants in Mwinilunga pointed out that some churches like Pentecost were not guiding their members on the importance of descent dressing thereby tempting men to commit adultery. The participants in Mwinilunga who belonged to the CMML denomination were of the view that they were taught descent dressing in church and men could not easily be tempted to commit adultery thereby controlling the spread of HIV/AIDS. Most of the participants were of the view that the prevalence of HIV/AIDS could reduce drastically if all the people began to respect and appreciate the biblical teachings of Christianity. The respondents gave an example of people obeying the commandment which instructs Christians not to commit adultery. The participants strongly felt that true Christians can not commit adultery. This is consistent with the findings of a study done in Edendale (South-Africa) where it was found that some Christian churches encouraged their members to reduce engaging in extra and premarital sexual activity, thereby reducing their risks for AIDS, (Garner, 2000). Some participants of the FGDs especially in Mwinilunga said that they were obeying the teachings from the Bible although it was difficult to determine the extent of such obedience. The participants strongly felt that true Christians cannot commit adultery hence, preventing HIV/AIDS. These results indicate that Christian faith (religion) if adhered to seriously can help people not to engage in risky behaviours that can predispose them to contracting HIV/AIDS thereby controlling the disease. This might also mean that people take what they are taught in churches seriously and they consider the teachings to be true.

A further analysis showed that the majority of the discussants in the FGDs in Mwinilunga were CMML by denomination while the majority of the discussants

in Solwezi were Pentecostal by denomination. The majority of the female discussants in Mwinilunga also added that the CMML church did not allow females to wear pairs of trousers and 'hip stars' because they bring about a lot of sexual defilements leading to the spread of HIV/AIDS. On the contrary, the discussants in Solwezi who seemed to belong to Pentecostal churches were of the view that dressing was not an issue. They added that 'evil was in the mind not in dressing.' These findings of the study show that the CMML denomination (Christian religion) might be one of the determinants of a low prevalence of HIV/AIDS in Mwinilunga. This might also imply that the church might be a means of behaviour change to keep the prevalence of HIV/AIDS low. This is consistent with the findings of a study by Garner (2000) that religious organizations manifest 'extensive' power, power that has the potential to influence the behaviour of their members (Garner, 2000). Agadjannian (2001) also pointed out that church participation in Africa created an environment for social exposure and interaction to new ideas, which could then influence HIV/AIDS prevention.

6.5 Cultural practices and beliefs

The respondents were asked about the cultural practices that are done in the communities. The majority, 93.8 percent of the respondents from Mwinilunga said that male circumcision was a traditional/cultural practice done and 70.8 percent of their Solwezi counterparts also said male circumcision was a cultural practice in the area especially in the remote areas of Solwezi. This also came up in the focus group discussions in Mwinilunga where most of the discussants stated invariably that male circumcision was one of the cultural practices in the area. This might be the reason for the low prevalence of HIV/AIDS in Mwinilunga as compared to Solwezi.

The respondents were also asked about which of the cultural practices were very common in the two communities. The study shows that the majority of the respondents, 70.8 percent from Mwinilunga said male circumcision was very

common in the area and only 44.6 percent of their counterparts from Solwezi said male circumcision was also very common. This was supported by the results of the focus group discussions as the majority of the participants in Mwinilunga stated that male circumcision was very common in the area as compared to their Solwezi counterparts who said it was not very common. From such findings, we can still deduce that male circumcision may be a determinant of low prevalence of HIV/AIDS.

The male respondents were also asked on whether they were circumcised or not. The study showed that the majority of the male respondents, 69.2 percent from Mwinilunga were circumcised as compared to only 30.8 percent of their male counterparts from Solwezi who said were circumcised. This was similar to a finding by Laumann (1997), who reported that 77 percent of adult American men were circumcised. However, the American culture and the culture in the areas of study are totally different. The majority of the male participants of the FGDs in Mwinilunga also agreed that they were actually circumcised. These findings support the assertion that MC could be one of the determinants of the low prevalence of HIV/AIDS in Mwinilunga district.

The findings of the study on male circumcision are also in line with some studies that have been done else where. For instance, one of the earlier investigations on the issue is a comparative study of four African cities conducted in 1999. Two West African Cities, Cotonou in Benin, and Yaounde in Cameroon, were found to have low HIV infection rates of three percent and four percent respectively, among men aged 15-49 years. The other two sites, Kisumu in Kenya and Ndola in Zambia, had infection rates of 20 percent and 23 percent respectively, for the same population group. In Cotonou and Yaounde, nearly all the men in the study reported being circumcised. Only 10 percent of the men in Ndola and less than 30 percent of the men in Kisumu meanwhile had undergone the procedure. Furthermore, the study found that HIV prevalence was below 8 percent in men

circumcised before their sexual debut and 25 percent in uncircumcised men (de Vincenzi, 1994).

Some researchers examined why HIV was so prevalent in the AIDS- belt and one demographic factor, which stood out, was that all the AIDS-belt countries were also places where men were not traditionally circumcised (Caldwell, et al, 2003).

Some of the factors in this study may not have statistical significance but because of their qualitative nature, they have been discussed thoroughly in this subsection.

The respondents in the study were asked about the significance of male circumcision and also the reason for it being common in their areas. The majority of the respondents, 55.4 percent from Mwinilunga said male circumcision could prevent STIs as compared to only 38.5 percent of their counterparts in Solwezi. This is consistent with the results of the FGDs. Most of the male discussants in Mwinilunga pointed out that MC got rid of the foreskin so that a circumcised male could not harbour the microbes for STIs. They also said that MC was done so as to be identified as a man in that community.

As reported in several other studies (Bonner, 2001; Siegfried et al, 2003; Caldwell and Caldwell, 2003), although the UN and the Centre for Disease Control are only beginning to accept the connection between AIDS and male circumcision, there is increasing awareness in the AIDS- belt that circumcision can be beneficial. Non-circumcised men in this area were more likely to have chancroid, a sexually transmitted disease, similar to syphilis, which results in open sores making infection by the AIDS virus more likely. The Caldwell study (2003) concludes that universal circumcision would reduce the spread of HIV in the AIDS- belt.

The majority of the participants in the FGDs in Mwinilunga also mentioned that MC was done for ethnic identification so that a man is identified as being Lunda

or Luvale who are known in their communities as “the tribes of the circumcised.” The participants said they felt important to belong to the “tribe of the circumcised.”

Respondents were asked about chances of getting HIV if somebody is circumcised. The study results show that the majority of the respondents (both male and female), 93.8 percent from Mwinilunga and 69.2 percent from Solwezi said the chances of getting HIV are usually low when somebody is circumcised. This also came up in the FGDs in which the discussants pointed out that when a male is circumcised, the foreskin is removed and the transmission of STIs is reduced. This is similar with the findings of some researchers who have argued that the skin on the inside of the male foreskin is ‘mucosal’, similar to the skin found on the inside of the mouth or nose. This mucosal skin reportedly has a high number of langerhan cells, which are HIV target cells rich in white blood cells or doorway cells for HIV (Wilson, 2003). The other reason why MC was common in Mwinilunga was that it was done as a tradition and also for hygienic purposes. Males in the FGDs in Mwinilunga mentioned that a man who was not circumcised was “dirty” around the glans penis. These findings are similar with the finding of a study done by Gray (2000), who found that “due to the moist, mucosal surface on his penis, the uncircumcised male has a much higher chance of having a micro ulceration in the glans and inside the foreskin than the circumcised male”. This exposes the uncircumcised male to a greater risk of getting sexually transmitted diseases and HIV as concluded by Gray.

The respondents further clarified the low chance of getting STIs if a male was circumcised by mentioning that during the initiation ceremonies where males were circumcised, the males were encouraged to have good behaviour and also to portray good morals especially sexually. The participants who seemed to have undergone the procedure said they were abiding by such teachings. However, it was difficult to determine the extent to which they were abiding. The study

findings on male circumcision show that male circumcision might be a factor in determining the low prevalence of HIV/AIDS.

The respondents were also asked to mention who exactly performed the male circumcision. The study results show that the majority of the respondents, 75.4 percent from Mwinilunga and 53.8 percent from Solwezi said it was done by experienced elderly traditional men. This result was further supported by the results of the FGDs where a proportion of the male discussants said MC was performed by well experienced elderly traditional men and Doctors at the health facilities. These results may imply that it is not possible for the transmission of HIV/AIDS to take place during circumcision, as there is no sharing of sharp objects used for circumcision.

Another cultural practice which was found to be significant in this study was the restraining of illicit sexual intercourse i.e. no sex before marriage and no sex outside marriage. Although far below than half of the respondents, 44.6 percent from Solwezi and 20.0 percent from Mwinilunga said this was a cultural practice which was respected and adhered to. This cultural practice was also supported in the FGDs especially in Mwinilunga. The majority of the female discussants mentioned that illicit sexual intercourse was a taboo. Therefore, restraining of illicit sexual intercourse was a common cultural belief. The reason for restraining illicit sexual intercourse was meant to help people maintain their virginity until they got married. It was also meant to help married people to stick to their sexual partners. This might be a factor to determine a low prevalence of HIV/AIDS if it were adhered to because by so doing, people might not engage in risky behaviours for contracting HIV/AIDS.

The study results also show that female initiation ceremonies were practiced more in the rural settings than in urban areas. The female initiation ceremonies were meant to train young girls on how to have morally acceptable behaviour in society. Girls were also taught and encouraged to abstain from sexual intercourse

among other things. This could imply that the good morals that were taught during the initiation ceremonies helped the people to stay away from risky behaviours for contracting HIV/AIDS thereby, determining the low prevalence of HIV/AIDS to some extent.

6.6 Knowledge of HIV/AIDS

Almost all the respondents reported having heard of HIV/AIDS and also high percentages of the respondents 100.0 percent from Solwezi and 93.8 percent from Mwinilunga were able to give a correct definition of HIV/AIDS. These results were supported by the results of the FGDs in which the participants were able to define HIV/AIDS and mentioned the modes of transmission. These results show that the participants in the two areas of study were generally knowledgeable about HIV/AIDS. Since both of the areas of study showed a high level of knowledge, this can not explain the reason for the different prevalence rates of HIV/AIDS in the regions. However, this shows that there may be other factors determining a low prevalence of HIV/AIDS. In any case, youths outside school might not be as knowledgeable.

As regards the best measure of preventing HIV, the study results show that the majority of the respondents pointed out that abstinence was the best measure, 90.8 percent from Solwezi and 86.2 percent from Mwinilunga. Other respondents mentioned safe sex as a way of preventing HIV/AIDS. This finding is consistent with the Zambia Demographic and Health Survey, (CSO etal, 2003), which pointed out that Zambians reported a high level of knowledge of both HIV transmission routes and prevention strategies. However, there are rural-urban variations regarding knowledge of ways to avoid HIV/AIDS.

There was no significant difference between women and men in knowledge of AIDS (CSO etal, 2003). In comparison, it was indicated that 96 percent of both men and women had heard about HIV/AIDS, (CSO, 1998), while the 1996 ZDHS indicated about 100 percent of both men and women, (CSO, etal 1996). Exposure

to higher levels of education is a key factor in improving knowledge about ways of preventing sexually transmitted infections. In general most of the respondents knew the ways in which HIV could be transmitted. When asked to spontaneously *mention the ways*, 92.3 percent of the respondents from Mwinilunga and 81.5 percent of the respondents from Solwezi mentioned most of the ways of getting HIV. Knowledge, therefore, does influence one's attitude to a certain extent. Most of the students acknowledged that HIV/AIDS can be avoided, but there seems to be a serious discrepancy between knowledge, attitude and practices among the respondents in the study. It appears that people still need continuous conviction regarding the importance of the prevention of HIV/AIDS.

In the current study, respondents were asked about their sources of HIV/AIDS information. The majority of the respondents from Solwezi, 76.9 percent were able to mention at least 2 sources (Youth Alive Centre, Radio, TV), as compared to far below half of their Mwinilunga counterparts, 36.9 percent who also mentioned some source. This is supported by the results of the FGDs where the participants mentioned at least a source of HIV/AIDS information. These results show that the respondents were well informed about HIV/AIDS and the general expectation is that they have heard about HIV/AIDS and can therefore prevent it and thereby help to reduce the prevalence of HIV/AIDS. However, it was difficult to determine the extent to which the high level of HIV/AIDS knowledge was being put into practice for its prevention. In any case, the expected view is that well informed individuals would choose not to engage in behaviours that lead to the transmission of HIV/AIDS. However, the study results on the sources of HIV/AIDS information show that differences in HIV/AIDS prevalence might not be explained by the sources of HIV/AIDS information available but, probably by other means.

6.6 Attitude of respondents towards the prevention of HIV/AIDS

According to the findings of this study, the majority of the respondents supported the preventive measures. A higher proportion of the respondents, 80.0 percent

from Solwezi and 70.8 percent from Mwinilunga reported the preventive measures. Only 32 (24.6%) of the total respondents did not approve of the use of HIV/AIDS preventive measures. The majority of these, 29.2 percent were from Mwinilunga while only 20.0 percent were from Solwezi. The main reason cited by these respondents for not using HIV/AIDS preventive measures like using condoms is that, they said they were circumcised. Such a finding shows that the low HIV rate can be attributed to MC to some extent.

The majority of the respondents 95.4 percent from Solwezi and 84.5 percent from Mwinilunga felt that HIV/AIDS prevention issues were important, because they can help reduce the prevalence and incidence of HIV/AIDS. These respondents pointed out that they were able to join a campaign for HIV/AIDS prevention if it were started. These results are supported by the results of the FGDs where the majority of the respondents were ready to join a campaign tailored towards the prevention of HIV/AIDS. This finding has revealed that the majority of the respondents took the responsibility of preventing HIV/AIDS upon themselves. This implies a positive attitude among the respondents.

In this study, the respondents were asked whether they agreed or disagreed with certain statements regarding the prevention of HIV/AIDS. The study also shows that 87.7 percent of the Solwezi respondents and 86.2 percent of the Mwinilunga respondents agreed that it was their own responsibility to prevent HIV/AIDS in their communities. Only 12.3 percent of the respondents from Solwezi and 13.8 percent from Mwinilunga did not agree. The reason they did not agree is that, such a responsibility was for other people or some organizations. Thus, a closer analysis revealed that these seemingly contradictory results were infact related to the context in which the participants were. It is because they were in school by then. Therefore, the two regions of study did not seem to differ in their attitude towards the prevention of HIV/AIDS.

The results of this study may imply that even though people do not fully put HIV/AIDS preventive measures into use, they have a positive attitude in the prevention of HIV/AIDS. This, therefore, means that they do support the prevention of HIV and also appreciate their important role in this issue. Although with regard to information on people's attitude the respondents may be wrong about other people's opinion, this perception is however important since it may be a factor in shaping their behaviour. The use of attitudinal information might not be suitable for precise or detailed interpretation because it does not uncover the depth of feeling or its origin. Nevertheless, this has portrayed the general climate of opinion. The study findings show a positive attitude in the two areas of study towards the prevention of HIV/AIDS. However, according to this study, a positive attitude may be difficult to explain the difference of HIV/AIDS prevalence in the two areas of study.

6.7 Activities towards HIV/AIDS prevention

In this study, the respondents were asked about specific activities done towards the prevention of HIV/AIDS. Although not statistically significant, the study results show that the majority of the respondents, 80.0 percent from Solwezi and 70.8 percent from Mwinilunga said that some activities were going on in their communities. These activities included education of HIV/AIDS in schools, youth programmes, condom distribution and some mentioned male circumcision. The participants in Solwezi mentioned the availability of VCT services although not enough and not readily accessible. They also mentioned that ARVs were not available and accessible to all the people who needed them.

With regards the best measures to help prevent the spread of HIV/AIDS, the respondents in Mwiniluga mentioned that all males needed to be circumcised. They also said all the people without faithful sexual partners needed to abstain or practice safe sex. Their Solwezi counterparts mentioned abstinence and safe sex as the best preventive measures.

Prevention is the mainstay of the response to AIDS, but it is seldom implemented at a scale that would turn the tide of the epidemic. Effective, inexpensive and relatively simple HIV prevention interventions do exist, but the pace of the epidemic is clearly outstripping most country efforts towards effective prevention programming (UNAIDS, 2004).

Fortunately, a number of countries are demonstrating results in reducing HIV infection rates. Senegal, Thailand and Uganda pioneered early HIV prevention successes. In recent years, similar progress has been recorded in countries as diverse as Brazil, Cambodia and the Dominican Republic. The global community can learn from these prevention successes and adopt them (UNAIDS, 2004).

6.9 Implications of the Study

The study findings have shown that there are socio-economic factors that are likely to influence the prevalence of HIV/AIDS in Mwinilunga and Solwezi districts of the North-western province.

Some cultural factors have also been identified as influencing the prevalence of HIV/AIDS in the two (2) districts. These cultural factors include male circumcision, female initiation ceremonies and some beliefs like no person should have sex before or outside marriage. Religious factors have also been found to have an association with the prevalence of HIV/AIDS in Mwinilunga and Solwezi districts.

It is also encouraging to find out that the respondents showed a high level of knowledge about the transmission of HIV and its prevention. A positive attitude towards the prevention of HIV/AIDS was also portrayed. This could be attributed to the level of education. In line with HIV/AIDS knowledge, the study findings have also showed that to be effective, HIV/AIDS education should be supplemented with counselling through Voluntary Counselling and Testing (VCT) services. This is because once a person begins to think about the issues of

HIV/AIDS after being presented with information, he/she should have recourse to a counsellor (within the family or circle of friends or a professional) to tailor that information to their life and to be able to formulate and take steps that will lead to behaviour change or even to reduce vulnerability. If the latter is the desired level of education, then it is almost completely missing.

It is interesting to find out that some people are now discussing issues about HIV/AIDS in their homes. This is according to the findings of the current study.

Today's youth generation is the largest in history: nearly half of the global population is less than 24 years old. They have not known a world without AIDS. Young people between the ages of 15 and 24 years are both the most threatened globally accounting for half of all new cases of HIV and the greatest hope for turning the tide against AIDS. The future of the epidemic will be shaped by their actions (UNAIDS, 2004).

CHAPTER 7

7.0. CONCLUSION AND RECOMMENDATIONS

7.1. Conclusion.

The epidemic of HIV/AIDS remains extremely dynamic, growing and changing character as the virus exploits new opportunities for transmission. Therefore, adequate information on social, cultural, religious and economical factors that influence or affect the prevalence of HIV/AIDS is essential for developing programmes relating to the prevention of HIV/AIDS. This study has identified some of the factors or the determinants of low prevalence rate of HIV/AIDS in Mwinilunga district.

According to the current study, factors such as residence, tribe, female initiation ceremonies, male circumcision, forbidding (restraining) of sexual intercourse before and outside marriage, good attitude towards the prevention of HIV/AIDS, high level of HIV/AIDS knowledge, religion and economy have been identified as some of the factors that might determine the low prevalence rate of HIV/AIDS.

However, due to the fact that the youth out of school were not included in this study, the findings may not be generalized to the youth in the general population. However, we can still draw some conclusions on some cultural and social practices that could be of help as we try to scale down the prevalence rate of HIV/AIDS.

According to this study, Christian religious denominations can be used for behaviour change in terms of controlling HIV/AIDS because church members consider seriously what they are taught in church. Therefore, we can expect more behaviour change if the dangers of HIV/AIDS are preached in churches. Christian denominations might be one of the factors that might be determining a low

prevalence rate of HIV/AIDS in Mwinilunga district. This is so because the majority of the respondents in Mwinilunga were CMML by denominations and they pointed out that they were taught to have good morals in society and to obey God's commandments for example the commandment which says, "You shall not commit adultery". They also mentioned that the church encourages them to present their bodies as a "living sacrifice before God" by decent dressing and good behaviour, not wearing "hip stars" that can easily tempt men to commit the sin of adultery. The respondents mentioned that they took the teachings of their churches seriously.

Effective prevention requires policies that help reduce the vulnerability of a large number of people. This means creating a social, legal, cultural and economic environment in which prevention is possible. An effective response to HIV/AIDS goes hand in hand with basic socio-economic development. Prevention friendly efforts take many forms and can often be implemented by both public and private sectors.

Some studies have concluded that universal male circumcision would reduce the spread of HIV/AIDS in the AIDS-belt (Caldwell, 2003). From the findings of this study, we can see that to scale down the prevalence of HIV/AIDS, we need to take a holistic view towards its prevention. This means that success will not only be cultural but social, economical, religious and also political. Male circumcision might only be one component in the fight against HIV/AIDS according to the findings of this study.

The findings of the study also show that tribal practice might have a role to play in the prevalence of HIV/AIDS. It is because the majority of the Lundas are circumcised. This is because the participants who were Lunda by tribe were 6.24 times more likely to have been from Mwinilunga, which has a moderately low prevalence of HIV/AIDS than the participants who were of other tribes.

Furthermore, the male respondents who said they were circumcised were 5.47 times more likely to have been from Mwinilunga than those who said they were not circumcised. This might imply that more of the male respondents in Mwinilunga were circumcised than in Solwezi. This might be one of the reasons for Mwinilunga having moderately low prevalence of HIV/AIDS.

The study findings also show that the respondents who said young people in the district went through initiation ceremonies were more likely to have been from Mwinilunga than from Solwezi meaning that initiation ceremonies might be a factor in determining the moderately low prevalence of HIV/AIDS in Mwinilunga district.

However, improving access to and education about preventive measures such as condoms, Voluntary Counseling and Testing (VCT), abstinence and better treatment of sexually transmitted diseases is also paramount.

The biggest barrier to be broken down in the prevention of HIV/AIDS is personal commitment and assuring ownership on part of all the people (politically, socially, economically, culturally, religion, etc). Meanwhile, there is neither a social barrier to limit the spread of HIV nor a barrier to its control if there is political and social will.

7.2. Recommendations.

Based on the findings of this study, the following recommendations are made: -

1. The current study shows that exposure to initiation ceremonies helps the youth to have good morals because they are taught not to indulge themselves in illicit sexual intercourse. Therefore, there is need for these cultural practices especially female and male initiation ceremonies to be reinforced in all the communities if possible. By doing so, the prevalence of HIV/AIDS might be reduced.

2. The study has further revealed that male circumcision might be a determinant of a low prevalence rate of HIV/AIDS among other factors. Male circumcision should therefore be encouraged in all the health institutions and it should be free of charge so that men are motivated to be circumcised. In any case, society has to overcome its irrational fears and begin to encourage cultural practices that can prevent the transmission of HIV/AIDS.
3. This study has further revealed that Christianity as a religion can be a determinant of a low prevalence rate of HIV/AIDS in that true Christians that uphold the biblical teachings would not engage in activities like sexual immorality that exposes people to the risks of HIV/AIDS. Therefore, there is need for men and women of God (the church) to intensify teachings from the word of God. Furthermore, HIV/AIDS should also be included in the programmes of the churches because people tend to take more seriously what is taught in churches than what is taught in public meetings.
4. The study has also revealed that availability of specific sources of HIV/AIDS information makes people more knowledgeable about HIV/AIDS and this can help people in knowing how best they can prevent HIV/AIDS. Therefore, the government should put in measures to make sure that people are continuously informed about HIV/AIDS where ever they may be found. Measures should also be put in place to continue revising the curricula in all learning institutions so that people have the current information hoping that people with a high level of knowledge would make well informed choices to prevent the spread of HIV/AIDS; thereby reducing the prevalence of HIV/AIDS.
5. The study has also revealed that active HIV/AIDS committees in the communities where people live can also help to reduce the prevalence of HIV/AIDS. Therefore, there is need for the government to strengthen the existing committees towards the prevention of HIV/AIDS. The committees should also be set up in communities that are lacking them. In any case, the

local governments have to create the infrastructure, enact enabling laws and commit resources on these very important issues of life and living.

6. Another recommendation that could be made is that since we are now aware of the association between HIV/AIDS and male circumcision, a controlled trial of circumcision is needed to see if male circumcision would help to control the HIV/AIDS epidemic.

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APPENDIX: A

INFORMATION SHEET: PARTICIPANT

Introduction

This form gives you information on the study in which you are being requested to participate. To make sure that you have all the facts about this study you must read this form. If you agree to participate in this study you must sign the consent form below. You will be allowed to keep a copy of this form and to discuss anything that is not clear to you concerning this study with the members of this study. If you feel that you cannot participate in the study, you are free not to.

Purpose of the research and procedures

Mrs. Ngambo E. M. Mushinkula of the University of Zambia, School of Medicine, Department of Community Medicine is carrying out this study. This study is being done in partial fulfillment of the requirement of the Master of Public Health degree, which will be submitted to the University of Zambia. If you have any doubts, kindly direct them to Mrs. Ngambo E. M. Mushinkula, P.O. Box 110248, Solwezi. Tell: 08 -821821, Cell: 095 - 768995, or to the Head of Department of Community Medicine, P. O. Box 50110, Lusaka, Tel: 252641 or to the Chairman, Research Ethics Committee of the University of Zambia Ridgeway Campus P.O. Box 50110 Lusaka.

You are being requested to take part in a study that is seeking to analyse the determinants of low prevalence rate of HIV/AIDS. HIV/AIDS is a major public health problem. It has become a serious health and development problem in many countries around the world and Zambia has not been spared. Human Immuno deficiency Virus (HIV) is the virus that causes the Acquired Immune Deficiency Syndrome (AIDS). HIV destroys the biological ability of the human body to fight off opportunistic infections such as tuberculosis. A person can be infected with the HIV for a long time without showing any symptoms; he or she can transmit the infection through sexual contact to other, uninfected people. An infected woman can also transmit the disease to her infant during pregnancy or during delivery or while breastfeeding. HIV can also be spread by transfusions of contaminated blood and by sharing needles used for injections and drug use. Unless they die from something else first, virtually all infected persons will eventually die from the disease.

This study will involve a face-to face interview with research staff who will ask you some questions using a structured questionnaire and focus group discussions about factors associated with the low prevalence rate of HIV/AIDS.

Risks, discomforts and benefits of the study

This study has no risks or discomforts associated with it. However, there are benefits associated with it in that you will be able to gain some knowledge and understanding of HIV/AIDS. Your contributions will highly be appreciated.

Confidentiality

All the information you will provide will not be given out to any person who is not part of the research staff. Privacy and confidentiality are assured.

Consent form

By signing below, I confirm that I have understood the information regarding participation in this study and that it is voluntary. I freely and voluntarily choose to participate. I understand that my rights and privacy will be maintained.

I hereby give my consent to participate in the "study of the determinants of the low prevalence rate of HIV/AIDS".

Signature of participants

Date

Witness (Name and Signature)

Date

APPENDIX: B

THE UNIVERSITY OF ZAMBIA SCHOOL OF MEDICINE DEPARTMENT OF COMMUNITY MEDICINE

FOCUS GROUP DISCUSSION GUIDE FOR YOUNG ADULTS AGED 16 - 24 YEARS.

A STUDY TO IDENTIFY DETERMINANTS OF THE LOW PREVALENCE RATE OF HIV/AIDS IN MWINILUNGA AND SOLWEZI DISTRICTS IN NORTHWESTERN PROVINCE.

1. **Introduction**
 - a). Facilitator
 - b). Note Taker
 - c). Focus Group Members (young adults)
 - d). The subject and purpose of the discussion
2. **HIV/AIDS knowledge**
 - a). What is HIV/AIDS?
 - b). How is it transmitted?
 - c). How can you tell that somebody has HIV/AIDS?
 - d). How do you get HIV/AIDS information?
3. **Cultural practices and beliefs**
 - a). What cultural practices are common in this community?
 - b). What is the significance of the cultural/traditional practices that you have mentioned?
 - c). Have you ever heard of male circumcision? Is it a common practice in this community?
How is it done?
How has it improved the health of young men in this community?
Do you think it is a practice that should be continued in your community and why?
 - d). Are there any cultural practices/beliefs in this community that you think can help to prevent the transmission of HIV/AIDS? If yes, what are they?

How can they prevent the transmission of HIV/AIDS? Which of the mentioned practices is the best measure in preventing HIV/AIDS?

4. Attitude towards the prevention of HIV/AIDS

- a). Is it important for us to prevent HIV/AIDS?
- b). Whom do you think is responsible for preventing HIV/AIDS in this community?
- c). If an HIV/AIDS prevention campaign were to be started today, are you ready to join the campaign? Why?

5. Relationship between religion HIV/AIDS prevalence rate

Which religion do you belong? How is religion related to the prevention of HIV/AIDS? Is HIV/AIDS discussed openly in your religion?

6. Practices towards HIV/AIDS prevention

- a). Has this community done anything specifically to prevent the spread of HIV/AIDS? What has been done?
- b). Is there an AIDS Committee in this community? How active is the AIDS committee?
- c). What measures can help us to prevent the spread/transmission of HIV/AIDS in this community?

7. Summary

Summarize on what you have gained from the focus group discussion and thank the participants for the participation.

TIME LIMIT: 1 HOUR TO 1 HOUR 30 MINUTES

APPENDIX: C

THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

DEPARTMENT OF COMMUNITY MEDICINE

STRUCTURED QUESTIONNAIRE FOR INTERVIEW SCHEDULE

TITLE: A STUDY TO IDENTIFY THE DETERMINANTS OF THE LOW PREVALENCE OF HIV/AIDS IN MWINILUNGA AND SOLWEZI DISTRICTS IN NORTH WESTERN PROVINCE

QUESTIONNAIRE NO: _____

NAME OF THE SCHOOL: _____

DATE OF INTERVIEW: _____

INTERVIEWER'S NAME: _____

INSTRUCTIONS TO RESEARCH ASSISTANTS

1. Always introduce yourself to the respondent.
2. Explain the purpose of the study and ask for permission to do the interview.
3. Request the respondent for a written consent before you start.
4. If the respondent decline to take part, do not force him/her.
5. Do not write names of respondents on the questionnaires.
6. Tick \checkmark in the spaces provided according to the respondent's given answer.

NOTE: The information you give is highly confidential

SECTION A: DEMOGRAPHIC DATA

FOR OFFICIAL USE ONLY

1. Sex.....

1). Male

2). Female

2. What is your age last birthday?

1).

2).

3).

4).

3. What is your marital status?

1). Single

2). Married/living together

3). Divorced

4). Widowed

5). Separated

6). Other (Specify).....

4. What is your highest education level attained?

1).

2).

3).

4).

**FOR OFFICIAL USE
ONLY**

5. What is your family's monthly income?

- 1). Below K150, 000
- 2). K151, 000 – K300, 000
- 3). K301, 000 – K600, 000
- 4). K601, 000 and above

6. Residential area.....

- 1). Low density area
- 2). Medium density area
- 3). High density area
- 4). Rural setting

7. What tribe are you

- 1). Luvale
- 2). Lunda
- 3). Kaonde
- 4). Others (Specify).....

8. Who is your breadwinner?

- 1). Father
- 2). Mother
- 3). Auntie
- 4). Uncle
- 5). Others (Specify).....

**FOR OFFICIAL USE
ONLY**

9. What is his/her occupational status?

1). Professional

2). Self employed

3). Student

4). Others (Specify).....

10. What is your religion?

1). Christianity

2). Moslem

3). Hindu

4). Buddhism

5). Others (Specify).....

11. What religious denomination do you belong to?

1). Catholic

2). CMML

3). Pentecostal

4). Evangelical

5). SDA

6). Others (Specify).....

12. How often do you attend your religious denomination?

- 1). Every Sunday
- 2). Every Saturday
- 3). Do not attend
- 4). Others (Specify).....

13. How long have you been living in this community?

- 1). Months.....
- 2). Years.....
- 3). Always.....

**SECTION B: CULTURAL PRACTICES
AND BELIEFS**

14. What cultural practices are done in this community?

- 1). Male circumcision
- 2). Restraining of illicit sex
e.g. no sex outside
marriage or when you are
still young
- 3). Others (Specify).....

15. Is male circumcision common in this community?

- 1). Common
- 2). Very common
- 3). Not common
- 4). Do not know

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| |
| |
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| |

16. If common/very common, why?

- 1). It's a tradition
- 2). For hygienic purposes
- 3). To prevent STIs
- 4). Others (Specify).....

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| |

17. If male – Are you circumcised?

- 1). Yes
- 2). No

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| |
| |

18. Who performs the male circumcision?

- 1). Elderly men (Traditional circumcision)
- 2). Medical personnel (Medical circumcision)
- 3). Others (Specify).....

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| |
| |

19. Do you think your chances of getting AIDS are small, moderate, great, or do you think that you have no chance of getting it at all?

- 1). Small
- 2). Moderate
- 3). Great
- 4). No risk at all

20. Why do you think your chances of getting HIV/AIDS are low?

- 1). Abstains from sex
- 2). Uses a condom
- 3). Circumcised (male)
- 4). No transfusions/injections
- 5). Has only one sexual partner
- 6). Others (Specify).....

21. Sexual cleansing refers to the sexual ritual performed with the spouse of the deceased by members of the deceased family in order to pacify the spirits of the deceased. How common is sexual cleansing in this community?

- 1). Very common
- 2). Somewhat common
- 3). Not common at all

**FOR OFFICIAL USE
ONLY**

22. Are you for the idea of sexual cleansing?

1). No

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| |

2). Yes

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23. If No, why?

1). Somebody can get
HIV/AIDS

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2). Others (Specify).....

24. Do young people in this community go through initiation ceremonies?

1). Yes

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2). No

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3). Do not know

25. Is education about AIDS included in initiation ceremonies?

1). Yes

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2). No

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3). Do not know

**SECTION C: HIV/AIDS PREVENTION
ACTIVITIES AND ATTITUDES**

26. Has this community done anything specifically to prevent the spread of HIV/AIDS?

1). Yes

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2). No

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3). Do not know

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27. What has been done? What else?

- 1). Educational campaigns
- 2). Education in schools
- 3). Youth programmes
- 4). Condom distribution
- 5). Do not know
- 6). Others (Specify).....

28. Is there an AIDS committee in the community?

- 1). Yes
- 2). No
- 3). Do not know

29. How active is the AIDS committee?

- 1). Very active
- 2). Somewhat active
- 3). Not active at all

30. Is education about AIDS provided in the primary schools that serve the children of this community?

- 1). Yes
- 2). No
- 3). Do not know

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31. Is education about AIDS provided in the secondary schools that serve the young people of this community?

1). Yes

2). No

3). Do not know

32. Where do young people meet new sexual partners in this community?
Any other?

1). School yard

2). Private swellings

3). Bar

4). Shop

5). Others (Specify).....

33. Are there special efforts to prevent the spread of HIV/AIDS at these places?

1). Yes

2). No

3). Do not know

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34. Whose responsibility is it to prevent HIV/AIDS in this community?

1). My own responsibility

2). For other people

3). For married people

4). I do not know

5). Others (Specify).....

35. If an HIV/AIDS prevention campaign were started today, will you join the campaign?

1). Yes

2). No

36. Do you discuss issues related to HIV/AIDS in your home?

1). Yes

2). No

37. What is the best practice that you can recommend for preventing HIV/AIDS?

SECTION D: KNOWLEDGE OF HIV/AIDS

38. Have you ever heard of a disease called AIDS?

1). Yes

2). No

39. Is there a source of HIV/AIDS information in this community?

1). Yes

2). No

3). Do not know

40. If Yes, what is this source?

1). A local radio station

2). Youth centre

3). At school

4). Others (Specify).....

41. Is there anything a person can do to avoid getting HIV/AIDS?

1). Yes

2). No

3). Do not know

42. What can a person do?

- 1). Abstain from sex
- 2). Use condoms
- 3). Limit sex to one partner
- 4). Others (Specify).....

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43. Do you know someone personally who has the HIV/AIDS or someone who died of AIDS?

- 1). Yes
- 2). No

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44. Have you ever talked about ways to prevent getting the virus that causes AIDS?

- 1). Yes
- 2). No

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45. Should youths be taught about using a condom to avoid AIDS?

- 1). Yes
- 2). No
- 3). Do not know/It depends

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46. Is there any peer education in this school about HIV/AIDS?

1). Yes

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| |

2). No

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47. Is AIDS one of the main health problems in this community?

1). Yes

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2). No

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3). Do not know

48. Is there any peer education in this Community about HIV/AIDS?

1). Yes

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| |
| |

2). No

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APPENDIX: D (i)



THE UNIVERSITY OF ZAMBIA

RESEARCH ETHICS COMMITTEE

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

Ridgeway Campus
P.O. Box 50110
Lusaka, Zambia

Assurance No. FWA00000338
IRB00001131 of IORG0000774

22 August, 2005
Ref.: 005-06-05

Ms Ngambo Mundongo, BSc ZRN
Department of Community Medicine
University of Zambia
LUSAKA

Dear Ms Mundongo,

RE: **SUBMITTED RESEARCH PROPOSAL**

The following research proposal was presented to the Research Ethics Committee meeting held on 7 July, 2005 where changes were recommended. We would like to acknowledge receipt of the corrected version with clarifications. The proposal has now been approved. Congratulations!

Title of proposal: **"The determinants of the low prevalence of HIV/AIDS in North Western Province, Zambia"**

CONDITIONS:

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

Yours sincerely,

Prof. J. T. Karashani, MB, ChB, PhD
CHAIRMAN
RESEARCH ETHICS COMMITTEE

Date of approval: 22 August, 2005

Date of expiry: 21 August, 2006

APPENDIX: D (ii)



THE UNIVERSITY OF ZAMBIA RESEARCH ETHICS COMMITTEE

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Assurance No. FWA00000338
IRB00001131 of IORG0000774

Ridgeway Campus
P.O. Box 50110
Lusaka, Zambia

27 July, 2005
Our Ref: 005-06-05

Ms Ngambo Mundongo, BSc, ZRN
Department of Community Medicine
School of Medicine
University of Zambia
LUSAKA

Dear Ms Mundongo,

RE: SUBMITTED RESEARCH PROPOSAL

The following research proposal was presented to the Research Ethics Committee on 7 July, 2005, and the following changes were recommended prior to approval.

Title of proposal: **"The determinants of the low prevalence of HIV/AIDS in North Western Province, Zambia"**

The committee noted that this was an important topic but took note of the following corrections that need to be made:

Corrections:

- A number of statements need to be revisited e.g. "AIDS is futile"; and
- Suggest that the title reads 'Determinants of HIV/AIDS in Mwinilunga and Solwezi in North Western Province of Zambia' to give it more definition.

The research proposal was APPROVED subject to above corrections.

Please resubmit a corrected version of your proposal as recommended above with a letter highlighting the changes that you will have made.

Yours sincerely,

Mrs M. Mbewe
ACTING SECRETARY - RESEARCH ETHICS COMMITTEE

APPENDIX: E



THE UNIVERSITY OF ZAMBIA SCHOOL OF MEDICINE

Telephone: 252641
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Telex: UNZALU ZA 44370
Fax: +260-1-250753

Dean's Office
P.O. Box 50110
Lusaka, Zambia

The Provincial Education Officer,
P.O. Box 110097
North-Western Province,
Solwezi.

7th September, 2005

Dear Madam,

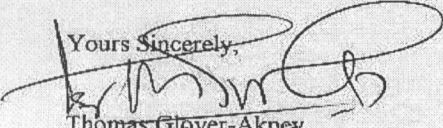
**Request for permission for Ms. Ngambo Mundongo, MPH student
to conduct a study in Solwezi and Mwinilunga Districts of
North-Western Province**

We are writing to kindly request that you grant permission to Ms. Ngambo Mudongo to conduct a study in the High Schools of Solwezi and Mwinilunga Districts as part of her Masters in Public Health (MPH) degree requirement.

Ms. Mundongo's study is titled, "**Determinants of low prevalence of HIV/ AIDS in Solwezi and Mwinilunga Districts of North-Western Province**". She plans to start data collection in the High Schools by 14th September, 2005 using data collection techniques of interviews and focus group discussions, she will be supported by two assistants in doing the study. Ms. Mundongo has informed us that she would complete the study in two weeks from this starting date.

We shall be grateful for any assistance you may give Ms. Mundogo to enable her successfully complete the study in the High Schools of the two Districts.

Yours Sincerely,



Thomas Glover-Akpey
MPH Co-ordinator)

copy: Ms. Ngambo Mundongo

APPENDIX: F

All correspondence should be addressed to
the Provincial Education Officer
and not to Individuals
Telephone: 821037/ 821038/ 821672/ 821386
Telegrams: **PROVED SOLWEZI**



In reply please quote

No.

REPUBLIC OF ZAMBIA MINISTRY OF EDUCATION

**OFFICE OF THE PROVINCIAL EDUCATION OFFICER
P.O. Box 110098
SOLWEZI**

22nd Septembr, 2005.

The MPH Coordinator,
University of Zambia
P.O Box 50110
LUSAKA

Dear Sir,

**RE: PERMISSION FOR MS. NGAMBO: MPH STUDENT TO CONDUCT A
RESEARCH IN SOLWEZI AND MWINILUNGA DISTRICTS.**

I refer you to the letter you wrote to the Provincial Education Officer, in which you requested for permission for Ms. Ngambo Mundongo to conduct a study in Solwezi and Mwinilunga Districts of North Western Province.

You indicated that the study title is 'Determinants of low prevalence of HIV/AIDS'. In view of this, if it is within your means, the office would be interested to have a copy of the findings. I have no objection to your request, however the District Education Board Secretary for Solwezi and Mwinilunga should be informed upon commencement of the activity.

F.C. Hampondela
SENIOR EDUCATION STANDARDS OFFICER (MATHS)
For/ PROVINCIAL EDUCATION OFFICER
NORTH WESTERN PROVINCE.

C.C. Ms. Ngambo Mundongo

C.C. District Education Board Secretary
SOLWEZI.

APPENDIX: G



**THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE**

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Dean's Office
P.O. Box 50110
Lusaka, Zambia

The Provincial Education Officer,
P.O. Box 110097
North-Western Province,
Solwezi.

7th September, 2005

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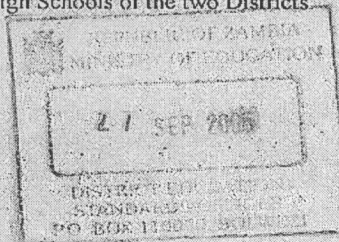
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We shall be grateful for any assistance you may give Ms. Mundongo to enable her successfully complete the study in the High Schools of the two Districts.

Yours Sincerely,

Thomas Glover-Akpey
MPH Co-ordinator)

copy: Ms. Ngambo Mundongo



*Permitted:
#the - DESO - Solwezi District*

APPENDIX: H



THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE

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Dean's Office
P.O. Box 50110
Lusaka, Zambia

The Provincial Education Officer,
P.O. Box 110097
North-Western Province,
Solwezi.

7th September, 2005

Dear Madam,

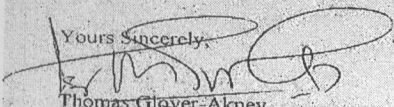
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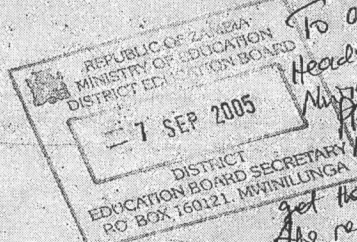
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Yours Sincerely,


Thomas Glover-Akpey
MPH Co-ordinator)

copy: Ms. Ngambo Mundongo



*To all the
Heads of
High Schools
Mwinilunga
Please assist
Ms Ngambo Mundongo
get the information that
she requires
Dum Tsh
ASBS*