A RESEARCH REPORT

ON

KNOWLEDGE ON HIV & AIDS AND SEXUAL BEHAVIORS AMONG THE NEPAL POLICE OF KATHMANDU METROPOLITAN, NEPAL.

BY

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DECEMBER 16, 2009

DECLARATION BY THE CANDIDATE

I hereby declare that the work presented in this research report entitled "**KNOWLEDGE ON HIV & AIDS AND SEXUAL BEHAVIORS AMONG THE NEPAL POLICE OF KATHMANDU METROPOLITAN, NEPAL."** has been done myself, and has not been submitted elsewhere for the award of any degree. All sources of information have been specifically acknowledged by reference to the authors of institutions.

Signature……..

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RECOMMENDATION

This is to be recommended that the research report entitled **"KNOWLEDGE ON HIV & AIDS AND SEXUAL BEHAVIORS AMONG THE NEPAL POLICE OF KATHMANDU METROPOLITAN, NEPAL."** has been carried out by **Chetan Nidhi Wagle** for the partial fulfillment of **Bachelor Degree in Public Health.** This original work was conducted under my supervision. To the best of my knowledge, this Research Report has not been submitted for any other degrees.

I would like to forward keeping this research report for final evaluation.

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December 16, 2009

APPROVAL LETTER

On the recommendation of the research advisor, Dillee Prasad Paudel, this research report submitted by **Chetan Nidhi Wagle** entitled **"Knowledge on HIV and AIDS and sexual behaviors of Nepal Police of Kathmandu Metropolitan, Nepal"** is approved for examination and submitted to the Purwanchal University in partial fulfillment of the requirements for Bachelor's Degree of Public Health.

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CERTIFICATE OF EVALUATION

This research report entitled **"Knowledge on HIV and AIDS and sexual behaviors of Nepal Police of Kathmandu Metropolitan, Nepal"** submitted by Chetan Nidhi Wagle has been evaluated as a partial fulfillment of requirements for the Bachelor's Degree of Public Health.

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Date: Dec-16, 2009 Chetan Nidhi Wagle.

ABSTRACT

Introduction

Nepal Police are in general more vulnerable to HIV/AIDS than their civilian counterparts. Professional characteristics , bereft of the comforts of home, coupled with rigorous service requirements and sexually active age are some circumstances, they may visit sex workers frequently. Proper knowledge about the HIV and AIDS and appropriate implication in the sexual behaviors is the core essence. The study is carried out to probe out the knowledge regarding HIV and AIDS among the Nepal Police and their sexual behaviors.

Objectives

To assess the knowledge on HIV & AIDS and sexual behaviors among the Nepal Police of Kathmandu.

Methods

Descriptive, cross-sectional type of study was carried out among the 251 policemen from Armed Police Battalion no 1 and Central Police Special Task Force, Naxal, Kathmandu. Sample size was selected using prevalence formula and the respondents were selected purposively from their working area. Self Administered structured closed ended questionnaire has been selected as the tool for the data collection and data was analyzed via windows SPSS 12.0

Results

Among the 251 policemen 34.7% belonged to the age group of 20-25 years with mean age of 27.98yrs, 78.8 % married. 100% of them could read and write, 50% were literate in secondary education. 56.6 % were Police Constable, 15.5 % Head Constable, 26.7 % A.S.I. and only 1.2% S.I with mean work experience of 8.47 years. Above average i.e. 73% of them had accurate knowledge about HIV and AIDS. Radio /TV was the major source (59 %). Nine out of 10 were aware about the MOT of the HIV is unsafe sex 93.6 % agreed on the use of the condom and 86.5 % about not having the multiple sex partners

as the measure of prevention of HIV transmission. More than half (64 %) hadn't heard term "window period". Two-fifth (39%) of them received training on HIV and AIDS. 60.6 % had premarital sex, 52.2 % have multiple sex partners. Prevalence of policemen having sex with CSWs was 77.6% which is seen maximum in the age group of 15-20 years accounting 90 %. 15.9% use to have sex with oral and anal routes too. 13.9 percent of respondents who have the knowledge about the MOT of HIV (unsafe sex) were not applying in the behavior. Almost all (99.2 %) had felt the essence and the need of awareness raising program about HIV and AIDS in Nepal police.

Conclusion

With the knowledge score of 7.3 out of 10, the policemen are found to be aware about the MOT, Sign and symptoms and preventive measures about HIV and AIDS. However the simple misconceptions are prevalent as well. At the mean time there is gap in between the knowledge and behavior of use of condom to prevent the HIV transmission. The high prevalence of extramarital, premarital and sexual relation with CSWs can lead to several predictable problems among security personnel. Comprehensive awareness raising programs, training, health education, condom distribution, operational research in relevant field must be launched with in the premises of the Nepal Police.

KeyWords: *Nepal Police, Knowledge, Behavior, CSWs, Condom*

ACRONYMS AND ABBREVIATIONS

ABC	Abstinence Be faithful and use Condom
AIDS	Acquired Immune Deficiency Syndrome
ART	Anti Retroviral Therapy
ASI	Assistant Sub Inspector
BCC	Behavior Change Communication
CSW	Commercial Sex Worker
DSP	Deputy Superintendent of Police
FSW	Female Sex Worker
GoN	Government of Nepal
HC	Head Constable
HIV	Human Immunodeficiency Virus
ICTC	Integrated Counseling Treatment center
IDU	Injecting Drug User
IEC	Information Education and Communication
MSM	Man having Sex with Man
MSW	Male Sex Worker
MTCT	Mother to Child Transmission
NACO	National AIDS Control Organization
NACP	National AIDS Control Programme
NAMS	National Academy for Medical Sciences
NASP	National AIDS STD Programme
NCASC	National Center for AIDS and STD control
NGO	Non Governmental Organization
NTP	National TB Programme
PC	Police Constable
PLWH	People Living with HIV
PMTCT	Prevention of Mother to Child transmission
PPTCT	Prevention of Parent to Child transmission

PU	Purbanchal University
RTA	Royal Thai Army
SAARC	South Asian Association for Regional Cooperation
SI	Sub Inspector
SP	Superintendent of Police
S/S	Sign and Symptoms
STAC	SAARC TB and HIV/AIDS Centre
STD	Sexually Transmitted Diseases
STI	Sexually Transmitted Infection
TB	Tuberculosis
TG	Trans Gender
UN	United Nations
UNAIDS	United Nation's Programme for AIDS
USA	United States of America
VCT	Voluntary counseling and Testing
WHO	World Health Organization

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CHAPTER – I

1. INTRODUCTION

1.1 Background of the Study

HIV & AIDS is the threat that is challenged to the global community and since the date is indicated as the major cause to peak-up the morbidity and mortality of the people resulting in the severe loss of productivity in and of the human life. The global HIV epidemic has emerged as a formidable challenge to public health, development and human rights. In most of the countries affected by HIV, it has eroded improvements in life expectancy and mortality. In just 25 years, HIV has spread relentlessly from a few widely scattered "hot spots" to virtually every country in the world. Nearly twenty-five years of experience with HIV prevention and ten years of experience with effective antiretroviral therapy have produced mountains of evidence about how to prevent and treat HIV. The estimated number of persons living with HIV worldwide in 2007 was 33.2 million [30.6–36.1 million], a reduction of 16% compared with the estimate published in 2006, 39.5 million [34.7–47.1 million])[1]. These differences between estimates published in 2006 and those published in 2007 result largely from refinements in methodology, rather than trends in the pandemic itself. The highest burden was in Sub Saharan Africa followed by South and South East Asia. More than 95% of these were in low and middle income countries. Epidemic update 2007 states that every day, over 6800 persons become infected with HIV and over 5700 persons die from AIDS, mostly because of inadequate access to HIV prevention and treatment services. The HIV pandemic remains the most serious of infectious disease challenges to public health. The global prevalence of HIV infection (percentage of persons infected with HIV) is remaining at the same level, although the global number of persons living with HIV is increasing because of ongoing accumulation of new infections with longer survival times, measured over a continuously growing general population; The estimated number of deaths due to AIDS in 2007 was 2.1 million[2]

According to latest estimates the total number of Adult people living with HIV is 30.8 million, similarly Adult AIDS deaths in 2007 is estimated up to 1.7 million globally[2]. In Asia, national HIV prevalence is highest in South-East Asia, with wide variation in epidemic trends between different countries.

The first case of HIV was seen in Nepal in 1988[1], and till the date HIV/AIDS is considered to be the most serious public health problem. As of Ashad 2065, Cumulative no. of reported cases of HIV & AIDS 12004 and that of AIDS is 1945 and 495 deaths have been reported from AIDS[3]. The data is only the reported one however, it is estimated that more than 70000 HIV positives are residing in Nepal. Most at risk groups are said to be clients of sex workers, sex workers, IDU users, police and army.

Nepal Police has the glittering image among the Asian Police and even on the UN peace service in different part of the world. With a theme of "Truth, service and security" or in nepali "*satya, sewa, surakchyaa*" there are more than 50,000 personnel of Nepal Police serving for the nation[4]. However there is the sad part of the story that they are supposed to be much at risk population of transmission of HIV and AIDS.

1.2 Statement of the Problem

Uniformed service members are in general more vulnerable to HIV/AIDS than their civilian counterparts. This is due to their professional characteristics and age group (18-45 years). Often they are posted or deployed for extended periods away from home. Bereft of the comforts of home, coupled with rigorous service requirements, uniform service members live and work in tense situations. In such circumstances, they may visit sex workers frequently. Research on sex work in Nepal reveals that 38.3 percent of the clients of FSWs come from the police and army. Family Health International/Nepal (FHI/Nepal) programs along the East-West Highway have also found a very high risk of HIV among uniformed services, based on STI and treatment referrals. The other equally significant dimension of this issue is protecting the rights of the HIV/ AIDS vulnerable groups (FSWs, IDUs, MSM, and PLWHA). The promotion and protection of human rights constitutes an essential component in preventing transmission of HIV, through

reducing vulnerability to infection and the impact of HIV/AIDS. In many countries including Nepal, the HIV epidemic has resulted in increased blame and stigmatization of vulnerable groups. For most vulnerable groups in Nepal, the negative and unsympathetic behavior of the police is an immediate concern. Intimidating police behavior poses barriers to accessing services for HIV/AIDS prevention and treatment. All these issues highlight the urgent need for an HIV/AIDS prevention, treatment, care, and support programs in the Nepal. Simultaneously, there is a need for creating an enabling environment in the Nepal Police to support prevention activities among vulnerable groups.

It is, therefore, very difficult to assess the extent of HIV/AIDS prevalence rate among the security personnel, however, a plausible estimate could be in line with the national average, which is 0.5 percent. It could be higher, as there are factors such as dislocation from family and community, which can make security personnel more vulnerable than the civilian population. The Nepal Police is therefore similar to other uniformed service personnel in respect to their increased HIV/AIDS vulnerability[4]. There are very few literatures found in this topic in Nepal Police.

An unpublished report prepared By Nepal Police hospital, Maharjgunj states that the total number of the positive cases of HIV among the VCT clients of Nepal Police in the year 2006, 2007, and 2008 is found to be 2, 5, and 3 respectively[5]. It can be estimated that there are more hidden cases.

The out-standing response on HIV and AIDS by Nepal Police is the preparation of HIV/AIDS strategy and workplan 2005. Based on the workplan, Nepal police has been conducting the several awareness, counseling preventive care, and treatment and care services related to HIV and AIDS establishing a separate section in the Nepal Police hospital, Maharjgunj. After the establishment of the VCT centre at the Nepal Police hospital, Maharjgunj in 8th September 2007, 3829 personnel of Nepal police has received the service of VCT[5]. Mobile camp regarding VCT is also another major function of the centre. There are very few study done in Nepal Police, research in this area should be

prioritized as the justice sector plays a crucial role in promoting a more effective approach to the rule of law and providing important access to justice for a population which in turn impacts directly on efforts to create a secure and stable environment necessary for sustainable development.

1.3 Rationale of the Study.

1. HIV and AIDS is a major public health problem of our country and the strengthening of the preventive approaches in the uniform service sectors could be a boon for the national AIDS control program.
2. Security personnel are believed to be sexually active, and they have high degree of mobility as well and thus resulting directly and indirectly in increased frequency of sexuality which might lead toward the increased vulnerability of transmission of HIV.
3. The study helps to find out the knowledge and practice about HIV and AIDS which will ultimately help the policy makers of the nation to strengthen the IEC activities in the Nepal Police as well as the other uniform services.
4. Based on the findings of the research several programs could be launched from the national level with the collaboration of developmental and supporting partners along with the spirit of 3Ps(public, private, partnership).

1.4 Objectives of the Study

The study has the following general and specific objectives.

1.4.1 General Objectives

To assess the knowledge on HIV & AIDS and sexual behaviors among the Nepal Police of Kathmandu.

1.4.2 Specific Objectives

- To assess the knowledge about MOT, S/S, Preventive measures, Window Period, ARV therapy about HIV & AIDS.
- To explore the need of health education on HIV & AIDS.

- To identify the sexual behaviors such as extramarital, premarital and homosexuality behaviors.
- To identify the practice of use of condoms during sex with SWs or other male partners.

1.5 Research Question of the Study

- What is the knowledge about the HIV and AIDS among Nepal Police?
- What is the need of the IEC programs about HIV and AIDS in Nepal Police?
- What is the sexual behavioral pattern?

1.6 Operational Definition of the Variables and Items.

Nepal Police: (*Nepal prahari)* Working under Home Ministry can also be frequently denoted as "Security personnel" or "Uniform service" Personnel.

Age: It refers the completed years of age of respondents.

Post or Level: it refers to the present post of respondents. Eg, SI, ASI, PC. HC.

Educational Qualification: For the study purpose the classification of educational qualification will be as follow

- Primary level (1-5)
- Lower secondary level (6-8)
- Secondary level (9-10)
- Higher secondary level (11, 12)
- Higher studies (upper level than above)

Comprehensive Knowledge: It would be described by Forced Distribution Method of appraisal where ranking are made as excellent, above average, average, below average and poor by marking of 90-100%, 70-90%, 30-70%, 0-10% respectively.

HIV: HIV stands for "Human Immuno deficiency Virus" which infects cells of the human immune system and impairs their function

AIDS: AIDS stands for 'Acquired Immuno Deficiency Syndrome' and describes the collection of symptoms and infections associated with acquired deficiency of the immune system. Infection with HIV has been established as the underlying cause of AIDS and it applies to the most advanced stage of HIV infection.

Correct Mode of Transmission of HIV

- Unprotected sexual intercourse (anal and vaginal) and oral sex;
- Contaminated blood and blood products, tissues and organs;
- Mother to child transmission (MTCT).

HIV is not Transmitted

- Shaking hands, hugging or kissing;
- Sharing food, eating or drinking utensils;
- Getting bites of mosquitoes or other insects.
- Caring of AIDS patients also does not carry risk of HIV transmission

Correct Major Signs and Symptoms of HIV and AIDS

- Weight loss (> 10% of body weight)
- Fever for > 1 month, intermittent or continuous
- Chronic diarrhea for longer than one month, intermittent or continuous

Correct Prevention Methods of HIV and AIDS

- By using only HIV screened blood or blood products when required
- By avoiding injectable drugs and needle sharing
- By using a condom (consistently and correctly) for safer sex
- By participating in Prevention of Mother to Child Transmission

Confirmation of Person Infected With HIV and AIDS: It is confirmed by the lab test of the suspected blood sample.

Sexually Transmitted Infections: (STI) - are gonorrhea, syphilis, scabies, HIV and AIDS. It can also be termed as STD (sexually transmitted diseases). However, TB, Malaria are not STIs.

Training: Training regarding HIV and AIDS.

Health Education Class: IEC activities from radio, TV, posters are ignored. Only face to face effective class or instructive class are concerned.

Window Period: Period up to 3 month until which the sign and symptoms doesn't appears nor the test of HIV in lab is found positive. Validity of test in window period is zero.

Treatment of HIV/AIDS – ARV: Antiretroviral Therapy (ART) on HIV and AIDS

Uniform service: Security personals of government of Nepal

Unsafe Sexual Practice: No use of condom during sexual contact

Safe Sexual Practice: Use of condom correctly during sexual contact

Homosexuality: Sexual relation between same sexes. E.g. MSMs- male having sex with male.

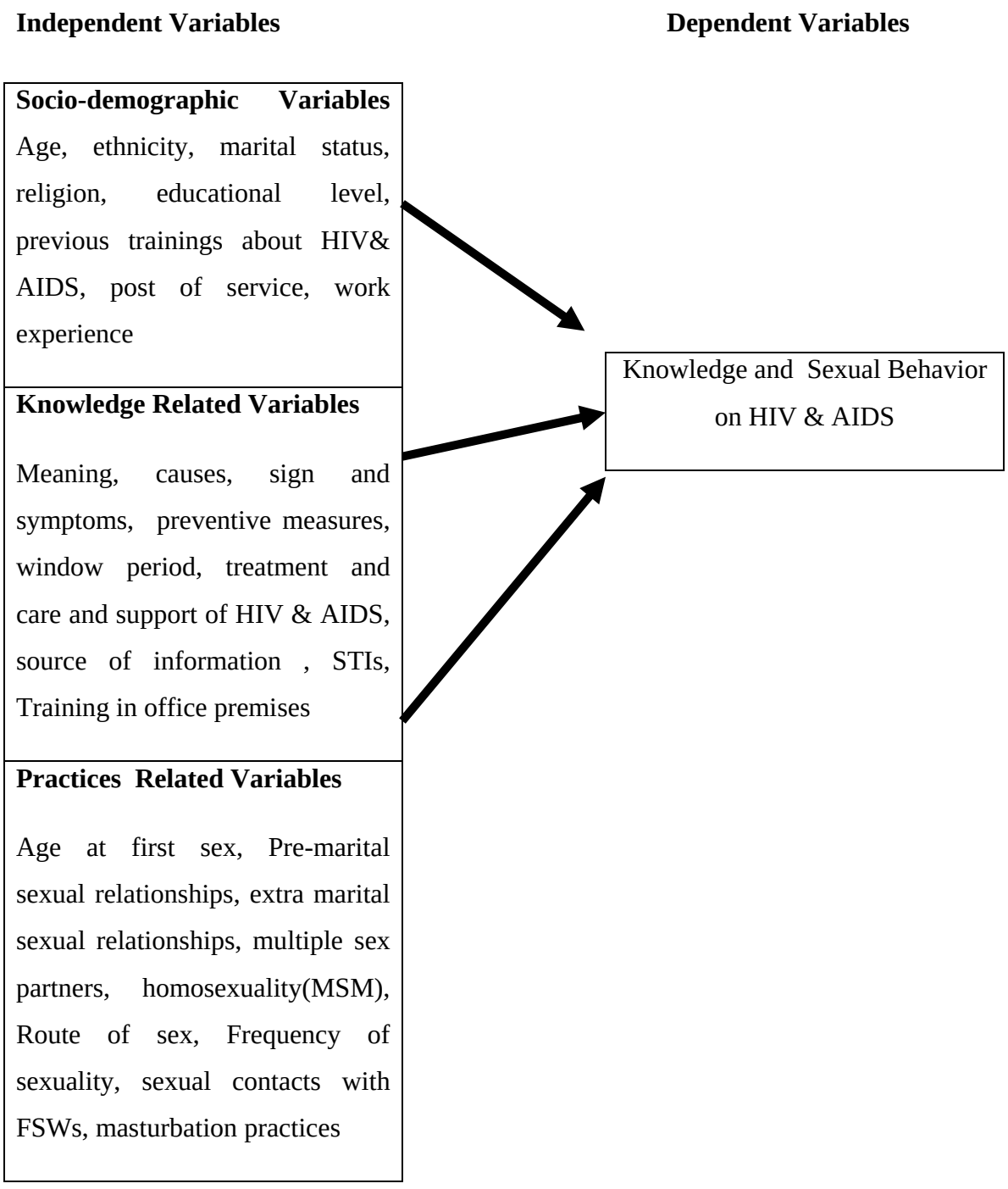
Pre-marital sex: Sexual relation before marriage.

Extra-marital sex: Sexual relation with other persons than wife.

Multiple sex partners: sex partners > 2 in number.

Infected: Means the subject infected with HIV.

1.7 Conceptual Framework of the Study



CHAPTER- II

LITERATURE REVIEW

Very few studies related to the knowledge on HIV and AIDS and sexual behaviors have been done earlier. Some of the literatures that have been taken as the reference for the study are extracted below.

In 2006, Family Health International and New Era conducted Behavioral Surveillance Survey among 1103 Nepal Police personnel[5]. The survey showed that almost 61% (672) policemen had sex with the FSWs. The study shows that 19.4% of total anal sex accounts for the MSM practices. In other words 0.6% of the 1103 policemen are MSMs.

Similarly the several studies have revealed that uniformed service personnel are the regular clients of FSWs. (Dhiraj Sharma and et. al comparative study of awareness regarding HIV and AIDS among the transportation workers and FSWs of Sunsari and Morang district , FEB, 2008 shows that 25.4% of the total costumers for sex of FSWs is accounted by Nepal police and army[6].

Although HIV/AIDS prevalence in the Nepal Police Service is not known, it is reasonable to estimate that it is comparable with the national average of 0.5 percent. The prevalence may be even greater due to the nature of police work, which places them in vulnerable situations. Even by using the figure of 0.5 percent prevalence, the total number of HIV-positive personnel in the Nepal Police could be as high as 230. If only 60 percent of them were to be married, about 138 of their spouses or partners are also at very high risk[5]. Furthermore, if those spouses are already infected and pregnant, their children may be born with HIV. This relatively small-scale problem, if not addressed effectively, could ultimately bring serious consequences to the Nepal Police Service. Giving this reality serious consideration, the Nepal Police is in the process of formulating a comprehensive HIV/AIDS strategy and work-plan. The development of this curriculum is an additional effort in this regard. An effective HIV/AIDS response requires adequately

addressing the social and structural epidemics of poverty, conflict, war, gender inequality, stigma and discrimination, and human rights violations, which are fertile grounds for the spread of HIV/AIDS. These issues highlight the significant need for an educational program for the Nepal Police. This curriculum seeks to contribute to this purpose.

In January 2007, Eric G. Bing and et al conducted a research involving a stratified random sample of 1,710 military personnel in four regions of Angola. Over 90% were sexually active and 60% had two or more sexual partners within the past year. Condom use varied depending on partner type, from a low of 10% to a high of 54%[7]. Factors independently predicting the number of sexual partners included younger age, younger age of sexual debut, being away from home, being in the eastern part of the country, higher military rank, higher education, alcohol before sex, and problem alcohol use. Independent predictors of sexually transmitted infection symptoms included age of sexual debut, lower education, higher rank, and having had sex with a casual partner or a commercial sex worker in the previous 12 months. These findings indicate high rates of HIV risk-taking behaviors among military personnel and the need for aggressive prevention campaigns to reduce HIV risk among military personnel and the populations they serve.

In 1993, the Preventive Medicine Division of the RTA Medical Department conducted a Survey on the knowledge, attitudes and preventive practices among RTA personnel; It was found that out of 1,002 RTA (Royal Thai Army) personnel, over 70% had been informed about HIV/AIDS from the RTA medical officers. More than 75% had accurate knowledge about HIV/AIDS and more than 55% consistently used condoms in extra-marital sexual relations. In 1991, the Preventive Medicine Division of the RTA Medical Department began surveillance among a sample group of 400 in Bangkok. The surveillance was subsequently expanded nationwide in 1992. In collaboration with the Epidemiology Division of the Ministry of Public Health since 1995, the sample size has become 5,000 per year. It was found that the rate of condom use has gradually increased

from 34% in 1992 to more than 80% in 2001. In Bangkok, the percentage of consistent condom use among RTA conscripts when having sex with sex workers increased significantly from 26% in 1991 to more than 80% in 2001. This percentage continues to increase[8].

Similarly, UNAIDS piloted a KAP study of Uniformed Peacekeepers in Liberia which assessed the range of attitudes and sexual practices of peacekeepers (including the police) during deployment in order to evaluate the impact of mission awareness strategies and to assist in the design of appropriate and targeted interventions. Conclusions from the study noted the wide-ranging differences in pre-deployment training. Only 51% of respondents were considered to have a comprehensive knowledge of HIV/AIDS and its transmission and prevention. Misconceptions about how to prevent the spread were noted and inconsistent use of condoms was identified as a grave problem. In terms of their own personal risk of contracting the HIV virus, 51% of respondents considered themselves to be at no risk, 37% considered themselves to be at low risk, over 10% considered themselves to be at high risk and around 2% did not know[9]. The levels of self-perceived risk varied within and among peacekeeping contingents, military observers and police officers.

"Knowledge, Attitude and Practice (KAP) surveys are an important tool for analyzing how a police force views HIV/AIDS and how it deals with the risks of contracting the disease. UNAIDS has conducted a number of KAP surveys however few have been specifically aimed at the police. Where surveys have been carried out internally by police forces they are often subject to the same confidentiality or sensitivity issues as noted above. It is therefore difficult to take away any generalizations about the results of KAP surveys, each being case specific and each survey posing slightly different questions[10]"

Another case study by Pharoah in October 2004 on the Crime and Justice Statistical Division, Malawi Police Service (MPS) revealed that the National Statistics Office in Malawi had undertaken a survey of attitudes in 2004 to HIV/AIDS within the police.

This survey is unpublished therefore only limited information is available about its findings. Pharoah reports that the survey found that over half of the respondents felt that characteristics of their job made them susceptible to HIV/AIDS; 61% reported knowing someone in the service who had died of AIDS; and virtually all felt that HIV/AIDS was negatively affecting the performance of the police service[11].

Another study published in journal of security sector management states that the data on the prevalence of HIV/AIDS within the police is argued to be patchy and, to a certain extent, contradictory. For example, a 2000 survey of the Ethiopian police reported an infection rate of 7%, whereas in 2004 a survey of the wives of police personnel revealed an infection rate of almost 30%[12].

HIV prevalence figures are unavailable in the public domain for Nigeria's 150,000-strong armed forces, since force-wide HIV testing has not been conducted. Nigeria is Africa's largest contributor of troops—including military observers and civilian police—to UN peacekeeping missions. Preliminary results from an ongoing study funded by the U.S. Naval Health Research Center found a 15% HIV sero-prevalence rate among soldiers on active duty. One study of veterans of the country's peacekeeping efforts in Sierra Leone and Liberia during the 1990s suggests that 11% were infected, compared with a 5% infection rate in the general adult population. An important knowledge, attitudes, and practices (KAP) survey of the Nigerian Armed Forces conducted in 2001 provides an opportunity to better understand the dynamics and factors underlying the increases their chances of acquiring HIV, as they are exposed not only to socially disrupted settings, but also to the possibility of infection through wounds and contaminated blood. Adefolalu has found that HIV prevalence in the Nigerian military increased with years of duty as peacekeepers. No studies, however, have compared the proportion of HIV cases in the military that are due to sexual transmission with the proportion attributed to exposure to contaminated blood or other risk factors[13].

Nigerian military personnel find themselves in professional and personal situations that increase their likelihood of engaging in behavior that places them at high risk for

contracting STIs, including HIV. In view of the fact that military personnel live with and interact freely with the civilian population they could serve as a potential core transmission group to the larger population.

In this way the literature is reviewed thoroughly.

CHAPTER- III

METHODOLOGY

3.1 Study Design:

Descriptive, cross-sectional study was carried out to explore the knowledge and behavior of the Nepal Police about HIV and AIDS.

3.2 Study Population:

All the security personnel of Nepal Police in the Kathmandu metropolitan were taken as the study population.

3.3 Study Area:

The study area was taken inside the metropolitan area of Kathmandu and as the study site Armed Police Battalian no 1, Naxal and Central Police Special Task Force, Naxal was taken.

3.4 Sample Size:

In 2006, Family Health International and New Era conducted Behavioral Surveillance Survey among 1103 Nepal Police personnel. The survey showed that almost 61% (672) policemen had sex with the FSWs. The following formulae have been applied for the sample size estimation.

On the basis of 61% prevalence, we can calculate sample size as follows.

$$n = \frac{Z^2 p q N \ldots\ldots\ldots}{d^2(N-1) + Z^2 p q}$$

Where,

n= required sample size.

p= population proportion (prevalence of policemen having sex with FSWs)

q= (1-p)

d= acceptable standard error (0.05)

N= total known population of the study area. (N=800 at the Armed Police Battalian no 1, Naxal and Central Police Special Task Force, Naxal)

Z= standard variate at the confidence interval level 95% (Z=1.96)

$$= \frac{(1.96)^2 (0.61) (1-0.61) 800\ldots\ldots\ldots\ldots\ldots}{(0.05)^2 (800-1) + (1.96)^2 (0.61) (1-0.61)}$$

$$= \frac{731.113}{2.91}$$

= 251 policemen were taken.

3.5 Sampling Technique:

Sampling technique for the study purpose was Non- Probability, Purposive of type.

3.6 Data Sources:

For the Primary data Policemen was taken as the source.

3.7 Tools for Data Collection:

Self Administered structured closed ended questionnaire was applied as tool for data collection.

3.8 Method of Data Collection:

The method applied for the data collection was structured interview.

3.9 Data Management Analysis and Interpretation:

After collection of the data from the study site the data was checked, rechecked as well as cross checked. Data was analyzed via windows SPSS 12. Data is presented in the tables and figures. Ranking of knowledge related variables will be done by using forced Distribution Method of Performance Appraisal.

3.10 Validity and Reliability: For the ensurement of the validity and the reliability of the study the following measures are undertaken.

- Discussion over questionnaire before data collection and everyday discussion on the procedure was followed during the data collection.
- Data analysis was done by SPSS12.0 windows version.
- Self checking and cross checking (consistency checking and completeness checking) was carried out
- Supervision and guidance from the faculties.

3.11 Inclusion and Exclusion criteria.

3.11.1 Inclusion criteria:

- Only male Policemen
- Those who gave oral consent.
- The Policemen up to the ASI level in Nepal Police
- Only those policemen present in the office premises on the date of data collection were included.

3.11.2 Exclusion Criteria:

- Those who were not willing to give answer.
- Those who were ill and were unable to answer.

3.12 Expected Outcomes

- The study and its finding could be useful for both the policy makers of the government (MOHP/DOHS) as well as for the Nepal Police Headquarter for combating the public health burden of HIV and AIDS among uniformed services jointly.

3.13 Ethical Consideration:

- Permission was taken from respective offices and the senior staffs of the study area
- Purpose and objectives of the study was explained and Oral consent was taken from each respondent
- Assurance of confidentiality of the information
- Freedom was given to the respondent to skip any question during interview process
- Dignity of the Policemen was highly considered
- Low profile was maintained so as not to let them put high expectations

3.14 Limitation of the Study:

- Due to limitation of time and due to busy schedule of officer level policemen, officers and higher level officers couldn't be taken as respondents.
- Having a concept of general criteria of entering Nepal Police is class 8 pass (previously class 5) the structured questionnaire is prepared. However those who can't read weren't taken.

3.15 Study Period: Study period was from Baishak to Ashar of 2066 BS.

CHAPTER- IV

GENERAL FINDINGS

This study is focused on the knowledge about the HIV and AIDS as well as on the sexual behavior of the Nepal Police. The result of the study will be presented in this chapter which will be categorized in the following different sub headings; socio-demographic findings, knowledge related findings and behavior related findings.

4.1 Socio-Demographic Findings

The findings related to the age, marital status, age at marriage, religion, educational qualification, caste, post, work experience of respondents are stated below.

4.1.1 Respondents by Age

Table 1 : Respondents by age (n=251)

Age group	Frequency	Percentage
15-19	20	8.0
20-24	87	34.7
25-29	68	27.1
30-34	38	15.1
35-39	32	12.7
40-44	6	2.4
Total	**251**	**100.0**

It was found that only 2.4 percent of the respondents were in the age group 40-44, maximum percentage i.e. 34.7 percent of the respondents belong to the age group of 20-24 years. The age of respondent is scattered from minimum of 18 years to maximum of 43 years with the mean age of 27.98 years with the standard deviation of 6.13 years.

4.1.2 Respondents by Marital Status and Age at Marriage

It was found that out of 251 of respondents, 78.8 percent were married and 20.3 percent remained unmarried as shown in the table below. The mean age at marriage of the respondents was found to be 21.45 years.

Table 2 : Respondents by marital status and age at marriage (n=251)

Marital status	Frequency	percentage
Unmarried	51	20.3
Married	197	78.5
Divorced	2	0.8
Widower	1	0.4
Total	**251**	**100.0**

4.1.3 Respondents by Religion

The study showed 87 percent of respondents were Hindu and about 10 percent were Buddhist and remaining were Christian, Muslim and Others respectively as shown below.

Table 3: Respondents by religion (n=251)

Religion	Frequency	Percent
Hindu	219	87.3
Buddhist	25	10.0
Christian	2	0.8
Muslim	2	0.8
others	3	1.2
Total	**251**	**100.0**

4.1.4 Respondents by Caste

Table number 4 deals with the ethnic origin of the respondents which showed 23.9 percent of Chhetri occupying maximum number. Similarly 23.9 percent of Dalits, 15.9 percent of Brahmins, 7.6 percent of Newar, 5.6 percent of Mongolians as shown below.

Table 4 :Respondents by caste (n=251)

Caste	Frequency	percentage
Brahmin	40	15.9
Chhetri	86	34.3
Gurung, Magar, Rai, Limbu = Mongolians	14	5.6
Newar	19	7.6
Dalit	60	23.9
Others	32	12.7
Total	**251**	**100.0**

4.1.5 Respondents by Educational Qualification

Table 5: Respondents by educational qualification (n=251)

Educational qualification	Frequency	Percent
Primary	20	8.0
Lower-secondary	71	28.3
Secondary	126	50.2
Intermediate	23	9.2
Bachelors degree & above	11	4.4
Total	**251**	**100.0**

As shown in the table above we can see that in this study cent percent of the respondents were literate out of which 8 percent were literate in primary education , 28.3 percent in lower secondary, 50 percent in secondary, 9.2 percent in intermediate and remaining 4.4 percent in the graduate and post-graduate level.

4.1.6 Respondents by Work Experience

It was found that 39 percent of the respondents had the work experience up to 5 years and about more than a quarter (30percent) had experience of the 6-10 years. The mean years of the work experience of the respondents was found to be 8.47 years.

Table 6: Respondents by work experience (n=251)

Work experience in years	Frequency	Percent
Up to 5 years	98	39.0
6-10 years	75	29.9
11-15 years	43	17.1
16-20 years	31	12.4
21 and above	4	1.6
Total	**251**	**100.0**

4.1.7 Respondents by Post

The study revealed, more than half (56.6 percent) of the respondents were Police constable, 15.5 percent Head Constable, 26.7 percent A.S.I. and only 1.2 percent S.I. as shown below in table no.7.

Table 7: Respondents by post (n=251)

Post	Frequency	Percent
P.C	142	56.6
H.C	39	15.5
A.S.I	67	26.7
SI	3	1.2
Total	251	100.0

4.1.8 Respondents by Educational Qualification and Post

It was found that in the group of 142 Police Constables; about 63 i.e.44 percent had acquired secondary education, and about 41 percent the lower-secondary level. Similarly out of 39 Head Constables about 60 percent were said to be literate in secondary levels. Likewise out of 67 A.S.I.s about 60 percent were literate in secondary level,15 percent in intermediate and 12 percent in Bachelors and above level. And finally out of 3 SIs one has acquired intermediate and rest two had acquired the bachelors and more as shown in the frequency table below.

Table 8: Respondents by educational qualification and post (n=251)

	Post				Total
Educational qualification	**P.C**	**H.C**	**A.S.I**	**SI**	
Primary	12	4	4	0	20
Lower-secondary	59	7	5	0	71
Secondary	63	23	40	0	126
Intermediate	8	4	10	1	23
Bachelors degree & above	0	1	8	2	11
Total	142	39	67	3	251

4.2 Knowledge Related Findings

Under this topic the findings related to the knowledge of the respondents will be dealt thoroughly.

4.2.1 Ever Heard About HIV and AIDS and the Source

Cent percent of the respondents had heard about HIV and AIDS

The source of information about from where they had heard about the HIV and AIDS was asked and the result shows that it was the radio/TV that acted the major source of information accounting 59 percent, similarly 41 percent of respondents accredited Newspapers and magazines about their source, at the mean time about 16 percent of respondents had their friends as the source of information.

Table 9: Ever heard about HIV and AIDS and the source (n=251)

Source	Frequency	Percentage
Radio /TV	148	59.0
Newspaper. Magazines	102	40.6
Health workers	61	24.3
Friends	42	16.7
Family. Relatives	30	12.0
others	23	9.2
Total	**406**	**161.8**
Frequency and percentage exceeding due Multiple response		

4.2.2 Knowledge on Difference Between “HIV” and “AIDS"

About the 46 percent of the respondent told that “HIV” and “AIDS" are the same thing and about half i.e.49 percent of respondents told that they are different thing which is correct, but remaining 4 percent were unknown about the matter as shown in the figure below.

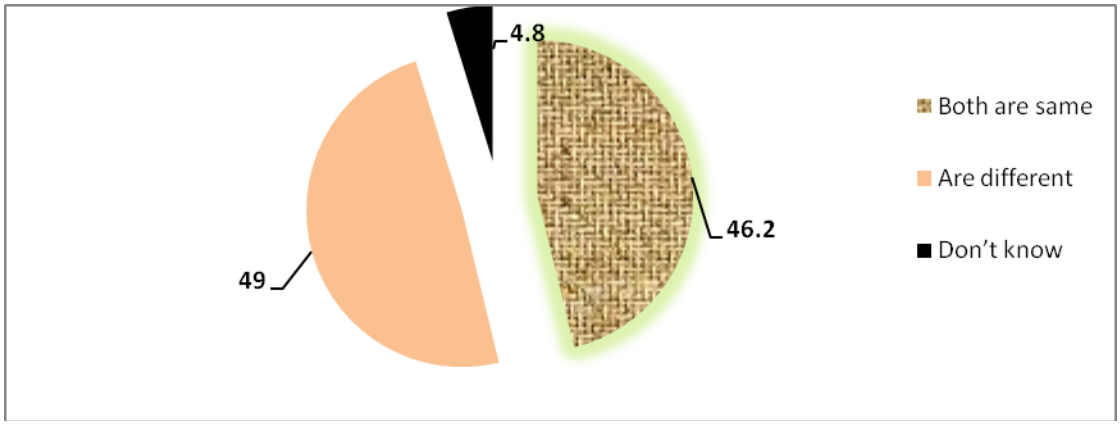


Figure 1: Knowledge on difference between “HIV” and “AIDS" (n=251)

4.2.3 Knowledge on Mode Of Transmission of HIV and AIDS

The figure number two shows that about 91 percent of the respondents were aware about the MOT of the HIV is unsafe sex, similarly about 84.5 percent them said it could also be transmitted via infected syringes and about 69 percent said that HIV transmits through the transplacental route. However about 7 percent of them told that HIV transmits during eating together and 6 percent said it transmits during hugging the patients. More than one fifth of the respondents (22.7 percent) had wrong concept that HIV transmits by the mosquito bite.

Figure 2: Knowledge on Mode of Transmission of HIV (n=251)

4.2.4 Knowledge on the Sign and Symptoms of HIV and AIDS

It was found that almost four-fifth (78.1 percent) of the respondents were well known that one of the s/s of HIV is weight loss but 12.7 percent didn't know the s/s, similarly about 15 percent of respondents said it is chronic diarrhea and fever greater than 1 month but about 20 percent of them said that it is not the s/s which is incorrect and remaining 23 percent were unknown about the s/s as shown below.

Table 10: Knowledge on the sign and symptoms of HIV and AIDS (n=251)

Sign and symptoms	Weight loss		Weight gain		diarrhea and fever	
	freq	perc	freq	perc	freq	perc
Yes	196	78.1	16	6.4	143	57.0
No	23	9.2	169	67.3	50	19.9
Don't know	32	12.7	66	26.3	58	23.1
Total	**251**	**100**	**251**	**100**	**251**	**100**

4.2.5 Knowledge on Conformation For HIV Status

Nine out of ten(90 percent) respondents were correct about the knowledge that HIV status can only be confirmed be the blood test, six percent said that patient seems ill and remaining four percent of the respondents were unknown about the real fact as shown in the figure no. 3 below.

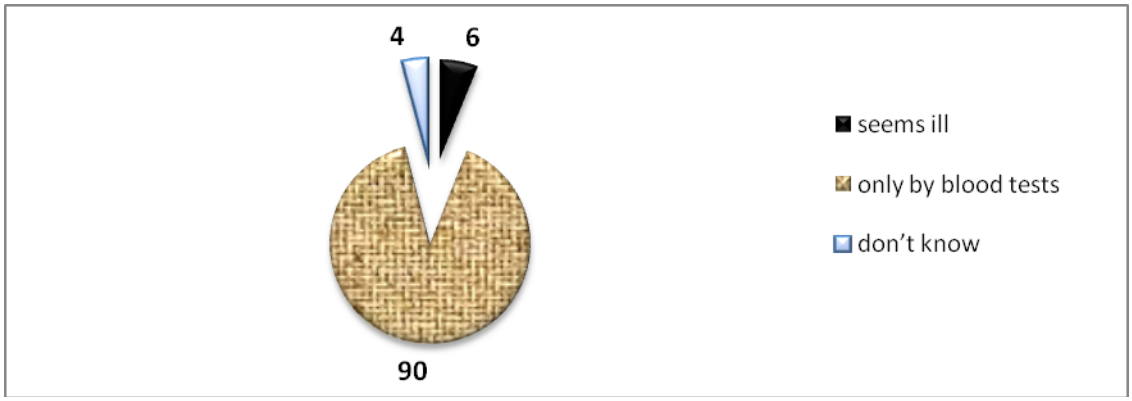


Figure 3: Knowledge on conformation for HIV status (n=251)

4.2.6 Knowledge on Transmission of HIV by health looking person

Study revealed about three quarters of respondent were correct about the fact that the healthy looking person can also transmit HIV to other person, but 10 percent of them were incorrect, and remaining 13.5 percent were unknown about the fact.

Figure 4: Knowledge on healthy looking person can transmit HIV to other or not (n=251)

4.2.7 Knowledge on the Prevention of HIV and AIDS

4.2.7.1 Prevention Possibility

It was asked among the respondents that whether the HIV and AIDS could be prevented or not. The findings are tabulated comparing with the post of the respondents in the table below. Out of 142 PCs 78.2 percent were correct, 14.2 percent were incorrect and 7.7 percent were incorrect. Similarly about 79.5 percent of HCs were correct about 91 percent of ASIs were correct and cent percent of SIs were correct that HIV and AIDS can be prevented. However 12 percent of the respondents were incorrect and 6 percent of them didn't know the fact.

Table 11: Prevention possibility (n=251)

Level or Post			Prevention possibility of HIV			Total
			Yes	No	Don't know	
	P.C	Frequency	111	20	11	142
		% within post	78.2	14.1	7.7	100
	H.C	Frequency	31	5	3	39
		% within post	79.5	12.8	7.7	100
	A.S.I	Frequency	61	5	1	67
		% within post	91	7.5	1.5	100
	SI	Frequency	3	0	0	3
		% within post	100	.0	.0	100
Total		**Frequency**	**206**	**30**	**15**	**251**
		% within post	**82**	**12**	**6**	**100**

4.2.7.2 Knowledge on Prevention Measures

Table 12: Knowledge on prevention measures (n=251)

Prevention measures/ options	True		False		Don't know	
	Freq	Percent	Freq	Percent	Freq	Percent
Use condom	235	93.6	3	1.2	13	5.2
Should share needles	11	4.4	215	85.7	25	10
Should have multiple sex partners	8	3.2	217	86.5	27	10.4
Total	**251**	**100**	**251**	**100**	**251**	**100**

As shown it the above table the respondents were asked about the preventive measures of the HIV transmission. It was found that about 93.6 percent were agreed on the use of the condom and 85.7 percent agreed on not sharing the needles and 86.5 percent about not having the multiple sex partners. However 5.2 percent of them were unknown about the use of condom about the measure of the prevention.

4.2.8 Knowledge on STIs

4.2.8.1 Ever Heard STI

It was found that majority (97.6 percent) of the respondents have heard about the STIs.

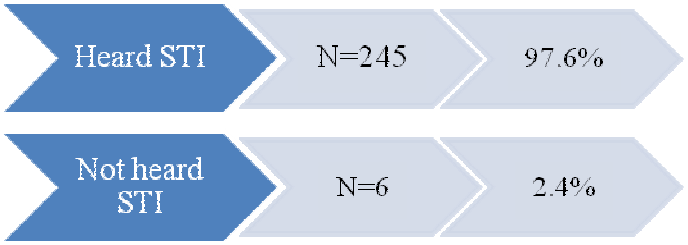


Figure 5: Ever heard STI n=251

4.2.8.2 Knowledge on the Types of STI (N=245)

It was found that out of the 245 police personnel who have heard about the STIs, 6.5 percent have said that T.B. is STI, similarly 3.7 percent said that malaria is STI which are wrong. About seven out of ten respondents were correct that Gonorrhea is STI, similarly percent of them agreed that HIV and AIDS is STI. But it is the sad part of the story that almost 69 percent of respondents weren't agree on the fact that Scabies is also STI as shown in the table below.

Figure 6: Knowledge on types of STI (n=251)

STI Diseases	True		False		Don't Know	
	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.
TB	16	6.5	205	83.7	24	9.8
Malaria	9	3.7	202	82.4	34	13.9
Gonorrhea	172	70.2	45	18.4	28	11.4
Scabies	37	15.9	169	69.0	39	15.9
HIV and AIDS	201	82.0	27	11.0	17	6.9
Total	245	100	245	100	245	100

4.2.8.3 Knowledge on the Vulnerability/Possibility of Transmission of HIV to STIs Patients

Majority of the respondents i.e. 89.6 percent had agreed that there is more possibility of transmission of HIV among the STI patients. However 2.4 percent didn't agree on the fact and remaining 2 percent were unknown to this statement.

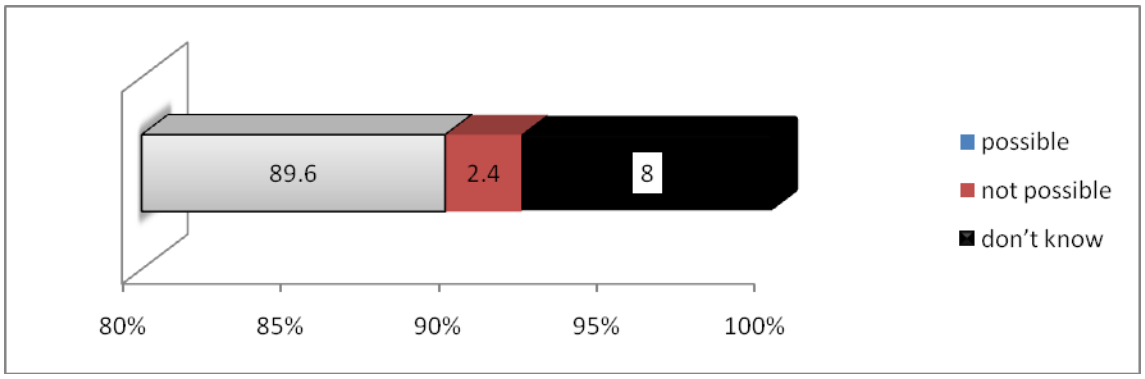


Figure 7: Knowledge on the possibility of transmission of HIV to STIs patients' n=251

4.2.8 Knowledge on Window Period

4.2.8.1 Ever Heard about Window Period

The study shows that more than half (64 percent) of the respondents hadn't heard about the term "window period". Only 35.9 percent of them had heard about the term.

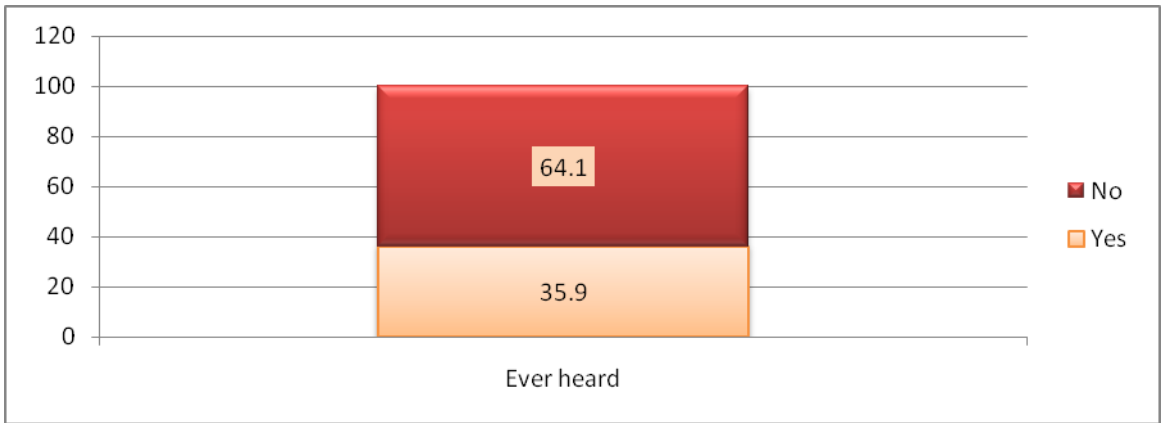


Figure 8: Ever heard about window period n=251

4.2.8.2 Knowledge on Period of Window Period (N=90)

Out of 90 respondents who have ever heard about the term “window period”, about 57 percent were able to identify the correct period of window period which is of three months. Out of the correct answer replying respondents about 68.8 percent have taken the previous training about the HIV and AIDS. At the mean time about 36.7 percent of the 90 respondents who have heard about the window period were unable to identify the correct period of window period.

Table 13: Knowledge on period of window period (N=90)

		Knowledge on window period's period		
Ever taken training on HIV		**Correct**	**Incorrect**	**Total**
YES	Freq	33	15	48
	Perc	68.8	31.2	100
NO	Freq	24	18	42
	Perc	57.1	42.9%	100
Total	**Freq**	**57**	**33**	**90**
	Perc	**63.3**	**36.7**	**100**

4.2.9 Training Giving Institutes on HIV and AIDS Versus Post. (N=98)

It was found that about two-fifth (39 percent) of the respondents have received some sorts of training about HIV and AIDS. About 33.8 percent of PCs were trained; similarly 53.8 percent of HCs, 38.8 percent of ASIs and cent percent of SI were trained about HIV and AIDS. About half of the respondents (49 percent) received by their own office, 38.8 percent by health workers and remaining 12.2 percent by NGOs/INGOs. The training giving institutes versus the post of the training receiving respondents can be seen in the figure below. It shows that about 47.9 percent of the PCs were trained by their own office, 63.2 percent of them by HWs, and 6. Percent of them by I /NGOs. Similarly about 25 percent of HCs were trained by I/NGOs. And 50 percent of ASI were trained by the I/NGOs

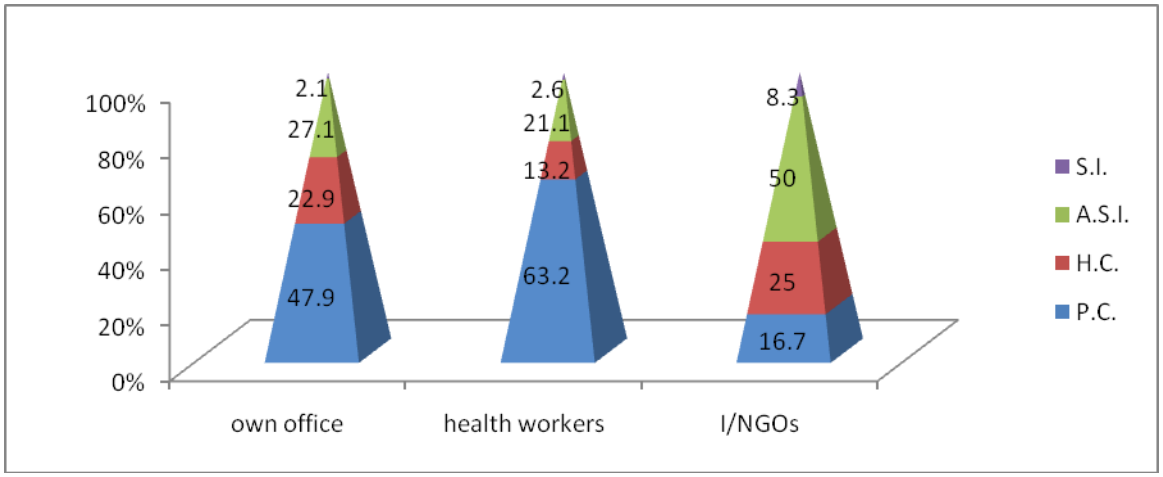


Figure 9: Training giving institutes on HIV and AIDS versus post. (n=98)

4.2.10 Treatment of HIV

4.2.10.1 Possibility of Complete Treatment

Most of the respondents (68.5) agreed that HIV and AIDS couldn't be treated completely. Out of 44 respondents who said that HIV could be treated completely majority (79.5 percent) were PCs.

Table 14: Possibility of complete treatment (n= 251)

Complete treatment	POST								Total	
	PC		HC		ASI		SI			
	Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc
YES	35	79.5	8	18.2	1	2.3	0	0	44	17.5
NO	83	48.3	26	15.1	61	35.5	2	1.2	172	68.5
Don't know	24	68.6	5	14.3	5	14.3	1	2.9	35	13.9
Total	**142**	**56.6**	**39**	**15.5**	**67**	**26.7**	**3**	**1.2**	**251**	**100**

4.2.10.2 Ever Heard About ARV

The figure below shows that almost three-fourth (73 percent) of the respondents hadn't heard about ARV but only about a quarter of them had heard about it. Out of those who

had heard about ARV therapy almost 60 percent had taken the training about HIV and AIDS previously.

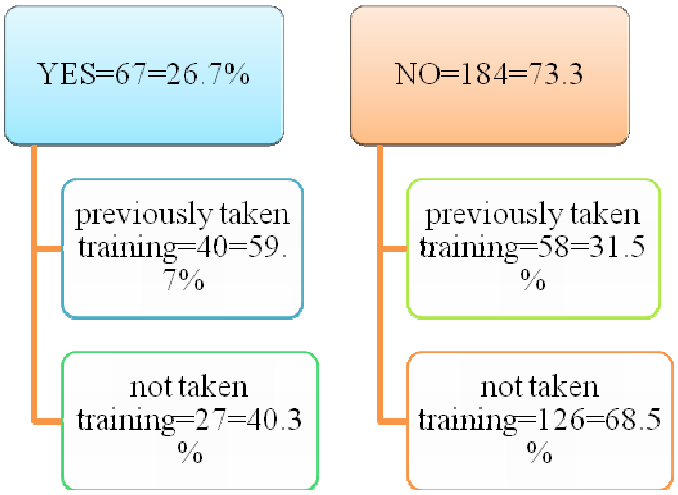


Figure 10: Ever heard about ARV therapy (n= 251)

4.3 Behavior Related Findings

4.3.1. Ever Had a Sexual relation.

Majority of the respondents (97.6 percent) were found having the sexual experience. Out of 251, 245 of them had experienced the sexual relationship as shown in the figure below.

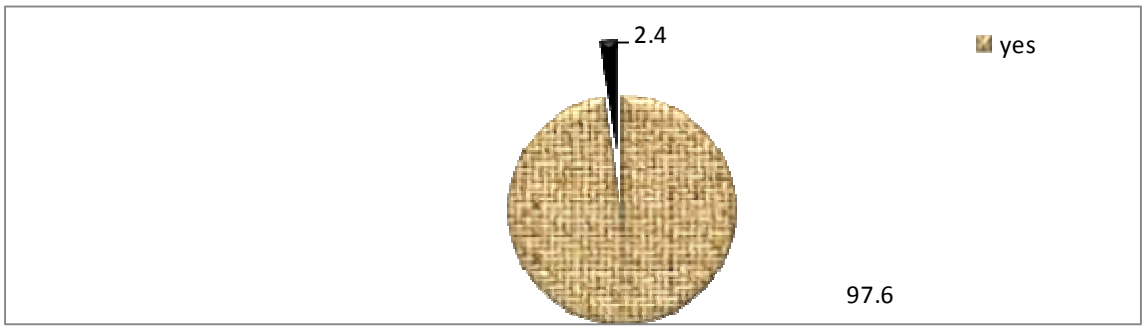


Figure 11: Ever had a sex (n=251)

4.3.2 Age at First Sex

The scatter diagram is shown to describe the age at first sex of the respondents which revealed that the most of the age at first sex was concentrated towards 15-25 years. The mean age at first sex was calculated to be 18.96years ranging from minimum of 11 years to maximum of 29 years. Pearson's correlation was calculated to be r = + 0.337.

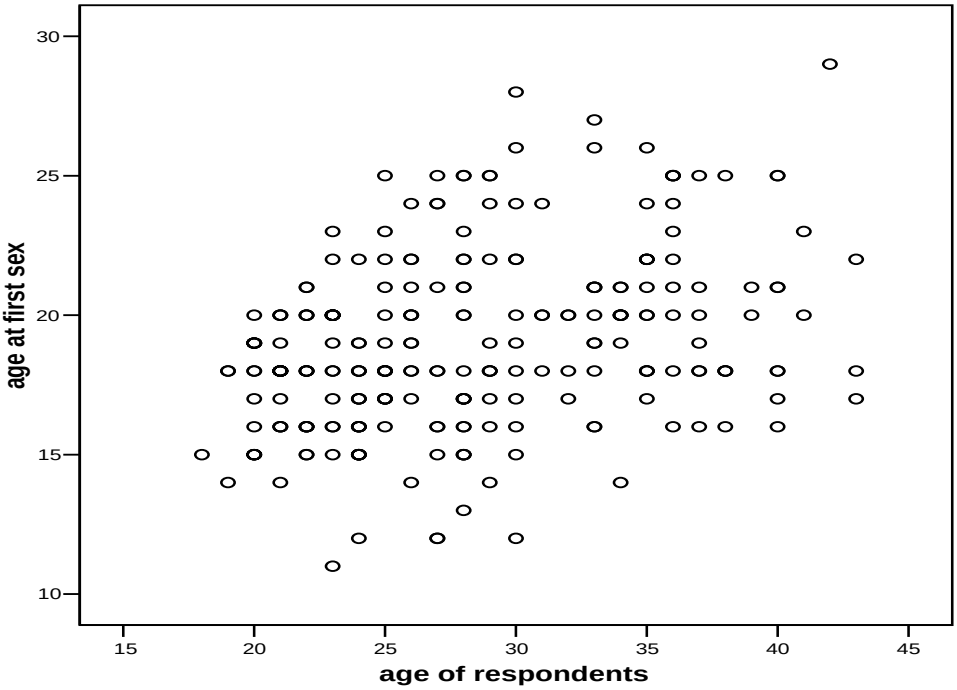


Figure 12: Age group vs. age at first sex

4.3.3 Premarital Sexual Behavior

More than three-fifth (60.6 percent) of the respondents had experienced the premarital sexual relation. It was found that mean age at first sex was found to be 18.96 percent but the mean age at marriage was found to be 21.45 years which reveals the strong evidence of the premarital sexual relationships. Chhetri's accounted the maximum premarital sexual relation with prevalence within the group of 27.6 percent and with in ethnic distribution minimum was found among Gurung, Magar, Rai, Limbu's accounting 5.3 percent as shown in the table no. 15.

Table 15: Premarital sexual behavior (n=251)

Caste	Premarital sex/ Yes	
	Freq.	**Perc.**
Brahmin	**29**/40	19.1
Chhetri	**42**/86	27.6
Gurung, Magar, Rai, Limbu	**8**/14	5.3
Newar	**14**/19	9.2
Dalit	**41**/60	27.0
Others	**18**/30	11.8
Total with in premarital sex	**152/ 251**	**60.6**
Total	**251**	**100**

4.3.4 Number of Sexual Partners (N=245)

Out of 245 of the respondents, 59 or 24 percent had single sexual partner, 58 or 23.6 percent of them had two sexual partners and remaining 128 or 52.2 percent of them had greater than two or multiple sex partners. The frequency of the sex-partners by post is shown below in figure.

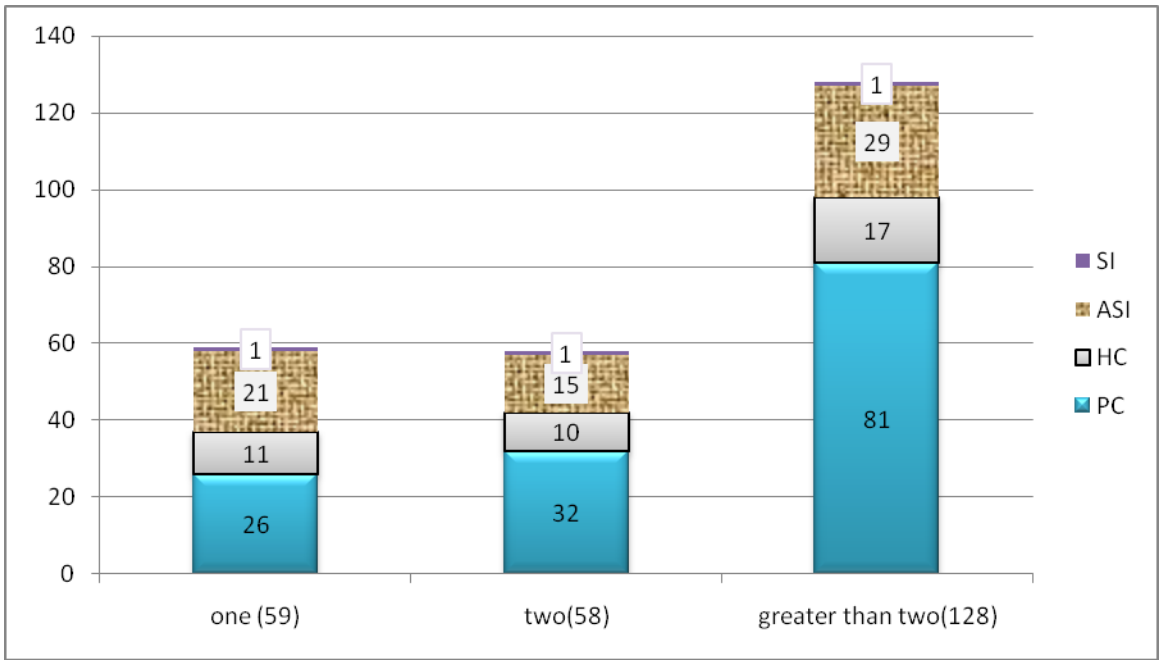


Figure 13: Number of sexual partners (N=245)

4.3.5 Multiple Sex Partners n=128

Among the 128 of the multiple sexual partners, maximum was accounted with in the post of police personnel was accounted by ASIs with 61.7 percent (29 out of 47), and then by PCs with 57 percent (81 out of 142) and then by HCs with 43.5 percent (17out of 39), and minimum accounted by SIs with 33.3 percent (1 out of 3).

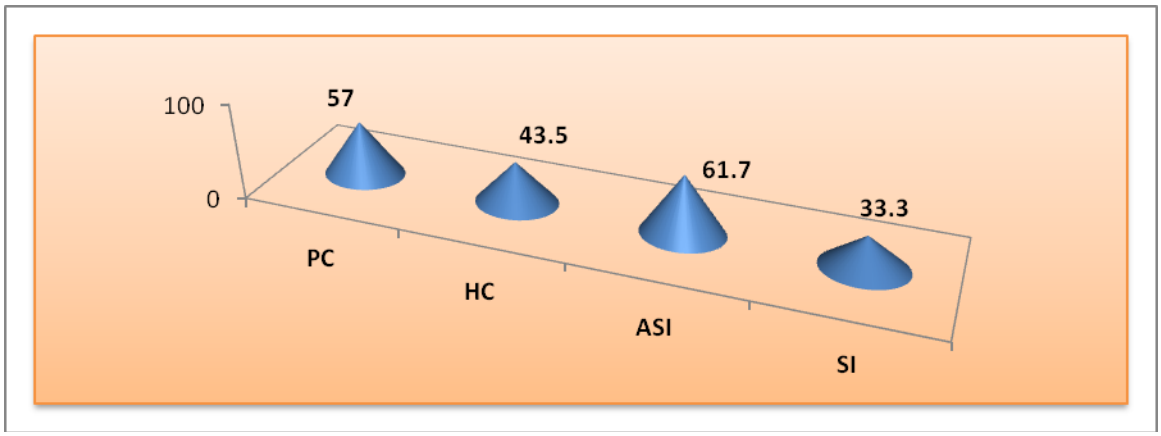


Figure 14: multiple sex partner n= 128

4.3.6 Extramarital Sexual Relationship n =195

More than three quarters (77.6 percent) of the respondents had been found to be involved in the sexual relationship out of their married life. Cent percent of the respondents with extramarital sexual relation was made with CSWs similarly 63.1 percent of them with Girl friends. There hasn't been any evidence of homosexualism.

Table 16: Extramarital sexual relation ship N=195

Extra-marital relation	Frequency	Percentage
Girl friend	123	63
CSW	195	100
Male partner	0	0
Total	**318**	**163**
Frequency and percent exceeding due to Multiple response		

- Prevalence of extra marital sex= 195/251 = 77.6%
- prevalence of policemen having sex with CSW= 195/251*100 = 77.6%

4.3.7 Sexual Relation with CSWs and Age Group

Out of 195 of respondents having sexual relation with CSW was seen maximum in the age group of 15-20 years accounting 90 percent. Minimum sexual relation with CSW was seen in the age group 40-45 years accounting 68.75 percent as shown in the table below.

Table 17: Sexual relation with CSWs and age group (n= 195)

Age group	Freq	Frequency (sexual relation with CSW)	Percentage in age group category
15-20	20	18	90
20-25	87	72	82.7
25-30	68	49	72.05
30-35	38	29	76.31
35-40	32	22	68.75
40-45	6	5	83.3
Total	**251**	**195**	**77.6**

4.3.8 Frequency of Sexuality with CSWs

Seven out of ten police personnel (71.7 percent) agreed that they had the sexual relation with CSWs sometimes. Similarly 6 percent of them did always have sexual relation with CSWs and 22.3 percent of them have stated that they had never experienced sexual relationship with CSWs.

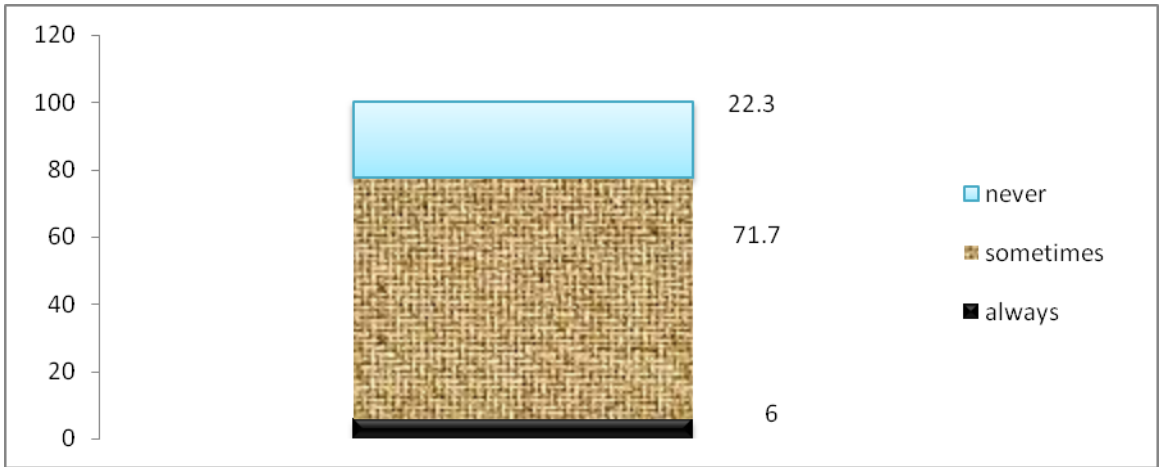


Figure 15: frequency of sex with CSWs (n=251)

4.3.9 Route of Sex

Majority of the respondents (84.1 percent) were found to be experiencing the vaginal route while having sexual relation with CSWs. However remaining 15.9 percent of them were experiencing all routes of sex including oral and anal.

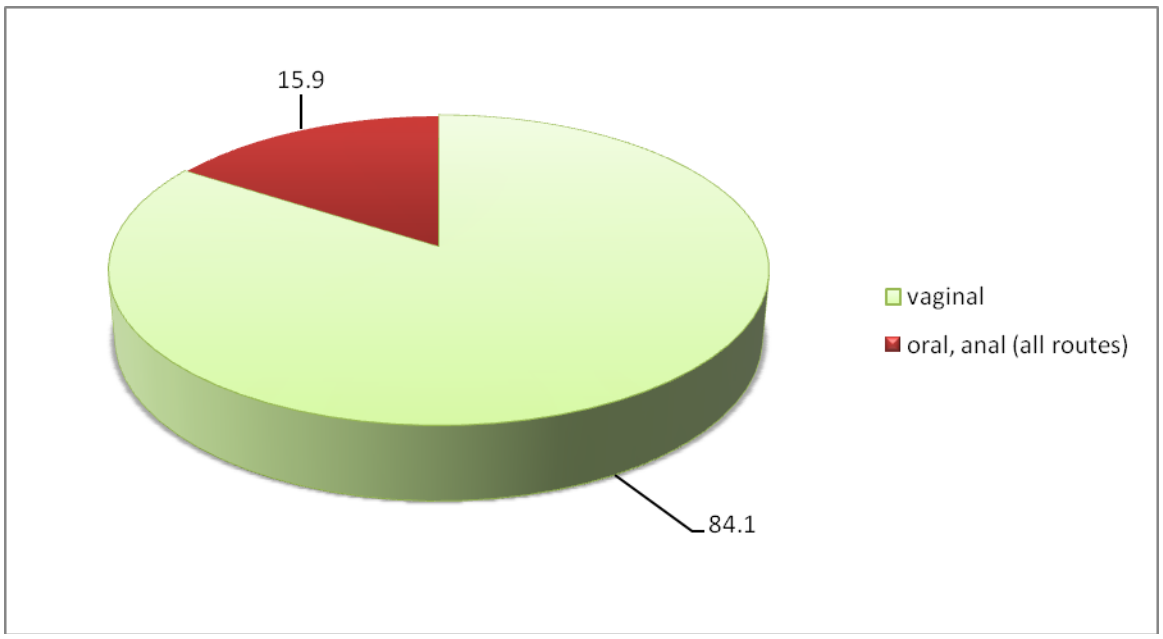


Figure 16: Route of sex n=195

4.3.10 Use of Condom When Having Sex With CSWs N=195

Most of the respondents (86.9) having sex with the CSWs were found to be using the protection, the condom. But it was found that about 13 percent of them were not using the condom even if they were having sex with CSWs as shown in the table below.

Table 18: Use of condom when having sex with CSWs N=195

Use of condom	Frequency	Percentage
Yes	169	86.9
No	26	13.1
Total	**195**	**100**

4.3.11 Knowledge and Behavior of Use of condom

Basically some sort of gap was revealed by the study about the Knowledge and the behavior. Simple analysis is shown in the cross-table below in between the knowledge status about the mode of transmission of HIV is unsafe sex or doing sex without using condom and the real behavior of using or not using the condom while having sex with CSWs. Its well understood from the table that about 86 percent of respondents who are aware on the fact that unsafe sex i.e. not using condom while having sex with CSWs can lead to transmission of HIV did used condom while having sex with CSWs. That is 86 percent of them were applying the knowledge on their behavior. But, 25 out of the 179 (13.9 percent) respondents who had the knowledge about the MOT were not applying in the behavior.

Table 19: Knowledge and behavior of use of condom n=195

Knowledge / Behavior	Yes	No	Don't know	Total
Yes	154	8	7	169
No	**25**	1	0	26
Total	**179**	**9**	**7**	**195**

4.3.12 Masturbation Practices

Masturbation is believed to be the normal phenomena. The queries about the masturbation practice among the police personnel was quenched by the following findings which suggests that prevalence of masturbation was found to be 43.42 percent and was seen maximum in the age group in the 15-20 years and was seen in decreasing trend in higher age groups as shown in the table below.

Table 20: Masturbation practices n=251

Age category	Age frequency	Masturbation (Frequency)		Masturbation (percentage) within age group	
		Yes	No	Yes	No
15-20	**20**	13	7	65	35
20-25	**87**	44	43	50.05	49.95
25-30	**68**	32	36	47.05	52.95
30-35	**38**	10	28	26.31	73.69
35-40	**32**	10	22	31.25	68.75
40-45	**6**	0	6	0	100
Total	**251**	**109**	**142**	**43.42**	**56.58**

4.3.13 Talking Habit about HIV and AIDS With friends

The study showed that 213 out of 251 respondents(84.8 percent) used to talk about the HIV and AIDS among the friends and . Among the 213 police personnels PC, HC, ASI and SI accounted the following talking habits.

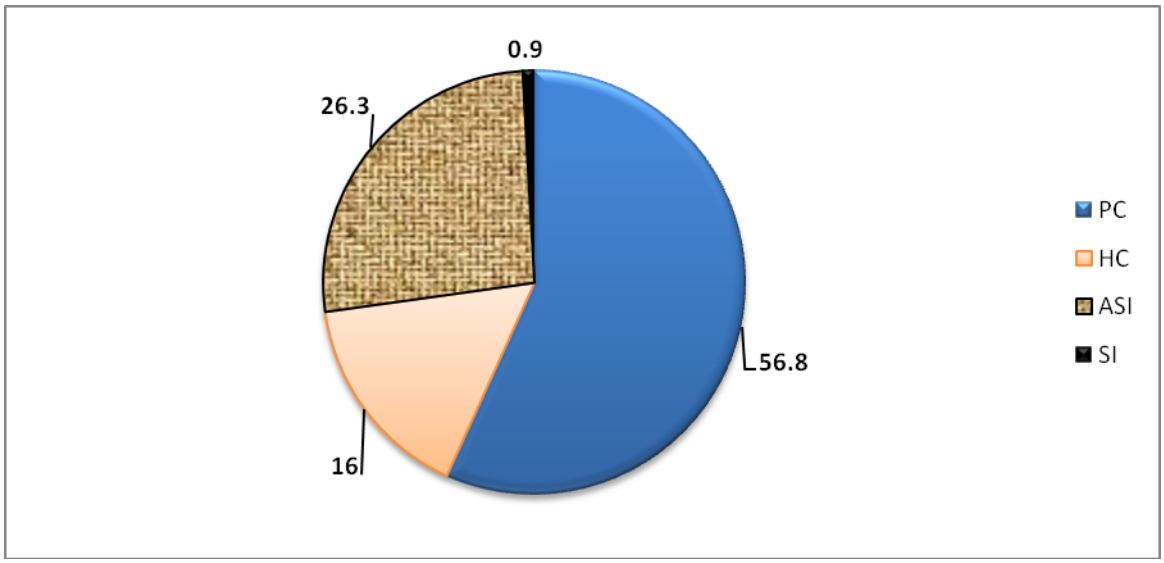


Figure 17: Talking habit about HIV and AIDS with friends n=251

However, PC, HC, ASI and SI talked about HIV and AIDS within their circles or post or level by 85.2, 87.17, 83.58, 66.66 percentages respectively.

5. Perception Regarding HIV and AIDS

5.1.1 Need of Awareness about HIV and AIDS among Nepal Police

Almost all of the respondents i.e. 99.2 percent had felt the essence and the need of awareness raising program about HIV and AIDS in Nepal police.

Table 21: need of awareness about HIV and AIDS among Nepal police n=251

Need of awareness	Frequency	Percentage
Yes	249	99.2
No	2	0.8
Total	251	100

5.1.2 Type of Awareness Raising Program n=249

The best mode of awareness raising program on the Nepal police was felt to be the Health Education program which was agreed by 63 percent of respondents, 10 percent of them have suggested on the condom distribution program however more than a quarter i.e.27 percent have focused on launching both of the program as shown in the table below.

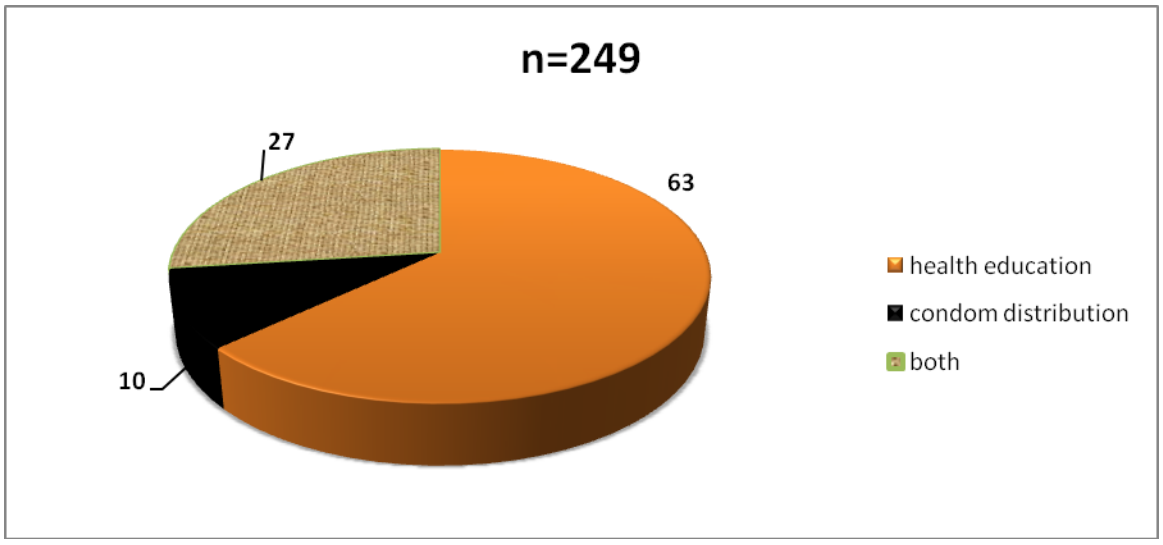


Figure 18: Type of awareness raising program (n=249)

5.1.3 Behavior Towards Positive n=251

More than two-third of the respondents stated that they do/will love the HIV positive patients. Similarly about a quarter of them have stated that they will behave as previous and finally 3.2 percent and 2.8 percent of them have stated that they will keep a distance and hate respectively to the positive patients of HIV and AIDS as shown below in the table no.22.

Table 22: Behavior towards positive n=251

Behavior	Frequency	Percentage
Hate	7	2.8
Love	170	67.7
As previous	66	26.3
Keep distance	8	3.2
Total	**251**	**100**

5.1.4 Perception Towards Personal Risk of Getting HIV.

About one fifth of respondents (20 percent i.e. 51 out of 251) had agreed that they could be caught with HIV and remaining four fifth (80 percent i.e. 200 out of 251) of them had said that they didn't have any risk of getting HIV. Among the circles of the post of the police personnel 29.87, 7.69, 10.4 percent of the PCs, HCs and ASIs had felt that they had got the personnel risk of getting HIV. But cent percent of SIs had refused that they had such risks. It could be due to only three SIs in the study.

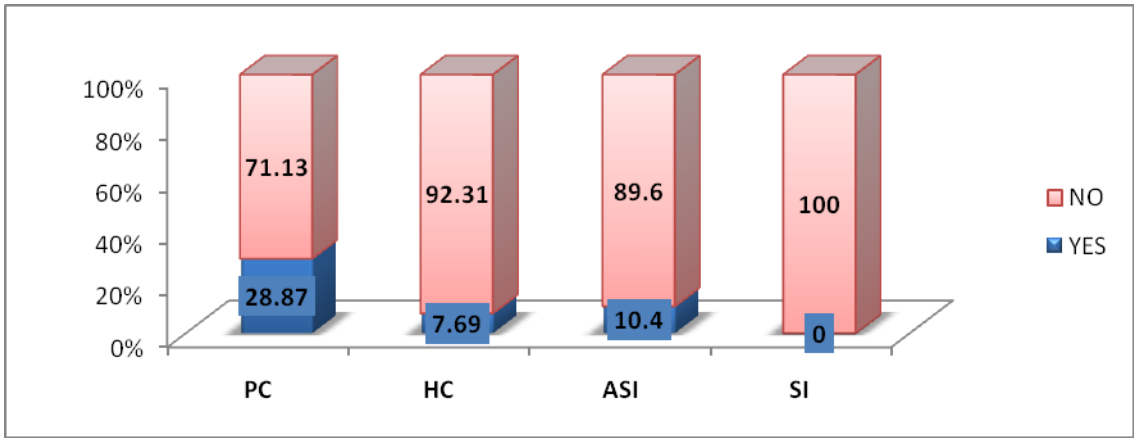


Figure 19: Perception towards personal risk of getting HIV n=251

CHAPTER-V

DISCUSSION

The study is a one shot type i.e. cross sectional of type. At the mean time it is supposed to be descriptive type of study. The basic objectives of the studies were to ascertain information on the knowledge and behavior regarding HIV and AIDS among the Nepal Police. In this section we are discussing more about the result. Some of the results would be analyzed in relation to the other studies.

5.1 Socio-Demographic Profile

Socio-demographic findings in this study give us the basic information about the social, cultural and other demographic findings about the respondents. Study shows that almost all i.e. 97.8 percent fall with in the age group of 15-40 years. The maximum percentage is covered by the age group of 20-25 years. As much as three quarters of the respondents are found to be married with the mean age at marriage of 21.45 years which is better(17.2 percent) as compared to NDHS 2006. As the national data the most of the respondents are Hindu. According to the Nepal Police regulation there is no any discrimination during the selection of the new recruits on the basis of the ethnic ground. As per the national census, maximum respondents are Chhettri. At the mean time, Seconly Newars occupy the second largest group it could be because of the dominance of Newar population in the Kathmandu.

There is universal literacy rate of the respondents. That is all of the policemen can read and write because only those personnel are selected who have completed their primary level education for P.C. the findings of the study has shown that 50% were literate in secondary education. However the higher degrees are seen low as compared to the lower one it could be because of the post. Higher post does requires the higher education qualification, but still in the hierchy of command the higher the post the less the number. In study 56 percent are PC and 1.2 percent are SI. That’s the reason why the finding shows the low literacy in the bachelor’s degree and above. Work experience is also taken

as one of the variable in the study. The finding shows the mean work experience was found to be 8.47 years. The more the work experience the more will be the policemen separated from the home lives and consequently the more will be exposed to harmful, sexual risks and behaviors.

5.2 Knowledge about HIV and AIDS

On the knowledge related findings we can find that term HIV and AIDS was universally heard it could because of the several sources of information. Study shows radio and TV act as the major source of their information due to their easy access. Almost half of the respondent i.e.46 percent have said that “HIV” and “AIDS” are the similar things. It shows that most of the respondents are unaware about the specific information. Study shows that majority of them are aware about the MOT as well as sign and symptoms of the HIV. However, more than one fifth of the respondents (22.7 percent) had wrong concept that HIV transmits by the mosquito bite. As many as 93 percent of them knew about use of condom as a measure of preventing HIV transmission. It could be all because of the source of information. Almost all of them i.e.97 percent have heard about STI however almost 11 percent have failed to recognize HIV and AIDS as one of the types of STI. The study shows that more than half (64 percent) of the respondents haven’t heard about the term “window period’ and 57 percent out of those who have heard have correctly identified the period of window period which is of three months. Basically, the reason behind this fact could because of the depth of the content as well as its technical character. It was found that about two-fifth (39 percent) of the respondents have received some sorts of training about HIV and AIDS. Some of the International multilateral partners have recognized the need of training and awareness so such training has been organized in Nepal Police from few I/NGOS. Only about a quarter of them have heard about ARV therapy although Nepal Police hospital at maharjgunj is providing this service and moreover it has developed, published and distributed the IEC materials related to the VCT services as well as ARV services.

5.3 Sexual Behavior

Almost all of the respondents (97.6 percent) had experienced sex. The mean age at first sex is found to be 18.96years. However mean age at marriage was found to be 21.45 years which shows high prevalence of premarital sexual behavior of 60 percent. About 52.2 percent of them who have ever experienced sex have greater than two or multiple sex partners. There is bout 77.6 percent of prevalence of the respondents having sex with CSWs which is higher in amount as per the Behavioral Surveillance Survey carried out by Family Health International and New Era in 2006. The survey showed that almost 61% policemen had sex with the FSWs. About 6 percent of them do always have sexual relation with CSWs. The reasons behind these sorts of sexual behavior could be seen in the respondents are their sexually active age group, extended periods away from home and other factors. About some 16 percent of them are found to be experiencing all sorts of the sexual routes including anal and oral. Anal intercourse is regarded to be the most risky for HIV transmission. Most of the respondents (86.9) having sex with the CSWs were found to be using the protection, the condom. But it was found that about 13 percent of them were not using the condom even if they were having sex with CSWs. Some gap was seen by the study about the Knowledge and the behavior about use of condom to prevent the HIV and AIDS. 13.9 percent) respondents who have the knowledge about the MOT are not applying in the behavior. It could be due to lack of effective Behavior Change Communication BCC program.

5.4 Miscellaneous / Perception Regarding HIV and AIDS

It was found that more than four fifth i.e. 84 percent of the respondents do talk about HIV and AIDS among their friends. It is because of the raised issue of HIV and AIDS. The most overwhelming finding of this study that almost all of police personnel of the study have felt the essence of the awareness raising program about HIV and AIDS in Nepal Police. Similarly about two-third of them have stated that they do/will the patient of HIV

and AIDS. It is the matter of humanity and the finding shows that Nepal Police is ready to fight against the stigma that has barred the prevention and control of the HIV and AIDS in Nepal. And only about one fifth of the respondents agreed that they have some personal risk of getting HIV. They are pretty sure that they couldn't be caught of HIV and AIDS.

CHAPTER-VI

CONCLUSION AND RECOMMENDATIONS

The study collected the information on the knowledge and behavior regarding HIV and AIDS among Policemen of Nepal Police in Naxal.

6.1 Conclusion

Basically most of the respondents were found to be kept informed about the HIV and AIDS. With the general scoring of 7.3 out of 10 Policemen in this study were found having comprehensive knowledge of *above average*. The mean accurate knowledge on MOT was found to be 82%. That on S/S was 67%. Similarly, 88% of them had mean accurate knowledge on Preventive measures. Only 36 % had heard about “window period”. Radio /TV was the major source (59 %).Nine out of ten of them were aware that MOT of the HIV is unsafe sex with infected persons. But still about half (52.2 %) do have multiple sex partners. Prevalence of policemen having sex with CSWs is 77.6%. There is gap of about 13.9 percent between the MOT and use of condom for prevention of HIV transmission is seen. Almost all (99.2 %) had felt the essence and the need of awareness raising program.

After the analysis of findings as well as some of the discussion of the related matters we have come up with the following recommendations.

6.2 Recommendations

Findings from this study have several implication of for the design of intervention strategies. There is still lack of specific knowledge like window period, misconception regarding MOT etcs. On the other hand, there is some gap in between the different posts. Secondly there is gap in between the knowledge and practice of condom use.

Thus the following recommendations can be made.

- **Misconceptions Regarding MOT, Meaning Of Window Period, ARV Therapy Should Be Corrected.** It has been found that Radio and TV are the most accessible source. An attempt must be made to develop specific radio/TV messages that addresses prevailing misperceptions as well as reinforces the knowledge. Such messages must be displayed through the programs of Uniform services while on Radio or TV. Basically, interpersonal communication channels such as discussion, groups or peer education seem to be more appropriate means to convey specific information and should be used to uplift the knowledge.
- **Comprehensive Awareness Raising Program on Office Premises.** There is an essence of the immediate development of awareness raising intervention as a package in the office premises. It includes the training, health instruction classes, condom demonstration, role play about the HIV and AIDS. The schedule shall be managed without disturbing the regular security concerns. Development, production and dissimination of printed as well as audiovisual HEIC materials must be carried out. Responsible body for conduction could be Nepal Police Hospital , NCASC, Home Ministry as well as MOHP. It requires internal and external coordination. Similarly, the system for the toll free telephone system must be introduced in headquarters to get informed about the problems regarding HIV and AIDS.
- **BCC Interventions.** As, there is gap in between the knowledge and behavior of use of condom to prevent the HIV transmission. The risky sexual behavior could be fatal. Therefore, personnel engaging in unprotected sex with CSWs should be informed about correct, prompt and regular use of condom. The reduction of multiple sexual partners must be encouraged. For this Behavior Change Communication should be applied as the Model of communication for the predictable change in the behavior.

- **Condom Distribution Program.** There must be the proper availability of condom in the office premises in the kits in the toilets, or somewhere easily accessible must be established. The regular re-supplement of condoms must be ensured. It could develop the habit of using condom among the personnel. The impressive messages must be kept at the site for enabling them to use condom. At the mean time demonstration of condom should be carried out for ensuring safe sex.
- **Opening of the HIV and AIDS Section (institutionalization)**

  Based on the finding on the study majority of the respondents felt that the essential services related to the HIV and AIDS should be provided with in their office premises. One of the good option could be the Opening of HIV and AIDS section on the premises. Decentralization of HIV and AIDS services must be emphasized. Nepal Police hospital should have to extent its service at least up to the district level. The focal point for AIDS related activities in district with the coordination with D/PHOS, CBOs, I/NGOs. Fundamental service it could provide could be awareness raising services, VCT services, ART services to the infected personnel.
- **Observation of National and International HIV and AIDS Related Days.** By Continuation and strengthening of mass rally, quiz competitions, essay competitions related to the HIV and AIDS and by effective and strong participation of the personnel in such days will simply help in imparting knowledge as well as positively change in attitude and behavior.
- **Stigma Reducing Specific Programs.** In the study only few have stated that they hate HIV positive however till today, Stigma is a major barrier for the identification, control, treatment as well as prevention of HIV and AIDS of general population as well as personnel of uniform services. Basically the fear of loss of job after being identified as the HIV positive could be prevalent among the policemen. But it is not so. To fight against such stigmas there must be proper establishment of stigma reducing programs and activities within Nepal Police.

- **Public Private Partnership.** As stated in the finding very few have received training or other services from private sectors. At the mean time there are so few I/NGOs working with Nepal Police in HIV and AIDS. There must be creation of effective environment for the participation of several organization for sharing the responsibilities as well as benefit to achieve common goals. Police Headquarters must built flexible policies regarding the effective participation of private sectors in prevention and control of HIV and AIDS in Nepal Police.
- **Operational Research.** Very few studies are carried out in the uniform sector. Initiation of necessary studies among the policemen could reveal the more facts that could be utilized in proper interventions regarding HIV and AIDS among such vulnerable population.

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ANNEXES

ANNEX-I

Oral informed consent letter.

Informed consent letter

Good morning/afternoon/evening respected dear gentleman. My name is Chetan Nidhi Wagle from surkhet, khajura10, a third year public health students. I'm conducting a research titled *"KNOWLEDGE ON HIV & AIDS AND SEXUAL BEHAVIORS AMONG THE NEPAL POLICE OF KATHMANDU METROPOLITAN, NEPAL"*

The major objective of my research is to assess the knowledge and sexual behaviors related to HIV and AIDS. I hope this research would be helpful to implement and strengthen the new programs in the uniform services sector much effectively.

The findings of the study will be used only for the research purpose. All the information's collected would be kept confidential. It is not necessary to write your name. It is a self administered questionnaire which won't take more than 5 minutes to fill up. You won't be compelled to reply if you don't want to participate. Your participation is completely voluntary.

If you have any questions or doubts, you may ask questions on the following email address.

uchetan@hotmail.com
9841578495(mobile)

ANNEX-II

Self Administered Questionnaire

A

"KNOWLEDGE ON HIV & AIDS AND SEXUAL BEHAVIORS AMONG THE NEPAL POLICE OF KATHMANDU METROPOLITAN, NEPAL"

Research Questionnaire, 2009

SOCIO-CULTURAL AND DEMOGRAPHIC INFORMATION

1. Questionnaire no

2. Age

3. Marital status

Unmarried	Married	Divorced	Widower

4. Age at marriage

5. Religion

Hindu	Buddhist	Christian	Muslim	Others

6. Ethnicity

Brahmin	Chhetri	Gurung, Magar, Rai, Limbu	Newar	Dalit	Others

7. **For how long you are as a Security personnel of Nepal Police ? (work experience)**

8. Your present post

PC`	HC	ASI	SI

9. Educational level

Up to 5 (primary)	6-8 (lower-secondary)	9-10 (Secondary)	Intermediate (IA,11,12)	Bachelors degree & above

KNOWLEDGE RELATED INFORMATIONS.

10. Have you heard about HIV/AIDS?

Yes	No

11. If yes, what is the source of your information?

Radio/TV	Newspaper/magazines	Poster pamphlet	Health workers	Friends	School campus	Family and relatives	Others

12. Is "HIV" and "AIDS" the same?

Yes	No	Don't know

13. Is HIV transmitted by following methods?

Description	Yes	No	Don't know
Eating together with patient of HIV			
Transfusion of infected blood			
Unsafe sexual practices			
Hugging and Helping AIDS patients			
Exchanging and using infected needles			
With a Mosquito bite			
Giving birth to a baby by HIV infected mothers			

14. Are the following sign and symptoms correct about HIV and AIDS infected patient?

Description	Yes	No	Don't know
Continuous diarrhea and fever for greater than 1 month			
Looses the body weight			
Gains the weight			

15. How do you know that a person is infected with HIV/AIDS?

Person looks ill	From blood test	Don't know

16. A healthy looking person who has HIV/AIDS can infect other people?

Yes	No	Don't know

17. Can HIV/AIDS be prevented?

Yes	No	Don't know

18. How is HIV transmission prevented?

Description	Yes	No	Don't know
Have sex only by using condom			
HIV Infected mothers should give birth to child			
Exchange the needles and use it			
One should have multiple sex partners			

19. Have you ever heard about sexually transmitted Infections (STIs)?

Yes	No

20. If yes, which of the following diseases are STDs?

Description	Yes	No	Don't know
TB			
Malaria			
Syphilis / Gonorrhea			

Scabies			
HIV and AIDS			

21. "Person with STD is susceptible for HIV infection"

Yes	No	Don't know

22. Have you ever heard about "Window Period" of HIV infection?

Yes	No

23. If yes how long is it for?

3 month	No
6 month	
3 years	
6 years	

24. Have you ever taken the training/ health education classes about HIV and AIDS?

Yes	No

25. If yes who have given such training/ health education classes?

Your officers/ office	No
Health workers	
NGO's and INGO's	
Others (specify)	

26. Can HIV and AIDS be completely treated?

Yes	No	Don't know

27. Have you ever heard about Anti Retro Viral therapy for HIV and Aids?

Yes	No

BEHAVIOR RELATED QUESTIONS

28. Have you ever have a sex with any body?

Yes	No

29. How old were you when you had a sex at first time?

30. Have you ever experienced pre-marital sex?

Yes	No

31. How many persons did you have a sex with?

One	
Two	
More than two	

32. Have you experienced sexual relation except your wife?

Yes	No

33. If yes then whom did you have with?

Girlfriend	
Sex-workers	
male sex partners	

34. Do you use a condom while having sex with sex workers, or un-introduced persons?

Vaginal	No
Oral	
Anal	
All of the above	

35. Which route of sex do you have a sex with sex-workers, un-introduced persons?

Yes	No
Oral	

36. How often do you have sex with sex-workers, un-introduced persons?

Always	Sometimes	Never

37. Do you have practice of masturbation?

Yes	No

38. Do you talk about HIV/AIDS among your friends?

Yes	No

39. Do you think any program should be launched in the premises of Nepal Police office about HIV and AIDS?

Yes	No	Don't know

40. If yes what type of program you want to be launched?

Health education and awareness	
condom distribution	
All of the above	
None of the above	
Other (specify)	

41. How would you behave/react to a person infected with HIV/AIDS?

I hate	Love them	As before (no change)	Make distance

42. Do you think you are personally at risk of getting HIV?

Yes	No

(***Note: for the ease of the respondents the self administered questionnaire was filled by converting the questions into Nepali language***)

ANNEX- III

MEMORIES

Respondents being informed about the research

. ***Inspecor Bishnu Bd Karki, Observing the respondents***

An ASI filling up the form

Replying the self administered questionnaire after filling that up…

With Insp. Raj Kumar KC

With SI Santosh Shrestha

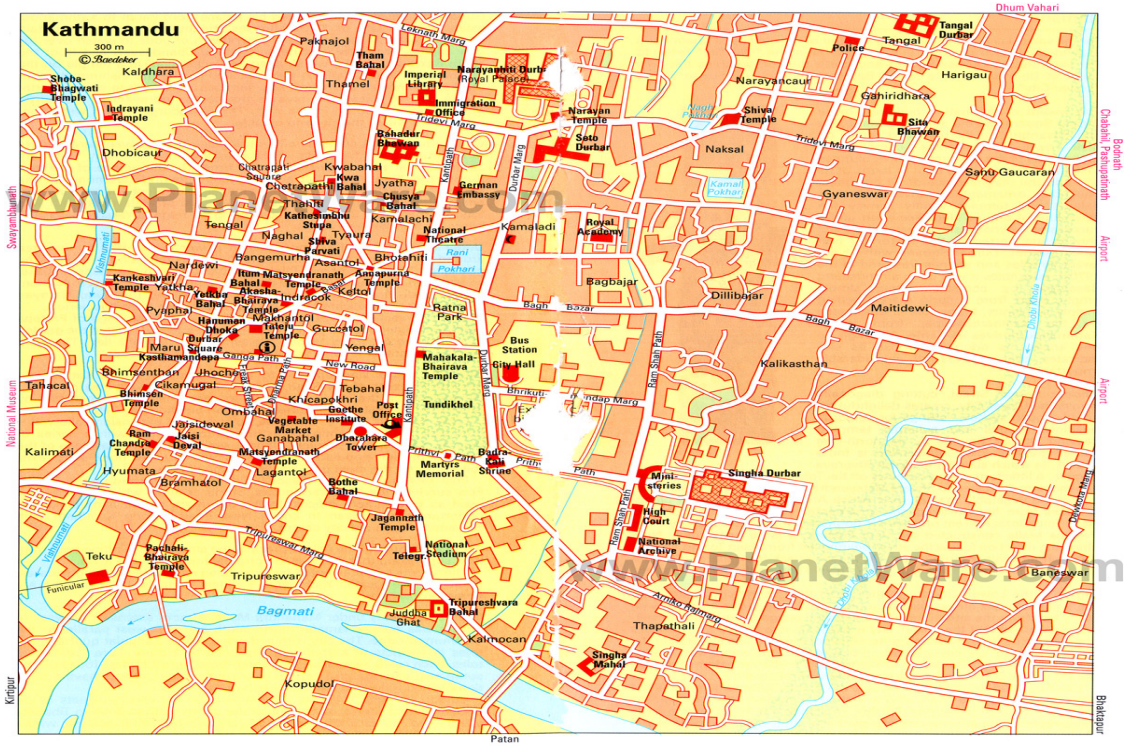
A poster about VCT at Nepal police Hospital

Anita supporting during data collection

ANNEX-IV

Map of Nepal and Kathmandu.

KATHMANDU CITY



K