

**ACCESSING KNOWLEDGE ON TB, HIV & STI AND TENDENCY
OF RISK BEHAVIOUR AMONG
MALE PRISON INMATES**

(A Case Study of Two Prisons of Kathmandu and Palpa Districts)

A DISSERTATION SUBMITTED TO:

**THE CENTRAL DEPARTMENT OF SOCIOLOGY & ANTHROPOLOGY
FACULTY OF HUMANITIES AND SOCIAL SCIENCES
UNIVERSITY CAMPUS
TRIBHUVAN UNIVERSITY, KIRTIPUR
KATHMANDU, NEPAL**

SUBMITTED BY:

LOK NATH KANDEL

**TRIBHUVAN UNIVERSITY
KATHMANDU, NEPAL**

APRIL 2013

TRIBHUVAN UNIVERSITY
FACULTY OF HUMANITIES AND SOCIAL SCIENCES
THE CENTRAL DEPARTMENT OF SOCIOLOGY & ANTHROPOLOGY
UNIVERSITY CAMPUS, KIRTIPUR
KATHMANDU, NEPAL

RECOMMENDATION LETTER

This dissertation entitled **Accessing Knowledge on TB, HIV & STI and Tendency of Risk Behaviour among Male Prison Inmates (A Case Study of Two Prisons of Kathmandu and Palpa Districts)** has been prepared by Lok Nath Kandel under my supervision for the partial fulfillment of the requirements for the Master's Degree of Arts in Sociology. To the best of my knowledge the study is original and carries out useful information.

I hereby, recommend this dissertation to the evaluation committee for its final evaluation and approval.

Kapil Dahal

Central Department of Sociology & Anthropology
Tribhuvan University
Kirtipur, Kathmandu, Nepal

April 2013

TRIBHUVAN UNIVERSITY
FACULTY OF HUMANITIES AND SOCIAL SCIENCES
THE CENTRAL DEPARTMENT OF SOCIOLOGY & ANTHROPOLOGY
UNIVERSITY CAMPUS, KIRTIPUR
KATHMANDU, NEPAL

APPROVAL LETTER

This dissertation entitled **Accessing Knowledge on TB, HIV & STI and Tendency of Risk Behaviour among Male Prison Inmates (A Case Study of Two Prisons of Kathmandu and Palpa Districts)** has been prepared and submitted by Lok Nath Kandel has been approved for the partial fulfillment of the academic requirements for the Masters' Degree of Arts in Sociology.

Dissertation Committee

Dr. Om Gurung
Professor
(Head of the Department)

External Examiner

Kapil Dhal
(Supervisor)

Date: April 2013

ACKNOWLEDGEMENT

This dissertation has been submitted to the Central Department of Sociology and Anthropology, Faculty of Humanities and Social Sciences, Tribhuvan University for the fulfillment of the academic requirement for the Master's Degree of Arts in Sociology. First of all, I would like to express my sincere thanks to Professor Dr Om Gurung, Head of the Central Department of Sociology and Anthropology for his supportive consideration to proceed ahead of this dissertation. In the context of preparing this dissertation first of all I would like to extend my sincere gratitude to my respected supervisor Kapil Dahal, Lecturer of the Central Department of Sociology for his excellent guidance and supervision.

My special gratitude goes to Shambhu Koirala, Director General, Prison Management Division, Ministry of Home Affairs, Government of Nepal for his approval to carry out the interview with prison inmates inside the selected prisons. Likewise, I would also like to thank to the Jailors of the selected jails (Central Jail of Kathmandu and district jail of Palpa) for their permission to conduct the interview with prison inmates.

For coordination, I would like to extend my thanks to Rishi Raj Ojha, the Director of Youth Power Nepal, an NGO working in the field of HIV prevention, care and treatment in prison setting. Likewise, I would also like to extend my thanks to Krishna Singh and Prakash Subedi, Training & Counselors of Youth Power Nepal for their valuable support to conduct the interview directly with prison inmates of the selected prisons.

Similarly, I would like to extend my thankfulness to all prison inmates who directly involved in the process of interview as key respondents of the selected jails and provided very much important information towards knowledge on HIV, STI, TB and risk behavior among male prison inmates.

Finally, I am very much thankful to Biwesh Ojha, Surveillance Associate, National Center for AIDS and STD Control who helped me in preparing questionnaire and data analysis of this dissertation.

Lok Nath Kandel

Date: April 2013

Tribhuvan University
Kathmandu Nepal

ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
CBS	Central Bureau of Statistics
DoHS	Department of Health Services
FSW	Female Sex Work
GoN	Government of Nepal
HIV	Human Immunodeficiency Virus
HTC	HIV Testing and Counseling
ICPD	International Conference on Population and Development
IDUs	Intravenous Drug Users
IEC	Information Education and Communication
INGO	International Non-Government Organization
KPHR	Key Populations at Higher Risks
MoHP	Ministry of Health and Populations
MSM	Male Sex with Male
MSW	Male Sex Workers
NCASC	National Center for AIDS and STD Control
PLHIV	People Living with HIV
PWID	People Who Inject Drug
STD	Sexually Transmitted Diseases
STI	Sexually Transmitted Infection
SW	Sex Workers
TG	Transgender
SPSS	Statistical Package for Social Service
UNAIDS	United Nations Program on HIV AIDS
UNDP	United Nations Development Program
UNGASS	United Nations Generally Assembly on Special Sessions
UNICEF	United Nations Children Fund
UNODC	United Nations Office of Drugs and Crime Control
USAID	United States of Agency for International Development
WB	World Bank
WHO	World Health Organization

TABLE OF CONTENT

RECOMMENDATION LETTER	ii
APPROVAL LETTER	iii
ACKNOWLEDGEMENT	iv
ACRONYMS.....	v
TABLE OF CONTENT	vi
LIST OF TABLE.....	viii
CHAPTER– I	1
INTRODUCTION.....	1
1. Background of the Study	1
2. Statement of the Problem.....	3
3. Rational of the Study	5
4. Objectives of the Study.....	6
5. Limitation of the Study	6
6. Organization of the Study	6
CHAPTER– II	7
LITERATURE REVIEW.....	7
2.1 Theoretical Reviews	7
2.2 Reviews of the Previous Studies	10
2.3 Proposed Conceptual Framework	16
CHAPTER– III	17
METHODOLOGY	17
3.1 Study Site Selection.....	17
3.2 Sample Selection	17
3.3 Questionnaire Design	17
3.4 Data Collection.....	18
CHAPTER-IV.....	19
DATA ANALYSIS AND INTERPRETATION.....	19
4.1 Socio-Cultural and Demographic Characters	19

4.2	Knowledge on TB, HIV AIDS and STI among the Prison Inmates.....	21
4.3	Tendency of Risk Behavior to HIV and STI among the Prison Inmates.....	25
4.4	Stigma and Discrimination	27
CHAPTER–V		29
SUMMARY OF FINDINGS AND CONCLUSION		29
5.1	Summary of the Findings.....	29
5.2	Conclusion.....	31
5.3	Suggestions and Issues for Further Studies:.....	31
References		32
Annex I: Questionnaire for Interview.....		35

LIST OF TABLE

SN	Table Title	Page
4.1.1	Cast/Ethnic Composition of the Respondents	19
4.1.2	Composition of Religion of the Respondents.....	200
4.1.3	Distribution of Respondent's Education Level	200
4.1.4	Distribution of Respondent's Reason for Imprisonment.....	21
4.2.1	Distribution of the Respondent's Knowledge on HIV AIDS.....	222
4.2.2	Knowledge of the Respondents to whether HIV is Curable.....	222
4.2.3	Distribution of Respondents about Knowledge about Preventive Measure of HV	223
4.2.4	Distribution of the Respondents Knowledge on HIV by Different Source.....	233
4.2.5	Respondent's Knowledge on Basic Symptoms of TB.....	24
4.2.6	Respondent's Knowledge on Cause of TB.....	244
4.2.7	Distribution of the Respondents who got TB in the Prison.....	255
4.3.1	Distribution of the Respondents by Condom Use	266
4.3.2	Distribution of the Respondents by Sharing Syringe during Injecting the Drugs....	26
4.3.3	Distribution of the Sex Activity in Prison	27
4.4.1	Distribution of the Respondents by their HIV Status.....	27
4.4.2	Distribution of the Respondents by Stigma and Discrimination to PLHIV	28

CHAPTER– I

INTRODUCTION

The study has been planned to examine the knowledge on TB, HIV and STI among the male prison inmates of selected prisons. Moreover, the study also intended to analyze the tendency of risk behavior to HIV and STI among prison inmates inside the prisons. The finding of the study would certainly be helpful to design the program for prison inmates and give idea for further study among prison inmates.

1. Background of the Study

From the record of first millennia BC, the concept of prison started from the ancient civilization of Mesopotamia and Egypt. Such prisons were like underground where criminals were kept and being awaited for the decision of death sentence or become slaves (<http://www.prisonhistory.net/prison-history/history-of-prisons>).

The historical account of jails in Indian sub-continent can be traced back to the Epic age. In Ramayana, when Bharat saw Rama at Chitrakut, the latter, while making detailed inquiry about the state of polity and welfare of people of Ayodhya. In Manusmriti it is stated that "(the King) should have all the prisons built on the royal highway, where the suffering and mutilated evil doers can be seen". There were also horrific punishments like feeding to animals, mutilations etc. In Mahabharata, it is also stated that people were also locked up like Krishna's parents in a jail of Mathura where Krishna was born. The pre-Buddhist jails were said to be very cruel, inmates were kept in chains and under heavy loads. Whipping was a daily routine there (*The History of Prison of India*).

In Nepal, the government of Nepal established prison in 1914 BS (1858 AD) with the name of Jagannathdewal which was administered by "Muktiyar" and the chief was Rana General. This is now called Central Jail. In the beginning, the prison was managed by Military but after the political transformation of 1950, Ministry of Home Affairs is managing the prison department. Now there are 74 Prisons in 72 districts of Nepal. There are no jails in Bara, Dhanusha and Bhaktapur districts. Kathmandu and Dang districts have two jails.

In the modern time, the governments have come up with the several prison reform schemes and prisoners have started receiving more care and supportive services around

the world. There are 10 million prisoners at any time and 30 million people are incarcerated every year around the world (*Annual Report -2011, UNODC*).

In Nepal, the capacity of all prisons is only for 6,416 inmates but 14,121 (Male-13126, Female-995) prison inmates are incarcerated. It is more than double (220percent) of the existing capacity. The large numbers of prisoners are compelled to spend their imprisoned lives in the limited space like chicken in a battery (*Department of Prison Management of Nepal, 15 Nov 2012*). Today's prisons were designed many years before. So, capacity is not sufficient for the increased number of prison inmates in Nepal. The prison capacity has not been scaled up in comparison to the increasing trend of prison population.

People are imprisoned in different cases and from different part of the country and put them together for different periods. The prisoners are saints, some are ordinary and some are from most at risk group (Injecting Drug Users, Sex Worker, Men Sex with Men, Migrants) and people living with HIV. Whatever the background, prison inmates are kept in the same boundary with limited space in the prison. Moreover, there is high turnover of the prisoners and overcrowding inside the prisons makes prison population vulnerable to transmission of TB, HIV and other communicable diseases (Skin infections, Tuberculosis (TB) and Hepatitis etc).

There is very little data on TB, HIV and STI prevalence or risk behaviors among the prisoners in Nepal. It is assumed that risk behaviours such as unprotected anal sex between men (both consensual and coerced), unsafe injecting and tattooing are common in the prison system in Nepal as in most countries in Asia. If unsafe sexual activities and drug use exists within prisons, there would be a significant possibility of HIV transmission among the prison population. Since there is high turnover, the prisoners may transmit TB, HIV and STI to their sex partner and injecting partners. There have been some ad hoc HIV prevention efforts in limited prisons through different donor organizations.

Considering the reality, Nepal national HIV & AIDS strategy (2006-2011) has identified prison population as most at risk group of HIV transmission. According to Nepal Country Progress Report 2012 (NCASC, 2011), it is estimated that there are approximately 50,200 HIV infected populations in the country. IDUs, MSM, FSWs, male labour migrants, and clients of FSWs are identified as most-at-risk of HIV in Nepal.

2. Statement of the Problem

Since the first detection of first AIDS case in Nepal in 1988, Nepal has progressed from “low-prevalence” country to one with high a so-called “concentrated epidemic” in certain key population at higher risk (KPHR). This is because HIV prevalence among some risk groups is higher than 5 percent while HIV prevalence in the general population is below one percent. The recent estimate of HIV infections in the country is approximately 50,200 (Nepal Country Progress Report 2012, NCASC). With HIV prevalence of 6.3 percent and 2 percent among injecting drug users and female sex workers respectively, and prevalence is 3.8 percent and 5.2 percent among MSM and MSW respectively. 1.4 percent HIV prevalence among Male Labor Migrant (MLM). The largest numbers of reported HIV infection come from men who have been clients of sex workers (*NCASC, IBBS 2011*). HIV infection in Nepal mainly occurs in the younger age groups. 72.5 percent of recorded infections are in between the ages of 20 to 39 years. 1,121 cases of HIV infection have been recorded among the children of the group 0-9 years (*NCASC, Cumulative HIV Situation as of June, 2012*).

According to the latest (2011) estimation of NCASC, 50,200 people are living with HIV AIDS in Nepal. But according to National Centre for AIDS and STD Control (NCASC), 20,583 people are reported as PLHIV to the end of June 2012. Out of 20,583, male are 13,157, female are 7,417 and third gender (TG) are 9. Among the different subgroups of the population, female sex worker, clients of sex worker and Intravenous Drug Users (IDUs) cover the higher number among the reported cases.

In total 1,518 prison inmates were tested and counseled. Out of them 13 cases were identified as HIV positive which is 0.85percent. The cases were identified in the prisons where HIV intervention has been implemented (*Annual Repor-2012, Youth Power Nepal*).

Limited data available on HIV risk behavior in prisons in Nepal. The National Strategy categorizes the prison population as a most-at-risk population (MARP) based on international evidence and experience. However, a rapid assessment of drug use and HIV carried out in 1999 (UNODC) found that drug injectors with a history of imprisonment were 4.6 times more likely to be HIV-positive than those without such a history. Studies among 95 inmates in five prisons in Eastern Nepal found that 28 percent were drug users. Of those, 75 percent “always” shared needles while injecting. It has been realized nationally

and internationally that an individual has more probability of contracting HIV in a prison than in the community. The available strategic information related to these populations is inadequate to device appropriate policies and strategies in the country.

Except for political prisoners majority of these inmates are from marginalized and discriminated population. According to WHO publication, HIV Prevention, Care and Treatment in Prisons in the South-East Asia Region-2007, in the prisons HIV prevalence is much higher among injecting drug users (IDUs) and sex workers than in the general population. Nepal is not exceptional to the facts that the prisoners are among the population considered highly vulnerable to HIV (NCASC 2004) and need interventions to reduce their vulnerability. Nepal's National Action Plan 2008-2011 states that there is a need to pursue intervention programs for prison population. At the moment the programs related to HIV prevention, treatment and care are operating at a very small scale and a comprehensive program on prevention of HIV AIDS in prison setting in Nepal is very much desirable.

Since the almost prisons are overcrowded, the prison inmates have to spend imprisonment period in limited space. Other hand, they are away from family which may cause homosexual behavior as alternative way to fulfill sexual desire. Since there is no provision of distribution of condom and lubricants inside the prison, that may cause new incidence of STD and HIV infection among them.

Safe sexual practice is needed to halt and reverse the new infection of HIV. It was found that that the new population appears in the risky group every year who have heard about the HIV AIDS but not serious for safe behavior.

3. Rational of the Study

Different types of programs have been designed and implemented to address the health, social and cultural issues up to the community. Likewise, people have conducted different types of studies and researches focusing to the general population outside the prisons. As the result, the situation has been changed in the society now by then. The prison is just considered as the place of hell and very much rare programs are designed and implemented to improve the lives of prison inmates. From the prospective of humanitarians view, the lives prison inmates are very poor. After all, they are also the members of the society and will also come back to their society after certain duration. If they are not updated with the development process that happens outside the prison, there will be big gap of understanding when they come out from the prison. Consequently, the released prison inmates may fall into isolation in the society and would be more chances to involve again in criminal activities. But development activities should stop chances to happen such incidence in the society again.

After early 1990s, NGOs, INGOs and Government of Nepal have implemented HIV and STI related different levels of interventions among the high risk behavior population and general population. But the prison inmates are not covered as compared to the population outside the prison. However, the limited interventions have been initiated in few prisons from last few years. As of Dec 2013, NGO has started comprehensive package for HIV prevention among the 13 prisons out 74 prisons in Nepal. Out 1,518 HIV test conducted among the prison inmates, 13 cases are identified as HIV positive cases which is almost 0.85percent prevalence. This shows that if the prison inmates are aware about the modes of HIV & STI transmission, there might be less chances of HIV transmission from one inmate to another. So it's more important to identify their level of knowledge, attitude, behavior and practice on HIV, STI and condom.

The study has been designed keeping intention to bring forward the existing level of knowledge, attitude, behavior and practice on HIV AIDS, STI and condom use among the prison inmates of two different prisons with and without HIV intervention. And it supposed that the finding of the study will be helpful to the respective organization in future to design appropriate program and implement the activities accordingly to minimize risky behavior of acquiring HIV and STI among the prison inmates.

4. Objectives of the Study

The general objective of the study is to identify level of knowledge and practice among the prison inmates. In addition, the specific objectives of the study are:

1. To examine the knowledge on TB, HIV & STIs and condom among male prison inmates.
2. To analyze the tendency of risk behavior to HIV and STI
3. To identify the level of stigma and discrimination against PLHIV in Prison.

5. Limitation of the Study

The study is focused to establish the knowledge on TB, HIV AIDS and STIs and tendency of risk behavior attitude towards condom among the male prison inmates. The proposed study has been undertaken to meet the partial fulfillment of the requirement for master's degree of Sociology. However, the limitations of the study are:

- ❖ The respondents of the study are the male prison inmates who have been imprisoned since last one year.
- ❖ The study is conducted among the limited prison inmates.
- ❖ The respondents of the study are only male prison inmates.

So, the findings of this study do not represent for national level and can't be generalized.

6. Organization of the Study

This study is divided into five chapters. The first chapter is the introduction which includes background, statement of the problem, objectives, significance/rational, limitations and organization of the study. The second chapter represents literature review which includes the theoretical and empirical review as well as brief overview of national, regional and global HIV situation and the conceptual framework of the proposed research. The third chapter is about research methodology which contains the research sites, types of respondents, sample size, questionnaire design, and process of data collection, processing, analysis and interpretation. The fourth chapter represents the detail about the data analysis and interpretation of the study population based on the pattern of the questionnaire. The fifth chapter covers the summary finding, conclusion and recommendation.

CHAPTER– II

LITERATURE REVIEW

2.1 Theoretical Reviews

2.1.1 HIV AIDS and STIs

HIV AIDS was identified in 1981 for the first time and diagnosed in 1983 in US. In Nepal it was identified in 1988. HIV stands for Human Immunodeficiency Virus and AIDS stands for Acquired Immune Deficiency Syndrome caused by HIV. Robert Gallo was the first person who identified HIV AIDS. HIV AIDS has been globally spread in a short of span of its life and has been a great challenge to human being. HIV has its own special characteristics. When HIV enters into human body, it hides itself in human blood so that the human immune system doesn't know the virus and can't produce antibody immediately. Then the gradually increases itself inside the human body and gradually ruins the human immune system. When human body loses the immune system, different opportunistic infections like TB, pneumonia, fever, cough and other communicable diseases appear. AIDS is the last stage of HIV infection. Now HIV AIDS has been one of the greater killers. The cure of HIV AIDS is still mysterious and has been a serious challenge to medicine science of twenty first century. Many researches have been done but absolute remedy is not found yet.

Sexually Transmitted Infections (STIs) are the infections transmitted through unsafe sexual contact from one person to another. It is considered as public health problem. STIs are often considered one of the most common infections, occurring globally, resulting in high morbidity primarily in the developing regions of Southeast Asia and sub-Saharan Africa. Studies indicate that where STI prevalence is very high, HIV prevalence is equally high. In some Sub-Saharan countries in Africa, HIV infects up to one third of the adult population. According to estimated annual incidence (Annual Report 1999, WHO), 340 million of new cases occurred among the men and women age 15-49 years. People with STI have 3-10 times greater risk of being infected with HIV. According to the Annual Report of HMIS (2067/68 BS) a total of 62,871 HIV cases were tested for HIV and 1338 were identified as HIV positive.

2.1.2 Epidemic of HIV AIDS

HIV AIDS still remains as one of the world's most serious health problem. However, global solidarity in AIDS response during the past decade continues to generate extraordinary health gain. Global AIDS news is encouraging. The new infection of HIV is continuing to decline in the world.

Global

In 2012, UNAIDS has received comprehensive reports from 186 countries (96percent of 193 UN member countries) on progress in their national AIDS response. UNAIDS has estimated that 34 million people are living with HIV at the end of 2011. Out of which, 2.5 million people became newly infected with HIV and 1.7 million were died of AIDS- related illness. Compare to 2001, new infection with HIV was reduced by 20percent in 2011. Likewise AIDS related death declined by 24percent in 2011. And more than 8 million people are receiving antiretroviral therapy. (*UNAIDS, Global AIDS Report 2012*)

South East Asia Region

Although the HIV prevalence rate is still low in South-East Asia, it's burden is in the region. Because of the largest population base and presence of several factors that enhance the spread of HIV, including poverty, gender inequality and social stigma, the South-East Asia Region is likely to increasingly suffer from the burden of the epidemic. An estimated 4.2 million people were living with HIV AIDS in South-East Asia in 2011; it is the second highest number of cases in the world after sub-Saharan Africa.

HIV Prevalence in Nepal

Though the four cases of HIV were found in 1988 in Nepal, the number dramatically increased from 1995 and onwards. To the end of June 2012, the reported cumulative HIV cases are 20,583 (M-13,157, F- 7,417 and TG-9). The total estimated HIV infections are 50,288 in 2011. The HIV prevalence among adults (15-49 years) is 0.30 percent in 2011(*Situation Analysis of HIV AIDS in Nepal, Kathmandu, NCASC 2011*). The situation is quite different among the Key Population at Higher Risk (KPHR). According to the IBBS of 2009, the HIV prevalence among IDUs of Eastern Terai, FSWs of Terai Highway, MSM (Kathmandu) is 6.3 percent, 2.2 percent and 3.8 percent respectively. Among the reported cases (N=2,060) of 2011, the sexual contact is the major routs of HIV transmission led by 87.9percent whereas mother to child is 7.7 percent, sharing unsafe needle/syringe is 4.2 percent and blood/blood product transfusion is 0.2 percent.

HIV Prevalence in Prison

One study was carried out to review the HIV intervention program in prison in Canada and worldwide which aimed to reduce the HIV transmission among prison inmates. The study examined the risk of HIV and HIV intervention which include HIV Testing and Counseling (HTC), needle exchange, condom distribution, bleach and methadone maintenance among prison inmates from 2002 to 2007. The study assessed the pre and post release outcomes of sexual education and peer-based HIV prevention program in the prison.

HIV prevalence among prison inmates in developed countries ranges from 0.2 percent in Australia, 2 percent in the US, to over 10 percent in some European countries. Europe and Central Asia has 19 percent, South Asia has 3 percent only, 9 percent in Asia Pacific countries, 3 percent in Caribbean, 11 percent in Latin America, 10 percent in North Africa and Middle East and 20 percent in Sub-Saharan Africa. A study conducted in 17 prisons of Quebec provinces in Canada has found that female prisoners have 8.8 percent prevalence of HIV infection and only 2.4 percent among male prison inmates. (*National Collaborating Center for Infectious Diseases, Evidence Review on Primary HIV Prevention Intervention in Prisons and upon Release, 2008*).

In total 1,518 prison inmates were tested and counseled. Out of them 13 cases were identified as HIV positive which is 0.85 percent. The cases were identified in the prisons where HIV intervention has been implemented (*Annual Report of Youth Power Nepal, 2012*).

HIV Related Intervention in Prison Setting in Nepal

Although there is very few data on the prevalence of HIV or HIV risk behaviors among prison inmates in Nepal, it is assumed that risk behaviours such as unprotected anal sex between men (both consensual and coerced), unsafe injecting and tattooing are common in the prison system in Nepal as in most countries in Asia. There have been some ad hoc HIV prevention efforts in prisons but there have yet to be any interventions implemented on a broader scale.

In Nepal very limited data available on HIV risk behavior in prisons. A rapid assessment of drug use conducted in 1996 reported that 45.6 percent of injecting drug users (IDUs) had been taken into police custody, and another 7.69 percent had been detained in prison, at least once during their lifetimes (*Drug abuse in Nepal: a rapid assessment study, Bull Narc*

1996). A rapid assessment of drug use and HIV carried out in 1999 found that IDUs with a history of imprisonment were 4.6 times more likely to be HIV positive than those without such a history (*Nepal HIV drug assessment report. Kathmandu, Family Health International, 1999*). A small study 2002 in five prisons also reported that 19 percent of the inmates were IDUs.

2.2 Reviews of the Previous Studies

2.2.1 Knowledge, Attitude and Behaviour

Knowledge is defined as familiarity, awareness, expertise or understanding gained through experience or study (Business Dictionary, 2010). It is the sum of what is known in a certain field, the range of what has been perceived, discovered or learned. According to encyclopedia (2010), three requirements have to be fulfilled before a person can say that “he/she knows”. These requirements are first the person should know or have knowledge about that the statement is true, second the person should believe the statement to be true and third the person should have valid reasons to believe that the statement is true.

Education sector has a vital role for HIV prevention. Recent data shows that knowledge of HIV and how to prevent from transmission is slowly improving among young adults and adolescents. However, the level of knowledge is still too low in most countries and far below the goal set at the UN General Assembly Special Session on HIV AIDS of reaching a comprehensive HIV knowledge of 95percent by 2010. Statistics show that on a global level only an average of 31 percent of young men and 19 percent of young women have accurate understandings of the virus, and about its transmission and non-transmission routes, spread and treatment (*UNGASS Report 2010*).

The majority of the prison inmates have knowledge and understanding on HIV AIDS and STI. The level of knowledge and understanding among the inmates regarding HIV and STI was discovered to be directly correlated to the level of education of the respondents. Most of the respondent prisoners were aware of the modes of infections, and sexual intercourse unprotected sex with a sex worker, casual contact with an infected person, and blood transfusion were cited as mode of transmission by most inmates.

An overwhelming majority (93.5 percent) of the respondent prisoners were aware of Tuberculosis, however only half (50.4 percent) knew of Hepatitis B and an even smaller

population (43.5percent) had heard about Hepatitis C. There is also information asymmetry between inmates from Kathmandu versus those from outside, especially on both forms of Hepatitis. While 61.7 percent of respondents from Kathmandu knew Hepatitis B, only 38.2 percent of prisoners from outside prisons knew of it. Also, 55.8 percent of Kathmandu inmates were aware of Hepatitis C against 30 percent from outside prisons.

As the case of HIV AIDS and STIs, the information on all sicknesses appears to be directly related to education levels. Those with University or technical degree (TB- 100 percent, Hep B- 93.1 percent, Hep C- 75.9 percent) were the most informed followed by those with Informal education (TB- 96.3 percent, Hep B- 46.3 percent, Hep C- 40.7 percent) and illiterate inmates (TB- 89.7 percent, Hep B- 22.4 percent, Hep C- 17.2 percent) were the least knowledgeable on either of TB, Hepatitis B, or Hepatitis C. (*Epidemiological study on HIV and other infection among Female Prisoners, UNODC-2012*)

University of Heidelberg conducted a study on “Assessment of Knowledge, Attitude and Behaviour Concerning HIV and STI in Selected Population in 1997”. The overall awareness about HIV AIDS and STI was found to be quite high, although misperceptions regarding non-sexual transmission routes of HIV were still frequent. For example, a quarter of policemen, 9.1 percent of ANC patient and 18 percent of male high school students thought that HIV is transmitted through insect bites. Other misperception mentioned included sharing of clothes and sitting on a warm seat also transmit HIV.

Of the 357 respondents interviewed, 22 percent reported high TB stigma, 26 percent low TB knowledge, and 20 percent negative attitudes. There was significant association between age groups, ethnicity, education status, marital status and occupation status were associated with the knowledge on TB (p-value < 0.01). Higher education status, younger age group and upper caste people were associated with high knowledge about TB. The results of fitting logistic regression showed that both attitude and stigma were statistically significant with knowledge on TB (p-value < 0.05). Negative attitudes, high stigma and low TB knowledge were associated (*KAP Survey among communities to Enhance Response on Nepal’s TB Control Program, HERD, March 2010*).

The level of awareness about HIV transmission and prevention appears to be rather satisfying, as 71 to 89 percent of TGs are aware of the most common source of HIV transmission except about mother–to-child transmission, the awareness of which has been

reported only by half of the TGs (*Risk and Vulnerability Assessment of Transgender People in Nepal-2011, UNDAIDS*).

2.2.2 Risk Behavior

A U.S. study revealed that male inmates' attitudes and behaviors about same-sex acts changed the longer they were incarcerated. Initially 1 percent said they were homosexual, 4percent bisexual, and 95 percent heterosexual. When asked about the current sexuality, 75 percent of the inmates considered themselves as heterosexual, 14 percent bisexual and 9 percent homosexual. Likewise, another study similarly found that, prior to incarceration, 79 percent of American inmates identified themselves as heterosexual, 15 percent bisexual, and 6 percent homosexual. When asked about their sexual orientation during their present incarceration, 69 percent identified themselves as heterosexual, 23 percent bisexual and 7 percent homosexual.

Wolitski and the Project START Team of California conducted a survey with young men (n=552) in prison setting where sexual education intervention was enhanced. Prior to the intervention, it was reported that the unprotected intercourse with main partner was 76 percent and nearly half of the participant had non protective sex with non-main partner. After the completion of the study among the inmates who received the enhanced interventions, it was found that the unprotected sex was significantly lower compare to those inmates who received only a single-session intervention.

Other strategies to reduce unsafe sex involve linking visitation and family prison program with HIV risk reduction intervention. Such visiting programs are initiated to maintain the social relationship is beneficial both as a reward system for controlling inmate's behavior and increase chances of successful re-entry into their family and community. The research has suggested that almost 50percent of the male prisoners are committed for heterosexual and willing to return to their partner after releasing from the prison or custody.

2.2.3 Attitudes and Practices

According to the survey of teenagers of Nepal carried out by UNICEF/UNAIDS, the teenagers are highly aware of HIV risk, but this awareness does not guarantee safe-sex behavior. Although overwhelming majority (92 percent) of teenagers have heard of HIV AIDS, only 74 percent of teenagers knew that they should use condom when having sex,

and only two-thirds (69 percent) could say that they should not have sex with female sex workers. The study shows that almost 20 percent of teenagers considered premarital sex as proper. One in five boys and nearly one in 10 girls interview had had a sexual experience. 65 percent of boys said that they had used condom during sexual intercourse. Unprotected sex led to a 14 percent pregnancy rate and 22 percent sexually transmitted diseases (STD) infection rate inn boys and 13 percent rate in girls. The pregnancy rates were high in districts where girls were pressured in having sex. The number of boys who had had sex was far higher than the number of girls. This suggests that a high number of boys were visiting commercial sex workers, constituting high-risk behaviors.

Condom use rate was higher among the Indo Aryan, with 71 percent among boys who had sex and 88 percent among girls. Marginalized ethnic groups had the lowest rate of condom use, 50 percent among boys and 62 percent among girls who had sex. Most teenagers said they were interested in learning more about sex and sexual health. They wanted more information about STD, HIV AIDS and safe sex. Radio and television were the best sources of information on HIV AIDS (*UNICEF/UNAIDS, April 2001*).

More than three-fourths of TGs respondents perceive that condom use leads to lack of pleasure and cite that as the major hurdle in condom use. To effectively address their vulnerability to HIV and STI, the need to be trained to project condom as a sexual stimuli rather than a means of disease protection to their clients and motivate them to use condoms. This may have a better potential of being accepted by encouraging innovative approaches, such as the adoption of flavored condom and lubricants (*Risk and Vulnerability Assessment of Transgender People in Nepal-2011, UNDAIDS*).

The result in a study performed in Sweden shows that the majority of the respondents had positive attitudes towards people living with HIV. The respondents who had previous experience of working in the health care sector and the respondents having previous experience of caring for patients with HIV as well as the respondents in age group 26-30 and 31-45 showed less refraining attitudes, but also less empathic attitudes towards HIV AIDS patients. The number of respondents who would refrain from treating a patient with HIV, if the opportunity was presented, increased with decreasing age, and was greater among respondents not having previous experience working in the health care sector or

caring for patients with HIV AIDS. This indicated how personal experience along with education and knowledge could influence the attitudes (*Aschberg & Sjöblom 2009*).

The majority of studies conducted during the 20th century shows that attitudes among nursing students towards people infected with HIV are generally positive (*Lohrman et. al., 2000, Röndahl, Innala & Carlsson, 2003, Veeramah, Bruneau & McNaught, 2008*). The studies show that the students in most cases are willing to care for people suffering from HIV AIDS.

A study performed by Mahat and Eller (2009) shows a somewhat different result than the majority of other studies conducted among nursing students on the topic attitudes and knowledge towards HIV AIDS patients. The study, a KAP survey, was performed in Nepal. The result shows that the respondents, like in previous studies, have a lack of knowledge and a need for more education about HIV AIDS care, transmission, symptoms and treatment (*Mahat & Eller, 2009*). Contrary to other studies performed, the respondents participating in this study expressed a greater deal of negative attitudes towards HIV AIDS patients, but most of the participants stated that they were still willing to care for people suffering from the disease. Thirty-eight percent of certificate students and 25percent of Bachelor of Science Degree (BS) students agreed upon the statement that people with AIDS deserve their faith.

2.2.4 Stigma and Discrimination

Many prisoners do not receive pre- and post-test counseling when they go for an HIV test. Those who receive a positive test result feel that they do not receive adequate counseling and support after their diagnosis. The confidentiality of their HIV status has been breached through institutional practices. Prisoners with HIV or HCV have difficulties getting medical care. This has been most thoroughly documented among women prisoners, who have problems obtaining blood tests, accessing physicians and specialists, obtaining adequate pain medicine, and accessing medications to relieve the side effects of HIV and HCV drugs. Treatment interruptions have been shown to result in substandard HIV anti-retroviral treatment. Prisoners report trouble accessing their HIV anti-retroviral medications as prescribed because of security lockdowns, attendance at court, transfers, failure to order or reorder drugs, and other problems. There have been several inquests into inhumane

deaths of prisoners with AIDS in federal penitentiaries. (*De Bruyn, Theodore, A plan of action for Canada to reduce HIV/AIDS-related stigma and discrimination*)

Over four-fifth of the Transgender (TG) community members reportedly are facing some form of discrimination owing to their gender identity, whereas 61 and 48 percent of TGs facing discrimination at their workplace or in their daily activities and health care facilities respectively. The stigma and discrimination faced by the community is also supported by the episodes of physical and sexual harassment as 56 percent of TG community members included in the study reported to have been beaten at least once due to their gender identity and 65 percent reported to have at least one forceful sex. Only one-third of them are aware of the availability of facilities and services that they use for seeking support in case they face discrimination, whereas 90 percent of all those included in the study want to use any such facility of services to overcome the problem of stigma and discrimination. (*Risk and Vulnerability Assessment of Transgender People in Nepal-2011, UNDAIDS*)

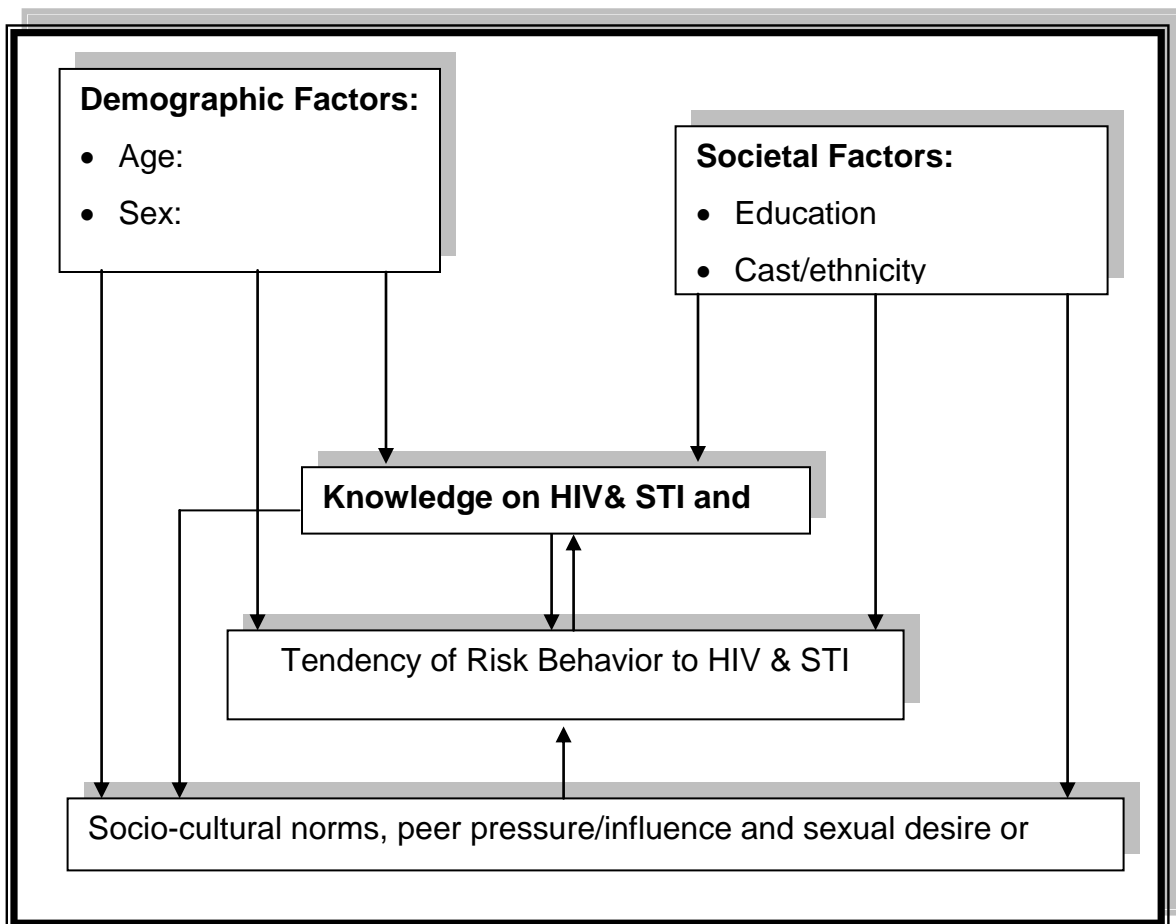
A number of studies conducted in South India during the past two years reported high levels of stigmatization and discrimination against people living with HIV AIDS. The stigmatization is even higher towards those people living in marginal lifestyles from the typical Indian society such as men who have sex with men (MSM), female sex workers (FSW) or IV drug users. People infected with HIV who belong to these groups are doubly stigmatized. Recent studies show that fear of discrimination, rejection and stigmatization is a great barrier that influences timing of testing as well as the timing to disclose a positive test results to their family and spouse (*Chakrapani et.al, 2009*). Homosexuality is widely stigmatized in India and was legalized as late as in July 2009 (*Pembrey & Spink, 2010*). Studies suggest that most homosexual men do get married due to social pressure and that they may engage in high risk sexual behavior with their wives (because of the pressure to have children) while remaining at high risk for contracting HIV infection through unprotected sex with other men (*Thomas, Mimiaga & Menon 2009*).

According to Madumo and Peu (2006) final year nursing students did express feelings of compassion and sympathy for patients suffering from HIV AIDS, but also agreed to the statement that the care given by them to those patients were affected by stigma. Stigmatization caused unequal treatment and discrimination. The fear of transmission caused difficulties in caring for the patients. The students also expressed anger and

frustration when they were expected to care for the patients infected with HIV, as they felt the supervision in caring for the patients was insufficient.

2.3 Proposed Conceptual Framework

In the study, the conceptual framework assumes to explain the level of risk behavior to HIV and STI among the prison inmates as influenced by self-sexual desire, socio-cultural norms, by force or peer pressure. Here socio-cultural factors affect demographic characteristics; mass media influences knowledge on HIV AIDS and STIs and use of condom. The above relationship can be mentioned in the following conceptual framework:



CHAPTER– III

METHODOLOGY

The study conducted with the aims of accessing knowledge on TB, HIV & STI among male prison inmates and their tendency of risk behavior among the inmates of Kathmandu and Palpa prisons. In addition, the study also has also aimed to see the level of level of stigma and discrimination against PLHIV in the prison. Hence, this study is completely based on the primary data.

3.1 Study Site Selection

In Nepal, HIV intervention has been initiated in 13 prisons against 74 prisons. This shows that the most of the prisoners are not reached with the HIV intervention. The study was designed in such a way to capture the respondents from both types of the prisons so the findings would be nearer to the reality. The study was conducted focusing on the prisons of Kathmandu district (Central Jail) and Palpa district. Central jail represents the prisons where HIV intervention has been implemented and Palpa jail represents the prisons where there is no HIV intervention yet and it is considered as virgin site from the point of view of HIV intervention.

3.2 Sample Selection

A total of 105 male prison inmates were taken as sample respondents for the purpose of this study. For this, 50 respondents were taken from Central Jail and rest 55 respondents were taken from the virgin sites. However, the numbers of inmates are more in Kathmandu than Palpa. The respondents were randomly taken from the prison inmates who have been staying in the prison at least from last one year. The study has fully maintained the confidentiality of respondents.

3.3 Questionnaire Design

For the study, the questionnaire has been designed to access the knowledge on TB, HIV, and STI among male prison inmates and their tendency of risk behavior to HIV and STIs. The questionnaire has been divided into four different sections. The first two section of the questionnaire cover the general information of the respondents (related to demographic characteristics) are respondent's knowledge on TB, HIV & STI and tendency of risk

behaviors. The third and fourth sections explores about the level of risk behavior and stigma and discrimination against PLHIV in prison. The set of questionnaire is attached.

3.4 Data Collection

The data were collected from the field in Mar-April 2013 within the proposed area based on cross sectional design. The questionnaires were directly asked to the prison inmates through one to one interview method. Besides, the secondary information was also taken from different resources including internet websites and researches for the use of this study.

3.5 Data Processing

The completed questionnaires were preceded. First of all, the questionnaires were checked manually and then the data were be managed in a specific program using Epi Data software.

3.6 Data Analysis and Interpretation

The data and figures that obtained from program have been analyzed and interpreted mainly based on its research design. The frequency and cross-tabulation figure is presented both in number and percentage.

CHAPTER-IV

DATA ANALYSIS AND INTERPRETATION

This chapter describes the basic socio-cultural and demographic characters, level knowledge on TB, HIV, STI and tendency of risk behavior; level of stigma and discrimination among the sampled respondents. The subsequent sections of this chapter explain the information based on the response of the respondents.

4.1 Socio-Cultural and Demographic Characters

This section describes about the basic characteristics which includes the socio-cultural and demographic details which are considered as contributing factors for the respondent's level of knowledge, attitude and practice in the field of study.

4.1.1 Cast/Ethnic Composition of the Respondents

Cast is the main base of the social hierarchy of Nepalese population. The ethnic composition of the sample respondents from two prisons of Kathmandu and Palpa district are presented in the table (#01) below.

Table 01: Distribution of the Respondents by Casts/Ethnicity

Cast	No. of Respondents	Percent
Brahmin	16	15.2
Chetri	22	21.0
Newar	8	7.6
Gurung	10	9.5
Magar	12	11.4
Tamang	9	8.6
Sudhra	6	5.7
Others	22	21.0
Total	105	100.0

Source: Field Survey, 2013

The table shows that the majorities of the sampled respondents are from Chetri (22 percent) and followed by Brahmin (16 percent), Magar (12 percent) and Gurung (10 percent). The sub-group "other" represents by 22 percent from the remaining casts/ethnic groups like Tharu, Madhesi, Rai, Limbu.

4.1.2 Composition of Religion of the Respondents

The sampled populations are also from different religion. The table (#02) below shows the composition of the sampled prison inmates by religions that prevail in Nepal. Most of the respondents are from Hindu religion. Rest religions represents very few in the composition by religion.

Table 02: Distribution of the Respondents by Religion

Religion	No. of Respondents	Percent
Hindu	79	75.2
Buddhist	9	8.6
Muslim	4	3.8
Christian	8	7.6
Others	5	4.8
Total	105	100.0

Source: Field Survey 2013

4.1.3 Distribution of Respondent's Education Level

Education is also one of the very much important factors in the country. Education is assumed to help for the development of individual as well as community and country. The composition of the selected respondents by education level is presented in the table (#03) below.

Table 03: Distribution of the Respondents by Education Level

Education Level	No. of Respondents	Percent
Illiterate	9	8.6
Literate	10	9.5
Primary	12	11.4
Lower Secondary	16	15.2
Secondary	25	23.8
SLC	18	17.1
10+2	11	10.5
Bachelor	2	1.9
Master	2	1.9
Total	105	100.0

Source: Field Survey 2013

The table (#03) shows that majority of the prison inmates are from secondary and below. This fact explains that should take strategy increase the level of education level of Nepal to reduce the crime in the society.

4.1.4 Distribution of Respondent’s Reason for Imprisonment

The selected respondents are imprisoned in different cases. The table (#04) below shows the reasons why people are incarcerated.

Table 04: The Distribution of the Respondents by Reason for Imprisonment

Reasons	No. of Respondents	Percent
Drugs peddling	21	20.0
Girls trafficking	4	3.8
Murder	27	25.7
Rape	13	12.4
Theft	28	26.7
Others	12	11.4
Total	105	100.0

Source: Field Survey 2013

The table (#04) shows that the most of the respondents are incarcerated in the case of theft (28 percent), murder (27 percent) and drug peddling (21 percent) respectively. Girls trafficking represent the lowest reason for incarceration. This shows that the responsible authority should plan with higher priority to minimize the crime in the community according to the composition of the crime.

4.2 Knowledge on TB, HIV AIDS and STI among the Prison Inmates

This section describes about the level of knowledge on TB, HIV AIDS and STI of the sampled respondents of two districts Kathmandu (Central Jail) and Palpa (district jail). HIV intervention has been implemented whereas there is no HIV intervention program in district Jail of Palpa. The section will explain the comparative level of respondents knowledge of the respondents who are reached through HIV and STI related BCC and treatment services against the respondents who are not reached through the service.

4.2.1 Distribution of the Respondent's Knowledge on HIV AIDS

In order to identify the knowledge on HIV AIDS, STI and TB among the sampled prison inmates, they were asked whether they have heard and understand or not with two options yes or no. The table (#05) clearly states that the most of the respondents have heard and understand about HIV AIDS, STI and TB by 93.3, 86.7 and 95.2 percent respectively. Based on the response, the programmer should think to design further strategy to increase the knowledge on STI comparing to HIV AIDS and TB.

Table 05: Distribution of the Respondent's Knowledge on HIV AIDS, STI and TB

Respondent's Response	HIV AIDS		STI		TB	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	98	93.3	91	86.7	100	95.2
No	7	6.7	14	13.3	4	3.8
Total	105	100.0	105	100.0	104	99.0
Missing	-	-	-	-	1	1
Total					105	100

Source: Field Survey 2013

4.2.2 Knowledge of the Respondents to whether HIV is Curable

In order to explore the knowledge of the respondents towards curability of HIV, they were asked whether HIV is curable or not. The table (# 06) shows that 86.7 percent of the respondents confirmed the expected answer. But 6.7 percent responded that HIV is curable and rest 6.7 percent of the respondents didn't response any. This shows that there are still big populations who don't know that HIV is not curable yet.

Table 06: Distribution of the Respondents by Knowledge of HIV Curable

Responses	Frequency	Percent
Yes	7	6.7
No	91	86.7
Total	98	93.3
Missing/Don't know	7	6.7
Total	105	100.0

Source: Field Survey 2013

4.2.3 Knowledge on Preventive Measures of HIV

The study explored the level of knowledge of the selected respondents from the prison inmates on preventative measures of HIV. The table (#07) shows that only 84.8 percent of the respondents know the preventive measure of HIV infection. It means there are still certain proportion of populations (almost 15.2 percent) who may acquire and transmit HIV due to lack of proper knowledge. The programmer should address to uplift the knowledge of such population.

Table 07: Distribution of the Respondents about Knowledge on Preventive Measure of HIV

Responses	Frequency	Percent
Yes	89	84.8
No	8	7.6
Total	97	92.4
Missing	8	7.6
	105	100.0

Source: Field Survey 2013

4.2.4: Distribution of the Source of Knowledge of HIV

The table (#08) clearly spells out that the respondents have learned about HIV through the Radio, TV, Books, Friends and Newspapers by 51, 50, 42, 36 and 20 percent respectively.

Table 08: Distribution of the Source of Knowledge of HIV

Source of Knowledge	Frequency of the Responses	Percent of Cases
Radio	51	52.6
TV	50	51.5
Books	42	43.3
Newspaper	20	20.6
Friends	36	37.1
Family Members	7	7.2
Social Leader/NGO	8	8.2
Drama	6	6.2
Others	8	8.2
	228	235.1

Source: Field Survey 2013

4.2.5 Respondent’s Knowledge on basic Symptoms of TB

The study explored the respondents’ knowledge on basic symptoms of TB. For this the respondents were asked with multiple options whether they are aware about the very basic and common four symptoms of TB. The table (# 09) explains the level of knowledge on basic symptoms of TB. The respondents replied with multiple responses.

Table 09: Distribution of Knowledge on basic Symptoms of TB

Symptoms of TB	Responses	
	Frequency	Percent
Have-two weeks cough	7	36.8
Fever at night	3	15.8
Loss of weight	5	26.3
Sweating at night	4	21.1
Total	19	100.0

Source: Field Survey 2013

From the table (#09), it can be concluded that the respondents are not properly aware about the key symptoms of TB.

4.2.6 Respondent’s Knowledge on Cause of TB

The study explored the respondents’ knowledge on cause of TB. For this the respondents were asked with multiple options whether they are aware about the very basic cause of TB. The table (#10) explains the level of knowledge on cause of TB. The respondents replied with multiple responses.

Table 10: Distribution of Knowledge on basic Symptoms of TB

Possible cause of TB	Multiple Responses	
	Frequency	Percent
Causes of TB-Smoking	90	44.8
Causes of TB-Alcohol use	39	19.4
Causes of TB-Malnutrition	34	16.9
Causes of TB-Infection	37	18.4
Causes of TB-Others	1	.5
	201	100.0

Source: Field Survey 2013

From the table (#10), it can be concluded that the respondents are not properly aware about the key symptoms of TB.

4.2.7 Distribution of the Respondents who got TB in the Prison

TB is highly communicable disease. There is more likely of TB transmission to those who are HIV positive. There might be chances of double infection ie TB HIV co-infection. In order to identify the proportion of the population with TB infection, the respondents were asked whether they got TB in the prison. The response of the sampled population is presented in the table (#11) below.

Table 11: Distribution of the Respondents who had got TB

Responses	Frequency	Percent
Yes	3	2.9
No	94	89.5
Total	97	92.4
Missing/Don't know	8	7.6
Total	105	100.0

Source: Field Survey 2013

From the table, 2.9 percent of the respondents have got TB during their stay in the prison. Likewise 7.6 percent of the respondents couldn't respond properly whether they had TB or not. This shows that the prison management should organize TB related orientation to the prisoners and should allocate separate space to the prison inmates who have got TB so that there be very much less chances of further transmission of the TB to other inmates.

4.3 Tendency of Risk Behavior to HIV and STI among the Prison Inmates

This section describes about the tendency level of risk behavior to HIV and STI of the sampled respondents of two districts Kathmandu (Central Jail) and Palpa (district jail). The section will explain the tendency of risk behavior now and then of the respondents who are reached through HIV and STI related BCC and treatment services against the respondents who are not reached through the service.

4.3.1 Distribution of the Respondents by Condom Use

Condom use is very much important variable to determine the level of risk behavior to HIV and STI. The respondents were asked whether they were using condom during last sexual contact. The table (# 12) shows that 75 percent of the respondents reported that they had not use condom during their last sexual contact.

Table 12: Distribution of the Respondents who had Used Condom during Last Sex

Response	Frequency	Percent
Yes	19	18.1
No	79	75.2
Total	98	93.3
Missing/Don't Know	7	6.7
Total	105	100.0

Source: Field Survey 2013

4.3.2 Distribution of the Respondents by Sharing Syringe during Injecting the Drugs

IDUs are the most vulnerable population towards getting infection of HIV, STI, HBV and HCV. Sharing syringe during injecting drugs makes higher chances of HIV transmission. This variable is also measured by the IBBS study of Nepal in certain interval. Here the table (#13) shows the percentage of the IDUs who are imprisoned used share syringe during injecting drugs. The table (# 13) shows that 5.7 percent of the respondents reported that they had not use condom during their last sexual contact. There is also big number who didn't respond properly.

Table 13: Distribution of the Respondents by Sharing Syringe

Response	Frequency	Percent
Yes	6	5.7
No	13	12.4
Total	19	18.1
Missing/Don't Know	86	81.9
Total	105	100.0

Source: Field Survey 2013

4.3.2 Distribution of the Sex Activity in Prison

In order to access the risk behavior among the prison inmates, the respondents were asked what type of sexual activities they perform inside the prison. For this they were asked with four options. The table (#14) below presents the responses comparing the sex activities among the prison inmates of Kathmandu and Palpa prisons. The prison inmates of both prisons didn't respond properly however few of them responded about the type of sex they perform inside the prison. Only 6 and 10 respondents openly shared about their sexual behavior of Kathmandu and Palpa respectively. The respondents who openly shared about their sexual behavior, 33.3 percent of Kathmandu and 40 percent of the respondents of Kathmandu and Palpa districts are having anal sex inside the prison.

Table 14: Distribution of the Type of Sex in Prison

Type of Sex activity	Kathmandu		Palpa	
	Frequency	Percent	Frequency	Percent
Sex activity-Anal	2	33.3	4	40.0
Sex activity-Oral	1	16.7	2	20.0
Sex activity-Don't know	2	33.3	4	40
Total	6	100	10	100.0

Source: Field Survey 2013

This shows that the prison where HIV intervention is not being implemented has relatively higher level of risk behavior among the male prison inmates.

4.4 Stigma and Discrimination

In order to access the tendency of risk behavior to HIV and STI among the prison inmates, a shot list of risk accessing questions were designed and asked to the respondents. The findings regarding the tendency of risk behavior are listed below.

4.4.1 Distribution of the Respondents by their HIV Status

The total respondents were asked whether they are aware about their HIV status or not. The table (#15.) clearly explains the HIV status of the respondents. 39 percent of the respondents know about their HIV status and 59 percent of the respondents don't know about their HIV status. This shows that bigger populations don't know their HIV status.

They should go through HIV Testing and Counseling (HTC) which is considered as the entry point of HIV prevention.

Table 15: Distribution of the Respondents by their HIV Status

Response	Frequency	Percent
Yes	41	39.0
No	62	59.0
Total	103	98.1
Missing	2	1.9
	105	100.0

4.4.2 Distribution of the Respondents by Stigma and Discrimination to PLHIV

The respondents were asked three questions to identify the level of stigma and discrimination among the prison inmates. In Palpa, 46 respondents responded the questions and 100 percent of them expressed on stigma and discrimination against PLIV. Whereas in Kathmandu, it is slightly denies in providing support to PLHIV.

Table 16: Distribution of the Respondents by Stigma and Discrimination

Behavior to PLHIV	Kathmandu		Palpa	
	Frequency	Percent	Frequency	Percent
Ready to Sit together and Share Utilities	36	90	46	100
Ready to Involve in other Activities	40	100	46	100
Ready to Provide Support & Care	37	92	46	100
Total	40	94	46	100

Source: Field Survey 2013

CHAPTER-V

SUMMARY OF FINDINGS AND CONCLUSION

The study analyzed the knowledge on TB, HIV AIDS and STI and tendency of risk behavior among the prison inmates of the selected two districts Kathmand and Pala. For this study, the data was collected from field survey, conducted in March – April 2013. In total 105 inmates (55 from Palpa District and 50 from Kathmandu district) were randomly selected for the study purpose.

5.1 Summary of the Findings

The sample respondents are prison inmates from different socio-economic and demographic characteristics. The summary of the findings is arranged in basic demographic characteristic that includes resident district, marital status, age, ethnicity, religion, education level, duration of imprisonment and cause of imprisonment. In addition, the summary also covers the findings of knowledge on TB, HIV AIDS and STI; stigma discrimination against PLHIV and risky behaviors.

5.1.1 Basic Demographic Characteristics

- The highest number of the prison inmates is from Chettri cast that occupy 21 percent of the total respondents. Brahmin and Magar occupy by 15.2 and 11.4 percent respectively.
- 23.8 percent of the total respondents are from secondary level. 17 percent of the respondents have done SLC whereas only 1.9 percent is from Bachelor and Master's degree.
- 75.2 percent of the total respondents are from Hindu religion. Buddhist and Christian are 8.6 and 7.6 percent respectively.
- 91.4 percent of the total respondents fall under the age of 18 to 40 years.
- 53 percent of the total respondents are married and 43 percent are unmarried.
- 89.5 percent of the sampled inmates are imprisoned for the first time and 6.7 percent of them are there for second time.

- Theft, murder and drug peddling are the major cases of imprisonment which are represented by 26.7, 25.7 and 20 percent respectively.

5.1.2 Knowledge on TB, HIV AIDS and STI

- 93.3 percent of the total sampled respondents have heard and understand about HIV AIDS.
- 95.2 percent of the respondents have heard about TB.
- 87.6 percent of the respondents have heard about STI.
- Majority (51percent) of the respondents have heard about HIV from the source of radio.

5.1.3 Tendency of Risk Behavior to HIV and STI

- 70 and 16.2 percent of the respondents had sexual contact with their girlfriend and female sex worker respectively during their first sexual contact.
- 75.2 percent of the respondents reported that they had not used condom during their last sexual contact.
- 19 percent of the respondents reported that they had injected drug before they came to the person.
- 5.7 percent of the respondents used to share needle/syringe among the injecting drug user. 81.9 percent of the respondents didn't respond whether they shared or not.
- 92 percent of the respondents reported that there happens of anal and oral sex among prison inmates.

5.1.4 Stigma and Discrimination against PLHIV

In order to access level of stigma and discrimination against PLHIV, few questions were designed and asked with the respondents. The findings related to the stigma and discriminations are listed below.

- 39 percent of the respondents are aware about their HIV status
- 100 percent of the respondents of Palpa responded no stigma and discrimination against PLHIV
- 94 percent of the respondents of Kathmandu responded no stigma and discrimination against PLHIV

5.2 Conclusion

The data are collected from the 105 sampled respondents aged 18 and above within the study sites. The collected data have been analyzed. After the analysis of the demographic characteristics, it has been concluded that majority of the prisoners are from the age of 18-40 years. Most of them have got up to the SLC level education. This concludes that the crimes are happening due to lack of higher education.

Comparatively more respondents (95.2 percent) have heard about TB whereas 93.3 and 87.6 percent of them have heard and understand about HIV AIDS and STI respectively. Sixty percent of the respondents had sexual contact with girlfriend and 16.2 percent had visited female sex workers during their first sexual contact. Seventy five percent of the respondents did not use condom during their last sexual contact and most of them have reported that they had sex with casual partner. As reported by the respondents both anal and oral sex happens among the male prison inmates.

5.3 Suggestions and Issues for Further Studies:

Based on the study, the following suggestions are suggested to ensure well knowledge, no risky behavior and zero stigma and discrimination.

- Stakeholder/Programmer should plan HIV intervention program inside the prison so that there will be less chances of the HIV and STI transmission.
- TB related activities should be integrated with HIV prevention program inside the prison so that there will be very less chances of TB infection.
- HTC and STI mobile clinic will help to screen the HIV status and diagnosis and treatment of STI in time.
- Since both anal and oral sex exists inside the prison, there should be easy process of providing condom to the prison inmates through prison clinic.

Since the very much limited sample size taken from two prisons for this study, the finding can't be generalized. So it is suggested to make a wider research among the prison inmates in the similar topics.

Since this study was just prepared for the fulfillment of the requirement, it is suggested to share the proposal with key stakeholders.

Since prison is the sensitive location for the study, good coordination should be established with prison administration before starting the study.

References

Annual Report 1999, WHO

Business Dictionary, 2010

Carnahan, T. & McFarland, S. (2007). Revisiting the Stanford Prison Experiment: Could participant self-selection have led to the cruelty? *Personality and Social Psychology Bulletin*, Vol. 33, No. 5, 603-614.

Chatterjee A, Uprety L, Chapagain M, Kafle K (1996). *Drug abuse in Nepal: a rapid assessment study*. Kathmandu, Family Health International, 1999. *Nepal HIV drug assessment report*

De Bruyn, Theodore, A plan of action for Canada to reduce HIV/AIDS-related stigma and discrimination

De Bruyn, Theodore, A plan of action for Canada to reduce HIV/AIDS-related stigma and discrimination

Department of Prison Management of Nepal (15 Nov 2012). *Statistical Update of Department of Prison Management of Nepal/Ministry of Home Affairs, Government of Nepal*

Drug abuse in Nepal: A Rapid Assessment study, Bull Narc 1996

Family Health International, 1999: *Nepal HIV Drug Assessment Report, Kathmandu*,

Haney, C., Banks, W. C., & Zimbardo, P. G. (1973), Study of prisoners and guards in a simulated prison. *Naval Research Reviews*, 9, 1–17. Washington, DC: Office of Naval Research

Haney, C., Banks, W. C., & Zimbardo, P. G. (1973). Interpersonal dynamics in a simulated prison. *International Journal of Criminology and Penology*, 1, 69–97.

Haslam, S. A. & Reicher, S. D. (2012). When prisoners take over the prison: A social psychology of resistance. *Personality and Social Psychology Review* 154-179.

Haslam, S. A., & Reicher, S. D. (2006). Stressing the group: Social identity and the unfolding dynamics of responses to stress. *Journal of Applied Psychology*, 91, 1037-1052.

HERD (2010), *KAP Survey among communities to Enhance Response on Nepal's TB Control Program*, Study conducted by Health Research and Social Development

- Forum (HERD), Kathmandu, Submitted to Nepal TB Control Program, on March 2010
- History of Prisons, <http://www.prisonhistory.net/prison-history/history-of-prisons>
- Lohrman et. al., 2000, Røndahl, Innala & Carlsson, 2003, Veeramah, Bruneau & McNaught, 2008
- Mahat, G. & Eller, S. L. (2009). HIV/AIDS and universal precautions: knowledge and attitudes of Nepalese nursing students. *Journal of Advanced Nursing*, 65(9), 1907-1915.
- National AIDS Control Organization. (2007). *About NACO*, Retrieved April 7, 2010, from National AIDS Control Organization, http://nacoonline.org/About_NACO/
- National Encyclopedia (2010)
- National Collaborating Center for Infectious Diseases, Canada, *Evidence Review on Primary HIV Prevention Intervention in Prisons and upon Release, 2008*
- NCASC (2009). *IBBS-Integrated Bio-Behavioural Survey among IDUs, MSM, FSW*
- NCASC (2011). *National HIV AIDS Strategy 2011-2016*
- NCASC (2011). *Situation Analysis of HIV AIDS in Nepal, Kathmandu*
- NCASC, *Cumulative HIV Situation of Nepal as of June, 2012*
- NCASC, *Nepal Country Progress Report 2012 (NCASC, 2011)*
- NCASC, *Nepal national HIV & AIDS strategy (2006-2011)*
- NCASC, *Situation Analysis of HIV AIDS in Nepal, Kathmandu, 2011*
- Paul C, Gupta SD, Sharma S, Deb M (2002), *Awareness, perception and risk behaviors of drug users in the prisons*. (Presented in the XIV International AIDS Conference; July 7-12, 2002; Barcelona, Spain Abstract WeOr1323)
- Prison History, <http://www.prisonhistory.net/prison-history/history-of-prisons>
- Reicher, S. D., & Haslam, S. A. (2006). Rethinking the psychology of tyranny: The BBC Prison Study. *British Journal of Social Psychology*, 45, 1–40.
- UNAIDS (2012). *Global AIDS Report*
- UNAIDS (2011). *Risk and Vulnerability Assessment of Transgender People in Nepal UNGASS Report 2010*
- UNICEF/UNAIDS, April 2001
- University of Heidelberg, “A study on Assessment of Knowledge, Attitude and Behavior Concerning HIV and STI in Selected Population in 1997”
- UNODC (2011). *UNODC Annual Report, 2011*

UNODC (2012). *Epidemiological study on HIV and other Infection among Female Prisoners*

Upadhaya, Mahendra Nath, *Overcrowding of Prison Populations, the Nepalese Perspective*

Youth Power Nepal (2012). *Annual Report –Comprehensive Package for Prison Inmates*

Zimbardo, P. G. (1971). The power and pathology of imprisonment. *Congressional Record*. (Serial No. 15, 1971-10-25). Hearings before Subcommittee No. 3, of the Committee on the Judiciary, House of Representatives, Ninety-Second Congress, *First Session on Corrections, Part II, Prisons, Prison Reform and Prisoner's Rights: California*. Washington, DC: U.S. Government Printing Office.

Annex I: Questionnaire for Interview

A Study on Accessing Knowledge on TB, HIV and STI and Tendency of Risk Behavior among Male Prison Inmates

Introduction:

Namaste! My name is, I am here to collect data for the purpose of study. This study is being conducted by an individual as part of partial fulfillment of Master's Degree in Sociology to access the knowledge on TB, HIV & STI and tendency of risk behavior among male prison inmates so that the finding of the study will contribute to design HIV intervention strategy inside the prisons in future. During this interview, I will ask you some personal questions about yourself (socio-demographic), your knowledge on HIV/AIDS, STI and condom, stigma & discrimination and your behavioral characteristics before and now.

Confidentiality and consent:

I will ask some questions relating to yourself and your personal behavior and I am hopeful that you will provide correct information. The information given by you will be kept very confidential. Your name will not be mentioned on this form. All the mentioned information will be used only for the study purpose. If you find uncomfortable, you do not have to answer any question or you may end this interview at any time you want. This survey will take about half an hour.

Would you be willing to participate in the interview?

1. Yes 2. No

Signature of the interviewer:Date:

Operational definition of Prison Inmates: Persons who have been imprisoned in any case and staying in the prison are known as prison inmates.

Interviewee Code:

--	--	--

Questions:

PART I: GENERAL INFORMATION OF THE RESPONDENTS (DEMOGRAPHIC AND SOCIO-CULTURAL CHARACTERSTICS)

Q. No	Questions	Answers grouping and coding	Skip to....
1.	District of residence	1
2.	Marital Status	Married..... 1 Unmarried..... 2 Single..... 3 Separated..... 4 Divorced..... 5 Widower..... 6	
3.	What's your Age? Years	
4.	What's your Caste or ethnicity?	Brahmin..... 1 Chhetri..... 2 Newar 3 Gurung..... 4 Magar..... 5 Tamag..... 6 Occupational Cast..... 7 Other..... 8	
5.	What's your Religion?	Hindu..... 1 Baudhist..... 2 Muslim..... 3 Christian..... 4 Other..... 5	
6.	What's your education level you have completed?	Illiterate..... 1 Literate/no formal education..... 2 Primary Level..... 3 Lower Secondary Level 4 Secondary Level..... 5 SLC Pass..... 6 Higher Secondary..... 7 Bachelor degree..... 8 Master's degree..... 9	
7.	Since when are you in prison?	One year..... 1 Two years..... 2	

		Three years.....	3	
		More than three years.....	4	
8.	In which case you have been imprisoned?	Drugs peddling	1	
		Girls Trafficking.....	2	
		Murder.....	3	
		Rape.....	4	
		Theft	5	
		Other.....		
9.	How often have you been imprisoned?	First time.....	1	
		Second time.....	2	
		Third time.....	3	
		Fourth time.....	4	
10.	What was your profession before imprisoned?	Farmer.....	1	
		Business.....	2	
		Entrepreneurship.....	3	
		Job.....	4	
		Jobless.....	5	

PART II: KNOWLEDGE ON TB, HIV and STI

Q. No.	Questions	Answers grouping and coding	Skip to....
Knowledge on STI			
11.	Have you ever heard about HIV/AIDS	Yes..... No	1 2 → 18
12.	Where did you hear about HIV/AIDS for the first time? (mode of exposure)	Radio..... TV..... Teacher/Text Book..... Newspaper/Magazine..... Peers/friends..... Family Members..... Social Workers/NGO..... Community Event/drama.....	1 2 3 4 5 6 7 8
13.	Do you know how HIV transmits?	Unsafe Sexual Contact..... Sharing injectable device..... Using infected Blood..... If Infected Mother give Birth..... Blood Transfusion Other:	1 2 3 4 5 6
14.	Is HIV curable?	Yes.....	1

		No	2	
15.	Do you know the modes of HIV prevention?	Yes..... No.....	1 2	
16.	If yes, What are the possible modes of HIV Prevention? (can express multiple answers)	Having single partner or wife & husband..... Use sterilized injectable device.. Safe Blood Transfusion..... No child from HIV infected mother..... Correct & consistent Condom Use.....	1 2 3 4 5	
17.	To what condition do you think you are at risk of HIV infection?	High risk..... Some risk..... No risk..... Don't know.....	1 2 3 4	
Knowledge on STI				
18.	Have you ever heard about STI?	Yes..... No..... Don't know.....	1 2 3	21
19.	If yes, Which disease do you understand by STI? (Multiple response possible)	White Discharge/Discharge of Pus/Dhatu flow..... Pain during urination..... Burning Sensation while Urinating..... Ulcer or sore around genital area..... Syphilis (Bhiringi) HIV..... Others..... Don't know	1 2 3 4 5 6 7 8	
20.	Do you currently have any of the following symptoms?	White discharge/Discharge of pus Pain during sensation..... Burning sensation while urinating.. Ulcer or sore around genital area... Others (specify).....	1 2 3 4 5	
21.	Have you gone medical treatment for any of these symptoms	Yes..... No.....	1 2	
22.	Have you had any above mentioned STI Symptoms in the last one year?	Yes..... No.....	1 2	24

23.	If yes, where did you get the treatment?	Prison health clinic..... Mobile STI clinic in prison..... Hospital..... Private clinic.....	1 2 3 4	
Knowledge on TB				
24.	Have you ever heard of TB?	Yes..... No.....	1 2	
25.	What cause TB?	Smoking..... Alcohol drink..... Malnutrition..... Infection..... Others.....	1 2 3 4 5	
26.	Have you ever had TB in your lifetime?	Yes..... No.....	1 2	→ 30
27.	If yes, where did you go for treatment?	Health center..... Hospital..... DOTS Centre..... Others.....	1 2 3 4	
28.	Have you had TB during prison time?	Yes..... No.....	1 2	→ 30
29.	If yes, where did you have your treatment?	Prison Health Clinic..... Hospital..... DOTS Centre..... Others.....	1 2 3 4	
30.	Do you have any of these symptoms?	Cough for 2 weeks..... Fever at nights..... Weight Loss..... Night Sweats.....	1 2 3 4	

PART III: TENDENCY OF RISK BEHAVIOR TO HIV & STI

Q. No.	Questions	Answers grouping and coding	Skip to....
31.	Have you ever had sexual intercourse?	Yes No	1 2 → 34
32.	How old were you at your first sexual intercourse?Years Don't know/can't recall	
33.	Whom did you had sex with?	FSW..... Male..... Girlfriends.....	1 2 3

		Wife.....	4	
		Others.....	5	
34.	Have you heard about different mode of sex? (can answer multiple options)	Hetero/ vagina sex.....	1	
		Anal sex.....	2	
		Oral sex.....	3	
		None of above.....	4	
35.	Do you think which type of sex activity happens inside the prison?	Anal sex.....	1	
		Oral sex.....	2	
		If any other mode of sex (mention).	3	
		Don't Know.....	4	
36.	Which of the sex mode have you exposed (can answer multiple options)?	Hetero/ vagina sex.....	1	
		Oral sex.....	2	
		Anal sex.....	3	
		None of above.....	4	→49
37.	If you had sex in prison, after how any months you had your first sex?months/years		
38.	Which types of sex do you usually practice during your stay in prison?	Anal sex.....	1	
		Oral sex.....	2	
		Both oral & anal sex.....	3	
		None of above	4	
		If any other type of sex (specify)...	5	
39.	How often do you have sex in prison?	Once/ Twice a week.....	1	
		Once/ Twice a month.....	2	
		Occasionally.....	3	
		Never.....	4	
40.	How many sex partners do you have at present?	One.....	1	
		Two.....	2	
		More than two.....	3	
41.	Do you have sex on mutual understanding?	Yes.....	1	
		No.....	2	→ 45
42.	If yes, what do you exchange for sex?	Cash.....	1	
		Kind.....	2	
		Nothing.....	3	
43.	If no, who does force for sex?	Chaukidar.....	1	
		Naike.....	2	
		Bhai naike.....;	3	
		Official.....	4	
		Security personnel.....;	5	
		Other prisoners.....	6	

44.	When did you have last sex in the prison?	Within a week..... Within a month..... Before six month..... Before one year Before two years.....	1 2 3 4 5	
Condom use during sexual intercourse				
45.	Did you use a condom in your last sexual intercourse?	Yes..... No.....	1 2 → 47	
46.	Who suggested condom use that time?	Myself..... My Partner Don't know.....	1 2 3	
47.	Why didn't you use condom that time?	Not available..... Too expensive..... Rejected by partner..... I didn't like to use it..... Didn't think it was necessary..... Didn't think of it Others (Specify)..... Don't Know.....	1 2 3 4 5 6 7	
48.	Where did you get condom from?	From NGO..... From friends..... Others.....	1 2 3	
49.	Do you want regular supply of condom inside the prison?	Yes..... No.....	1 2	
Use of Drugs and injection				
50.	Do you inject drugs?	Yes..... No.....	1 2 → 56	
51.	Did you inject drugs before imprisonment?	Yes..... No.....	1 2	
52.	If yes, how long did you inject drugs?	One year..... Two years..... More than two years.....	1 2 3	
53.	Did you share the syringe with your friends while injecting drugs?	Yes..... No.....	1 2	
54.	Are you still injecting inside the prison?	Yes..... No.....	1 2	
55.	Think about the last time you injected drugs. Did you use a needle or syringe that had previously been used by someone else?	Yes..... No..... Don't know.....	1 2 3	

PART IV: STIGMA AND DISCRIMINATION

Q. No.	Questions	Answers grouping and coding	Skip to....
56.	Do you know about your HIV status?	Yes..... No.....	1 2
57.	If yes, what's your HIV status?	HIV +ve..... HIV -ve.....	1 2 →63
58.	If HIV +ve, do other prison inmates & staff know your status?	Yes No.....	1 2
59.	If yes, do inmates, staff & security personnel behave friendly with you?	Yes No.....	1 2
60.	If no, who does discriminate to you? (can give multiple answers)	Prison inmates..... Prison staff..... Security personnel..... Prisoner's leaders (Chaukidar..)	1 2 3 4
61.	If no, what kind of discrimination are you facing? (can give multiple answers)	Receiving less care attention than other inmates from Health staff.... Been isolated in group..... Excluded to involve in indoor activities..... Been physically assaulted..... Inmates don't support even in minor sickness..... Other (if any).....	1 2 3 4 5 6
62.	For what reason you have not shared about your HIV+ve status to other prison inmates &staff?	Because of Discrimination by others..... Fear of disclosure and will not get minimum treatment, care and support Other reason (specify).....	1 2 3
63.	Do you feel comfortable to sit together and share toilet with HIV +ve people?	Yes..... No.....	1 2
64.	Do you let HIV + ve people to involve in indoor activities inside the Prison?	Yes..... No.....	1 2
65.	If you are requested, will be ready to provide care & support to PLHIV?	Yes..... No.....	1 2