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A Rapid Situation Assessment of HIV/STI/TB and Drug Abuse among Prisoners in Uganda Prisons Service

Final Report



Uganda Prisons Service



United Nations Office on Drugs and Crime

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**A Rapid Situation Assessment of HIV/STI/TB
and Drug Abuse among prisoners in Uganda
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And
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Acronyms

AAFB	Acid Alcohol Fast Bacilli
AIC	AIDS Information Centre
AIDS	Acquired Immune Deficiency Syndrome
ART	Anti-retroviral treatment
BCC	Behaviour Change Campaign
CDC	Centres for Disease Control and Prevention
DOTS	Directly Observed Treatment Short Course
FGD	Focus Group Discussion
HCT	HIV Counselling and Testing
HIV	Human Immuno-Deficiency Virus
ICRC	International Committee of Red Cross
IEC	Information Education Communication
KII	Key Informant Interview
MARPS	Most At Risk Populations
MDR-TB	Multi-Drug Resistant Tuberculosis
MSM	Men who have Sex with Men
MUSPH	Makerere University School of Public Health
NCST	National Council for Science and Technology
OI	Opportunistic Infections
PEM	Promoting Evidence Based Health Management
PHAs	Persons Living with HIV/AIDS
PMTCT	Prevention of Mother to Child Transmission of HIV
PPS	Proportional Probability Sampling
RSA	Rapid Situation Assessment
STI	Sexually Transmitted Infections
TB	Tuberculosis
UNAIDS	Joint United Nations Programme on AIDS
UNFPA	United Nations Fund For Population Activities
UNODC	United Office on Drugs and Crime
UPS	Uganda Prisons Service
WHO	World Health Organization

Executive Summary

Background

The assessment determined the prevalence of HIV, syphilis, tuberculosis and drug abuse among prisoners, assessed the knowledge, attitudes, behaviour and practices of prisoners in relation to drug abuse, HIV/AIDS, STIs, and tuberculosis; and identified factors associated with the transmission of HIV, STIs and tuberculosis and drug abuse among prisoners. In addition gaps in HIV prevention and care services for prisoners in Uganda Prisons were identified.

Methods

A semi-structured interviewer administered questionnaire and a checklist were used to interview 459 prisoners and 85 health workers respectively from 34 prisons sampled using Probability Proportional to Size (PPS) technique. Biological samples for HIV, syphilis and TB tests were collected from consenting individuals. Four Focus Group Discussions (FGD) with prisoners and four key informant interviews were held with the Officers in-charge of purposively selected prisons. Observation checklists were used in all the prison units to evaluate the quality of existing prevention and care services. Quantitative data was analysed using STATA V.10 while qualitative data was manually analyzed.

Results

The general prevalence of HIV among prisoners was 11%, higher among female prisoners at 13% compared to their male counterparts at 11%. The general prevalence of syphilis was 5%, lower among female prisoners at 4% than male prisoners at 5%.

No TB organisms were identified from sputum collected from 8 respondents. Despite this finding, 4.6% (21/459) respondents reported having ever suffered from TB of whom 38% (8/21) reported TB was diagnosed while in prison and 14% (3/21) were on treatment at the time of the assessment. Projecting 3/459 to the national figure per 100,000 population, this would translate to 654 TB cases in prisons which is higher than the actual national TB prevalence estimated at 300/100,000.

Sixty five percent of the respondents reported drug abuse in Ugandan prisons. The most commonly abused drugs were tobacco/cigarettes, Cannabis sativa (marijuana) and khati /mairungi (Catha edulis). There was no reported Injecting Drug Use (IDU).

Sixty nine percent of male prisoners and sixty five percent of female prisoners knew at least two methods of HIV prevention. Fifty one percent of male and 47% of female prisoners had no incorrect beliefs about HIV transmission. Ninety one percent of the respondents knew that a healthy looking person may be infected with HIV, while 78% of respondents knew that there is no cure for AIDS. Eighty two percent (82%) of the respondents knew that HIV virus can be transmitted from mother to the child.

Fifty nine percent of males and 24% of female prisoners did not know any sign and symptom of STI in women. Twenty one percent and 37% of men and women respectively did not mention any sign or symptom of STI in men.

Sixty one percent knew that TB is an airborne disease. The proportion of prisoners that mentioned chronic cough for more than three weeks as a symptom of TB was 69% while only 61% knew that TB is curable.

Thirty three percent of prisoners perceived themselves to be at risk of acquiring HIV in prison and cited the reasons as sharing shaving instruments (62%), skin piercing instruments (37%) and unsafe sexual behaviour (7%). The attitude of prisoners towards HCT was positive as evidenced by ninety two percent of the respondents who admitted that HIV testing is beneficial. However, the attitude towards fellow prisoners with HIV is negative since 43% of the respondents hold the view that HIV clients should be separately accommodated.

Forty percent of the respondents reported ever seeking HCT services while in prison and 76% had actually tested and of these 95% sought and received their results.

Forty percent of the respondents had heard of MSM in prison of whom 68% were of the opinion that few prisoners are involved, 32% reported that MSM was of a coercive nature and 3% reported having received sexual advances from fellow prisoners.

Sexual behaviours among the respondents 12 months prior to imprisonment was assessed and 42% reported sexual intercourse with non-regular partners, 37% of the prisoners reported using a condom in the last sexual encounter with a non-regular sexual partner while 13% reported consistent use of condom when having sex with non-regular sexual partners

The health system in prison was constrained by: inequity in health financing, insufficient human resource with required competencies, unacceptably high stock out levels of essential medicines and other health supplies, poor infrastructure and generally poor prison conditions.

Conclusion

The prevalence of HIV and syphilis among prisoners was higher compared to that in the general population. Though no TB organisms were identified among the respondents, the cases on treatment reflect a higher TB burden than the national average. The reported involvement in high risk sex and a history of having contracted a STD prior to imprisonment, as well as presence in prison of risk behaviours such as MSM, sharing of razor blades and drug abuse could all contribute to prisoners' vulnerability and risk to HIV infection. However, the assessment only adduced statistically significant association between HIV infection and a history of STD.

The high prevalence of HIV in prisons is likely to increase the risk of TB transmission to communities within and outside the prison walls. The poor prison conditions and a weak

and poorly facilitated Prisons Health System contribute to the burden of these diseases and practices.

Uganda Prisons Service could be facilitated by government and other partners to enhance its capacity to launch a response commensurate to the demonstrated burden of HIV//STI/TB and Drug abuse. An affirmative action by government and partners in scaling up prison based health care interventions is very important since this will have a positive (synergistic) bearing on current public based interventions. Good prison health is good public health.

1.0 INTRODUCTION

1.1 Background

HIV/AIDS is still a problem in Uganda notwithstanding an impressive reduction in the prevalence from 18.5% in the early 1990s to 6.5%. The national adult population prevalence was estimated at 6.4% in 2005¹. The population of Uganda Prisons Service (UPS) being a microcosm of the Ugandan society, continues to experience the severe social, economic and developmental consequences of the HIV/AIDS epidemic. While the HIV epidemic is generalized in Uganda, the population of Uganda prisons is more vulnerable and at a higher than average risk of HIV infection than the general population. It is therefore categorized as one of the Most at Risk Populations (MARPS) in Uganda².

Globally, the prevalence of HIV (and other STI) among prisoners is reported to be higher than in the general population. Different factors have been associated with the high HIV prevalence in prisons. While in many parts of the world it is attributed to sharing injections inside and outside the prison and men who have sex with men (MSM), in Sub-Saharan Africa it is due to unsafe heterosexual sex similar to the general population, MSM and unsafe medical practices rather than the injection of drugs. The other related factors include overcrowding, use of unsafe skin piercing instruments, violence, lack of education and information^{3,4}. Studies carried out to determine the prevalence of HIV and the associated factors among prisoners have demonstrated varying figures from as low as 2% in USA, 28% in Vietnam to as high as 44% in South Africa⁵.

Sexual contact between men is common in prisons around the world. Studies from many countries in different regions of the world have documented varying ranges of the practice from as high as 73% in Brazil to as low as 5.2% and 4% in Nigeria and Zambia respectively⁵. However, it is usually difficult to determine the exact levels of sexual activity in prisons because MSM is a major taboo for both prisoners and prison officers and authorities, generally illegal and studies rely on self reporting which is embarrassing and characterized by fears of reprisal or additional punishment. Sexual activity in prisons is influenced by several factors that include: duration of sentence, type of accommodation, level of supervision and the presence of young offenders⁴.

Similarly, studies among prisoners around the world have consistently demonstrated higher rates of tuberculosis (TB) than in the general population⁶. It has been observed that individuals that are most vulnerable to TB in the communities are disproportionately represented in prisons. This is because the social and economic conditions that increase vulnerability to TB also increase vulnerability to criminal behaviour and imprisonment⁷. In addition, since there is a strong association between HIV and TB, the high prevalence of HIV among prisoners increases the risk of TB transmission in prisons.

There are growing fears that the high rate of TB in prisons coupled with weak health care systems are contributing to the emergence of Multi-Drug Resistant Tuberculosis (MDR-TB) strains⁸. To address the problem of TB in prisons, the following interventions are recommended: early case detection through screening of prisoners on admission,

effective case management using DOTS, accurate and timely recording and reporting of cases, community mobilization through IEC/BCC among others⁶.

Like HIV and Tuberculosis, drug use is wide spread in prisons in most countries in the world. A large number of prisoners come to prisons with established drug abuse habits. Other prisoners start using drugs while in prisons as a coping mechanism in an overcrowded and violent environment to release tension^{9,10,11}.

Due to needles being scarce and illegal, injection drug users in prisons always hide and share them exposing prisoners to a range of blood borne infections including HIV, Hepatitis B Virus and Hepatitis C Virus. Likewise, the use of oral or inhaled psychoactive substances may increase the likelihood of HIV transmission by impairing judgment and hindering the adoption of preventive measures in circumstances where these measures would be required^{3,12}.

In order to reduce HIV infection among drug using prisoners, UNAIDS recommends that prison services should put in place drug treatment programmes as well as initiate appropriate harm reduction interventions⁴.

Prisoners have a right to receive health care, including preventive measures equivalent to that available in the general community¹³. General principles adopted by National AIDS programmes should apply equally to prisoners and the community. Some of the most cost effective interventions promoted in HIV prevention, care and support include: access to information especially through peers to peers activities, access to voluntary HCT, provision of condoms, access to drug treatment for drug dependants including Opioid Substitution Therapy (OST) for opiate dependents, access to clean injecting equipment for injecting drug users, universal precaution, access to disinfectant/clean piercing or tattooing equipment, meaningful involvement of People Living with HIV, community mobilization, PMTCT, prophylaxis and treatment of Opportunistic Infections (OIs), provision of integrated TB/HIV collaborative services, use of ART, and nutritional supplementation⁵.

1.2 Uganda Prisons Service (UPS)

UPS has demarcated Uganda into 11 administrative regions to enhance its management capacity over 222 prisons country wide. The population of prisoners is about 35,000 of which 5% are female and remand prisoners comprise 56.6%. There are high levels of overcrowding in UPS with some prisons accommodating 4 times above their designed capacities¹⁴. The ratio of staff to prisoners is 1:5 against the recommended standard ratio of 1:3.

Prisons Health Service (PHS) is a section under the Department of Support Services. Its mandate is to organize, plan and manage health care delivery in UPS in conformity with international and national standards.

In response to the HIV epidemic, UPS established the Prisons AIDS Control Programme (PACP) in 1993 whose goals, objectives and activities are within the framework of the National Strategic Plan on HIV/AIDS for Uganda.

1.3 Justification

In Uganda Prisons like elsewhere in other African Prisons, HIV sero-behavioural surveillance systems are weak or non-existent. It is therefore not possible to get accurate strategic information at any point in time about the magnitude and dynamics of HIV and other infections as well as care indicators in the prisons. Consequently, reliance has always been on data derived from general population based studies. However, data based on the general population may not fully reflect the unique situation in prisons. This therefore limits the designing of prison specific advocacy strategies, policies and prioritising programmatic interventions.

This Assessment was designed to provide baseline information on the HIV, syphilis, TB situation, related biomedical and behavioural correlates as well as the status of HIV care in Uganda Prisons Service. This information is needed to inform policy formulation, strategic planning and resource mobilization.

1.4 Overall Objective

The broad objective of the assessment was to provide policy makers, programme managers and health care providers involved in HIV programming and care in prisons with strategic information needed to monitor and evaluate existing programmes, and to effectively refine or design new strategies for combating the epidemic in Uganda Prisons.

1.4.1 Specific Objectives

The specific objectives of the assessment were:

1. To determine the prevalence of HIV, syphilis, tuberculosis and drug abuse among prisoners in Ugandan Prisons.
2. To assess the knowledge, attitudes, behaviour and practices of prisoners in Ugandan Prisons in relation to drug abuse, HIV/AIDS, STIs, and tuberculosis.
3. To identify factors that may be associated with the transmission of HIV, STIs and tuberculosis as well as influencing drug abuse among prisoners in Ugandan Prisons.
4. To identify gaps in drug abuse, HIV, STIs and tuberculosis prevention and care services for prisoners in Uganda Prisons.

2.0 METHODOLOGY

2.1 Study design and data collection techniques.

The study was a cross-sectional survey that applied quantitative and qualitative data collection methods. A semi-structured interviewer administered questionnaire was used to interview 459 prisoners from thirty four randomly selected prison units nationally and 85 health workers. Biological samples were obtained from consenting individuals. All individuals who consented in writing to participate in the study were requested to donate 5 mls of blood that was subjected to HIV and syphilis tests. The blood samples were transported and tested at the prison central laboratory in Luzira Prison Complex. For individuals who were clinically suspected to have TB, 03 sputum specimens were removed and examined. All results were returned to the study participants in their respective prison units where they were at the time of giving results.

The qualitative techniques involved 4 FGDs for prisoners in the prison units of Arua, Masaka, Gulu and Soroti. Key Informants Interviews (KII) were conducted in the 04 prison units where FGDs were carried out involving the Officer in-charge. The four units were purposively selected to ensure a representation from the northern, western, eastern and southern parts of the country. Observation checklists were used in all the 34 of the 35 selected prison units to evaluate the existing HIV/STI/TB prevention, drug abuse and care capacity in UPS. Insecurity prohibited data collection in Moroto prison.

The RSA was executed by PEM Consultancy with financial and technical support from UNODC-ROEA-Kenya. UPS staff participated in the study as part of an in house capacity building initiative for continued generation of programmatic and policy briefs to ensure sustainability. Depending on strategic technical placement, UPS health staff participated in positions ranging from being co-investigators to data collection.

2.2 Study area and population

The study was conducted in Uganda Prisons Service across the 11 regions and 34 prison units randomly selected out of the entire 222 prisons. The average population of prisoners at the time of the study was estimated at 35,464 (UPS, 2008). The prisoners in the whole country constituted the study population.

2.3 The RSA Team.

PEM consultancy constituted a technical study team from its consultants and co-opted a biostatistician from MUSPH. For purposes of capacity building and sustainability, technical staffs from the prisons' health services were recruited. These staff were drawn from the headquarters and were not known in the peripheral prison units so as to uphold independence and anonymity of the respondents. Special skills guided selection of data collectors. Experienced data entry clerks were co-opted from Global Consult, a data

- | |
|---|
| <p>Skills for data collection personnel</p> <ul style="list-style-type: none">▪ Previous training in HIV counselling▪ Interviewing skills▪ Ability to do field work▪ Previous experience in working with prisoners▪ Data recording and management skills▪ Willingness and ability to undergo training▪ Ability to work in a team▪ Technical competency and prior experience in HIV related research▪ Knowledge of respective local languages▪ Ability to communicate in a relevant local language. |
|---|

management firm. A Task Force comprised of members from technical partners provided technical oversight (Appendix 2).

Despite the baseline skills, data collectors underwent a three-day training to obtain insight in the survey and its objectives, techniques of interviewing, field procedures, a detailed discussion of the data collection tools and handling of the study biological specimens. The study tools were pre-tested in two Prison units (Kauga and Kampala Women Prisons) and subsequently adjusted.

2.4 Sample size determination and sampling methods.

2.4.1 Sample size determination

The study used a two stage sampling design. The two stages were the prison level and the individual level. The sample size for the prison units was determined using the following formula by Bennet et al (1991)

$$C = \frac{p(1-p) * D}{S^2 b}$$

Where,

C = The number of prison units/clusters

p = the probability of outcome of interest. In this case the outcomes of interest include knowledge of HIV prevention, practices and attitudes towards HIV. When there is no recent relevant publication this probability is set to 0.5

b = prison/cluster size. That is the number of prisoners we wish to select from each prison.

D = Design effect. Computed as $1+(b-1)roh$. Where roh is the rate of homogeneity which measures intra-prison/cluster correlation

S = standard deviation. It is a measure of variation in occurrence of outcome from person to person and it is changed depending on the precision required.

When $p=0.5$, $b=14$, $D=2$ and $S=0.032$ the number of prisons (clusters) required is 35.

The number of prisoners required for the study was derived by multiplying 14 with the number of clusters (35) to get 490. In order to allow for non response or poorly answered questionnaires, a non-response rate of 2% was factored in to make the number of respondents 500. Women were over sampled to 20% from 5% to allow comparisons with men.

2.4.2 Sampling methods

The 35 prison units were selected using Probability Proportional to Size (PPS) technique. The technique gave a higher chance of selection to bigger prisons or clusters. According to PPS, a list of prisons with their population sizes was drawn and another column with the cumulative total added. Next, a systematic sampling was used to select the 35 prisons as follows.

The cumulative total of the populations was divided by the number of prison units needed (i.e. 35 clusters) to get the sampling interval k . From the first interval, a random start g was selected using simple random sampling. Here a table of random numbers was used to get the random start. The prison in which the g fell, was the first prison to be selected.

From the random start g the k^{th} number $(g+k)$ became the second cumulative number to be selected. Like g the cluster or prison where the second cumulative number $(g+k)$ fell became the second prison/cluster to be selected. The process continued until 35 prisons were selected. Table 1 shows 35 prisons that were randomly selected using the procedure.

At individual level, systematic sampling procedure was applied. The serialized lists of prisoners in each prison were obtained and then a sampling interval k was determined by dividing the total number of prisoners by the predetermined number of prisoners required (n) per prison. In the first k serial numbers a number was randomly selected by blindly pointing at the serialised list of prisoners and this became the random start g . That is, the prisoner with the serial number g was the first in the sample. From the random start, the k^{th} numbers $(g+k, g+2k, \dots, g+(n-1)k)$ were obtained thereafter. The prisoners with the selected numbers were enrolled into the study.

Table 1: Distribution of sample size by region, prison unit and gender

Region	Prison	Population Size			Sample Size		
		Male	Female	Total	Male	Female	Total
Mid-Western	Hoima	198	11	209	7	7	14
	Isimba	566		566	14		14
Kampala extra	Upper Prison	2232		2232	14		14
	M/Bay	1314		1314	14		14
	Kampala (R)	1198		1198	14		14
Central	Kitalya	282		282	14		14
	Kigo	685	2	687	12	2	14
	Nakisunga	39		39	14		14
	Kapeeka	55		55	14		14
Southern	Masaka	656	29	685	7	7	14
	Munaina	268		268	14		14
	Mityana	126	5	131	9	5	14
South Eastern	Jinja Main	621		621	14		14
	Jinja Remand	668		668	14		14
	Bungungu-YO	156		156	14		14
Northern	Gulu	493	43	536	7	7	14
	Patiko	81		81	14		14
	Lira	456	18	474	7	7	14
	Apac	169	11	180	7	7	14
Western	Mubuku	312		312	14		14
	Ruimi	419		419	14		14
	Fort portal	804	33	837	7	7	14
Eastern	Kumi	209	18	227	7	7	14
	Tororo	475	12	487	7	7	14
	Sororti	544		544	14		14
	Mbale (M)	689		689	14		14
North Eastern	Moroto	169		169	14		14
North Western	Paidha	194	11	205	7	7	14
	Arua	516	15	531	7	7	14
	Adjumani	159	11	170	7	7	14
South Western	Kiburara	337		337	14		14
	Mbarara	568		568	14		14
	Kakiika	606		606	14		14
	Bushenyi	483	23	506	7	7	14
	Rukungiri	476	15	591	7	7	14
Total		17,223	257	9,758	392	98	490

2.5 Community mobilization for the study

Following the training of data collectors, permission was sought from the Commissioner General of Prisons (CGP) to proceed to the selected prisons to collect data. Subsequently, letters of introduction were issued to the heads of the teams to facilitate entry into the prisons. In addition, a message was communicated to all the Regional Prisons Commanders and Officers in-charge of the 35 prison units about the pending visits of the research teams. In the communication, the objectives and methodology of the study were stated.

The entry into the prison started with a briefing of the officer in-charge about the objectives and the methodology of the assessment. This was followed by an address of all the prisoners in the unit highlighting the general purpose of the study, the benefits and the necessity to have a representative group from them whose choice was purely randomised. This served to allay anxiety among the chosen prisoners as well as those who were not selected and to instil confidence in them. It was clearly explained to the prisoners that participation in the study was completely voluntary and refusal to participate would not attract punishment whatsoever.

2.6 Interview Process

Prisoners who were randomly selected to participate in the study were grouped and addressed. The objectives and methodology of the study were further elaborated and it was again pointed out that participation in the study was a personal decision and one was free to opt out at any stage. Members were given opportunity to seek clarification on any matter that was not clear to them.

After the group address, individual interviews were conducted in an environment which accorded auditory privacy to enable participants talk openly about their views. The respondent was requested to sign the consent form after the interviewer read and explained its contents to him/her. Upon signing the consent form, the personal interview started and at the end a request was made to the respondent to donate a sample of blood for HIV and syphilis tests and where clinically indicated an on-spot specimen of sputum was removed for Ziehl Neelsen Test.

2.7 Standard Operating Procedure for collection and handling of specimens.

2.7.1 Blood specimen for HIV and syphilis testing.

Removal of blood specimen

A tourniquet was applied to the upper arm; the skin over the veins was disinfected using an alcohol swab. With the bevel of the needle facing up the needle was inserted into the vein to draw 5 mls of blood. Thereafter the tourniquet was released and the needle withdrawn from the vein and immediately pressure applied on the puncture site with a plug of dry cotton wool.

Blood specimen handling

The blood was transferred into a vacutainer (with code number of respondent) containing an anticoagulant. The specimen was placed in a cold box with ice packs. The cold chain

was maintained through periodic replacement of ice packs that were exchanged at neighbouring public health facilities.

Examination of specimens for syphilis

In testing our samples for syphilis, we used a serological test which is a non-specific cardiolipin antigen test RPR (Rapid plasma Reagin Test). Plasma from the samples used.

The procedure of the test was as follows:

- Samples were centrifuged at 1,000 revolutions per minute for 1 minute
- The plasma was separated from whole blood
- Allowed the reagents, control and samples to reach the room temperature
- A drop of the sample was put on the plastic coated card
- The sample was spread evenly over the marked entire test circle
- Added a drop of the antigen onto the specimen
- Rotated the tile for 5 minutes on an automatic rotator at 100 rpm
- Read and interpreted the results macroscopically in good light
- We were setting +ve and -ve controls alongside every 50 samples

Results:

Positive samples showed characteristic agglutination ranging from weak reactive to strongly reactive. Negative samples showed no agglutination.

Examination of specimens for HIV

Sample used: Plasma.

Procedure: Allowed samples to reach room temperature

Sample collection: Samples were collected in vacutainer tubes, containing EDTA. Serum was harvested after centrifuging the samples at 1,000 rpm for 1 minute.

Specimen storage: Samples were stored at 2-8⁰C and were run in less than 7 days of collection. We first run all samples using determine HIV-1/2.

Test Procedure

- Removed the protective cover from each test strip
- Applied 50 micro litre of serum to the sample pad
- Waited for 15 minutes and read the results

Quality control: The procedural control is incorporated in the device and is labelled "control". If the control would not turn red, the results would be considered invalid and the test repeated.

Interpretation of results: For positive results, red bars would appear in both the control window and the patient window of the strip.

For negative results, one red bar would appear in the control window and no red in the patient bar of the strip.

All the samples that showed a positive reaction with determine method, were confirmed by running them using Start pack method. Those which became positive with determine and negative with start pack were run using Unigold which acted as a tie breaker.

2.7.2 Sputum specimen for Mycobacterium tuberculosis testing.

Removal of sputum specimen

All respondents suspected of having TB were requested to give 03 sputum specimens; 01 spot, and an early morning plus second spot specimen. Plastic, wide mouthed, leak proof containers with lid were used. The containers were labelled with the respondents' code number.

Sputum specimen handling and storage

Before processing, samples were kept at 4-8⁰C in cold boxes and later on in a refrigerator.

Procedure

- Smears were made and left to air dry
- Arranged on a staining rack over a sink
- Stained by Ziehl Neelsen method
- Air dried and examined using X100 objective microscopically

Quality control

Negative and positive smears were stained alongside the test samples and the negative control came out negative while the positive control came out positive showing AAFBs.

2.8 Data Management and Analysis

The data management process was handled by Global Research Consult (GRC) Ltd. All questionnaires from the field were received and registered by an administrator at GRC.

The Administrator handed over the registered questionnaires to the Data Manager (DM) who cross-checked them for consistency and completeness. Thereafter, a coding manual was developed and given to the pre-selected data coders who coded all responses. The codes were written in the coder's column of the questionnaire. The data coding process was followed by data entry using EPIDATA V.3.1 which was fitted with consistency and range checks. The data were double entered and the two electronic files were compared using the validate program of EPIDATA. All discrepancies were corrected after the validation exercise.

The cleaned data were exported to STATA V.10 for analysis. Frequency distribution tables for each variable and cross-tabulations of the key outcome variables and several independent variables were carried out. Qualitative data were analysed manually.

2.9 Ethical considerations.

The study protocol was subjected to ethical review and approval by the National Council for Science and Technology (NCST). The submission was preceded by consultative meetings with various technical partners and Uganda Prisons Service. The protocol was reviewed for technical soundness and methodological plausibility. Adequate attention was given to ethical issues and safe guard of the human rights of the participating prisoners. Minutes of the consultative meetings formed part of the submission to the NCST.

Arrangements through use of HIV/AIDS counsellors were made to give out the results of the study. In particular, blood results of all respondents who expressed the need to know their HIV and syphilis status were provided by professional counsellors. Medical treatment for those found HIV + or positive for syphilis was provided within the existing framework of health care service delivery.

2.10 Study Limitations

It was not possible to collect data from Moroto Prison because of insecurity.

3.0 RESULTS

3.1 Characteristics of respondents

Data was collected from 34/35 sampled prison units from 7th to 23rd December 2008. Overall a total of 459 prisoners were interviewed instead of the targeted 500 providing a response rate of 92%. In regard to HIV and syphilis 446 out of 459 accepted to be bled and tested giving a response rate of 97%. Males constituted 78% (360) while females were 22% (99) of the respondents. Background characteristics of the respondents are summarized in table 2. Background characteristics reflective in the general population were assessed in the prison context for ease of comparison and reference to the general population. This would allow for continuum of intervention when inmates are released back to the general population.

Table 2: Respondents by background characteristics by sex

Background characteristic	Male		Female		Total	
	Number	%	Number	%	Number	%
Age						
16-24	137	38.1	29	29.3	166	36.2
25-30	112	31.1	18	18.2	130	28.3
31-35	52	14.4	16	16.2	68	14.8
36-44	35	9.7	18	18.2	53	11.5
45 and above	24	6.7	18	18.2	42	9.2
Religion						
Roman Catholic	141	39.2	40	40.4	181	39.4
Protestant	114	31.7	38	38.4	152	33.1
Moslem	76	21.1	12	12.1	88	19.2
Pentecostal	25	6.9	8	8.1	33	7.2
Education						
No education	52	14.4	34	34.3	86	18.7
Primary	225	62.5	56	56.6	281	61.2
Secondary+	83	23.0	9	9.1	91	19.8
Employment history						
Pupil or student	11	3.1	4	4.0	15	3.3
Employed	327	90.8	80	80.8	407	88.7
Unemployed	22	6.1	15	15.2	37	8.1
Marital Status prior to imprisonment						
Single no partner	43	11.9	4	4.0	47	10.2
Single with partner	95	26.4	16	16.2	111	24.2
Married	196	54.4	55	55.6	251	54.7
Widowed	6	1.7	19	19.2	25	5.4
Separated/Divorced	19	5.3	4	4.0	22	4.8
None response	1	0.3	1	1.0	2	0.4
Duration in Prison						
< 1 months	38	10.6	16	16.2	54	11.8
1 - 6 months	102	28.3	39	39.4	141	30.7
6 - 12 months	67	18.6	11	11.1	78	17.0
12 - 24 months	71	19.7	12	12.1	83	18.1
> 24 months	79	21.9	21	21.2	100	21.8
None response	3	0.8	0	0.0	3	0.7
Prison status						
Convict	183	50.8	37	37.4	220	47.9
Remand	172	47.8	59	59.6	231	50.3
None response	5	1.4	3	3.0	8	1.7
Category						
Star	317	88.1	88	88.9	405	88.2
Ordinary-recidivist	39	10.8	9	9.1	48	10.5
None response	4	1.1	2	2.0	6	1.3
Home address						
Urban	161	44.7	25	25.3	186	40.5
Rural	198	55.0	72	72.7	270	58.8
None response	1	0.3	2	2.0	3	0.7
Responsibility in prison						
In leadership	88	24.4	17	17.2	105	22.9
Not in leadership but working	169	46.9	39	39.4	208	45.3
Not in leadership & not working	102	28.3	43	43.4	145	31.6
None response	1	0.3	0	0.0	1	0.2

3.2 Prevalence of HIV, syphilis and tuberculosis

3.2.1 Prevalence of HIV

Overall HIV prevalence among prisoners was 11%, higher among women at 13% compared to their male counterparts at 11%. The overall figure is double the average HIV population prevalence of 6.4% in the general population. HIV prevalence by background characteristics is summarised in table 3. There was no sufficient statistical evidence to show a difference in HIV prevalence by levels of background characteristics.

The burden of HIV infection among prisoners was collaborated by responses from FGDs and KII.

“Each time AIDS Information Centre (AIC) conducts tests here, they find other cases who are HIV positive, so it is a big problem.” KI

“Many inmates are dying because of AIDS”. FGD, Gulu Prison

“A good number of prisoners come when they are infected. Arua is a border town and a major business district. Defilement is the major crime of the prisoners in this prison; this means they are exposed to HIV”. KI

3.2.2 Prevalence of syphilis

The general prevalence of syphilis was estimated at 5% lower among female prisoners at 4% than male prisoners at 5%. Results of the prevalence of syphilis by background characteristics are presented in Table 4.

Table 3: Prevalence of HIV by background characteristics

Background characteristics	Tested positive	% positive	Tested negative	% negative	Total tested
Sex					
Male	38	10.8	314	89.2	352
Female	12	12.8	82	87.2	94
Religion					
Roman Catholic	17	9.8	157	90.2	174
Protestant	19	12.7	131	87.3	150
Moslem	7	8.2	78	91.8	85
Pentecostal	7	21.9	25	78.1	32
Others	0	0.0	5	100.0	5
None response	0	0.0	2	100.0	2
Education					
Never attained	6	7.1	79	92.9	85
Primary	30	10.9	244	89.1	274
Secondary+	14	18.7	73	93.3	87
Marital status before imprisonment					
Single with/out partners	13	8.6	138	91.4	151
Married	31	12.6	216	87.4	247
Widowed	2	8.7	21	91.3	23
Divorced/Separated	4	17.4	19	82.6	23
None response	0	0.0	2	100.0	2
Age					
16 – 24	16	9.9	146	90.1	162
25 – 30	15	12.0	110	88.0	125
31 – 35	10	15.2	56	84.8	66
36 – 44	8	15.1	45	84.9	53
45 and above	1	2.5	39	97.5	40
Duration in prison					
< 1 months	6	11.5	46	88.5	52
1 – 6 months	12	8.8	125	91.2	137
6 – 12 months	11	14.7	64	85.3	75
12 – 24 months	6	7.6	73	92.4	79
> 24 months	15	15.0	85	85.0	100
None response	0	0.0	3	100.0	3
Responsibility/work in prison					
In leadership	15	14.7	87	85.3	102
Not in leadership but working	17	8.5	183	91.5	200
Not in leadership & not working	18	12.6	125	87.4	143
None response	0	0.0	1	100.0	1

Table 4: Prevalence of syphilis by background characteristics

Background characteristics	Tested positive	% positive	Tested negative	% negative	Total tested
Sex					
Male	18	5.1	334	94.9	352
Female	4	4.2	92	95.8	96
Religion					
Roman Catholic	11	6.3	164	93.7	175
Protestant	6	4.0	144	96.0	150
Moslem	2	2.3	84	97.7	86
Pentecostal	2	6.3	30	93.8	32
Others	1	20.0	4	80.0	5
Education					
Never attained	5	5.8	81	94.2	86
Primary	13	4.7	261	95.3	274
Secondary+	4	4.5	84	95.5	88
Marital status before imprisonment					
Single with/out partners	6	3.9	147	96.1	153
Married	11	4.5	236	95.5	247
Widowed	2	8.7	21	91.3	23
Divorced/Separated	3	13.0	20	87.0	23
None response	0	0.0	2	100.0	2
Age					
16 - 24	7	4.3	156	95.7	163
25 - 30	7	5.6	118	94.4	125
31 - 35	3	4.5	64	95.5	67
36 - 44	1	1.9	52	98.1	53
45 and above	4	10.0	36	90.0	40
Duration in prison					
< 1 months	2	3.8	50	96.2	52
1 - 6 months	9	6.5	129	93.5	138
6 - 12 months	4	5.2	73	94.8	77
12 - 24 months	3	3.8	76	96.2	79
> 24 months	4	4.0	95	96.0	99
None response	0	0.0	3	100.0	3
Responsibility/work in prison					
In leadership	2	2.0	100	98.0	102
Not in leadership but working	14	6.9	188	93.1	202
Not in leadership & not working	6	4.2	137	95.8	143
None response	0	0.0	1	100.0	1

3.2.3 Prevalence of Tuberculosis

No TB organisms were identified from sputum collected from the 8 respondents who had cough for more than three weeks at the time of the study. Despite this finding, 4.6% (21/459) respondents reported having ever suffered from TB of whom 38% (8/21) reported TB was diagnosed while in prison and 14% (3/21) were on treatment at the time of the assessment. Projecting the 3/459 to the national the figure per 100,000 population, would translate to 654 TB cases in prisons which is higher than the actual national TB prevalence estimated at 599/100,000. All the above figures in prisons are beyond the national levels.

The participants in the FGDs and KII described the risk of acquiring TB in prisons as a reality. This was attributed to lack of isolation facilities, high levels of congestion and lack of knowledge about TB as evidenced by the following quotes:

“There is too much congestion in the wards. You can get in the ward, people are very many, and so if someone has TB, you can get it!” FGD, Gulu Prison

“They mix us and someone who comes from outside may have TB but they do not isolate them”. FGD, Soroti prison

In order to reduce the transmission of TB in prisons, KI and FGD participants made the following recommendations:

- Sensitise inmates about TB spread and control
- Isolate TB cases
- Decongest wards
- Improve on ventilation of the wards
- Train ward leaders about TB so that they are able to identify TB suspects and refer them to the clinic early
- Create isolation wards
- Establish laboratories that can diagnose Tuberculosis
- Screen new prisoners for TB on entry into prisons

3.2.4 Drug abuse in Uganda Prisons

A large proportion of respondents (64%) reported that there was drug abuse in prison. Fifty six percent of the respondents were of the opinion that a few prisoners abuse drugs. When asked to categorize the prisoners who abuse drugs, participants in a FGD laughed it off; thus

“Aaaahhh it is difficult to tell, it is an individual’s habit”

The most commonly abused drugs were reported to be tobacco/cigarettes by 90% of the respondents followed by Cannabis sativa (marijuana) by 49% and khati /mairungi (Catha edulis) mentioned by 17% while only 2% reported ever abusing alcohol while in prison. There was no reported use of injecting drug use in Uganda prisons. Though tobacco is not an illicit drug, its use is prohibited in the Uganda prison setting.

The proportion of prisoners who admitted abuse of drugs prior to imprisonment was 48% while the percentage of respondents who admitted to have ever abused drugs in prison was 12%. More male prisoners (15%) than females (2%) confessed having ever abused drugs.

Majority of the respondents (82%) reported that drugs get into the prison through the individual prisoners' effort. However, 23% of the respondents said that drugs are also smuggled into the prison with the assistance of prison staff. The role of prisoners in trafficking contrabands as well as the futile efforts by the custodial staff to check the practice was described during FGDs as follows:

“They search at the gate but still the drugs are smuggled in”
FGD Arua Prison

“The administration does not allow cigarettes in prison but there are prisoners who smuggle the cigarettes in, especially when they come from digging.” FGD Soroti Prison

The main reasons given for abusing drugs in prison were; reduction of anxiety and stress by 46% of the respondents, established drug habit prior to imprisonment by 24% and the need to gain strength was reported by 17%.

Responses from KIs and records review suggested that there are no specific programmes to mitigate effects of drug abuse in prisons. Responses on drug abuse in prisons are summarised in table 5. In order to control drug abuse in prisons, respondents suggested the following interventions as important;

- The leaders of prisoners should be very vigilant and empowered to ensure that cigarettes do not enter prison.
- Sensitisation of prisoners on the dangers of smoking.
- Putting in place stringent punishments for those caught smoking cigarettes or any type of drug.
- Improving and increasing the available recreation activities to occupy the prisoners.
- Relatives of prisoners should be searched so that they do not sneak in drugs.
- Giving prisoners cigarettes when they go to work on people's projects outside should be discouraged by the escorts.

3.3 Knowledge, Attitude, Practices and Behaviour

3.3.1 Knowledge about HIV/AIDS

The proportion of respondents who could mention at least 2 correct methods of HIV prevention was 69% for male prisoners and 65% for female prisoners. The majority of prisoners identified condom use as one of the methods used to prevent HIV transmission. There was no sufficient statistical evidence to show a difference in knowing at least two ways of preventing HIV by different levels of background statistics.

Table 5: Distribution of respondents by knowledge of prevention of sexual transmission of HIV

Background Characteristics	Abstinence %	Being faithful %	Condom use %	Don't share skin piercing instruments %	HIV counselling and testing %	Don't know %	Could mention at least 2 correct methods %	Number of respondent
Sex								
Male	41.9	37.2	63.3	38.3	10.8	4.2	68.9	360
Female	37.4	47.5	55.6	31.3	15.2	6.1	64.6	99
Religion								
Roman Catholic	39.2	38.1	61.3	33.1	13.3	5.0	69.1	181
Protestant	41.4	42.8	61.8	38.8	10.5	3.9	69.1	152
Moslem	36.4	37.5	63.6	35.2	9.1	4.5	60.2	88
Pentecostal	57.6	39.4	57.6	42.4	18.2	6.1	72.7	33
Others	60.0	20.0	60.0	100.0	0.0	0.0	100.0	5
Education								
Never attained	36.0	40.7	52.3	26.7	10.5	14.0	54.7	86
Primary	40.2	39.5	61.2	37.0	11.7	2.1	69.0	281
Secondary	45.6	34.2	69.6	46.8	13.9	3.8	77.2	79
Post secondary	61.5	61.5	84.6	38.5	7.7	0.0	76.9	13
Marital status before imprisonment								
Single no partner	40.4	23.4	66.0	38.3	17.0	8.5	61.7	47
Single with non regular partner	39.1	19.6	87.0	26.1	13.0	4.3	65.2	46
Single with regular partner	35.4	41.5	73.8	47.7	10.8	4.6	76.9	65
Married	43.4	46.2	54.2	35.1	12.0	4.0	69.7	251
Widowed	32.0	32.0	40.0	48.0	12.0	8.0	48.0	25
Divorced	33.3	33.3	100.0	33.3	0.0	0.0	33.3	3
Separated	40.0	35.0	70.0	30.0	0.0	0.0	65.0	20
None response	100.0	100.0	50.0	50.0	0.0	0.0	100.0	2
Age								
16 - 24	38.6	32.5	64.5	34.3	12.0	4.8	65.7	166
25 - 30	44.6	40.0	66.9	40.8	10.0	3.8	70.0	130
31 - 35	30.9	44.1	66.2	44.1	17.6	4.4	70.6	68
36 - 44	43.4	41.5	45.3	35.8	9.4	9.4	69.8	53
45 and above	52.4	54.8	47.6	23.8	9.5	0.0	64.3	42
Duration in prison								
< 1 months	38.9	44.4	70.4	37.0	13.0	3.7	74.1	54
1 - 6 months	36.9	39.7	63.1	28.4	8.5	4.3	59.6	141
6 - 12 months	35.9	37.2	55.1	32.1	14.1	5.1	62.8	78
12 - 24 months	51.8	33.7	60.2	43.4	12.0	1.2	74.7	83
> 24 months	43.0	42.0	62.0	47.0	14.0	8.0	75.0	100
None response	33.3	66.7	33.3	33.3	0.0	0.0	66.7	3

When asked about five common misconceptions (myths) of HIV transmission, fifty one percent of male and 47% of female prisoners had no incorrect beliefs about HIV transmission. Among the respondents with incorrect beliefs, the three most frequently held myths were; mosquito bites (39%); sharing utensils (21%) and sharing toilets (14%). Respondents were asked if a healthy looking person can be infected with HIV and whether AIDS is curable. Ninety one percent of the respondents knew that a health looking person can be infected with HIV while 78% of respondents knew that there is no cure for AIDS. The linkage between the prevailing level of awareness and its influence on behaviours was expressed by the KI as follows:

“The prevailing ignorance and superstitious beliefs on HIV among the prisoners is greatly influenced by lack of sufficient information”

Table 7 shows misconceptions on HIV transmission by background characteristics.

Knowledge of mother to child transmission was assessed. While eighty two percent (82%) of the respondents knew that HIV virus can be transmitted from mother to the child only 61% said that transmission can be prevented during delivery, 30% mentioned during breastfeeding and 22% mentioned transmission of infection during pregnancy.

Table 6: Proportion of prisoners who identified incorrect ways of HIV transmission

Background characteristics	Percentage of prisoners who believe that HIV/AIDS can be transmitted through:					Percentage with no incorrect belief	Number of respondent
	Mosquito bites	Touching an effected person	Sharing utensils	Sharing infected toilets with person	Witchcraft		
Sex							
Male	37.0	8.1	22.0	15.9	5.0	50.8	359
Female	45.5	6.1	16.2	11.1	2.0	46.5	99
Religion							
Roman Catholic	37.8	9.4	19.4	13.9	3.3	50.8	180
Protestant	39.5	8.6	25.0	17.8	5.9	48.0	152
Moslem	44.3	2.3	17.0	13.6	2.3	48.9	88
Pentecostal	27.3	9.1	15.2	9.1	9.1	54.5	33
Others	40.0	0.0	40.0	20.0	0.0	60.0	5
Education							
Never attained	54.7	9.3	25.6	14.0	4.7	32.6	86
Primary	39.9	7.5	21.7	16.7	4.3	50.0	281
Secondary	24.4	6.4	12.8	11.5	3.8	64.1	78
Post secondary	0.0	7.7	15.4	0.0	7.7	76.9	13
Marital status before imprisonment							
Single no partner	42.6	8.5	38.3	17.0	4.3	36.2	47
Single with non regular partner	41.3	10.9	39.1	34.8	6.5	35.6	46
Single with regular partner	46.2	7.7	21.5	13.8	6.2	44.6	65
Married	36.0	6.8	14.8	11.2	4.0	55.2	250
Widowed	32.0	8.0	20.0	16.0	4.0	52.0	25
Divorced	100.0	33.3	33.3	33.3	0.0	0.0	3
Separated	35.0	5.0	10.0	10.0	0.0	70.0	20
None response	50.0	0.0	0.0	0.0	0.0	50.0	2
Age							
16 – 24	48.8	7.8	30.7	21.1	4.2	43.0	166
25 – 30	37.2	10.1	21.7	16.3	5.4	45.0	129
31 – 35	19.1	2.9	11.8	4.4	2.9	67.6	68
36 – 44	34.0	5.7	9.4	5.7	1.9	62.3	53
45 and above	42.9	9.5	7.1	14.3	7.1	47.6	42
Duration in prison							
< 1 months	56.6	7.5	30.2	20.8	7.5	41.5	53
1 - 6 months	44.7	7.1	27.7	19.1	5.0	39.7	141
6 - 12 months	38.5	10.3	20.5	15.4	0.0	48.1	78
12 - 24 months	28.9	7.2	13.3	8.4	2.4	62.7	83
> 24 months	30.0	7.0	12.0	11.0	7.0	60.0	100
None response	33.3	0.0	33.3	0.0	0.0	33.3	3

3.3.2 Attitudes relating to HIV/AIDS

Perceived risk of getting HIV in Prison

The perception of risk by the prisoners to acquire HIV while in prison was assessed. Thirty three percent perceived themselves at risk of acquiring HIV in prison and cited the reasons as sharing of skin piercing instruments (37%), shaving instruments (62%) and unsafe sexual behaviour (7%). Those who perceived no risk of acquiring HIV in prison gave their reasons as having no sexual partner (77%) and not sharing shaving instruments (42%).

FGD participants indicated the risk of acquiring HIV in prison is a reality as reflected in the quotes below:

“There are accidents in prisons, for example some one may be cutting firewood and cuts himself, friends rush to help and even if there is blood, no one thinks of getting gloves”

“We share beddings and if you both have wounds, you can get HIV!”

Attitude towards HCT

Ninety two percent of the prisoners admitted that HIV testing is beneficial in prison and gave the following main reasons; planning for the future, accessing early treatment if positive and avoidance of re-infection once released.

Attitude towards People Having AIDS (PHAs)

Fifty seven percent of the respondents were opposed to the suggestion that HIV positive prisoners be separately accommodated while, 93% supported the provision of special diet to HIV positive prisoners.

3.3.3 HIV/AIDS related behaviour and practices

Sexual Practices

The study explored the practice of men who have sex with men (MSM) in prisons. Forty percent of the respondents acknowledged having heard of MSM in prison; of these, 68% were of the opinion that few prisoners are involved and 32% reported that MSM was of coercive nature, while 3% reported having received sexual advances from fellow prisoners.

Varied insights regarding the prevalence of MSM in prisons were expressed during FGDs and KIIs as follows:

“Definitely homosexuality is not here (Soroti prison) and it will not be here. I can say that because inmates here do not have sentences exceeding 5 years, so the tendency of homosexuality cannot creep in.”
FGD Soroti Prison

“There are prisoners who have been in prisons for a long time and so homosexuality is creeping in and it is a mode of transmission. We had an incident in one of the wards; we separated the prisoners and intensified health education to help inmates understand that this practice puts them at risk of HIV infection.” FGD Gulu Prison

“Homosexuality which could expose them to HIV infection in prisons is not rampant in this prison, the culture here is very strong and the inmates do not engage in MSM.” KI Gulu Prison

On how to deal with sexual feelings while in prison, inmates gave the following ways of handling their sexual desires : 55% ignore; 7% masturbate; 3% engage in extra curricula activities; 3% pray while 2% wait for wet dreams.

Sharing of shaving instruments

The practice of sharing shaving instruments was reported by 58% of the prisoners. Forty percent of the respondents admitted sharing a shaving instrument (a razor blade) with a fellow prisoner at one time. A KI had this to say on sharing of razor blades by prisoners;

“Sharing of razors is limited, but in a few instances it occurs and exposes them to infection”

Practices like tattooing common in other prisons elsewhere were not reported in Uganda Prisons services

Sexual practices and condom use prior to imprisonment

Sexual behaviours among the respondents 12 months prior to imprisonment were assessed. Fifty two percent reported sexual intercourse with non-regular partners. Thirty seven percent of the prisoners reported using a condom in the last sexual encounter with a non-regular sexual partner. Thirteen percent reported consistent use of condom when having sex with non-regular sexual partners.

Uptake of HCT and HIV status disclosure

Forty seven percent of respondents reported having ever sought HCT services in prison. Seventy six percent reported taking the test, 95% of whom had received their results. Those who had not received their results, the reason given was that the counsellors had not returned them.

Sixty percent of respondents admitted disclosing their HIV status to colleagues. The respondents who did not disclose gave reasons such as absence of someone to confide in or seeing no benefit in disclosing under the prisons circumstances. In spite of the high disclosure rate, prisoners in FGDs said:

“There is still stigma in prisons and finger pointing. We see those with HIV receiving special diet and this stigmatizes them” FGD Gulu Prison

3.3.4 Knowledge about STI

The study assessed the knowledge about symptoms and signs of STI in men. The respondents who could not mention any sign or symptom of STI were 21% and 37% among men and women respectively. The commonly mentioned symptoms or signs were pain while passing urine and abnormal genital discharge. Table 8 shows knowledge of signs and symptoms of STI in a man by background characteristics.

The knowledge of signs and symptoms of STI in women was also assessed. Fifty nine percent of male and 24% of female respondents did not know any sign and symptom of STI in women. Table 9 shows knowledge of signs and symptoms of STI in a woman by background characteristics.

3.3.5 Knowledge about Tuberculosis (TB)

The study assessed the knowledge about TB. Sixty one percent of the respondents knew that there is a relationship between HIV and TB. Fifty nine percent of the respondents mentioned that TB can be spread through air while fifty one percent mentioned sharing of utensils.

The main signs and symptoms of TB mentioned were; chronic cough for more than 3 weeks (69%), loss of weight (41%), chest pain (19%) and coughing blood (10%). Seventy four percent knew that TB can be cured; however, only 8% knew that TB treatment takes 8 months.

The inadequate knowledge on TB particularly among the prisoners’ leaders was expressed by participants in the FGD as follows:

“For us ward leaders, we do not know what causes TB or how it is spread, so how do we educate the other inmates?”

Table 7: Proportion of prisoners who mention the signs and symptoms of STI in a man

Background Characteristics	Lower abdominal pain	Abnormal genital discharge	Foul smelling discharge from the genitals	Burning pain on passing urine	Blood in urine	Swelling in genital area	Genital sores	Genital itching	Genital warts	Don't Know	Number of respondents
	%	%	%	%	%	%	%	%	%	%	
Sex											
Male	17.1	32.1	19.3	46.4	9.8	15.4	25.1	14.2	2.5	21.2	357
Female	17.3	25.5	14.3	32.7	5.1	7.1	17.3	13.3	0.0	36.7	98
Religion											
Roman Catholic	20.4	29.8	13.3	41.4	9.9	12.2	23.2	13.3	1.7	25.4	181
Protestant	17.4	31.3	27.3	48.0	10.7	8.0	23.3	12.0	0.0	23.3	149
Moslem	16.1	27.6	12.6	47.1	5.7	19.5	18.4	17.2	4.6	26.4	87
Pentecostal	3.0	36.4	18.2	27.3	3.0	24.2	33.3	18.2	3.0	24.2	33
Others	0.0	60.0	20.0	20.0	0.0	60.0	60.0	20.0	20.0	0.0	5
Education											
Never attained	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	86
Primary	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	277
Secondary	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4	79
Post secondary	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	13
Marital status before imprisonment											
Single no partner	14.9	19.1	21.3	40.4	8.5	27.7	21.3	10.6	0.0	29.8	47
Single with non regular partner	6.5	39.1	26.1	47.8	6.5	15.2	23.9	6.5	2.2	23.9	46
Single with regular partner	17.2	31.3	15.6	42.2	7.8	12.5	21.9	17.2	0.0	18.8	64
Married	18.9	30.8	16.8	45.2	9.2	12.0	24.4	15.6	3.2	25.2	249
Widowed	25.0	20.8	12.5	37.5	4.2	8.3	16.7	8.3	0.0	33.3	24
Divorced	33.3	33.3	33.3	33.3	0.0	0.0	0.0	33.3	0.0	0.0	3
Separated	15.0	45.0	20.0	35.0	20.0	10.0	30.0	15.0	0.0	15.0	20
None response	0.0	50.0	50.0	0.0	0.0	0.0	50.0	0.0	0.0	50.0	2
Age											
16 - 24	19.3	25.3	19.9	44.0	6.0	16.9	21.1	12.7	3.0	21.7	166
25 - 30	12.4	31.8	14.0	41.9	10.9	12.4	27.1	18.6	0.0	27.9	129
31 - 35	22.4	41.8	23.9	44.8	11.9	10.4	25.4	13.4	1.5	22.4	67
36 - 44	13.2	28.3	18.9	45.3	3.8	11.3	24.5	13.2	5.7	26.4	53
45 and above	20.0	34.1	14.6	41.5	14.6	12.2	17.1	7.3	0.0	26.8	41
Duration in prison											
< 1 months	20.8	30.2	22.6	52.8	9.4	15.1	28.3	15.1	0.0	15.1	53
1 - 6 months	17.1	29.1	18.4	42.6	6.4	14.2	19.9	15.6	2.1	27.7	141
6 - 12 months	19.2	29.5	12.8	43.6	11.5	16.7	34.6	11.5	3.8	19.2	78
12 - 24 months	19.8	29.6	18.5	39.5	8.6	11.1	18.5	18.5	1.2	28.4	81
> 24 months	11.0	35.0	20.0	42.0	9.0	12.0	21.0	10.0	2.0	27.0	100
None response	33.3	33.3	0.0	66.7	33.3	0.0	33.3	0.0	0.0	0.0	3

Table 8: Proportion of prisoners who can mention the signs and symptoms of STI in a woman

Background Characteristics	Lower abdominal pain	Abnormal genital discharge	Foul smelling discharge from the genitals	Burning pain on passing urine	Blood in urine	Swelling in genital area	Genital sores	Genital itching	Genital warts	Don't Know	Number of respondents
	%	%	%	%	%	%	%	%	%		
Sex											
Male	18.5	12.0	9.0	16.0	2.8	2.8	10.1	10.6	1.7	59.4	357
Female	37.4	31.3	23.2	29.3	2.0	12.1	26.3	30.3	0.0	24.2	99
Religion											
Roman Catholic	27.2	18.9	15.6	18.9	3.9	5.6	15.0	13.9	0.6	48.3	180
Protestant	22.5	17.2	13.2	20.5	2.6	3.3	14.6	14.6	0.7	49.0	151
Moslem	12.6	8.0	4.6	18.4	1.1	4.6	9.2	16.1	3.4	63.2	87
Pentecostal	24.2	21.2	6.1	12.1	0.0	9.1	12.1	18.2	0.0	54.5	33
Others	20.0	0.0	20.0	20.0	0.0	0.0	20.0	20.0	20.0	40.0	5
Education											
Never attained	20.9	18.6	15.1	11.6	2.3	8.1	16.3	15.1	0.0	50.0	86
Primary	20.5	13.7	9.7	19.1	1.8	2.5	13.7	12.9	1.4	53.2	278
Secondary	29.1	20.3	12.7	27.8	2.5	7.6	10.1	16.5	2.5	53.2	79
Post secondary	38.5	30.8	38.5	7.7	23.1	15.4	15.4	46.2	0.0	23.1	13
Marital status before imprisonment											
Single no partner	23.4	10.6	17.0	12.8	6.4	2.1	12.8	6.4	0.0	63.8	47
Single with non regular partner	10.9	10.9	8.7	10.9	2.2	6.5	8.7	6.5	2.2	65.2	46
Single with regular partner	23.4	18.8	4.7	23.4	3.1	9.4	10.9	25.0	0.0	46.9	64
Married	24.0	16.4	12.4	20.4	1.2	2.8	14.0	14.0	2.0	50.8	250
Widowed	37.5	25.0	33.3	29.2	0.0	16.7	33.3	25.0	0.0	20.8	24
Divorced	33.3	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	33.3	3
Separated	5.0	20.0	5.0	5.0	15.0	5.0	10.0	20.0	0.0	60.0	20
None response	50.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	50.0	2
Age											
16 - 24	20.6	9.1	9.7	16.4	3.0	4.2	11.5	13.9	3.0	53.3	165
25 - 30	20.0	19.2	6.2	18.5	2.3	4.6	11.5	16.2	0.8	60.0	130
31 - 35	25.4	22.4	17.9	22.4	3.0	1.5	13.4	14.9	0.0	50.7	67
36 - 44	20.8	18.9	17.0	22.6	0.0	7.5	20.8	15.1	0.0	45.3	53
45 and above	36.6	22.0	24.4	19.5	4.9	9.8	19.5	14.6	0.0	29.3	41
Duration in prison											
< 1 months	28.3	18.9	18.9	22.6	1.9	9.4	15.1	22.6	0.0	41.5	53
1 - 6 months	21.3	15.6	13.5	15.6	2.8	4.3	16.3	14.9	0.0	52.5	141
6 - 12 months	28.2	16.7	11.5	20.5	2.6	7.7	12.8	15.4	2.6	44.9	78
12 - 24 months	22.2	11.1	4.9	21.0	2.5	0.0	4.9	9.9	4.9	60.5	81
> 24 months	17.0	20.0	13.0	18.0	3.0	5.0	17.0	15.0	0.0	54.0	100
None response	33.3	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	66.7	3

Table 9: Correlates of HIV by risky behaviour among prisoners

Socio-demographic characteristics	Number of respondents <i>n</i>	HIV seropositive		Syphilis seropositive		
		Number and % positive <i>n</i> (%)	OR(CI)	Number of respondents <i>n</i>	Number and % positive <i>n</i> (%)	OR (95% CI)
History of STD						
No	241	20 (8.3)	1	243	10 (4.1)	
Yes	197	30 (15.2)	1.99 (1.08-3.63)*	197	12 (6.1)	1.51 (0.64-3.58)
History of sharing shaving instruments						
No	100	11 (11.0)		102	9 (5.0)	
Yes	180	20 (11.1)	1.04 (0.48-2.28)	180	6 (5.9)	0.84 (0.29-2.44)
Inconsistent condom use (condom users)						
No	47	5 (10.6)		48	3 (6.3)	
Yes	203	26 (12.8)	1.23 (0.45-3.41)	382	18 (4.7)	0.74 (0.21-2.62)
Use of drugs prior to imprisonment						
No	216	24 (11.1)		228	10 (4.39)	
Yes	227	26 (11.5)	0.97 (0.54-1.74)	217	11 (5.07)	1.16 (0.48-2.80)

* $p < 0.05$

Odds ratios of getting HIV and Syphilis were computed for history of STD, sharing shaving instruments, inconsistent condom use and use of drugs prior to imprisonment. Those who had a history of STD were two times more likely to have HIV compared to those who had not had STD (OR: 1.99 95%CI 1.08-3.63). Having shared shaving instruments, inconsistent condom use and use of drugs were not significantly associated with having HIV.

3.4 Status of HIV/STI/TB/Drug abuse prevention and care services.

The study assessed the status of HIV/STI/TB/drug abuse prevention and care services and identified existing gaps. There are two interrelated organizational frameworks under which HIV/STI/TB/Drug abuse prevention, care and support services are planned, implemented and evaluated. They include Prisons AIDS Control Programme (PACP) and Prisons Health Services

3.4.1 Prisons AIDS Control Programme (PACP)

PACP was formed in 1993 to guide the UPS response to the HIV/AIDS epidemic. It has the mandate to plan, implement and monitor all HIV/AIDS interventions in UPS. The structure of PACP is made up of the following:

- Steering committee responsible for ensuring that the activities of the programme do not conflict with the policies of the UPS.
- Management team and Core team responsible for the day to day management of the programme;
- Regional coordination committees found in all 11 administrative regions of UPS and responsible for programme activities.

- Unit AIDS Control Committees (ACC) based at every prison unit and responsible for the coordination and implementation of activities at the lower levels.

Prisons HIV/AIDS Strategic Plan 2008/09-2013/14 offers the overall guidance to all HIV/AIDS interventions. The strategic objectives of the plan are consistent with the National HIV/AIDS Strategic Plan (NSP) 2007/8-2011/12. The plan focuses on the thematic areas: (a) Prevention of HIV/AIDS transmission, (b) Provision of care and treatment, (c) Social support, (d) Health Systems Strengthening. The plan is currently in a draft form. UNDP and ICRC have committed to facilitate the process of finalizing the draft plan.

The biggest challenge to the implementation of the plan is lack of funds. According to available documents Uganda AIDS Commission estimates that approximately USD 28 million is required to fund comprehensive HIV/AIDS interventions in Uganda Prisons and Police during the period 2007/8-2011/12. Of this amount, actual contributions to UPS from external partners so far amount to less than 1% while pledges total to approximately 10%.

The assessment determined the functionality of the unit ACCs basing on the status of membership, holding of meetings, possession of a work plan and if implementation of activities therein were on schedule. Fifty percent of prison units had AIDS Control Committees (ACCs) for staff with full membership. Fifty nine percent (10/17 prisons) of the ACCs had held at least 1-3 meetings in the last six months, while 40% (4/10 prisons) had work plans three of which were on schedule.

In respect of ACC for prisoners, 53% (18/34) of the prison units had fully constituted committees. Fifty percent (9/18) of the ACCs had held between 1-3 meetings in the last six months. Forty four percent (4/9) of the ACCs had work plans and three of the work plans were on schedule.

The high turn over of prisoners (40,000 prisoners per annum) was identified as the biggest challenge to the effective performance of the ACCs; while, lack of a sustainable source of funding is a key constraint to optimal functionality of both staff and prisoners' ACCs.

3.4.2 Prisons Health Service (PHS)

Prisons Health Service is one of the sections under the Department of Support Services in UPS. The mandate of PHS is to provide quality health care services to prisoners, staff and their relatives.

The implementation structures under PHS include:

- Prisons Health Team based at Prison Headquarters and is responsible for the day to day management of health care services in UPS. It is headed by the Assistant Commissioner/Health.
- Murchison Bay Hospital categorised as a 200-bed General Hospital by Ministry of Health. It provides a wide range of clinical services in addition to training of staff, conducting operational research and offering technical support supervision to the

lower level health units. It is the national referral Hospital for prisoners in UPS and is located in Kampala Extra Region.

- Regional Health Units are located in the 11 administrative regions of UPS. They provide the first level referral services for all the lower health units in the region.
- Lower level Health Units are located in all the prison units and provide primary health care services.

In order to assess the current capacity of the Prisons Health System to deliver HIV/AIDS/TB/STI and drug abuse prevention and care services, the following aspects were examined:

(a) Operational Policy Framework

The delivery of health care services in UPS is guided by the National Health Policy and the Health Sector Strategic Plan. The Uganda Minimum Health Care Package (UMHCP) sets benchmarks to be attained by Uganda Prisons Health Service.

The Prisons Health Sector Work plan 2008/09 is well aligned to the national policies, standards and guidelines. HIV/AIDS is a subset of the prisons health sector plan and its goals are well aligned to the National Strategic Plan for HIV/AIDS in Uganda albeit lack an M&E framework. Health Promotion/Health education, Control of communicable diseases, Control of non-communicable diseases and maternal and child health have provisions to address directly the issues related to HIV/AIDS/TB and drug abuse in prisons.

(b) Human Resource for Health

Provision of health care services in general and HIV/AIDS/TB/STI and drug abuse preventive and care services in particular is premised on the availability of sufficient numbers of health workers with the required competencies. This assessment reviewed the current status of human resource for health with particular reference to staffing levels, deployment at the various levels and skills development. The approved staff establishment for Prisons Health Service is 436. Table 11 shows the current staffing levels in relation to the approved establishment at various levels.

Overall 75%(324) of the established posts are vacant leaving the proportion of posts that are filled by health workers in UPS to 25%. The staffing levels at the various levels are: 63% at Prison Headquarter; 23% at Murchison Bay Hospital and 25% for upcountry health units. Analysis of the current staffing levels by cadre revealed that 5/17(29%) posts of medical officers; 71/196 (46%) posts of nursing staff and 13/99 (13%) posts of the allied health workers are currently occupied. In the sampled prison units, 1/34 reported presence of a medical officer, 8/34 had clinical officers and 17/34 had nursing staff. Health services in majority of the prisons were run by nursing assistants-24/34. Seven of the thirty four prison units did not have health workers at all. The RSA inquired about recent competence development of the health workers at the sampled prisons. A total of 85 health workers were interviewed, 32/85 (38%) had attended refresher training in the last three years. Those who had not attended any training reported that they were facing difficulty in managing HIV/AIDS patients especially those on ART. Table 12 shows the percentage of health workers who had attended various trainings.

Table 10: Staffing levels vis-à-vis approved establishment of Prisons Health Service as at 30th December 2008

Prisons Health Team: Staffing level percentage 75%	Salary Scale	Approved Establishment	Filled	Vacant
Assistant Commissioner/Health	U1E Lower	1	1	0
Principal Medical Officer	U2 Upper	1	1	0
Senior Principal Nursing Officer	U2 Upper	1	1	0
Senior Pharmacist	U3 Upper	1	1	0
Senior Health Educator	U3 Upper	1	1	0
Principal Environmental Health Officer	U3 Upper	1	0	1
Bio-statistician/Health Information	U4 Upper	1	0	1
Driver	U8 Upper	1	1	0
Sub Total		8	6	2
Murchison Bay Hospital: Staffing level percentage 23%				
Medical Officers				
Principal Medical Officer	U2 Upper	1	1	0
Med. Off. Special grade (psychiatry)	U2 Upper	1	0	1
Med. Off. Special grade (obstetrics & gynaecology)	U2 Upper	1	0	1
Med. Off. Special grade (internal medicine)	U2 Upper	1	0	1
Med. Off. Special grade (surgery)	U2 Upper	1	0	1
Med. Off. Special grade (paediatrics)	U2 Upper	1	0	1
Senior Medical Officer	U3 Upper	1	1	0
Medical Officer	U4 Upper	4	3	1
Sub Total		11	5	6
Dental				
Dental Surgeon	U4 Upper	1	1	0
Public Health Dental Officer	U5 Upper	2	3	0
Dental Assistant	U8 Upper	1	0	1
Sub Total		4	4	1
Pharmacy				
Pharmacist	U4 Upper	1	0	1
Dispenser	U5 Upper	2	0	2
Sub Total		3	0	3
Nursing				
Principal Nursing Officer	U3 Upper	1	1	0
Senior Nursing Officer	U4 Upper	5	3	2
Nursing Officer/Nursing	U5 Upper	17	13	4
Nursing Officer/Midwifery	U5 Upper	3	3	0
Nursing Officer/Psychiatry	U5 Upper	1	1	0
Public Health Nurse	U5 Upper	1	0	1
Enrolled Psychiatric Nurse	U7 Upper	2	0	2
Enrolled Nurse	U7 Upper	46	2	44
Enrolled Midwife	U7 Upper	25	0	25

	Salary Scale	Approved Establishment	Filled	Vacant
Nursing Assistant	U8 Upper	15	7	8
Sub Total		116	30	86
Allied Health Professionals				
Senior Clinical Officer	U4 Upper	1	1	0
Health Educator	U4 Upper	1	0	1
Senior Laboratory Technologist	U4 Upper	1	2	0
Senior Psychiatric Clinical Officer	U5 Upper	1	1	0
Ophthalmic Clinical Officer	U5 Upper	1	1	0
Clinical Officer	U5 Upper	5	0	5
Health Inspector	U5 Upper	1	0	1
Assistant Entomological Officer (med)	U5 Upper	1	0	1
Radiographer	U5 Upper	2	0	2
Physiotherapist	U5 Upper	1	0	1
Occupational Therapist	U5 Upper	1	0	1
Orthopaedic Officer	U5 Upper	2	0	2
Assistant Health Educator	U5 Upper	1	0	1
Anaesthetic Officer	U5 Upper	3	0	3
Laboratory Technologist	U5 Upper	1	0	1
Laboratory Technician	U5 Upper	2	0	2
Laboratory Assistant	U7 Upper	1	0	1
Anaesthetic attendant	U8 Upper	2	0	2
Sub Total		28	5	24
Administrative and other staff				
Senior Hospital Administrator	U3 Upper	1	1	0
Hospital Administrator	U4 Upper	1	0	1
Personnel Officer	U4 Upper	1	0	1
Medical Social Worker	U4 Upper	1	0	1
Nutritionist	U4 Upper	1	0	1
Sen. Principal Stores Assistant	U4 Upper	1	0	1
Sen. Accounts Assistant	U5 Upper	1	0	1
Stenographer secretary	U5 Upper	1	0	1
Stores assistant	U7 Upper	2	0	2
Records assistant	U7 Upper	2	0	2
Accounts assistant	U7 Upper	2	0	2
Office typist	U7 Upper	1	0	1
Sub Total		15	1	14
Support staff				
Darkroom attendant	U8 Lower	1	0	1
Mortuary attendant	U8 Lower	2	0	2
Driver	U8 Lower	2	0	2
Cook	U8 Lower	3	0	3

	Salary Scale	Approved Establishment	Filled	Vacant
Askari	U8 Lower	2	0	2
Artisans mate	U8 Lower	3	0	3
Sub Total		13	0	13
Upcountry health units: Staffing level percentage 25%				
Medical Officer	U4 Upper	5	0	5
Health Educator	U4 Upper	5	0	5
Senior Clinical Officer	U4 Upper	11	8	3
Senior Nursing Officer	U4 Upper	11	1	11
Senior Dispenser	U4 Upper	9	1	8
Public Health Nurse	U5 Upper	6	0	6
Clinical Officer	U5 Upper	20	1	19
Psychiatric Clinical Officer	U5 Upper	5	0	5
Ophthalmic Clinical Officer	U5 Upper	4	1	3
Health Inspector	U5 Upper	5	0	0
Dispenser	U5 Upper	14	0	14
Public Health Dental Officer	U5 Upper	5	1	4
Laboratory technician	U5 Upper	4	0	4
Nursing Officer/Nursing	U5 Upper	10	6	4
Nursing Officer/Midwifery	U5 Upper	11	12	0
Nursing Officer/Psychiatry	U5 Upper	11	3	8
Assistant Health Educator	U5 Upper	5	0	5
Enrolled Psychiatric Nurse	U7 Upper	11	0	11
Enrolled Nurse	U7 Upper	20	3	17
Enrolled Midwife	U7 Upper	20	4	16
Laboratory Assistant	U7 Upper	11	0	11
Health Information Assistant	U7 Upper	11	0	11
Nursing Assistant	U8 Upper	24	19	5
Sub total		238	59	175
Grant Total	All UPS	436	109	324

Table 11: Health workers by training in the past 3 years

Area of training	Number trained(n=85)	Percentage Trained
Counselling course	9	11%
Comprehensive HIV care	4	5%
Management of ARVs/ART	4	5%
Home based HIV counselling and testing	2	2%
Rapid HIV testing	2	2%
PMTCT	1	1%
Management of HIV/AIDS	3	4%
Management of malaria	1	1%
Management of TB	3	4%
Management of mental health conditions	1	1%
Laboratory utilization and surveillance	2	2%

(c) Essential medicines and other health supplies

The study evaluated the availability of essential medicines and health supplies for HIV/AIDS/STI/TB prevention and care at the various health units. The proportion of health units that had in stock specified tracer items are indicated in table 13.

Table 12: Proportion of prison units with essential supplies in stock

Essential supplies	No. of prison units with items	%
Condoms	20/34	59%
Septin	17/34	50%
Coartem	17/34	50%
TB drugs	11/34	32%
Fluconazole	3/34	9%
Morphine	3/34	9%
HIV test kits	4/34	12%
Gloves	28/34	82%
Syringes and needles	29/34	85%

Only 12% of prison stations had HIV tests kits and 9% had fluconazole and morphine respectively for OI treatment and pain management. Inadequate quality of care in prisons is associated with persistent stock out of essential medicines according to comments made by the various FGD participants:

“Care is poor, there are insufficient drugs given to inmates, even for those with HIV who require Septin. Those on ARVs and Septin get their drugs from Gulu Hospital yet we have health workers in the prison”.

“How do you give me only Panadol, yet I have told you I have so many illnesses? They tell you drugs are over, wait for two/three weeks for drugs”

“Inadequate drugs would make me say the quality is poor, but the health workers try their best”

The assessment established that all health units run by Prisons Health Service unlike other public and private health units in Uganda do not access the Primary Health Care Conditional Grant and the National Drug Credit Line. The Ministry of Health is responsible for the management of these two facilities that are intended to improve access to essential drugs and supplies and reduce stock outs.

(d) Infrastructure

Clinics and Counselling rooms

The availability of appropriate physical infrastructure is an important determinant of the quality of health care services. The study assessed two aspects at the selected units; namely, the presence of physical structures that are designated to provide clinical services as well as the availability of counselling rooms that provide both auditory and visual privacy. Twenty one of the sampled prisons (61.8%) had structures designated as clinics. However, only 5 (24%) of these had counselling rooms that provided adequate privacy.

Laboratory Diagnostic facilities

Laboratory services are essential in the delivery of a minimum package of health care services. Basic laboratory services were found to be available at 8/21(38.1%) of the prison health units. The assessment established that Murchison Bay Hospital main laboratory was recently renovated and equipped under the UPS/ICRC Joint Health Pilot Project. The facility can now offer a wide range of laboratory services apart from determining CD4 count. The hospital has a collaborative arrangement with Mulago Hospital under which CD4 count is performed at no cost, an arrangement that runs short of being satisfactory for upcountry prison units.

Radiological and X-ray Diagnostic facilities

Murchison Bay Hospital has facilities for radiological diagnostic services that are currently not functional. Reasons given for non functionality were inadequate budget and lack of funds to repair and regularly service the machine. In addition, there is no radiographer on the staff establishment. Currently, all patients in need of radiological investigations are referred to Mulago Hospital. The service is accessed at a cost in addition to being associated with several logistical encumbrances such as transport and the need to provide security. Because of these challenges, many prisoners at the Hospital miss out on basic investigations which delays diagnosis of infectious diseases such as TB and in some cases result in death.

Ambulatory Services

One of the challenges to effective provision of care and support services is lack of an ambulance vehicle in the entire UPS. Patients who are seriously ill and referred from upcountry prison units to Murchison Bay Hospital or from Murchison Bay Hospital to Mulago National Referral Hospital are transported using a pick up vehicle. In addition; there are prisoners who are referred to Mulago National Referral Hospital to access specialized services that are not offered at Murchison Bay Hospital. The only mode of transport is the same pick up vehicle which is not only inadequate given the big numbers that are referred daily but also inappropriate taking into account the security aspect.

(e) Financing of Health Services.

The main source of funding for Prisons Health Service is from the government of Uganda through Ministry of Finance Planning and Economic Development (MOFPED). The projected annual budget for FY 2009/10 is estimated to be 470 million for the wage bill and 350 million for the non-wage bill (recurrent expenditures).

Of the 350 million, Murchison Bay Hospital receives 138 million compared to 240 million recurrent expenditure for a public community based hospital with similar status annually (MoFPED 2008).The remaining 212 million covers recurrent expenditure for the Prisons Health Team at the PHQs and the peripheral health units in the 222 prisons country wide.This reflects gross undercapitalization.

A review of the level of funding during the past 3 years indicates that there has been a modest increase in the range of 6%.This implies no significant improvement in the level of funding for Prisons Health Services unless affirmative action is taken by government or partners.

3.4.3 Status of essential preventive, care and social services

(a). Information, Education and Communication (IEC)

Health education is a cross cutting intervention through which essential preventive, care and support services are either provided or promoted. The staff establishment of Prisons Health Service provides for 13 posts of Health Educators of various categories; however, only the post of the Senior Health Educator is currently filled implying that 92% of the posts are still vacant.

The status of health education activities in the 34 sampled prison units was determined during the assessment. Forty four percent of the respondents admitted ever attending an HIV education session while in prison; 27% of whom had attended more than 3 health education sessions in the last three months. The main sources of information about HIV/STI/TB and drug abuse in prisons were reported to be from health workers and fellow prisoners. The main methods of information dissemination were reported to be Music, dance and drama, posters on HIV, video shows on HIV and health talks by health workers.

(b). HIV Counselling and Testing (HCT)

The coordination of HCT services in UPS is vested in a sub-committee of PACP. It is the responsibility of this sub-committee to among other things; build the internal capacity to promote access to HCT services by prisoners, staff and their relatives.

The study assessed the opinions of the respondents regarding access to HCT. Sixty nine percent of the respondents reported that it was possible to access HCT services in prisons. Data from the observation checklists indicated that 41% of the prisons had counsellors who are staff; 6% had counsellors who are prisoners. In the majority of prison units, HCT services were solely provided by partners who conduct outreach clinics to the units or at their established static units outside the prison. There are several challenges associated with provision of HCT services by partners that were described by participants in the FGD and KII as irregular.

“Prison allows visits from AIC and TASO Soroti but these visits are irregular.” FGD participant

“When prisoners are taken for counselling services outside, they take advantage and try to escape, some do escape! We cannot for instance risk taking capital offenders”. KI

(c) ART services in UPS

Currently the number of prisoners known to be on ARVs is about 100 (28%), as drawn from statistics compiled at Kampala Extra Region where the Prisons ART Centre is located. Statistics from other regions is unknown because of lack of an effective Health Management Information System.

Among the Ugandan population, it is estimated that 330,000 people are eligible for ARVs. However, as of March 2008, only 141,416 (43%) were on ARVs. Comparatively, access to ARVs is still a problem among the general population and prisoners.

(d). Tuberculosis control interventions

Tuberculosis is a major cause of morbidity and mortality among prisoners in Ugandan prisons. Results of study on natural causes of death among the inmates of Luzira Prison (Murchison Bay Hospital) showed that 41.2% of the deaths were accounted to tuberculosis (S. Onzivua, 2003).

The PHS action plan on the control of TB is well elaborated in the Prisons Health Sector Workplan 2008/09 and complies with the Ministry of Health standards on TB control interventions in Uganda. However, this elaborate action plan has not yet been translated into action. Throughout the Uganda Prisons service, only Murchison Bay Hospital has the capacity to diagnose TB using microscopy and provide treatment according to the

national treatment guidelines. The rest of the prison units rely on the community based health system for diagnosis and treatment.

However, there are ongoing efforts under the UPS/ICRC Joint Health Pilot Project to scale up TB control interventions to other prisons. Under this arrangement, three pilot sites of Gulu, Fort portal and Luzira Upper prison are to begin medical screening of prisoners on admission, conduct regular active case finding, case recording and reporting and improve laboratory diagnosis using sputum smear microscopy.

(e) Nutritional Supplementation

Proper nutrition plays an important role in the management of individuals with chronic conditions that include HIV/AIDS and TB. The daily ration for prisoners is composed of: Posho 680 g, Beans 142 g and Salt 15 g. The restriction to these items on the menu for prisoners is mainly due to the limited prison budget for food. While this diet provides sufficient calories and proteins, it is deficient in fats, essential minerals and vitamins. This deficiency was found to be more pronounced among prisoners with chronic conditions such as HIV/AIDS during a Joint UPS/ICRC Nutritional Assessment in Uganda Prisons²⁷. The assessment established that there is a modest nutritional supplementation programme at Murchison Bay Hospital supported by the Franciscan Prison Ministry. The rest of the units that were sampled did not have any formal nutritional supplementation programmes for sick prisoners. The challenge faced by HIV positive clients in relation to dietary supplementation was described by participants in FGDs as follows:

*Food is a problem for sick prisoners who need special diet.
“People who have HIV face a lot of problems in prison because if you have HIV and you are on ARVs, you cannot adequately supplement your diet”.*

3.4.5 Prison Specific Factors

Congestion, Isolation facilities, Water and Sanitation Systems

There are several prison specific factors that are known to facilitate the transmission of communicable diseases. They include overcrowding, lack of isolation facilities for prisoners with infectious diseases, poor water and sanitary facilities. The level of overcrowding is high with some prison units currently accommodating 4 times the designated capacity. The linkage between overcrowding and lack of isolation facilities for TB cases was described by participants in the FGDs and KII.

“There is over crowding in the wards, you can get in the ward, and find the people are very many, so if someone has TB, you can get it”

“They mix us and someone who comes from outside may have TB but they do not screen and isolate them”.

The status of water and sanitation systems is poor. Most stations lack running water and flushing toilets and so they continue to use the “night soil bucket system”, which is unhygienic and dehumanizing due to lack of privacy.

4.0 DISCUSSION

The assessment established the prevalence of HIV, syphilis, tuberculosis and drug abuse among prisoners. It also established the knowledge, attitudes, behaviour and practices of prisoners in relation to drug abuse, HIV/AIDS, STIs, and tuberculosis. In addition, factors associated with the transmission of HIV, STIs and tuberculosis and drug abuse among prisoners were identified. Lastly, gaps in HIV prevention and care services for prisoners in Uganda Prisons were documented.

The prevalence of HIV in prisons at 11.2% is double the national population HIV prevalence recorded at 6.4% in the 2005 AIDS Indicator Survey. The HIV prevalence is slightly higher among females than males; however, the difference is not statistically significant. The prevalence rate of 11.2% suggests that 3,584 prisoners of the estimated 32,000 total population of prisoners are living with HIV/AIDS. The implication of this is that the number of prisoners eligible for ART is approximately 358. The majority of prisoners are unaware of their HIV status as only approximately 500 prisoners are currently enrolled in comprehensive ART care in the entire Prisons Service.

The level of knowledge of HIV prevention among prisoners is lower (60-65%) than in the general Ugandan population (90%). The level of knowledge does not change with the duration of stay in prison; meaning that Uganda Prisons health education interventions have no impact on the level of knowledge of prisoners. Imprisonment would provide an opportunity for the prisoners to enrich their knowledge about HIV especially considering the fact that most of the time they are not engaged in any kind of labour.

The attitudes of prisoners towards fellow prisoners living with HIV/AIDS are still characterized by stigmatization and mystification as evidenced by 43% of the respondents who support separate accommodation for HIV infected prisoners. This is a pointer to the need for the prisons management to scale up education awareness.

The proportion of prisoners who engage in high HIV risk behaviours is higher than in the general community. This justifies the need for robust Information, Education and Communication programme in Uganda prisons to address behaviour change with prison tailored innovative approaches.

The perception of risk by the prisoners to acquire HIV in prison was well described and it included sharing skin piercing and shaving instruments as well as involvement in MSM. This information provides evidence about the existence of institutional factors that could promote HIV transmission in Ugandan prisons. As a way of preventing HIV transmission, the prisons authorities have the responsibility to ensure regular supply of razor blades in addition to putting in place measures aimed at preventing rape, sexual violence and coercion. Such measures include, providing adequate staffing, effective surveillance, disciplinary sanctions, work and leisure programmes. Structural interventions like providing better lighting, better shower and living arrangements are the other measures that could be implemented⁵. However, the control of HIV transmission through MSM a practice prohibited by law may be difficult since condom distribution; a key preventive intervention cannot be implemented in Uganda prisons.

The higher prevalence of syphilis (4.9%) among prisoners as compared to the general Ugandan community was a significant epidemiological finding. Syphilis is known to increase plasma viral load, genital viral load and a decrease in the CD4 count in HIV infected individuals. This leads to a higher infectivity of the individual²³. Therefore, the high prevalence of syphilis among prisoners increases the vulnerability to HIV infection for the prisoners who engage in such practices like MSM.

The demonstrated association between STDs and HIV in this assessment, coupled with a high prevalence rates of syphilis call for putting in place interventions to ensure early diagnosis and treatment of cases. Such interventions could be an integral component of the medical screening package on entry into prison. Intensifying IEC interventions could improve the level of knowledge among prisoners regarding signs and symptoms of STI and result into improved self reporting and early access to care.

Though no active TB organisms were identified in the sputum, the burden of TB was demonstrated to be higher among the prisoners than in the general community given that the projected patients on treatment translated to 654/100,000 a figure higher than the in the general population. The level of knowledge among prisoners regarding the cause, mode of transmission, clinical manifestations and prevention of TB was lower than in the community. The high TB burden is due to the high HIV prevalence in prison. Prisons management has the challenge to address TB and HIV using the collaborative approach to address the burden and the prevailing low level of awareness about the two conditions. It is well acknowledged that in order to increase utilization of TB services, there is need for prisoners to have right and consistent information on both TB and HIV; the relationship between them and the services available for both. In addition, the involvement and empowerment of the community through education is an important strategy for effective TB management since it enables timely detection of suspects, early initiation of treatment, as well as follow up of those on treatment using Community based DOTS²⁴.

The burden of drug abuse in prisons as expressed by the various indicators in the study provides evidence of an emerging problem. The finding that there is no IDUs is an important finding because IDU is a high risk factor for HIV transmission.^{9,10,11}. The absence of drug dependence treatment programmes in prisons is a shortcoming that is likely to result into the escalation of drug abuse and the attendant problems.

Many prison systems in Africa do not have formal structures for the delivery of prison health care services. They depend on external public health systems to deliver health care services to prisoners. The existence in Uganda, of a Prisons Health Service and a Prisons AIDS Control Programme provides an opportunity, to internally direct the HIV/STI/TB/drug abuse preventive, care and support services. However, the inadequacies in health financing, human resource for health, supply of essential medicines and health supplies, infrastructure for health care service delivery and the provision of essential clinical services constrain the delivery of quality health services in prisons.

The low level of funding of the Prison Health system compared to the public based health, a 25-30% level of human resource for health staffing, and the unmet essential

drugs need of over 50% of all health units present a big challenge to the prisons authority. The prisons are obliged to provide health care services that are at least equivalent to those available in the general community.

Knowledge of ones' HIV sero-status early in the course of HIV infection is a crucial first step in the ability to seek and access medical and prevention services. This results in improved quality of life and the prevention of HIV transmission to others through low infectivity and reduced risk. The high level of accessibility to HCT services in prisons, associated with a high level of appreciation by the prisoners of the benefits of one knowing his/her status, are important for HIV prevention and control in prisons and provided opportunity for improved health care seeking behaviour on release. However, the findings revealed that HCT services are predominantly provided by partners. The reliance on partners to provide HCT services is characterized by irregularity in outreach service provision, and difficulty to arrange escorts for prisoners to outside service points. However, the internal capacity of UPS to offer HCT services is limited by few counsellors who are not adequately motivated, insufficient test kits and health workers with no training in HIV counselling.

Morbidity among HIV clients is significantly reduced through the administration of prophylactic treatment for common opportunistic diseases. Septrin prophylaxis is a major component of comprehensive HIV care. The results of the assessment indicated that many prison units experienced frequent stock out of a range of drugs for prophylaxis including Septrin and fluconazole. This may lead to high morbidity and mortality among the PHAs due to life threatening conditions whose management is expensive.

Effective STI management is a key intervention in the control of HIV transmission. Government of Uganda recommends Syndromic Management of STIs as the standard treatment intervention. The demonstrated lack of key drugs for treatment of STI implies that cases are not effectively managed. This may lead to complications due to STI, resistance and further transmission of the infections to sexual partners.

The introduction of ART in the management of HIV dramatically changes the course of HIV disease. Currently ART services are only provided at Murchison Bay Hospital in Kampala Extra Region. The clients in other prison units access services from the outside public/private clinics or are referred to Murchison Bay Hospital. Under the Prisons Health Service work plan, regional prisons health units are to be designated as ART centres and this process should be expedited along with enhancement of nutrition programmes at the various prison units.

5.0 CONCLUSION

It can therefore be concluded that;

1. The prevalence of HIV was estimated at 11.2% while that of syphilis was 5%. The burden of TB was demonstrated to be higher than the general population as reflected from the numbers of patients on treatment among the respondents. Use of illicit drugs in Uganda prisons is limited. Overall the magnitude of HIV/Syphilis/TB was higher than the national country estimates. Current control interventions are not commensurate to with the level of these infection in the prisons settings.
2. Knowledge about HIV/AIDS/STI is far below the national estimates. Knowledge about TB is limited. Knowledge about drug abuse was high though information about practice in prisons was limited. Health education programmes in prisons were inadequate. Attitude of prisoners towards fellow prisoners living with HIV/AIDS was poor.
3. History of STDs was the only significantly associated factor with HIV transmission while stress and anxiety influence drug use. Other factors mentioned though not significantly associated with HIV transmission were MSM, sharing of razor blades and drug abuse.
4. Gaps in the delivery of HIV/STI/TB and drug use control in UPS include inadequate human resource, infrastructure, financing, essential medicines and health supplies and of lack harm reduction programs in UPS.

6.0 RECOMMENDATIONS and ACTION POINTS

Arising out of the findings and discussions detailed above, the following recommendations are proposed;

6.1 Recommendations

1. Management of Uganda Prisons Service could use the information obtained to advocate for more resources required to scale up HIV/STI/TB and Drug Abuse prevention, care and support services.
2. Prisons Health Service could conduct specific TB, and drug abuse studies to establish the burden and predictor variables for effective formulation of interventions.
3. Prisons Health Service could consider establishing a country wide health education programme to increase comprehensive knowledge about HIV/STI/TB and drug abuse. This could be done in collaboration with other development and technical partners in the country.
4. There is need for UPS and UNODC to initiate a drug dependence management as part of a comprehensive HIV prevention, treatment and care programme.
5. UPS could consider developing a comprehensive Prisons Health Service strategic plan as a resource mobilization tool. This could be discussed at a tripartite meeting of Ministry of Finance Planning and Economic Development, Ministry of Health and Ministry of Internal Affairs to agree on the modalities of implementation. The involvement in such discussion of the development partners could also be deliberately promoted.

6. There is need for UPS to collaborate with the Health Service Commission to fill the vacant posts on the establishment of the Prisons Health Service.
7. Prisons Health service could consider carrying out a comprehensive training needs assessment for health workers with the view of developing a capacity building strategy.
8. Prisons Health Service could lobby Ministry of Health to operationalise the arrangement of accessing the National Drug Credit Line and the Primary Health Care Conditional Grant to address stock outs.

6.2 Action Points

Deriving from the recommendations the following action points and action centres are proposed;

S/No	Action points	Action centres
1.	Put to use the information obtained from the RSA to advocate for resources to scale up HIV/STI/TB and Drug Abuse prevention, care and support services.	UPS <i>Lead role: Prisons Health Service and PACP</i>
2.	A specific TB study and drug abuse studies to establish the burden and predictor variables could be conducted.	UPS <i>Lead role: Prisons Health Service</i> <i>Other partners: NTLP and TB-CAP</i>
3.	Establish a country wide health education programme to increase comprehensive knowledge about HIV/STI/TB and drug abuse.	UPS <i>Lead role: Prisons Health Service and PACP</i> <i>Other partners: CDC, MoH, UAC, World Vision under the SPEAR project</i>
4.	Initiate a drug dependence management as part of a comprehensive HIV prevention, treatment and care programme.	UPS & UNODC <i>Lead role: Prisons Health Service</i>
5.	Develop a comprehensive Prisons Health Service strategic plan as a resource mobilization tool. This could be discussed at a tripartite meeting of Ministry of Finance Planning and Economic Development, Ministry of Health and Ministry of Internal Affairs to agree on the modalities of implementation. The involvement of the development partners could be useful.	Lead agency: UPS Supporting agencies: MOFPED, MoH, MoIA, UNDP, UAC, CDC, World Vision under the SPEAR Project.
6.	Collaborate with the Health Service Commission to fill the vacant posts on the establishment of the Prisons Health Service.	UPS <i>Lead role: Prisons Health Service</i>
7.	Consider carrying out a comprehensive training needs assessment for health workers with the view of developing a capacity building strategy.	UPS <i>Lead role: Prisons Health Service</i>
8.	Lobby Ministry of Health to operationalize the arrangement of accessing the National Drug Credit Line and the Primary Health Care Conditional Grant to address stock outs.	UPS <i>Lead role: Prisons Health Service</i>

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8.0 APPENDICES

Appendix 1: Terms of Reference

TERMS OF REFERENCE FOR THE ASSESSMENT OF THE HIV/STI/TB AND DRUG ABUSE SITUATION IN UGANDA PRISONS SERVICE

Background

The United Nations System in Uganda is committed to supporting the Government and the people of Uganda in implementing the National Strategic Plan (NSP) for HIV and AIDS 2007/08-2011/12.

Through the Joint HIV Programme of Support on AIDS, the UN has committed itself as a strategic partner in accelerating prevention, care and treatment and social support to reach sustainable universal access under TJNDAF outcome 4: Reduction of HIV incidence by 40% during the period of the NSP with a strategic focus on addressing the social, cultural and economic causes of vulnerability and better targeting of high risk groups.

One of the strategic objectives of the Joint Programme of support is prevention of HIV namely: “Universal access to evidence based quality assured HIV prevention services that lead to improved service uptake, sustained behaviour change and a reduction in the number of new infections”. In particular, the main expected output is: “Coordinated prevention programmes for Most at Risk Populations (MARPS) advocated for and developed”.

MARPS identified in Uganda NSP include; prison inmates and uniformed services, sex workers, fishing communities, internally displaced persons, people with disability, orphans and vulnerable children and mobile populations.

In order to intensify HIV prevention efforts, measures likely to be effective and cost effective in different settings need to be understood. Uganda has both a concentrated and generalized epidemic. Current programmes often focus on the general population and fail to adequately reach MARPS who require sensitive approaches; and often present legal, technical and logistical challenges. Indeed the NSP for the first time proposed better-targeted interventions to groups where highest proportion of new infections is occurring. Moreover, effective policies to prevent HIV inside prison and other correctional settings are often hampered by the denial of the existence of the factors that contribute to the spread of HIV (e.g. unprotected sex, drug use, gangs, violence) inside these institutions.

It is against this background that UNODC on behalf of the Joint programme of Support on AIDS, and in partnership with the Uganda Prisons Service aims to carry out a Rapid Situation Assessment (RSA) on prevalence of HIV/STI/TB, drug abuse and other risk behaviours in prison settings in Uganda.

Objectives

To carry out a rapid situation assessment on prevalence of HIV/STI/TB, drug abuse and other related risk behaviours in prison settings in order to generate comprehensive baseline information to:

1. Develop specific advocacy campaign messages addressing policy makers and Programme planners;
2. Inform policy development aimed at addressing HIV/STI/TB and drug abuse prevention and care programmes in prison settings;
3. Refine national strategy for HIV/STI/TB and drug abuse prevention and care in prison settings;
4. Inform HIV/STI/TB and drug abuse programme planning and prioritization for prison inmates, prison staff and their families.

Specific objectives

1. To update the available information on HIV/STI/TB/drug abuse and other risk behaviours in prison settings;
2. To establish the baseline of prevalence of HIV/STI/TB and drug abuse in prison settings;
3. To determine services available for HIV/STI/TB/drug abuse prevention and care in prisons;
4. To document services delivery gaps for comprehensive HIV/STI/TB/drug abuse care in prison settings.

Specific Tasks

1. Collect and analyze secondary information on HIV/STI/TB and drug abuse prevalence and other associated risk behaviours in prison setting;
2. Prepare a study protocol and tools for the RSA;
3. Circulate with key stakeholders for review and comments;
4. Submit final draft to National Council for Science and Technology for review and approval;
5. Carry out the Rapid Situation Assessment;
6. Prepare a draft RSA report and circulate among key stake holders for review and comment;
7. Incorporate comments on second draft RSA report;
8. Facilitate validation workshop for the RSA report;
9. Finalize RSA report.

The study will use a methodology that involves key sectors (MoH, UAC, Prisons Service and civil society), through operational research and wide dissemination and application of findings. The idea is to encourage key stakeholders to have in-depth exposure to the issues so that they will become strong internal advocates for issues of HIV/STI/TB and drug abuse in prisons.

Outputs/deliverables

The main output is the complete Rapid Situation Assessment report indicating:

- Magnitude of HIV/STI/TB/drug abuse situation in Ugandan prisons;
- Risk behaviours related to HIV/STI/TB transmission as well as drug abuse in Ugandan prisons;
- Existing interventions as well as required interventions to minimize risks;
- Availability, nature and effectiveness of comprehensive HIV/STI/TB/drug abuse prevention, care and support programmes;
- Recommended strategies to respond to the identified needs and gaps.

The RSA report should include:

- Summary highlighting the main findings, conclusions and recommendations;
- Background and rationale of the RSA;
- Objectives of the RSA;
- Methodology;
- Findings;
- Discussion and recommendations;
- References.

Timeline and reporting

6 weeks beginning October 2008

The consultancy will take place in close collaboration with the Uganda Prisons Service, Uganda AIDS Commission and UN Team of support on AIDS prevention theme group.

The research team will work under the supervision and with technical advice from UNODC ROEA, Kenya, and in close collaboration with the UN Prevention theme group.

Consultancy Team composition and skills required

The lead researcher is required to have the following qualifications and skills:

1. Advance degree in Public Health, medical or Social Sciences with proven track record in HIV and AIDS programming and behavioral research;
2. Experience and or knowledge of current best practice in the area of HIV in prisons;
3. Excellent qualitative and quantitative data collection and analysis skills;
4. Excellent facilitation ,communication and report writing skills;
5. Prior experience working in prisons settings.

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QUESTIONNAIRE

UPS/UNODC RAPID SITUATION ASSESSMENT ON DRUG USE/HIV&AIDS/STIs AND TB IN UGANDA PRISONS

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**QUESTIONNAIRE FOR A RAPID ASSESSMENT OF DRUG ABUSE
HIV/AIDS/STI/TB SITUATION IN UGANDA PRISONS SERVICE**

This questionnaire will be administered to all respondents (**prisoners**) who will consent in writing to be interviewed.
CIRCLE THE RESPONSES.

SUBJECT IDENTIFICATION

Questionnaire Number

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Date of interview

d	d	m	m	y	y
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Interview site: Name of Prison Unit:

Informed consent: 1. Yes 2. No

Interviewer's Name: Code:

Supervisor signature: Date:

1.0. SOCIO-DEMOGRAPHIC INFORMATION

No	Question	Coding category	Code <i>For official use only</i>	Skip
Q1.01	Age	Age in completed years	<input style="width: 40px; height: 25px;" type="checkbox"/>	
Q1.02	Sex of Respondent	Male Female	1 2 <input style="width: 40px; height: 25px;" type="checkbox"/>	
Q1.03	Tribe	<input style="width: 40px; height: 25px;" type="checkbox"/>	
Q1.04	Religion	African Traditional Roman Catholic Protestant Moslem Pentecostal Others Specify	1 2 3 4 5 6 <input style="width: 40px; height: 25px;" type="checkbox"/>	

Q1.05	What is the highest level of school attained?	Never attended Primary Secondary Post secondary	1 2 3 4	<input type="checkbox"/>	
Q1.06	What were you doing before imprisonment?	Professional (Teacher, health worker) Business person Farmer Pupil/Student Unemployed Others Specify:	1 2 3 4 5 6	<input type="checkbox"/>	
Q1.07	Marital Status prior to imprisonment:	Single no partner. Single with non-regular partner Single with regular partner Married Widowed Divorced Separated	1 2 3 4 5 6 7	<input type="checkbox"/>	

2.00 CONFINEMENT HISTORY

Q2.08	Duration in prison	Year.....Months.....Days.....		<input type="checkbox"/>	
Q2.09	Prison Status:	Convict Remand	1 2	<input type="checkbox"/>	
Q2.10	History of previous imprisonment:	Star Ordinary (recidivist)	1 2	<input type="checkbox"/>	
Q2.11	Address prior to imprisonment:	Urban Rural	1 2	<input type="checkbox"/>	
Q2.12	What is your responsibility/work in prison: Write leadership post/work mentioned:	In leadership Not in leadership but working Not in leadership & not working	1 2 3	<input type="checkbox"/>	

3.00 HIV/AIDS: KNOWLEDGE, ATTITUDE AND PRACTICES.

Q3.13	Mention ways in which one can prevent the sexual transmission of HIV? <i>Circle as many responses as mentioned</i>	A. Abstinence	<input type="checkbox"/>		
		B. Being faithful	<input type="checkbox"/>		
		C. Condom Use	<input type="checkbox"/>		
		D. Don't share skin piercing instruments	<input type="checkbox"/>		
		E. HIV counseling & testing	<input type="checkbox"/>		
		F. Don't know.	<input type="checkbox"/>		
		G. Others Specify:.....	<input type="checkbox"/>		
Q3.14	Can HIV be transmitted through the following? <i>Read options and circle those to which the respondent answers YES</i>	A. Mosquito bites.	<input type="checkbox"/>		
		B. Touching an infected person	<input type="checkbox"/>		
		C. Sharing utensils with infected person	<input type="checkbox"/>		
		D. Sharing toilets with infected person	<input type="checkbox"/>		
		E. Witch craft.	<input type="checkbox"/>		
		F. None of the above mentioned	<input type="checkbox"/>		
Q3.15	Do you consider yourself at Risk/No risk of getting HIV infection in prison?	At risk No risk.	1 2	<input type="checkbox"/> <input type="checkbox"/>	→ 17
Q3.16	Why do you think you are at risk of getting HIV infection in prison? <i>Circle as many responses as mentioned</i>	A. Have shared skin piercing instruments	<input type="checkbox"/>		
		B. Sharing of shaving instruments	<input type="checkbox"/>		
		C. Sharing of toothbrush	<input type="checkbox"/>		
		D. Been tattooed	<input type="checkbox"/>		
		E. Had a blood transfusion	<input type="checkbox"/>		
		F. Unsafe sexual behaviour	<input type="checkbox"/>		
		G. Other Specify:.....	<input type="checkbox"/>		

Q3.17	Why do you think you are at no risk of getting HIV infection in prison? <i>Circle as many responses as mentioned</i>	A. No sexual partner		<input type="checkbox"/>	
		B. Don't share tooth brushes		<input type="checkbox"/>	
		C. Don't share skin piercing instruments		<input type="checkbox"/>	
		D. Other Specify.....		<input type="checkbox"/>	
Q3.18	Do you think a healthy looking person can be infected with HIV?	Yes No	1 2	<input type="checkbox"/>	
Q3.19	Is there a cure for HIV/AIDS?	Yes No Not sure Don't know	1 2 3 8	<input type="checkbox"/>	
Q3.20	Have you ever had sexual intercourse in life?	Yes No	1 2	<input type="checkbox"/>	27
Q3.21	Have you ever used a condom in your life?	Yes No If no, why not?	1 2	<input type="checkbox"/>	
Q3.22	In the last 12 months prior to imprisonment did you have sex with someone who was not your spouse/regular sexual partner?	Yes No Don't remember Refused to answer	1 2 3 9	<input type="checkbox"/>	
Q3.23	The last time you had sex did you use a condom?	Yes No Don't Remember Refused to answer	1 2 3 9	<input type="checkbox"/>	
Q3.24	When you had sex, did you always use a condom or only sometimes or never?	Always Sometimes Never Refused to answer	1 2 3 9	<input type="checkbox"/>	

Q3.25	<i>If reply in Q22 was Yes, ask, if No skip to Q27</i> In the last 12 months prior to imprisonment did you always use a condom or only sometimes or never when having sex with someone who was not your spouse or regular sexual partner?	Always 1 Sometimes 2 Never 3 Don't Remember 5 Refused to answer 9	<input type="checkbox"/>	
Q3.26	In the last act of sexual intercourse with someone who was not your spouse or regular sexual partner did you use a condom?	Yes 1 No 2 Don't Remember 4 Refused to answer 9	<input type="checkbox"/>	
Q3.27	Have you ever attended an HIV education session in prisons?	Yes 1 No 2 Don't Remember 3	<input type="checkbox"/>	29 29
Q3.28	How many HIV education sessions have you attended in the last 3 months?	1 session 1 2 sessions 2 >3 sessions 3 None in last 3 months 4	<input type="checkbox"/>	
Q3.29	Have you seen any of the following in the last 12 months; organized within the prison?	A. HIV video B. HIV drama, dance & music C. HIV brochure/booklets D. HIV posters E. None of the above mentioned F. Others, Specify:.....	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Q3.30	What are the major sources of information about HIV/AIDS/STI/Drug abuse in prison? <i>Read options</i>	A. Health workers/counselors B. Print media (Newspapers, journals....) C. Electronic media (TV, Radio,) D. Posters and brochures E. Fellow inmates	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

	G. Religious groups	<input type="checkbox"/>	
	H. None of the above mentioned	<input type="checkbox"/>	
	I. Others Specify:.....	<input type="checkbox"/>	

4.00 SEXUAL PRACTICES IN PRISON

Please take note that when interviewing female respondents, the questions change accordingly.

Q4.31	During your time in prison, have you heard of any prisoner having sex with a male inmate? (in case of a female respondent: a female prisoner having sex with a female prisoner)	Yes	1	<input type="checkbox"/>	34
		No	2		
		Refused to Answer	9		
Q4.32	In your opinion to what extent do inmates have sex with each other (same sex)?(read options)	None is involved	1	<input type="checkbox"/>	
Few are involved	2				
Many are involved	3				
Almost all are involved	4				
I don't know	8				
Q4.33	In this prison, have you heard of a prisoner who has had unwanted sex or forced sex with a male inmate? (in case of a female respondent: a female prisoner)	Yes	1	<input type="checkbox"/>	
No	2				
Refused To Answer	9				
Q4.34	During the time you have been in prison, has any man suggested having anal sex with you? In case of female inmate: Has any woman suggested having sex with you?	Yes	1	<input type="checkbox"/>	
No	2				
Refused To Answer	9				

Q4.35	What do you do to handle the sexual urge while in prison?	A. Prayer	<input type="checkbox"/>	
		B. Engage in extra curricula activities e.g. football	<input type="checkbox"/>	
		C. Masturbation	<input type="checkbox"/>	
		D. Ignores the urge	<input type="checkbox"/>	
		E. Never experienced the sexual urge	<input type="checkbox"/>	
		F. Others Specify	<input type="checkbox"/>	

5.00 ATTITUDE TOWARDS HIV TESTING & PHAs IN PRISONS

Please tell us how much you agree or disagree with each of the statements about HIV testing in prison using the following expression; strongly agree, agree, neither agree nor disagree, disagree, strongly disagree, refused to Answer.

Q5.36	HIV testing is of no use because nothing much is done for the prisoner after testing.	Strongly agree.	1	<input type="checkbox"/>	
		Agree	2		
		Neither agree nor disagree.	3		
		Disagree	4		
		Strongly disagree.	5		
		Refused To Answer	9		
Q5.37	Inmates with HIV should be known and housed in a separate building away from other inmates.	Strongly agree.	1	<input type="checkbox"/>	
		Agree	2		
		Neither agree nor disagree.	3		
		Disagree	4		
		Strongly disagree.	5		
		Refused To Answer	9		
Q5.38	Uganda Prisons Service should provide inmates who are HIV positive with special diet	Strongly agree.	1	<input type="checkbox"/>	
		Agree	2		
		Neither agree nor disagree.	3		
		Disagree	4		
		Strongly disagree.	5		
		Refused To Answer	9		

6.00 DRUG ABUSE IN PRISON

In this section, I am going to ask you about drug abuse. The term drug abuse refers to taking of any psychoactive (mind altering) drug in any quantity not under medical supervision or not for medical purpose.

Q6.39	In your opinion are there inmates who abuse drugs while in prison?	Yes	1	<input type="checkbox"/>		
		No	2			→ 42
		Don't Know	8			→ 42
		Refused To Answer	9			→ 42

Q6.40	To what extent are drugs abused in prison? <i>Read options</i>	Only a few use them	1	<input type="checkbox"/>	
		Many use them	2	<input type="checkbox"/>	
		Almost all use them	3	<input type="checkbox"/>	
Q6.41	If yes, which drugs? <i>Circle as many responses as mentioned</i>	A. Khati (miraa or mairungi)		<input type="checkbox"/>	
		B. Cannibis sativa (Bhang or marijuana)		<input type="checkbox"/>	
		C. Cocaine		<input type="checkbox"/>	
		D. Heroine		<input type="checkbox"/>	
		E. Morphine		<input type="checkbox"/>	
		F. Pethidine		<input type="checkbox"/>	
		G. Tobacco/cigarettes		<input type="checkbox"/>	
		H. Alcohol		<input type="checkbox"/>	
		I. Petroleum products		<input type="checkbox"/>	
		J. Others . Specify:.....		<input type="checkbox"/>	
Q6.42	Have you ever abused drugs <i>before</i> imprisonment?	Yes	1	<input type="checkbox"/>	
		No	2	<input type="checkbox"/>	44
		Refused to answer	8	<input type="checkbox"/>	44
Q6.43	If yes, which drugs? <i>Circle as many responses as mentioned</i>	A. Khati (miraa or mairungi)		<input type="checkbox"/>	
		B. Cannibis sativa (Bhang or marijuana)		<input type="checkbox"/>	
		C. Cocaine		<input type="checkbox"/>	
		D. Heroine		<input type="checkbox"/>	
		E. Morphine		<input type="checkbox"/>	
		F. Pethidine		<input type="checkbox"/>	
		G. Tobacco		<input type="checkbox"/>	
		H. Alcohol/cigarettes		<input type="checkbox"/>	
		I. Petroleum products		<input type="checkbox"/>	
		J. Others . Specify:.....		<input type="checkbox"/>	

Q6.44	Have you ever abused any drugs while in prison?	Yes	1	<input type="checkbox"/>	
		No	2	<input type="checkbox"/>	46
		Refused to Answer	8	<input type="checkbox"/>	46
Q6.45	If yes, which drugs? <i>Circle as many responses as mentioned</i>	A. Khati (miraa or mairungi)		<input type="checkbox"/>	
		B. Cannibis sativa (Bhang or marijuana)		<input type="checkbox"/>	
		C. Cocaine		<input type="checkbox"/>	
		D. Heroine		<input type="checkbox"/>	
		E. Morphine		<input type="checkbox"/>	
		F. Pethidine		<input type="checkbox"/>	
		G. Tobacco/cigarettes		<input type="checkbox"/>	
		H. Alcohol		<input type="checkbox"/>	
		I. Petroleum products		<input type="checkbox"/>	
		J. Others . Specify:.....		<input type="checkbox"/>	
		Q6.46	<i>Ask if response to Q39 was Yes</i> How do drugs get into prison?	A. By Prison Staff	
B. By inmates with help of relatives				<input type="checkbox"/>	
C. By inmates' individual's effort				<input type="checkbox"/>	
D. Others specify.....				<input type="checkbox"/>	
Q6.47	<i>Ask if response to Q39 was Yes</i> Why do inmates abuse drugs? <i>Circle as many responses as mentioned</i>	A. Get sleep		<input type="checkbox"/>	
		B. Boredom		<input type="checkbox"/>	
		C. Gain strength/energy		<input type="checkbox"/>	
		D. Reduces anxiety/depression/stress		<input type="checkbox"/>	
		E. Gives feeling of wellbeing		<input type="checkbox"/>	
		F. Habit developed from outside the prison		<input type="checkbox"/>	
		G. Influence from other inmates		<input type="checkbox"/>	
		H. Others Specify:.....		<input type="checkbox"/>	

Q6.48	Are there Injecting Drug Users (IDU) in prisons?	Yes	1	<input type="checkbox"/>	
		No	2	→	50
		Don't Know	8	→	50
Q6.49	What type of drugs do inmates inject? <i>Circle as many responses as mentioned</i>	A. Heroine		<input type="checkbox"/>	
		B. Pethidine		<input type="checkbox"/>	
		C. Morphine		<input type="checkbox"/>	
		D. Don't Know		<input type="checkbox"/>	
		E. Others Specify:.....		<input type="checkbox"/>	

7.00 USE OF SHAVING INSTRUMENTS

Q7.50	Is there sharing of shaving instruments among prisoners?	Yes	1	<input type="checkbox"/>	
		No	2	→	53
		Don't Know	8		
		Refused To Answer	9		
Q7.51	Have you ever shared a shaving instrument with fellow prisoners?	Yes	1	<input type="checkbox"/>	
		No	2	→	53
		Refused To Answer	9		
Q7.52	What types of shaving instrument are shared by inmates?	A. Razor blades		<input type="checkbox"/>	
		B. Clippers		<input type="checkbox"/>	
		C. Scissors		<input type="checkbox"/>	
		D. Others Specify:.....		<input type="checkbox"/>	
Q7.53	Can you get HIV infection from sharing shaving instruments?	Yes	1	<input type="checkbox"/>	
		No	2		
		Don't Know	8		
Q7.54	Have you ever shared a toothbrush with a fellow prisoner in the last 6 months?	Yes	1	<input type="checkbox"/>	
		No	2		
		Refused To Answer	9		

8.00 SEXUALLY TRANSMITTED INFECTIONS

Q8.55	Have you ever had any STI other than HIV?	Yes	1	<input type="checkbox"/>	
		No	2	<input type="checkbox"/>	
		Don't Know	8	<input type="checkbox"/>	
Q8.56	If a man has a STI disease other than HIV/AIDS what signs/symptoms might he have? <i>Circle as many responses as mentioned</i>	A. Lower abdominal pain		<input type="checkbox"/>	
		B. Abnormal genital discharge		<input type="checkbox"/>	
		C. Foul smelling discharge from the genitals.		<input type="checkbox"/>	
		D. Burning pain on passing urine		<input type="checkbox"/>	
		E. Blood in urine		<input type="checkbox"/>	
		F. Swelling in genital area		<input type="checkbox"/>	
		G. Genital sores/herpes		<input type="checkbox"/>	
		H. Genital itching		<input type="checkbox"/>	
		I. Genital warts		<input type="checkbox"/>	
		J. Don't Know		<input type="checkbox"/>	
Q8.57	If a woman has a STI disease other than HIV/AIDS what signs/symptoms might she have? <i>Circle as many responses as mentioned</i>	A. Lower abdominal pain		<input type="checkbox"/>	
		B. Abnormal genital discharge		<input type="checkbox"/>	
		C. Foul smelling discharge from the genitals.		<input type="checkbox"/>	
		D. Burning pain on passing urine		<input type="checkbox"/>	
		E. Blood in urine		<input type="checkbox"/>	
		F. Swelling in genital area		<input type="checkbox"/>	
		G. Genital sores/herpes		<input type="checkbox"/>	
		H. Genital itching		<input type="checkbox"/>	
		I. Genital warts		<input type="checkbox"/>	
		J. Don't Know		<input type="checkbox"/>	

Q8.58	What action should one take when he/she has a STI? Circle as many responses as mentioned.	A. Go for treatment.		<input type="checkbox"/>	
		B. Notify partners.		<input type="checkbox"/>	
		C. Complete treatment.		<input type="checkbox"/>	
		D. Use condom until cured.		<input type="checkbox"/>	
		E. Abstain from sex until cured.		<input type="checkbox"/>	
		F. Don't Know.		<input type="checkbox"/>	
		G. Others. Specify:.....		<input type="checkbox"/>	
Q8.59	Is it possible to receive treatment for a STI while in prison?	Yes 1 No. 2 Don't Know 8		<input type="checkbox"/>	
Q8.60	In the last 6 months have you had any of the following conditions? <i>Read options</i>	A. Burning sensation during urination		<input type="checkbox"/>	
		B. Discharge from your penis/vagina.		<input type="checkbox"/>	
		C. Genital ulcers		<input type="checkbox"/>	
		D. None of the above conditions		<input type="checkbox"/>	
					→ 62
Q8.61	Did you seek treatment for this condition?	Yes 1 No. 2		<input type="checkbox"/>	
Q8.62	Is it possible to be tested for HIV in this prison?	Yes 1 No 2 Don't Know. 8		<input type="checkbox"/>	
Q8.63	Have you ever requested for an HIV test in prison?	Yes 1		<input type="checkbox"/>	
		No 2			→ 69
Q8.64	Did you actually take the test?	Yes 1		<input type="checkbox"/>	
		No. 2			→ 69
Q8.65	I do not want you to tell me the results of the test, did you find out the results?	Yes 1 No. 2		<input type="checkbox"/>	

Q8.66	If no, why didn't you find out the results? <i>Circle as many responses as mentioned</i>	A. Hard to come back for the results		<input type="checkbox"/>	
		B. Afraid		<input type="checkbox"/>	
		C. Attitude of clinic staff		<input type="checkbox"/>	
		D. Did not want to know		<input type="checkbox"/>	
		E. Refused to answer		<input type="checkbox"/>	
		F. Results not given to me		<input type="checkbox"/>	
		F. Don't Know		<input type="checkbox"/>	
		G. Others. Specify:.....		<input type="checkbox"/>	
Q8.67	If yes, to Qn 65, have you disclosed your results to anyone?	Yes	1	<input type="checkbox"/>	
		No.	2	<input type="checkbox"/>	
Q8.68	If no, what were your reasons for not disclosing? <i>Skip to 70 after asking this question</i>	A. Fear of discrimination/stigma		<input type="checkbox"/>	
		B. Have no one to confide in		<input type="checkbox"/>	
		C. Of no benefit to me		<input type="checkbox"/>	
		D. Others Specify:.....		<input type="checkbox"/>	
Q8.69	What could be the reason for not having taken the test? <i>Circle as many responses as mentioned</i>	A. Not interested.		<input type="checkbox"/>	
		B. I do not have HIV.		<input type="checkbox"/>	
		C. Cost of service.		<input type="checkbox"/>	
		D. Afraid		<input type="checkbox"/>	
		E. Time wasting		<input type="checkbox"/>	
		F. Lack of escorts		<input type="checkbox"/>	
		G. Service not available		<input type="checkbox"/>	
		H. Other Specify:.....		<input type="checkbox"/>	
Q8.70	Do you know any benefits of having HIV Counseling and Testing (HCT)?	Yes	1	<input type="checkbox"/>	
		No	2	<input type="checkbox"/>	

Q8.71	If yes to Q 70, which benefits do you know? <i>Circle as many responses as mentioned</i>	A. Plan for the future	<input type="checkbox"/>	
		B. Avoid infection/re-infection	<input type="checkbox"/>	
		C. Live positively	<input type="checkbox"/>	
		D. Seek treatment	<input type="checkbox"/>	
		E. Feed well	<input type="checkbox"/>	
		F. Others Specify:.....	<input type="checkbox"/>	

9.00 PMTCT

In this section I am going to ask you about transmission of HIV from mother to child.

Q9.72	Can the virus that causes AIDS be transmitted from mother to child?	Yes	1	<input type="checkbox"/>	
		No	2	→	76
		Don't Know.	8	→	76
Q9.73	When can the virus that causes AIDS be transmitted from mother to a child? <i>Circle as many responses as mentioned</i>	A. During pregnancy		<input type="checkbox"/>	
		B. During delivery		<input type="checkbox"/>	
		C. During breast feeding		<input type="checkbox"/>	
		D. Don't Know.		<input type="checkbox"/>	
Q9.74	Can the risk of transmitting HIV virus from the mother to the child be reduced?	Yes	1	<input type="checkbox"/>	
		No	2		
		Don't Know.	8		
Q9.75	If yes to Q74, how can the risk be reduced? <i>Circle as many responses as mentioned</i>	A. Delivering in a health facility		<input type="checkbox"/>	
		B. Attending ante natal care		<input type="checkbox"/>	
		C. Taking ARVs		<input type="checkbox"/>	
		D. Not breast feeding		<input type="checkbox"/>	
		E. Practicing safer sex during pregnancy		<input type="checkbox"/>	
		F. Don't know		<input type="checkbox"/>	

10.00 TUBERCULOSIS

In this section, I am going to ask you to tell me what you know about tuberculosis.

Q10.76	Is there a relationship between HIV and TB?	Yes	1	<input type="checkbox"/>	
		No	2	<input type="checkbox"/>	
		Don't Know.	8		
Q10.77	What is the cause of tuberculosis? <i>Circle as many responses as mentioned</i>	A. Smoking		<input type="checkbox"/>	
		B. Hereditary		<input type="checkbox"/>	
		C. Hard work		<input type="checkbox"/>	
		D. TB germ		<input type="checkbox"/>	
		E. Malnutrition		<input type="checkbox"/>	
		F. HIV		<input type="checkbox"/>	
		G. Don't know		<input type="checkbox"/>	
		H. Others. Specify:.....		<input type="checkbox"/>	
Q10.78	How is TB spread? <i>Circle as many responses as mentioned</i>	A. Through the air		<input type="checkbox"/>	
		B. Sharing of utensils		<input type="checkbox"/>	
		C. I don't know		<input type="checkbox"/>	
		D. Shaking hands		<input type="checkbox"/>	
		E. Others.		<input type="checkbox"/>	
Q10.79	If a person has tuberculosis of the lungs what signs and symptoms might s/he have? <i>Circle as many responses as mentioned</i>	A. Chronic cough for more that 3 weeks		<input type="checkbox"/>	
		B. Night sweats		<input type="checkbox"/>	
		C. Loss of weight		<input type="checkbox"/>	
		D. Coughing blood		<input type="checkbox"/>	
		E. Chest pain		<input type="checkbox"/>	
		F. Evening fevers		<input type="checkbox"/>	
		G. Don't know		<input type="checkbox"/>	

Q10.80	Is TB curable?	Yes No Don't Know	1 2 8	<input type="checkbox"/>	
Q10.81	How long does TB treatment take?	8 months 1 year I don't know Others Specify:	1 2 3 4	<input type="checkbox"/>	
Q10.82	How do you avoid getting TB?	A. Proper nutrition		<input type="checkbox"/>	
		B. Avoid contact with TB patient		<input type="checkbox"/>	
		C. Identify TB suspects and refer for treatment		<input type="checkbox"/>	
		D. Immunization at birth		<input type="checkbox"/>	
		E. Pasteurization (boiling)of milk		<input type="checkbox"/>	
		F. Improved house ventilation		<input type="checkbox"/>	
		G. Don't Know		<input type="checkbox"/>	
Q10.83	Have you ever suffered from tuberculosis?	Yes No	1 2	<input type="checkbox"/>	88
Q10.84	Was the TB diagnosed while in prison or outside the prison?	Inside the prison Outside the prison	1 2	<input type="checkbox"/>	
Q10.85	Were you given treatment for TB?	Yes No	1 2	<input type="checkbox"/>	
Q10.86	If no why?	A. Arrested before starting treatment		<input type="checkbox"/>	
		B. There is no health unit/clinic in prison		<input type="checkbox"/>	
		C. No drugs within the prison		<input type="checkbox"/>	
		D. Other Specify:.....		<input type="checkbox"/>	
Q10.87	If yes to Q 84 for how long was the treatment?	8 months Less than 8 months More than 8 months I don't remember	1 2 3 4	<input type="checkbox"/>	

CLINICAL EVALUATION TO ESTABLISH TB DISEASE AND REMOVAL OF RELEVANT BIOLOGICAL SAMPLES

Do you have any of the following signs and symptoms?

Symptom	Yes = 1 No = 2 Not applicable (N/A) = 3	Duration		
		Days	Weeks	Months
Cough				
Sputum				
Blood stained sputum				
Chest pain				
Loss of weight				
Fever				
Night sweat				

Note:

- a) Take sputum sample if:
 - i) Respondent reports history of a cough > 3 weeks + any 2 other signs/symptoms
 - ii) Interviewer’s observation if respondent coughed during the interview
- b) Please take 03 sputum samples:
 - i) On spot sputum immediately after the interview
 - ii) Early morning sputum
 - iii) Spot sputum when collecting the early morning
- c) If respondent on TB treatment indicate in the table above that she/he is on treatment and do not take sputum sample
- d) Take off blood for HIV and syphilis test.

LABORATORY INVESTIGATIONS AND RESULTS

Type of specimen	Specimen Code Number	Investigation done	Results		
Blood		HIV serology			
Sputum		ZN stain for AAFBs	1	2	3
Blood		Syphilis test (RPR)			

FOCUS GROUP DISCUSSION GUIDE

Target Audience: Prisoners

INTRODUCTION AND CONSENT

Greetings. My name isand I work with **PEM Consultancy**. We are conducting a survey on behalf of Uganda Prisons Service and United Nations Office on Drugs and Crime. The study is about the health of prisoners. I am interested in finding out your knowledge and opinions regarding HIV/AIDS/STI/TB and drug abuse as well as individual and community behavioral factors that promote the spread of these diseases in prisons.

Your participation in this study is voluntary; you can refuse to participate now or at any time of the interview. You are free to refuse to answer any questions. All your answers will be kept strictly confidential. There are no direct benefits to you if you choose to participate in this study; however, you will be helping Uganda Prisons Service to develop better programs to improve health care delivery in prisons. At this time do you want to ask anything about the survey?
Yes/No

I would like to give opportunity to the other two colleagues (the rapporteur and his/her assistant) to introduce themselves.

May I begin the discussion now? Yes/ No. If yes continue.

REGISTER PARTICIPANTS

Section 1. HIV/AIDS

1. Is HIV/AIDS a problem in this prison unit? **Probe reasons for answer given**
2. Which behaviors and practices expose inmates to HIV infection in this prison?
3. In your opinion what is the quality of HIV services offered in this prison? **Probe reasons for answer given**
4. What are the main challenges constraining the provision of HIV service in this prison?
5. What recommendation do you have to improve the quality of HIV services provided in this prisons

Section 2. Drug Abuse

1. Are there inmates in this prison who abuse drugs? **Probe if response is yes, if response is No continue to probe until certain that is a definite No, then end the discussion**
2. What types of drugs are abused in this prison?
 - a. In your opinion, why do prisoners abuse drugs?
 - b. How do the drugs enter the prison?
 - c. Are there a specific category of inmates who abuse drugs?
3. What problems are associated with drug abuse?
4. What should be done to control the abuse of drugs in prisons?

Any other comments

END

KEY INFORMANT INTERVIEW GUIDE

Indicate:

- Interviewee name
- Designation
- Name of Prison Unit

Section A. HIV/AIDS in Uganda Prisons

1. Is HIV/AIDS a problem in this prison unit? **Probe reasons for answer given**
2. Which behaviors and practices expose inmates to HIV infection in this prison?
3. In your opinion what is the quality of HIV services offered in this prison? **Probe reasons for answer given**
4. What are the main challenges constraining the provision of HIV service in this prison?
5. What recommendation do you have to improve the quality of HIV services provided in this prisons

Section B: Drug Abuse in Prisons

6. Is drug abuse an existing/emerging problem in Uganda Prisons Service?
 - How big is the problem?
 - What are the commonly abused drugs?
 - How are they accessed by the prisoners?
 - What are the factors that drive the abuse of drugs in prison?
 - What preventive actions are in place?
 - What should be put in place to curb the practice?

Section C. TB in Prisons.

7. What are the measures currently in place to control the spread of TB in UPS?
8. What are the factors promoting the spread of TB in prisons?

Any other comments

THANK YOU.

Appendix 5: Checklist

CHECKLIST TO ESTABLISH THE ORGANIZATIONAL CAPACITY FOR COMPREHENSIVE HIV CARE

Name of Prison UnitDate.

Interviewer:

A. Human Resource for Health

	Yes	No	State Number	
			UPS	District
1. Categories of health workers in Prison unit (State number)				
• Clinical Officer				
• Nurses				
• Nursing Assistants				
• Laboratory staff				
• Other specify:				
2. Categories of counseling staff				
• Counselors - Staff				
• Counselling Assistants - Staff				
• Counselors - Inmates				
• Counselling Assistants - Inmates				
3. Previous trainings attended by any of the health staff in the last three years. State number				
• Counselling				
• Comprehensive HIV care				
• ART				
• Home based HCT				
• Rapid HIV testing				
• Other specify:				
Remarks if any:				

B. Infrastructure.

	Yes	No	State number
1. Is there a structure designated as a clinic?			
2. Are there counseling rooms? How many?			
3. The counseling rooms provide visual and auditory privacy.			
4. The unit has an institutional telephone facility.			
5. There is access to internet services.			
6. WT available			
7. Source of water			
• Tap/piped water			
• Well			
• Spring			
• Bore hole			
• Pond			
• River			
• Lake			
• Harvested rain water			
• Other Specify:			
8. Toilet system			
• VIP latrine			
• Eco-San			
• Water borne			
• Bucket system			
• Pit latrine			
• Other specify:			
9. Waste disposal			
• Burning			
• Dumping			
• Burying			
• Incineration			
• Waste pit			
• Other specify:			
10. Laboratory facilities available?			
Remarks if any:			

C. Collaboration networks.

	Yes	No
1. Is there collaboration between the health facility/prison unit and the external health care providers?		
2. Memorandum of Understanding (MoU) signed?		
3. Meetings held with collaborators?		
4. Minutes available?		
5. Are there Joint Projects implemented?		
Remarks if any:		

D. Strategic Management.

	Yes	No
1. AIDS Control Committee (ACC) for staff present?		
If yes, number of members:		
2. Meetings of staff ACC held?		
If yes how many in last six months:		
3. Minutes of staff ACC meeting available? <i>Verify</i>		
4. Staff ACC work plan of activities available? <i>Verify copy</i>		
5. Staff ACC work plan activities on schedule? <i>Verify</i>		
6. AIDS Control Committee (ACC) for inmates present?		
If yes, number of members:		
7. Meetings of inmates ACC held?		
If yes how many in last six months:		
8. Minutes of inmates ACC meeting available? <i>Verify</i>		
9. Inmates ACC work plan of activities available? <i>Verify copy</i>		
10. Inmates ACC work plan activities on schedule? <i>Verify</i>		
Remarks if any:		

E. Essential supplies.

	Yes	No	N/A
1. Condoms available at the unit for distributions			
2. Septrin available at the unit			
3. Coartem available in stock			
4. TB drugs available/accessible.			
5. Fluconazole in stock			
6. Morphine available/accessible.			
7. HIV testing kits available			
8. Gloves available			
9. Syringes and needles available			
Remarks if any:			