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ACRONYMS

AITRP	-	AIDS International Training and Research Programme
CRWU	-	Case Western Reserve University
IPH	-	Institute of Public Health
MUST	-	Mbarara University of Science and Technology
USA	-	United States of America
USHS	-	Uganda Society for Health Scientists

Executive Summary

Uganda Society for Health Scientists (USHS) holds a business meeting every year that is attended by the advisory, executive board members and some selected members of the Society.

The Society held its 3rd Annual Scientific meeting from July 25 to 26 , 2002 at Hotel Africana. participants including scientists and non-scientists attended. The meeting was designed to provide a forum for scientific discussions of completed and on-going research studies.

The meeting was officially opened by Hon. Prof. Gilbert Bukenya, Minister in charge of the presidency.

Participants were drawn from various HIV/Aids research collaboration projects, including rakai, Medical Research Council (MRC), and Case Western Reserve University (CWRU) to present findings from their projects in the past 10 years.

Plenary sessions focusing on major results on HIV incidence, TB/HIV and update on HIV vaccines and oral abstract presentations were conducted. There were also groups on topical issues on HIV/AIDS prevention and management.

The scientific meeting was a great success. There was a lot of enthusiasm from all participants.

The workshop was closed by

And later participants were invited for a cocktail.

PRESENTATIONS

ASSESSMENT OF TUBERCULOSIS RELAPSE IN KAMPALA, UGANDA

Dr Carol Onyango CWRU

INTRODUCTION

- Tuberculosis is an important public health problem globally
- WHO estimates that there are about 8.4 million new cases of TB and 2.9 million TB related deaths each year, globally
- WHO estimates that there are about 68,000 new cases of TB each year with about 24,000 deaths annually due to TB
- 33,000 new cases of TB are attributable to HIV infection

TUBERCULOSIS RELAPSE

- IUATLD definition- "patient who, having been treated previously for TB was declared cured prior to becoming once again sputum positive"
- WHO definition – "a patient who has been declared cured of any form of TB disease in the past by a physician, after one full course of chemotherapy and has become sputum smear positive"

TUBERCULOSIS RELAPSE AND HIV/AIDS

- Perriens (1995) - patients infected with TB/HIV have twofold higher post treatment relapse rates
- In 2000, Fitzgerald et al showed that TB relapse is strongly associated with a history of symptomatic HIV disease
- Hawken (1993) – Patients treated with Thiacetazone had a 34 fold increase of relapse after successful initial TB treatment

Pulido (1997) - Patients treated for less than 9 months had a relapse risk 10.9 times higher than those treated for at least 9 to 12 months

REACTIVATION	REINFECTION
Same strain produces disease after initial cure.	Different strain produces disease after initial cure.
DNA fingerprint patterns are identical between isolates from the initial episode and the relapse episode.	DNA fingerprint patterns are identical between isolates from the initial episode and the relapse episode.

JUSTIFICATION

- Tuberculosis is a serious health problem in Uganda especially with its association with HIV
- The research done on tuberculosis relapse has been inconclusive
- Predictors of tuberculosis relapse are largely unknown in Uganda
- Rates of reinfection and rates of reactivation using DNA fingerprinting are unknown in Uganda

OBJECTIVES

- 1.To determine the rate of relapse in TB cases who have completed antituberculous therapy
- 2.To assess the predictors of relapse in TB cases who have completed therapy, in particular, whether HIV serostatus affects risk for relapse
- 3.To estimate the rate of reinfection versus the rate of reactivation in TB relapse
- 4.To assess the predictors of reinfection versus reactivation in people with tuberculosis relapse.

STUDY DESIGN

- Proposed study is a retrospective cohort study incorporating a nested case control study
- Readily available information on patient characteristics
- Availability of stored samples
- Source of subjects - Cohort of patients who have been or are undergoing treatment at the UG-CWRU Research Collaboration

Study	Year	Number of Participants	Number of HIV
TB-EPI	1993-1997	230	Positive Participants
Ethambutol	1994-1996	136	230 (100%)
M. Vaccae	1995-1997	120	124 (90%)
Household Contacts	1995-1999	378	0 (0%)
Microbiology Pilot	1995-Present	21	147 (39%)
Prednisolone	1998-Present	190	190 (100%)
IL-2	1998-Present	110	0 (0%)

INSTRUMENTS

- Chart reviews
- Computerized databases.
- Restriction fragment length polymorphism.

PRELIMINARY DATA

- Under normal treatment conditions a relapse rate of 5% is expected
- 1185 patients have been followed up in the studies carried out
- 691 are HIV positive and 494 are HIV negative
- 60 TB relapse cases are expected
- 138 retreatment cases of which 108 have been reviewed.

OBJECTIVE 1

To determine the rate of relapse in TB cases who have completed antituberculous therapy

- Incidence density – number of relapses per person years of observation in each of the studies
- Cumulative incidence - Kaplan – Meier methods. A single estimate of relapse will then be obtained using meta-analytic techniques

OBJECTIVE 2

To determine the predictors of TB relapse in cases who have completed therapy and diagnosed as cured.

- Univariate Description – Outcome : TB relapse, Potential predictors: HIV status, chest x-ray, sputum conversion at 1 and 2 months, treatment regimen and duration, drug resistance, and other variables of interest.
- Stratified analysis- to assess confounding and interaction. Possible confounders include age, sex, level of education, socioeconomic status
-

Multivariate analysis- each characteristic associated with relapse will be evaluated in a multivariate logistic regression model

Proportional hazards assumption will be tested with graphical methods

Cox regression analysis- the time interval from cure to date of relapse as the dependent variable; independent variables include treatment duration and regimen, extent of disease on chest x-ray, HIV status etc.

OBJECTIVE 3

To determine the rate of reinfection and reactivation in TB relapse

Estimate of incidence density - number of persons/PYO and Kaplan- Meier methods

Comparison of survival distributions (Kaplan- Meier) using the log-rank test

Modeling using Cox regression analysis

OBJECTIVE 4

To assess the predictors of reinfection versus the predictors of reactivation

Univariate descriptions made for each of the two groups

Stratified analysis to assess confounding and interaction

Assess correlates of relapse in each of the two settings using t-tests, chi- squared tests

KNOWLEDGE AND ATTITUDE OF NURSES TOWARDS NURSING CARE OF PATIENTS WITH HIV/AIDS IN MULAGO HOSPITAL KAMPALA UGANDA

MARIAM L. WALUSIMBI

URN, RN/M, DNA, BSN, MSN

Introduction

World wide statistics:

- 36 million people are infected with HIV/AIDS
- 21.8 million people have died thus far
- Sub-Saharan Africa has the highest prevalence
- 25.3 million infected people
- Uganda with a population of 21 million Has 1.4 million infected with the virus

Nursing Challenge

- Scientific literature and experience show that nurses worldwide are being severely challenged (Foley, 2001)
- Like all other nurses, nurses in Mulago Hospital are frontline health care providers
- They are exposed to the potential of contracting HIV/AIDS and other blood-borne diseases
- Scientific literature and experience show that nurses worldwide are being severely challenged (Foley, 2001)
- Like all other nurses, nurses in Mulago Hospital are frontline health care providers
- They are exposed to the potential of contracting HIV/AIDS and other blood-borne diseases
- Despite open HIV/AIDS knowledge, fear of contagion continues leading to prejudicial attitudes
- Negative attitudes compromise nursing care
- Nursing care of patients with HIV/AIDS is mysterious and disparate
- Differences evolve from psychological and ethical issues surrounding the disease.

(Melbey and colleagues 1993).

Reactions among nurses include:

- Resignation
- Refusal
- Violation of standard of care

Rationale for the survey

- Knowledge deficit is the main factor that contribute to misconceptions that lead to nurse's negative attitudes (Wang 1993)
- Educational programs and interventions have a significant impact on reduction of fear and alteration of prejudicial attitudes (Armstrong and Hewitt 1990)
- No studies have been conducted among nurses in Mulago Hospital.

Purpose

To assess the knowledge and attitude of nurses in Mulago Hospital towards their nursing care of patients with HIV/AIDS.

Research questions

1. What is the knowledge level about HIV/AIDS among employed nurses in Mulago Hospital?
2. What are the attitudes of nurses in Mulago Hospital towards patients with HIV/AIDS?
3. What are the correlations between knowledge, attitudes, and selected demographic data?
4. What are differences in knowledge and attitudes between groups based on selected demographic variables?

Study Methods

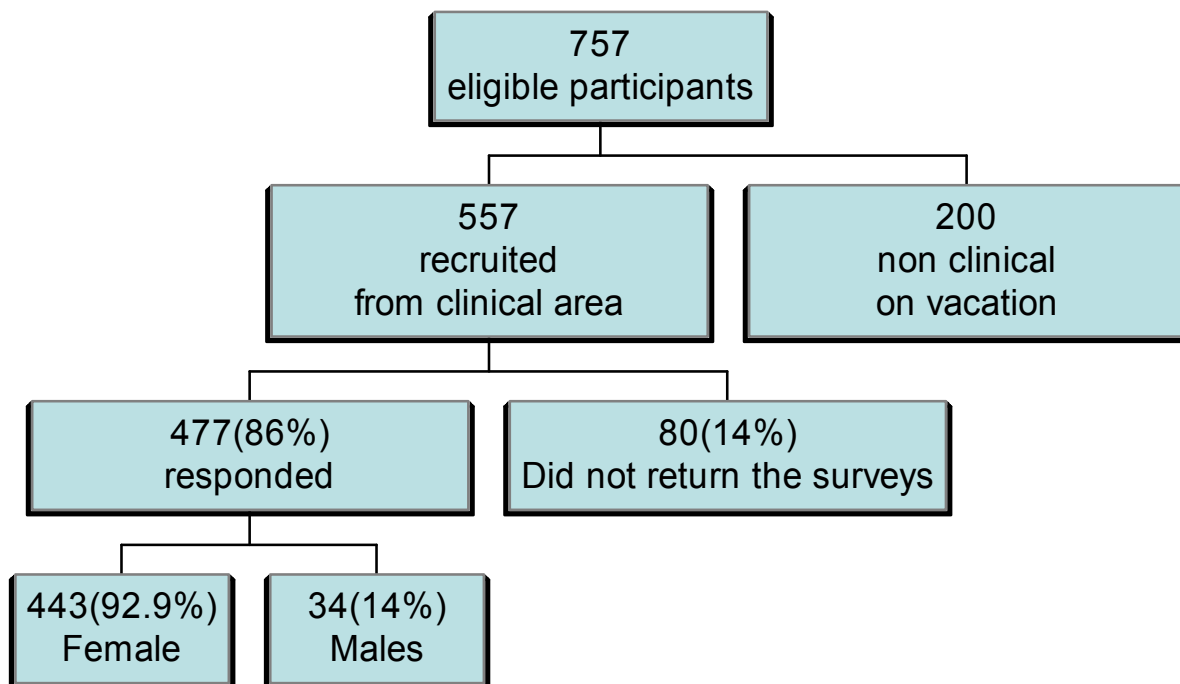
Design

- Descriptive and cross sectional
- From July to August 2001

Site/Setting

- Mulago Hospital with 1280 employees
- 757 (65%) are nurses

Study population



Inclusion criteria

Qualification as enrolled or registered nurse/midwife

EN – Enrolled Nurse

EM – Enrolled Midwife

URN – Uganda Registered Nurse

URM – Uganda Registered Midwife

BSN – Bachelor of Science in Nursing

Working in clinical setting in Mulago Hospital

Ability to speak and write English

Measurement

- Standardized questionnaire
- Demographic data
- General characteristics of participants
- Issue of HIV/AIDS in terms of an individual's experience and learning.
- Knowledge about HIV/AIDS (true/false)
- Suitable subcategories:
 - Agent and immunology
 - Course and manifestation of the disease
 - Transmission and incident
 - Risk groups
 - Precaution and prevention

An individual's attitude towards a patient with HIV/AIDS (Likert scale)

1. Factors that influence individual's attitude
 - Fear of contagion
 - Social stigma associated with HIV/AIDS
 - Fatal outcome of the disease
2. How resulting attitude influences care
 - Direct care
 - Education counseling

Analyses

Analyses were done using SPSS 10.1 Version

- Descriptive analyses were used to examine data from all three parts of the instrument and the subcategory of the knowledge and attitude scale
- Spearman *rho* correlation coefficients were calculated for the relations between variables
- T-tests were used to compare the mean values for independent variables between two groups
- One way ANOVAs were performed to test the significance of the difference between the independent variables that had three or more possible groups
- Adjusted scores were calculated to facilitate the comparison of scores of the attitude scale and the attitude subcategory scores.
- All scores, means, and standard deviations were adjusted by dividing raw values by the total number of items in the attitude scale
- The subcategory scores were adjusted by dividing raw values by the total number of items in the subcategory.

- Thus adjusted values ranged between 1-5 with 5 representing the most favorable attitude and 1 representing the most unfavorable attitude.
- Basing on the previous study the cut off point was 3.0 on the adjusted attitude scale.

Results

Distribution by unit

Unit	Frequency	Percentage
Surgical	183	38
OB/GYN	102	21
Medical	70	15
Pediatrics	60	13
Other	62	13
Total	477	100

Demographic characteristics

(a)

Age range	Freq n=477 (%)	Education	Freq n=477 (%)
20-30	107	Registered nurses	175 (37)
31-40	220 (46.1)	Enrolled nurses	146 (31)
41-50	117 (24.5)	Registered midwives	75 (16)
51-50	33 (6.9)	Enrolled midwives	69 (14)
		BSNs	11 (2)

(b)

Staff position	Freq n=477(%)
Staff nurse	325 (68)
Deputy ward manager	58(12)
Ward manager	60(13)
Other	34(7)

(c)

Sources of HIV/AIDS information	Frequency	Percentage
Radio	331	69.4
Seminars and workshops	307	64.4
Friends and colleagues	290	61
Television	274	57.4
In-service training	232	47
Other	36	8

Interest in educational sessions

Variables	Interested n=477(%)	Not interested n=477(%)
Interest in support groups	470 (98.5)	7.0 (1.5)
Interest in group discussions about HIV/AIDS	467 (97.9)	10 (2.1)
Interest in in-service programs	461 (96.6)	16.2 (3.4)

Factual knowledge about HIV/AIDS

Research questions 1

What is the knowledge level about HIV/AIDS among employed nurses in Mulago Hospital?

Total Scores on Knowledge Scale

Total correct responses	Freq (n = 477)	Percentage --(%)--	Proportion \geq 66%
7-10	1	0.2	58.3%
11-15	26	5.5	
16-20	129	27.0	
21 - 25	238	49.9	
26 - 31	83	17.4	
Mean = 21.9, sd = 3.8, mode = 22, median = 22 Possible score = 33. Mean of 66% was the cut off point.			

	No. of items	Raw mean	Mean %	Proportion \geq 66%
Agent and immunology	6	3.2 (1.34)	53.4	43.2
Course & manifestation	6	4.32 (1.20)	72.0	76.3
Transmission & incidence	6	4.39 (1.14)	73.2	78.4
Risk group	6	4.22 (1.14)	70.4	72.3
Precaution & prevention	9	5.8 (1.4)	64.6	59.7

Cut off point =66%

Research question 2

What are the attitudes of nurses in Mulago Hospital towards patients with HIV/AIDS?

Total Scores on Attitude

Raw Scores	Adjusted Scores	Freq (n = 477)	Percentage (%)	% Adjusted score \geq 3.0
35 – 54	1.00 – 1.57	0	0	94.8%
55 – 74	1.6 – 2.14	0	0	
75 – 94	2.1 – 2.7	5	1.0	
95 – 114	2.71 – 3.28	100	21.0	
115 – 135	3.29 – 3.85	316	66.2	
135 – 154	3.9 – 4.42	56	11.7	
155 - 175	4.3 – 5.00	0	0	
Mean = 121.9, sd 10.7, adjusted mean = 3.5 (cut off point 3.0) Adjusted score = raw score/35. High scores indicated positive attitudes.				

Attitude scores by subcategory

Subcategory	% adjusted scores at 3.0 or below	% adjusted scores ≥ 3.0	Adjusted mean score for subcategory	Adjusted standard deviation
What influences attitude				
Fatal outcome	19.1	80.9	3.8	0.7
Fear of contagion	25.2	74.8	3.59	0.7
Social stigma	5.9	94.1	4.2	0.7
How attitude influences:				
Direct care				
Education/counseling	9.2	90.8	3.86	0.66

N=7, adjusted score = raw values/total items in the subcategory

Research question 3

What are the correlations between knowledge, attitudes and selected demographic data?

Spearman rho Correlation Coefficient

Variable	<u>Knowledge score</u> Correlation (p)	<u>Attitude Score</u> Correlation (p)
Age	-.018 (.696)	.006 (.889)
Years of experience	-.027 (.552)	-.056 (.218)
Years in present position	-.084 (.067)	-.028 (.547)
Fear of HIV/AIDS contagion	-.149 (.001)	-.006 (.904)
Attitude score	.191 (.0001)	
N = 477, p < 0.5		

Research question 4

What are the differences in knowledge and attitudes between groups based on selected demographic variables?

Comparing mean between study groups

Knowledge scores

Variables	N	Mean	SD	p
Gender				
Male	34	23.7	3.8	
Female	433	21.8	3.8	.006
Ever provided care to patients with HIV/AIDS?				
Yes	452	22.05	3.7	
No	25	20.32	4.8	.027
Are educational resources to equip you with HIV/AIDS				
YES	89	21.42	4.5	
NO	388	22.1	3.6	.14
Any formal education on HIV/AIDS?				
Yes	304	22.2	3.8	
No	173	21.5	3.8	.06

How interested are you in group discussion?				
Interested	467	22.1	3.8	.000
Not interested	10	16.4	3.7	
How interested are you in support groups				
Interested	470	22.01	3.8	.023
Not interested	7	18.7	3.8	

n =477, t – test, p<0.5

Attitude Scores

Variable	N	Mean	SD	p
Gender				
Male	34	121.8	10.9	.463
Female	443	123.23	9.4	
Ever provided care for HIV/AIDS patients?				
Yes	452	121.9	11.0	.808
No	25	121.40	9.53	
Availability of HIV/AIDS resources				
Yes	89	122.14	11.13	.824
No	388	121.8	10.82	
Ever attended formal education on HIV/AIDS				
Yes	304	122.8	10.6	.021
No	173	120.4	11.20	
How interested are you in group discussions?				
Interested	467	122.06	10.8	.063
Not interested	10	115.6	13.61	
How interested are you in in-service programs?				
Interested	461	122.34		
Not interested	16	109.6	10.52	.0001
How interested are you in support groups?			13.71	
Interested	470	122	10.8	.179
Not interested	7	116.4	16.3	

n =477, t – test, p<0.5

ANOVA

Nursing education completed	Knowledge (sd)	p	Attitude (sd)	p
BSN (4yrs)	24.8 (2.6)	.0001	121.5 (11.3)	.759
EN (2 yrs)	22.6 (4.0)		121.8 (10.0)	
URN (3yrs)	22.3 (3.8)		121.5 (10.8)	
URM (3yrs)	20.7 (3.6)		123.1 (11.3)	
EM (2 yrs)	20.3 (3.0)		124.4 (9.0)	
Total (n=477)	22.0 (4.0)		121.9 (10.9)	

P – value<.05, F-test ANOVA

Nursing education (Multiple comparison)

	EN (2yrs)	EM (2yrs)	URN (3yrs)	URM (3yrs)	BSN (4yrs)
EN		2.3 (.000)	0.3 (.962)	2.0 (.003)	-2.2 (.325)
EM	-2.3 (.000)		-2.0 (.002)	-.4 (.978)	-4.5 (.002)
URN	0.3 (.962)	2.0 (.002)		1.6 (.012)	-2.5 (.205)
URM	-1.9 (.003)	0.4 (.978)	-1.6 (.012)		-4.1 (.006)
BSN	2.2 (.325)	4.5 (.002)	2.5 (.205)	4.1 (.006)	

p-value<.05, F-test ANOVA, (figures = mean difference)

Conclusions

- A deficit in HIV/AIDS knowledge among nurses and midwives was demonstrated
- A general positive attitude was evident
- Fear of HIV/AIDS contagion is great
- Knowledgeable nurses and midwives had positive attitudes
- Knowledgeable nurses were less fearful
- BSN group had higher knowledge
- Nurses and midwives who had provided care for patients with HIV/AIDS were more knowledgeable than those who had not.
- Resources to provide nurses with HIV/AIDS knowledge were inadequate and radios were commonly sources of information about HIV/AIDS
- Males had more HIV/AIDS knowledge than females
- Although nurses and midwives have a knowledge deficit, they expressed their willingness to learn.

Limitations

- Convenience sample from one hospital limits generalization of results beyond this site.

Recommendations

- Equipping nurses and midwives with HIV/AIDS knowledge may:
- Provide better HIV/AIDS knowledge base to educate clients
- Assist in reducing fear of contagion
- Supplement the sources of information about HIV/AIDS
- Enhance positive attitudes
- Target female at a lower level of education of education
- Target midwives regardless of their midwifery background for HIV/AIDS educational programs
- Replicate the study targeting midwives
- Replicate the study covering a wider scope.

PATIENT ASSESSMENT OF THE STIGMA ASSOCIATED WITH USE OF COMMUNITY BASED DIRECTLY OBSERVED THERAPY (DOT) IN UGANDA.

Achilles Katamba, MB.Ch.B, MS

BACKGROUND

Tuberculosis (TB) burden World wide

- 2 billion people have latent M. TB
 - 8 million per year develop TB
 - 2 million die every year
-
- In 1993 WHO declared TB a Global emergency and subsequently introduced the DOT strategy
 - Direct observed therapy, (DOT) is the practice where a health worker or designated worker in the community observes the tuberculosis patient swallow all tablets
 - Although sound in principle, DOT may not be applicable because of HIV epidemic
 - In countries where both TB and HIV are endemic, health care professionals and laymen alike recognize that TB and HIV are linked
 - A DOT strategy based in community may lead to stigmatization of TB patients because of known association with HIV
 - Some patients may avoid DOT in order to avoid the stigmatization of the treatment
 - TB is also a stigmatized disease
 - Therefore, it is important to understand attitudes of TB patients towards DOT strategy
 - Knowledge gained from the study will guide the implementation of the DOT strategy in the face of a high HIV prevalence

OBJECTIVE:

To assess whether TB patients are concerned about it's potential stigmatizing effects due to the association of TB and HIV/AIDS

Specific Aims

- To describe attitudes towards DOT in a Ugandan community
- To compare the attitudes and perceptions of TB patients towards TB between patients receiving DOT and those patients receiving SAT

METHODS

- Study design/site

A cross-sectional study in Kiboga and Mubende districts, Uganda

Study Population

Tuberculosis patients
DOT - Kiboga
SAT – Mubende

Data Collection

- An interviewer administered structured questionnaire developed using the Likert scaling method was used to record information from the study subjects

Outcome measure

- Patients' perceptions of the stigma associated with a tuberculosis diagnosis

Domains

- Perception that people believe someone can prevent getting HIV infection
- Perception that people believe someone who gets HIV is irresponsible
- Perception that people know I have TB
- Perception that people believe someone with TB also has HIV/AIDS
- Perception that people believe that they have HIV because they have TB
- Perception of people's attitude towards TB patients

Independent Variable

Being on DOT strategy

- Other co-variables were measured and evaluated as confounders or effect modifiers in the analysis
- Analytic strategy
 - Data was entered in Epiinfo- version 6.0 and analysis was done using SPSS
 - Item analysis for each domain was performed and scales were developed for some domains
- Domains with poor items variability were dichotomized
- Chi-square and Fisher exact test were used to compare categorical data and Mann-Whitney for continuous data
- Multiple linear regression was used to control for confounders

Internal consistency reliabilities

RESULTS

Demographics of DOT & SAT

AIM 1

- To describe attitudes towards DOT in a Ugandan community
- Do you like the idea of having a community health worker observe you swallowing your tablets?
- Out of 104 respondents on DOT, 97.1%(101) liked the idea of community volunteer observe them swallow their medicine
- 2.9%(3) didn't like the idea of a community volunteer observe them swallow their TB medicine

AIM 1

REASONS FOR ATTITUDE TOWARDS DOT

Reason for liking the idea of having a community volunteer

- The medicine is available and they are reminded to take their medicine
- Reason for not liking the idea of a community volunteer
- One patient doesn't like people to know he has TB
- Two patients prefer to do Hospital based DOT

AIM 2

To compare patients' attitudes towards TB patients between TB patients receiving DOT and those receiving SAT

- Six (6) different domains were examined using raw scores and scales
- Do you believe that if people are careful they can keep themselves from getting HIV?
Do you believe that someone who gets HIV infection is careless?
Do you think that your family members know that you have TB?
- **p-value < 0.001 Mean differences in domains between DOT and SAT respondents
- Univariate Linear regression: Effect of DOT on Domains/total score using SAT as reference gp
- Multivariate Linear regression predictors of total stigma assoc. with a TB Dx n = 205
- **Significant 0.05 *Significant 0.10 Ref. Category SAT

Summary

- AIM 1
 - Positive attitudes to the DOT strategy, (97.1%)
 - Medicine is available and they are reminded to take medicine
- AIM 2
 - DOT did not stigmatize tuberculosis patients
- Strengths
 - Study was conducted in a community where results would be applicable
 - One of the first studies to assess whether DOT stigmatizes tuberculosis patients
- Limitation
 - Attitudes and perceptions were assessed at one point in time, so it was not possible to assess the changing patterns over time
 - Generalizability of study limited to rural settings
- Recommendation
 - Since tuberculosis patients did not find the DOT strategy stigmatizing, wide implementation of the DOT strategy by TB control programs should be feasible in rural communities
 - Health education should be emphasized in DOT programs

Emotional and Behavioral problems of Adolescents living with HIV/AIDS as seen at the Mildmay Centre, Kampala

Kinyanda E and Musisi S

Extent of the Problem

- Uganda has been ravaged by the HIV/AIDS epidemic since early 1980's
- Has spawned a secondary epidemic of HIV –1 seropositive Adolescents
- HIV-1-seropositive Adolescents constitute about the (in 15-49 age gp.) :
 - 2.6% of the reported AIDS cases (UNAIDS,1998)
 - 24% of the estimated 1.3 million HIV seropositive persons

HIV /AIDS Psychological sequelae in Adolescence

Etiology

- Cope with the adjustment from childhood to adulthood
- Direct HIV affection of the brain substrata
- Cope with living with a chronic debilitating and ultimately fatal illness
- Associated with multiple negative life events e.g. early parental loss

HIV /AIDS Psychological sequelae in Adolescence

Psychiatric disorders

- Depression
- Bipolar disorder
- Anxiety
- Personality disorders
- Substance abuse

Henderson et al, 1998

HIV /AIDS associated Social sequelae in Adolescence

- Impaired skills acquisition
- Stigmatisation
- Multiple bereavements
- Frequent changes of caregivers

Objectives of the study

- Investigate the psychological and social functioning of HIV-1-seropositive Adolescents and their parents/guardians at the Mildmay Centre

Methodology

- A Cross-sectional descriptive study design was employed
- 82 HIV-1-seropositive Adolescents –parent/guardian pairs attending the Centre were consecutively enrolled into the study
- Were subject to pre-tested semi- structured questionnaire- one for the adolescents and the other for the parent/guardians

Adolescent questionnaire

- Socio-demographics
- Family background
- Academic and extra-curricula performance
- Use of substances of abuse
- HIV associated clinical signs and symptoms

- Psychological screening instruments**
- A Social adjustment screening questionnaire- SAS-M**

Parent/Guardian questionnaire

- Socio-demographics
- Number of children- both biological and adopted
- HIV serostatus
- Psychological screening instruments- WHO-SRQ-25, ICD-10 PCP checklist for depression, anxiety, somatisation
- Social adjustment screening questionnaire-SAS-M

Results:

Socio-demographics

Adolescents

Sex

- Male 36 44.4%**
- Female 46 55.6%**
- M:F ratio: 1: 1.3**

Age

- 10-12 29 35.8%**
- 13-15 43 53.1%**
- 16-18 9 11.1%**

Parent/Guardian

Sex

- Male 18 22.0%**
- Female 64 78.0%**
- M:F ratio: 1:3.6**

Age

- 15-34 17 20.6%**
- 35-54 45 54.9%**
- 55+ 20 24.5%**

Highest level of education

No formal education	1	1.2%
Primary level	62	75.6%
Secondary level	19	23.2%

Status of the parents

Both parents alive	2	2.4%
Only mother alive	13	15.9%
Only father alive	23	28.%
Both parents are dead	44	53.7%

Psychological function:

Adolescents

Sign. Psych. Distress

Scores (6 or more)	42	51.2%
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Disorders

Depression	34	41.5%
Anxiety	47	57.3%

Somatoform	15	18.3%
Alcohol abuse	2	2.4 %

Psychological function:

Parent/Guardian

Sign.Psych. distress scores (6 or more) 21 25.6%

Disorders

Depression	25	30.5%
Anxiety	39	47.6%
Somatoform	15	18.3%
Alcohol abuse	0	0.0 %

Psychological distress Correlates

Adolescent

- Age of adolescent (p=0.015)
- School attendance (=0.026)
- Playing a sport at school (p= 0.000)
- Academic grade of adolescent (p=0.005)
- Having Oral pharngeal candidiasis (p=0.002)
- Having herpes simplex (p= 0.03)
- HIV status of guardian (p= 0.038)

Parent/Guardian

- Relationship with adolescent (p=0.001)
- Marital status of guardian (p=0.024)
- Caring for other children (p= 0.01)
- HIV status of the guardian (p=0.000)

Social adjustment scores
(mean scores)

Conclusion:

- HIV/AIDS infection in Adolescence is associated with significant psychological and social impairment
- Parents/Guardians of Adolescents with HIV/AIDS also suffer from significant levels of psychological and social impairment

Recommendations:

- HIV/AIDS support services in this country should be sensitive to the needs of Adolescents and their primary care givers
- HIV/AIDS services for Adolescent and their parents/guardians should address their psychological and social needs
- There is a need for more studies to gain greater insights into the psychological disorders and their Mx. in the Adolescent age group

Is HIV incidence really declining in Uganda?

Prof J Whitworth

Medical Research Council Programme on AIDS

Uganda Virus Research Institute, Entebbe

Background

It is generally believed that:

- there is a frighteningly fast-developing epidemic of HIV in Africa
- however in Uganda there have been downward trends in HIV prevalence in rural and urban populations since the mid-1990s.
- similar reports from Senegal and Zambia, and selected groups in DRC, Cote d'Ivoire and Kenya.
- reductions attributed to successful behaviour change campaigns.

But is it true?

- It is claimed HIV rates have fallen from 30% to 10%, but where is the evidence?
- Quoted rates come from urban antenatal clinics, but are these typical of the whole of Uganda?
- Rates of prevalence of HIV, but falls in incidence have also been claimed.
- The fall in incidence of HIV must have started before any national prevention programme started
- Is any success due to the Government or is it due to over 1000 NGOs?

Prevalence and Incidence

- Prevalence: rate of existing cases of a condition in a population
- Incidence: rate of new cases of a condition occurring in a certain period of time
- In surveys of HIV, prevalence is affected by incidence of new cases, deaths, migration and survey coverage.
- Incidence is the most reliable measure of epidemic trends for HIV, but while there are several studies of prevalence in Uganda, there is little information about incidence.

- **Helsinki Declaration (2000)**

- **Belmont report (1978)**

- **CIOMS (1993)**

Sources of information

- HIV rates at 19 MoH antenatal clinics throughout Uganda
- HIV rates at STD clinic at Mulago
- Voluntary testing and counselling centres across the country
- Uganda blood transfusion services
- Research collaborations: MRC in Masaka, Columbia university in Rakai, Italian cooperation in Lacor
- AIDS information centre, TASO, UNAIDS/WHO database.

- **Helsinki Declaration (2000)**

- **Belmont report (1978)**

- **CIOMS (1993)**

HIV prevalence (%) in ANC sentinel sites

HIV prevalence (%) in ANC at Nsambya hospital by age group

HIV prevalence (%) in ANC at Lacor hospital by age group

HIV prevalence (%) in STD clinic at Mulago hospital

HIV prevalence (%) in Rakai cohort

Prevalence and Incidence

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Longitudinal cohort study

- We have been studying the whole adult population of 15 neighbouring villages in a rural part of Masaka District since 1989.
- Annual census of the population, followed by medical and serological surveys.
- We have been able to study the rates and trends in incidence and prevalence of HIV in a population-based cohort over a 10-year period.

Statistical methods

- Incidence rates computed for individuals bled 2 or more times with an initial HIV-1 seronegative result.
- Follow up from time of first bleed until estimated date of seroconversion, or date last bled if still seronegative.
- Estimated date of seroconversion is midpoint between last negative and first positive tests.
- Numerator is number of seroconversions in a calendar year. Denominator is person years at risk (PYAR).

Evidence of behaviour change

- MRC Masaka rural cohort:
 - older age at first sex for boys (17.5-18.2 years)
 - older age at first marriage for girls (18.5-19.5 years)
 - halving of unmarried teenager pregnancy rate
 - trebling of the ever use of condoms
- MoH Kampala and Jinja:
 - delay in onset of sexual activity (by 2 years)
 - 9% decrease in casual sex in male youths
 - 30-40% increase in ever use of condoms
- ANC Fort Portal:
 - decreased risk of infection associated with secondary school education
 - observed trends fit computer model assuming behaviour change

Conclusions

- There is consistent evidence from multiple and independent sources of falling HIV prevalence throughout Uganda.
- The trends at antenatal clinics are consistent with information from other sources.
- I have presented the first evidence of a significant fall in HIV-1 incidence in a rural general adult population in Uganda.
- The fall in incidence is seen in all population groups: males, females, young and old.

- In the worst affected ANC in urban centres the peak prevalence reached 30% and has since fallen to 8.7%.
- In rural areas the peak prevalence reached about 10% and has declined to 4.2%.
- The national estimated average peaked at about 20% and has declined to 6.1%.
- These reductions in incidence and prevalence are most consistent with risk-lowering behaviour change in the population.
- However, it is not possible to be certain what part of Uganda's response to the epidemic is responsible for the fall.
- It is possible that rates were already falling when the national AIDS programme was established.

What distinguishes the Ugandan response from that elsewhere in Africa has been

- strong political commitment at the highest level
- public education raising awareness, reducing stigma with active community involvement
- openness to strong partnerships with many non-state actors

- These results give hope to AIDS control programmes in other African countries that the AIDS epidemic can be controlled using similar approaches.

**Annual Scientific Meeting
For
Uganda Society for Health Scientists
Sponsored by AITRP at CWRU
July 25 – 26, 2002
Hotel Africana**

**Date: July 25th 2002
Schedule of Events**

1.00- 2.15 p.m.

Registration

Session I

Chair: Dr Edward Kigonya, Sen. Consultant Physician, Mulago Hospital

2:15 – 2:20 p.m.

Welcome - *Dr. Cecily Banura, Chairperson USHS*

2.20 – 2.30 p.m.

Opening Remarks - *Dr Chris Whalen, Director AITRP at CWRU*

2.30- 3:00 p.m.

Plenary Session I: Update on HIV Vaccines - *Dr Pontiano Kaleebu, UVRI/MRC*

3:00 – 3:15 p.m.

Discussion

3:15 - 3:45 p.m.

Plenary session II: MRC Project: Major findings of the MRC projects the last 10 years. - *Prof. James Whitworth*

3:45 – 4:00 p.m.

Discussion

4:00 – 4:30.p.m.

Official opening of the workshop

4.30 –6: 00 p.m.

Cocktail

July 26, 2002

8.00-8.15 a.m.

Registration

Session II

Chair: Dr Elly Katabira, Dean, Research

8:15 – 8:20 a.m.

Opening remarks - *Dr Chris Whalen, Director AITRP at CWRU*

8:20 – 8:50 a.m.

Plenary Session I: Rakai Project – Major findings the last 10 years by *Prof. Nelson Sewankambo*

8:50- 9:00 a.m.

Discussion

9:00 – 9:30 a.m.

Plenary session II: TB/HIV interactions – *Dr Chris Whalen, Director AITRCWRU*

9:30 - 10.00 a.m.

Tea Break

Session III

Chair: Dr. Edward Katongole Mbidde, Director, Uganda Cancer Institute

Oral Abstract Presentation - 10-minute presentations, followed by a 5-minute discussion

- 10:00 - 10.15 a.m. Epidemiology of Cervical Cancer in Africa – **Dr. Cecily Banura**
- 10:55 - 10.30 a.m. Emotional and Behavioral Problems of Adolescents living with HIV/AIDS: The Mildmay Centre Experience – **Dr. Segane Musisi & Dr. Eugene Kinyanda**
- 10:30 - 10.45 a.m. The case of Vitamin A, E, Zinc and Selenium in HIV infected adults
– **Mr. Lubowa Abudulman**
- 10.45 - 11.00 a.m. Knowledge and attitude of Nurses towards Nursing Care of Patients with HIV/AIDS IN Mulago Hospital – **Mrs. Mariam Walusimbi**
- 11.00 - 11.15 a.m. Ethics of HIV clinical research in developing countries - **Dr Fred Nakwagala**
- 11:15 – 11:30 a.m. Can Total Lymphocyte be used as surragate for CD4+ T Lymphocyte in the care of HIV Infected Patients – **Dr. Henry Barigye**
- 11:30 – 11:45 a.m. Comparative compliance to DOTS therapy in people infected with Tuberculosis alone and Tuberculosis and HIV infection – **Dr Achilles Katamba**
- 11:45 – 12:00 p.m. Assessment of TB relapse in Kampala Uganda – **Dr. Carol Onyango**
- 12:00 – 12:15 p.m. An assessment of plans and options taken by clients who receive VCT at AIC- **Mr. Eriya Murana**

12:30 – 1:45 p.m.

Lunch Break

1:45 – 4:00 p.m.

Session IV

Chair: Dr. Chris Whalen, Director, AITRP

Working groups

Group 1: HIV Prevention: Way Forward

Facilitators:

Rapporteur: Dr A. Katamba

Group 2: Anti Retroviral therapy: Updates

Facilitators: Dr Cissy Kityo

Rapporteur: Dr Francis Bajunirwe

Group 3: Alternative/complimentary treatments: What do we know?

Facilitators: Dr Grace Nambatya Kyeyune

Rapporteur: Mr. Erasmus Tanga Otolok

Group 4: Prevention and management of opportunistic infections: What are the current practices?

Facilitators: Dr A. Okwera, Dr H. Mayanja,

Rapporteur: Dr Juliet Babirye

4:00 – 5:00 p.m.

Reports from groups

5:00.p.m.

Closure

GROUP DISCUSSION QUESTIONS

**Uganda Society for Health Scientists,
Annual Scientific Meeting
Hotel Africana, July 25-26, 2002**

HIV Prevention: Way forward

1. Are behavior change and STI treatment for HIV prevention reaching limits of effectiveness in Uganda?
2. What are the second-generation interventions / innovative interventions that may have additional impact of reducing HIV transmissions?
3. Any other, that you think is relevant

GROUP DISCUSSION QUESTIONS

**Uganda Society for Health Scientists,
Annual Scientific Meeting
Hotel Africana, July 25-26, 2002**

ARV Therapy

1. What are the barriers to increase anti-retroviral therapy in Uganda?
2. What is being done to increase access?
3. Any other, that you think is relevant

Accountability

USHS Annual Scientific Meeting July 25 - 26, 2002 at Hotel Africana.

ITEM		U. Shs. Advanced	U. Shs. Spent
A. I	<u>Preparatory Meetings</u>		
	Administrative Support		584,300.00
	Secretarial/Logistical support		370,000.00
	II Publicity		
	Photography		20,000.00
	TV & radio coverage		100,000.00
	III Transport		119,500.00
	IV Stationery		588,700.00
	Photocopy		208,000.00
		Sub Total	
B	<u>During Meeting</u>		
	I		
	-		
	Main Hall Hire- Breakaway Rooms		300,000.00
	100 Morning Teas & Bites		350,000.00
	100 Buffet Lunches with sodas		1,443,000.00
	100 Evening Teas & Bites		450,000.00
	Breakfast meeting		361,000.00
	Cocktail		1,435,500.00
		Sub Total	
II Honorarium			
Chairpersons		360,000.00	
Facilitators		450,000.00	
Rappoteurs		360,000.00	
	Sub Total		1,170,000.00
C	<u>Post Workshop</u>		
	I		
	Report writing, Printing & dissemination		1,500,000.00
	Sub Total		1,500,000.00
		GRAND TOTAL	9,000,000.00

GROUP DISCUSSION QUESTIONS

**Uganda Society for Health Scientists,
Annual Scientific Meeting
Hotel Africana, July 25-26, 2002**

Prevention and Management of Opportunistic Infections

1. Why aren't INH (for Prevention of TB) and cotrimozole (for prevention of toxoplasmosis, PCP, bacterial infections etc), not widely used in Uganda?
2. What is the optimal treatment for the common OLS in Uganda: i.e. TB, Pneumonia, Cryptococcal meningitis, Toxoplasmosis, Candidiasis, Herpes simplex and blood stream infections.
3. Any other, that you think is relevant