**HIV & AIDS Research Unit**

**Current Research**

1. **Traumatic Stress and Protective Factors Reducing Suicide Risks among South African, Black Gay Men**

**Collaborators:**

1. **Temple University-College of Health (USA-Philadelphia)**
2. **Human Sciences Research Council (HSRC- South Africa)**
3. **University of Pennsylvania-Annenberg School for communication (USA)**
4. **Centers for Disease Control and Prevention (USA)**

**Project Summary**

The goal of this study is to increase scientific knowledge on traumatic stress and the mediating role of problem drinking and substance abuse on suicidal risks among South African black gay men. Internationally reports provide evidence that gay men are generally at elevated risk for suicide ideation, suicide attempts and completed suicides. South African black gay men are uniquely at risk for attempting and committing suicide that is a result of traumatic stress experienced from sexual orientation based stigma, discrimination, and victimization. Problem drinking and substance abuse are among the most adverse physical and mental health risks for sexual minorities. Advances have been made concerning suicide and suicide symptoms as a public health problem; however suicide research pertaining to racial sexual minorities is very limited. There is even less information regarding racial sexual minority groups in resource-limited countries. Drawing from social ecology theory the proposed project seeks to achieve three aims: to investigate the relationship between traumatic stress and suicide risks among South African black gay men; examine whether problem drinking and substance abuse mediate the relationship between traumatic stress and suicide risks among South African black gay men; and examine how personal (socio-demographic, residence, partner status, alcohol and drug use and treatment history, internalized homo-negativity, gay identity, depression, coping style, childhood sexual abuse), micro level factors (family support, social resources) and exo-system (institutional and social environmental) characteristics that function as risk or protective factors to suicidation experienced among South African black gay men. Three types of trauma are used to measure traumatic stress: personal (verbal, physical, property damaged), institutional (school, workplace, legal, medical services, mental health services), and social (social connectedness, social integration). The outcome, suicide risks are investigated by focusing on suicide ideation and attempts. Data will be collected from self-identified gay men in Port Elizabeth and surrounding neighbourhoods using mixed methods. Six focus group discussions will be conducted with 60 men characterized by age (young 16-25, young adult 26-35, and adult 36-44), education (student or non-student status). In-depth interviews will be conducted with 20 gay self-identified men representative of age and education. Stakeholder interviews will be conducted with 20 individual representatives of major service providers including the LBGT organization, police officials, emergency rooms, and alcohol and substances abuse treatment programs. Building on this formative information we will conduct surveys with 515 men using ACASI measured at baseline and 12 months.

**Public Health Relevance**

The existing body of evidenced based research on the health of sexual minorities is sparse. Even less information exists concerning sexual racial minorities. Findings will advance understandings of how being a marginalized sub-population within a marginalized population influence the health of South African black gay men.

1. **HIV Risk Behaviour amongst Women Sex Workers in the Nelson Mandela Bay Municipality**

**Collaborators:**

1. **Human Sciences Research Council (HSRC-South Africa)**

**Project Summary**

Sex work is considered a high risk sexual behaviour notably with the spread of HIV and other sexually infectious diseases. Sex workers are among the key populations most affected by HIV and STIs since the beginning of the epidemic. Effective interventions targeting sex workers are important components of comprehensive HIV and STI prevention strategies. The purpose of this study is to explore HIV risk behaviour amongst sex workers in Nelson Mandela Bay Municipality. This will also involve the assessment of challenges that sex workers face with regard to their sexual risk behaviour, and their relationships outside sex work. The study is guided by four aims namely: (a) to explore HIV risk behaviour among sex workers; (b) To assess experiences of sex workers that will heighten their susceptibility to HIV; (c) To assess the support given to sex workers; (d) to generate recommendations for addressing HIV risk behaviour among sex workers. Purposeful and convenience sampling will be used to select the sample. The study will utilise semi-structured interviews with 15 individual participants and it will mainly be exploratory as the aim is to obtain rich and new data from the participants.

1. **Growth Velocity of HIV- Infected and HIV- negative children with moderate malnutrition Supplemented with a Ready –to Use Supplementary Food (RUSF)**

**Collaborators:**

**Department of Dietetics**

**Department of Pharmacy**

**Department of Nursing**

**Medical Laboratory Sciences**

**Project Summary**

Approximately 4.7% of South African children below the age of five years suffered from moderate wasting (weight/height below -2 SD) and 23.9% from moderate stunting (height/age below -2SD) in 2008 (WHO Global Database on Child Growth and Malnutrition, 2011).

The research questions are: what is the prevalence of parasite infestation in children with moderate acute malnutrition admitted to targeted supplementary feeding programmes? Is Mebendazole effective to eliminate parasite infestation in children with moderate malnutrition? Are there significant differences in growth velocity during targeted supplementation in children with and without parasite infestation?

The aim of the study is to follow moderately malnourished children, treated with ready-to-use therapeutic foods as part of the integrated nutrition programme’s targeted supplementation programme in children between 12 and 60 months. Sub-objectives include determining:

-       Food security

-       Baseline data on clinical (including stool samples)\* and nutritional status;

-       Clinical (including stool samples)\* and nutritional data after 4 weeks;

-       Clinical and nutritional data after 12 weeks;

-       Determination of growth velocity during the intervention period.

The study will be in the form of a longitudinal cohort from admission to the targeted supplementation programme until discharge.

1. **South African Eastern Cape Women Pre-Exposure Prophylaxis (PrEP) Adherence Study**

**Collaborators:**

1. **Temple University-College of Health (USA-Philadelphia)**
2. **Centers for Disease Control and Prevention (USA)**

**Project Summary**

Oral tenofovir fumarate (TDF) with emticitabine (FTC) as pre-exposure prophylaxis (PrEP) has evidenced to be effective for reducing HIV acquisition among populations at high risk. However, trials conducted among women were unable to demonstrate effectiveness. Non-adherence was found to be the major factor contributing to the lack of effectiveness of PrEP in reducing HIV acquisition among women. The objective of the proposed study is to test an intervention to increase PrEP adherence among at-risk women residing in Port Elizabeth, South Africa. Guided by three aims the proposed study seeks to evaluate: (a) whether an intervention with a support group component will increase adherence compared with intervention with health promotion workshop; (b) whether an intervention with support group increases reduction of STIs; and (c) the effects of mediators and theoretical moderators on the outcomes. Using a double blind, intervention vs placebo control design the primary outcome is PrEP adherence, and the secondary outcome is decrease in STIs. Six focus group discussions will be conducted with 60 women. In-depth interviews will be conducted with 20 women. Building on this formative information we will recruit 550 at-risk women from clinics. Women will be randomly assigned to an HIV/STI risk reduction PrEP adherence intervention with support groups (n-225) and to and HIIV/STI risk reduction with health promotion control condition (n-225). Essays of PrEP adherence will be conducted every 4 weeks with assessments collected at baseline, six, and 12 months using ACASI.

1. **Institutional Research of HIV and AIDS on the Students of Nelson Mandela Metropolitan University (NMMU) Students**

**Project Summary**

This research project explores HIV risk perception of university students. The sample is taken from registered students at the NMMU, who voluntarily participate, through access to the student portal. Frequencies and percentages are used to describe categorical data. The Pearson correlation co-efficient (*r*) and Spearman’s rank co-efficient are used to measure the strength or degree of the relationship between variables and identify the significance of the correlation between two variables respectively.

Objective:

To assess the prevalence of /and association between sexual risk behaviour and alcohol use among NMMU students.

Sub-objectives:

a) To describe the prevalence of behaviour associated with: substance abuse and sexual risk behaviour.

b) Determine associations between demographics and health risk behaviour.

c) Develop holistic approaches to behaviour modification.

1. **Collaboration Strategies towards HIV and AIDS Integration into the Curriculum: A case of NMMU and two TVET Colleges**

**Project Summary**

South African lecturers work on the front line in addressing the everyday realities of HIV and AIDS in the higher education sector. However, the voices of lectures in relation to integration of HIV and AIDS in the curriculum and in their teaching and engagement with students are often lost in the midst of competing work demands. There is no standard approach or universal recipe to mainstreaming HIV and AIDS into the life of any institution. The role of the universities and TVET colleges in the process of fighting the spread of HIV and AIDS among students must be critically evaluated to determine the scope of an integrated interdisciplinary approach.

**Objectives:**

1. To identify strategies that lecturers could use to integrate HIV and AIDS into the curriculum at NMMU and the two TVET colleges.

**Sub-objectives:**

a) To investigate the contextual model of collaboration that could facilitate HIV and AIDS integration into the curriculum of selected higher education institutions.

b) Investigating the lecturers’ experiences of integrating HIV and AIDS into their modules.

c) Lessons lecturers might learn from each other’s experiences.

d) Exploring Moodle platform as a mechanism of integrating HIV and AIDS in particular modules.

e) Exploring reasons that enable or constrain collaboration towards HIV and AIDS integration in the institutions.

A case study design is used to collect data through document analysis, interviews and observations of lecturers from three disciplines (Tourism, Safety in Society, and renewable energy).

**Completed Research Project**

Socio-Economic Risk factors of HIV infection and Risk Behaviour in Informal Settlements in the Eastern Cape (2012-2014)