SEXUALLY TRANSMITTED INFECTIONS SCREENING AND MANAGEMENT AMONG ADOLESCENTS AND YOUNG ADULTS ATTENDING OUTPATIENTS CLINICS

Department of Public Health, School of Health Sciences

Core Team Members and Themes

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Themes:

Theme 2: Novel rapid diagnostic tests for improved healthcare delivery

Theme 8: Reproductive Health.

Declaration;

This is an original idea and piece of work. It is not funded from else where.

The idea is generated based on learnings from HIV programming in public health facilities.

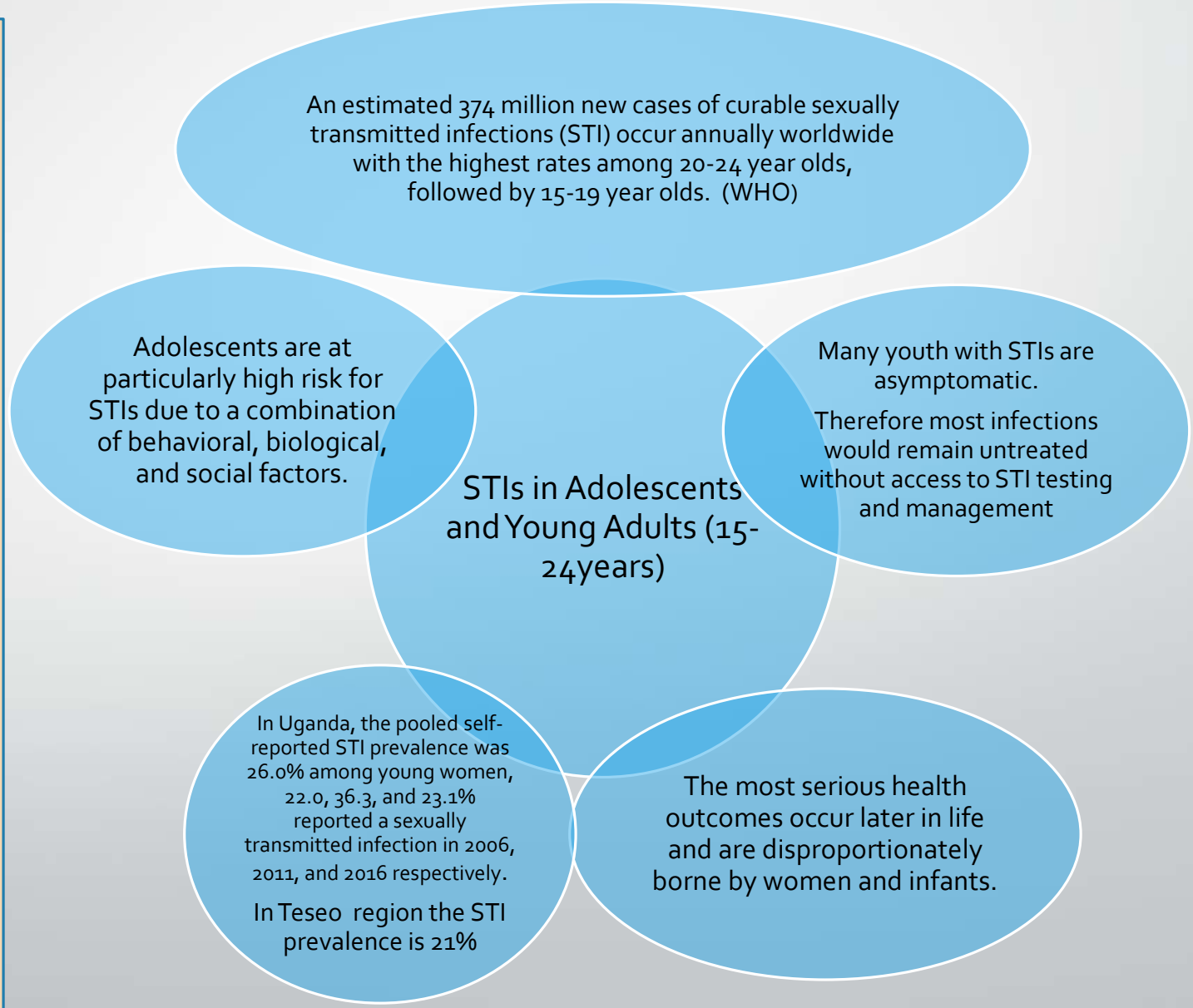
The research problem and Justification

Sexually transmitted infections (STIs) are infections that can be passed on during unprotected sex and intimate skin-to-skin contact.

Many STIs don't have any symptoms. This means an adolescent can have an STI without knowing it and pass it on to the partner during sex or close contact.

These include gonorrhea, syphilis, HPV, herpes, genital warts, HIV, hepatitis B, and chlamydia. Most are easily treated, especially when they are discovered early.

If left untreated, STIs can lead to serious health problems [3].-Infertility, death, Pelvic Inflammatory disease, emotional and mental illness, transmission to infants.



Justification Cont'

- Women age 15-19 are much more likely **(44%) to have never been tested for STIs** than older women (3- 8%), and the pattern is similar among men age **15-19 (53%) in** comparison with older men (14- 23%).[7]
- Facility specific data for STI screening among adolescents and young persons in Teso region indicates **35% testing coverage in outpatients clinics [8].**
- Service delivery through specialized STI healthcare facilities provide **inadequate coverage and tend to confer stigma [9]**.
- A 2016 systematic review evaluated **interventions to improve screening and re-testing in clinic-based settings and found that incorporating testing into routine clinic flow** improved screening rates among adolescents and young persons. [10] .
- Methods such as **offering universal screening regardless of the visit reason** and performing universal urine collection at the start of a clinic visit improved STI screening in adolescents and young persons. [11].

Proposed solution(Research Methodology)

Study goal:- To determine the acceptability and uptake of STI screening and management services and to determine the prevalence of STIs among the adolescents and young persons attending outpatient's clinics in four selected health facilities in four districts.

Study Objectives;

- To determine the proportion of adolescents and young persons (15-24years) attending outpatients clinics who have ever been screened for STIs in four health facilities.
- To determine the proportion of eligible adolescents and young persons (15-24years who are willing to be screened for STIs in outpatients clinics.
- To establish the prevalence of STIs (HIV, syphilis, hepatitis B, gonorrhoea) among adolescents and young persons (15-24 years screened for STIs in four health facilities.
- To determine the predisposing factors to STIs among adolescents and young persons screened at four health facilities.

Methodology cont'

- This is a **cross- sectional study** that will analyze data from adolescents and young persons at a specific point in time. Both quantitative and qualitative approaches will be used in data collection and analysis.
- Study will be conducted in four districts region with an estimated population of **3,425 adolescents**
- Four high volume sites will purposively be selected since they serve atleast 200 adolescents and young persons per month. I.e**. SRRH, Katakwi hospital, Kumi HC IV, Serere HCIV**
- **Study population;** All the **adolescents and young persons (15-24 years** old receiving health care services in the outpatients departments of the selected health facilities between January –June 2023.
- **Sample size;400** estimated using the Kish and Leslie equation.

Sample size estimation and sampling technique.

The sample size will be estimated using the Kish and Leslie equation

$$n = \frac{Z^2 pq}{e^2}$$

Where n is the sample size recommendation, Z=1.96 (value from the normal distribution), p is the prevalence of STI screening which is 40% in Uganda, considering the worst case scenario, to give the highest sample size, q=1-p and e is the level of precision which is set at 5%.

Therefore $n_0 = 1.96^2 * 0.5 * 0.5 / 0.005^2 = 363$

Study Variables

The primary outcome various include;

- Access of STI screening among adolescents and young persons.
- Prevalence of STIs (HIV, syphilis, hepatitis B, gonorrhea)

The secondary outcome variable;

- Acceptability of STI screening among adolescents and young persons.
- Factors associated with STIs infection among adolescents and young persons at community level

The independent variables will include;

- Age, school status, education level, Address, ,tribe, sex, marital status, occupation, previous history of STI treatment, sources of information about STIs, facilities visited for STI treatment, method of screening for STIs, human resources available to screen the patients for STIs.

Inclusion and Exclusion criteria.

- All adolescents and young persons 15-24 years accessing outpatients health services in selected sites at the time of data collection.
- Willing and provide voluntary informed consent will be eligible for inclusion in the study.
- We will exclude participants ;-who have not provided informed consent, those who are outside the age15-24 years and those already on STI treatment.

Data collection procedures and tools.

- Provide **informed consent** to obtain information on previous STI screening access, acceptability and utilization of STI screening and management.
- We will **conduct questionnaire interviews** for all eligible study participants.
- **Validate** participant bio-data and clinical characteristics from health facility outpatients registers and laboratory registers.
- **Adolescent counsellors** will be **identified and trained** to provide health education, counselling and to administer the questionnaires in Out-Patients Department (OPD).
- Health workers working in OPD will **collect samples for various STIs (HIV, syphilis, gonorrhoea and hepatitis B)** as per the ministry of health laboratory guidelines.
- **Samples will be sent and analyzed in the laboratory**
- **Results will be returned** to the principal investigator and the **client through the health workers** who supported in sample collection.
- **The results will then be entered into the interview questionnaire and the electronic system.**
- The data collection exercise will be done for a **period of 4 months**.

Conduct key informant interview

Outputs, Outcomes and Impact

Outputs;	Outcomes	Impact
Eight (8) Adolescent counsellor and 40 health workers in OPD will be identified and trained on the study protocol, STI screening and management in 4 health facility. 400 questionnaires well updated and analyzed. Facility data on STI screening and management captured and well updated in the MOH registers and analyzed Study report generated	Study results will be disseminated and published. Adolescents and young persons without STIs will change their risky behaviours. New approaches on STI screening and management will be identified. Health workers working in outpatients units will be competent in managing STIs. A cadre of adolescent counsellors working in OPD will be adopted and scaled up to other health facilities	Reduced STI prevalence among adolescents and young persons in the community. The finding will guide policy makers in adoption of strategies to improve STI screening and management targeting adolescents and young persons. Visibility of Soroti University after publishing and during presentation in conferences

Capacity building

The study plans to train 8 medical students on the data collection and analysis techniques	The trained students will work as research assistants for the project during the data collection	Collaborative meetings on how to write scientific proposals Conduct and disseminate credible scientific researches in credible peer reviewed journals

Data management and analysis

- Data collection shall be done with pre-design forms in the Open Data Kit (DK) software and then exported to excel.
- The ODK software will be loaded onto android phones.
- The data will then be cleaned, assessing for missing values, incomplete and inconsistent entries.
- The clean data will be exported from excel to STATA version 16.0 statistical software for further management and analysis.

Result Dissemination plan.

- The research findings will be disseminated to key stakeholders such as MOH, District health teams and facility health workers through the stakeholders meetings at district levels.
- The results will be shared with other implementing partners during the paediatric and adolescent conferences and national MOH organized meetings.
- The results will also be shared in Adolescent health and STI journals.

Ethical Consideration

- The proposal will be submitted to the designated REC for review and approval.
- The participants will sign informed consent forms.
- The participants' information will be kept confidential and disaggregated data will be shared as research findings.