

WEB BASED INTERVENTION FOR ALCOHOL AND SUBSTANCE ABUSE.

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Outline

- ▶ Introduction
- ▶ Methods
- ▶ Significance

Introduction

- ▶ Alcohol and other substance use disorders (ASUDs) are a growing public health concern- commitment to the problem under SDG3.0
 - ▶ SDG 3.0 says "Ensure healthy lives and promote well-being for all at all ages" and sub-goal 3.5 says by 2030 "Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol".
- ▶ At national level the commitment is to reduce by 31% (NDP III)
- ▶ MOH recommended a national program targeting major risk factors (MOH, 2015)
- ▶ Evidence to inform appropriate action still insufficient
- ▶ The youth are among the populations most vulnerable to substance abuse since they are influenced by peer pressure and their nature to experiment[1]

Introduction cont'd

- ▶ A study carried out among students of 4 universities in Kampala in 2017 found that 29.5% smoked shisha[8] while another study published in 2018 found that 40% of the university students were engaged in alcohol abuse[9].
- ▶ The accessibility to prevention and treatment services by young people in the country is low due to challenges ranging from human resource capital over infrastructural and logistic limitations to treatment and quality of care-related issues [12].
- ▶ Interventions for ASUD in Uganda have mainly remained through traditional physical meetings with psychotherapists in often not-so-near location in a rented premises or government facility.

Introduction cont'd

- ▶ A review of 15 randomised trials for web-based interventions featuring personalized feedback on students' patterns of alcohol consumption found out there was evidence to support the efficacy of very-brief, web-based interventions among college students for alcohol use reduction[[19](#)].
- ▶ The study team proposes to assess the
 - ▶ prevalence of substance abuse among the youths aged 18-24 in University,
 - ▶ develop a web-based intervention for the prevention and treatment of ASUD and
 - ▶ assess the feasibility and effectiveness of the intervention.

Problem statement

- ▶ Studies show web-based interventions are feasible and effective and provide privacy and anonymity to users[30] .
- ▶ In Uganda, despite widespread and growing availability of the internet and phone ownership especially among youth treatment modalities are mainly through physical psychotherapy sessions in rented premises or government facilities.
- ▶ The high phone density (64%, Clarke et al 2021) and internet access presents an opportunity for the implementation of web-based interventions that we have not utilised.
- ▶ A search carried out has not found similar intervention work in Uganda

Methods and material

▶ Design

- ▶ This will be a two-arm randomised controlled trial with a baseline assessment for eligibility and a three-month follow-up. It will have 1:1 allocation ratio for arms.
- ▶ One arm will be a web-based substance abuse intervention while another will be the standard care available at the institutions of the study participants.
- ▶ The study population will be students aged 18-24 in 3 largest private universities and 3 largest public universities
- ▶ The AUDIT[32] and DUDIT[33] tools will be used to screen for alcohol and illicit drug abuse respectively.
- ▶ Primary outcomes will be abstinence and reduction in frequency and amount of use of alcohol and drugs.

Methods cont'd-Inclusion and exclusion

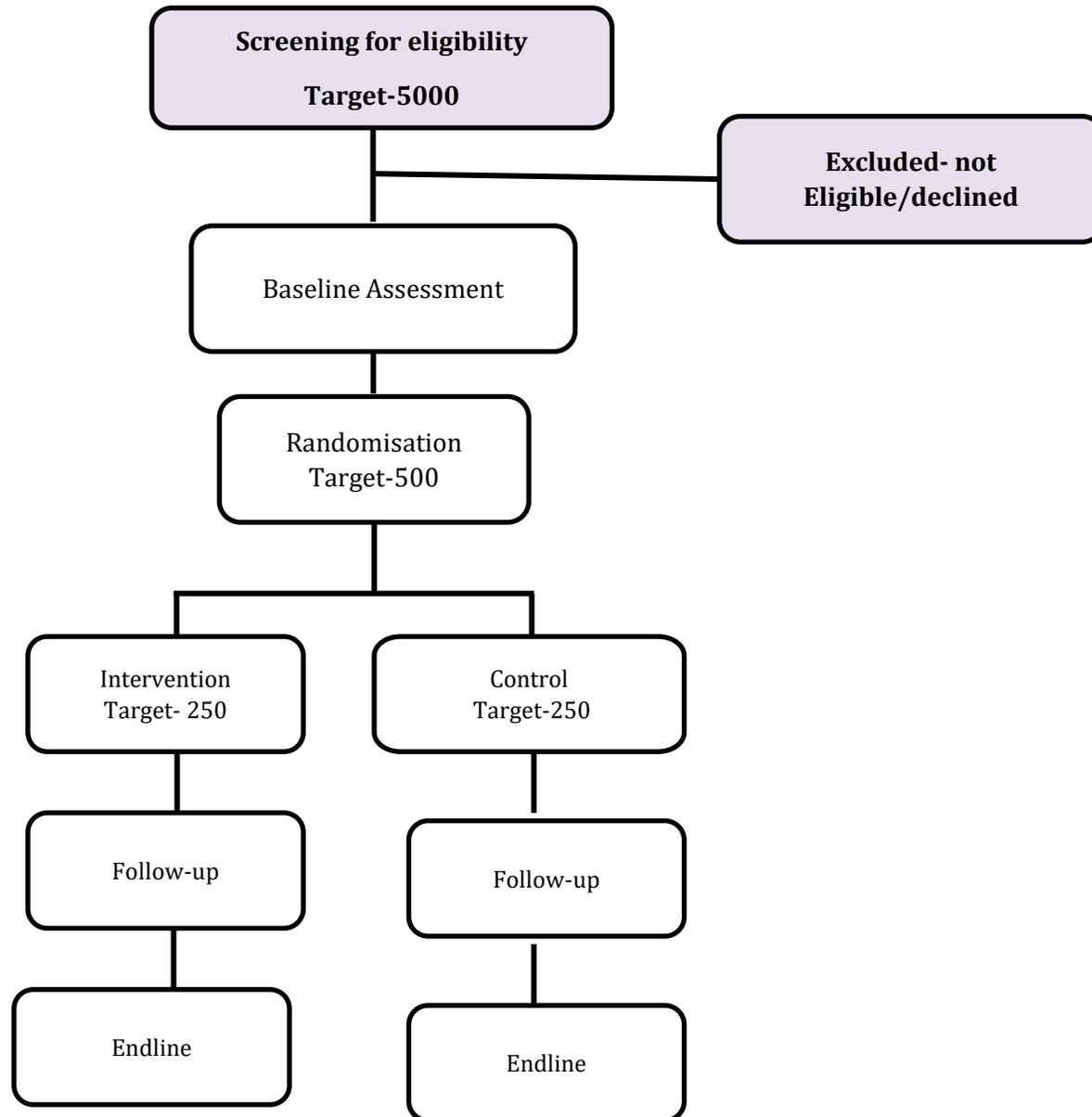
▶ Inclusion

- ▶ **Prevalence study:** Any student aged 18 - 24 years at any level of education from the selected universities
- ▶ **WEBSA intervention:** Any person aged 18 - 24 years at any level of education from the selected universities with ASUD problem based on AUDIT score of 8 and above or DUDIT score of 6 and above

▶ Exclusion

- ▶ **Prevalence study:** Doesn't consent
- ▶ **Websa Intervention:** On treatment

Screening and intervention process



Intervention

- i. Secure login details for users to a Platform with user friendly reading materials against substance use and alcohol accessible through students' phone web browsers or computers.
- ii. A web-based messaging platform where users can reach out to counsellors in case the materials are difficult to understand.
- iii. Email reminders will be sent to all especially those who may not be using the shared material routinely.
- iv. Dashboard for the data manager who will remotely monitor material use by each of the individual users.
- v. Participants with difficulty accessing or understanding the material will be advised to talk to the counsellors who will be online much of the day
- vi. The counsellors will make weekly follow-ups to check on the progress. However, the application on the participants' phones will be able to collect information on progress weekly. The counsellors The counsellors will follow-up on those whose details show queries on fidelity to the rules of intervention or will have failed to send the update on the progress.

Key outcome variables

- ▶ Having ASUD
- ▶ Alcohol/drug dependence (more severe form of ASUD)
- ▶ Global Functioning (Mental, Physical and Social functioning)
- ▶ Quality of Life
- ▶ DUDIT/AUDIT score
- ▶ Experience of depression and ASUD related outcomes

Data analysis

- ▶ Alcohol and substance use practices will be compared between intervention and control areas at each of 3 follow-up stages- (monthly) following intention-to-treat mode-T-tests and chi-sq tests to be used
- ▶ Difference in difference multivariable analysis techniques will be applied to assess factors associated with the difference between intervention and control groups. There will be interim analyses at end of month 1 and month 2 before the final end line analysis.
- ▶ Other perspectives in analysis will be explored. These include using multilevel mixed effects models with an intention-to-treat aspect. We expect clustering by halls of residence and Universities and thus the importance of mixed effects analysis

Ethical considerations

- ▶ Informed consent
- ▶ Approvals-IRB and NCST
- ▶ confidentiality

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