A study to compare the knowledge of school students before and after seeing a media campaign about the health risks of chewing khat

Submission date	Recruitment status	Prospectively registered
30/10/2024	No longer recruiting	Protocol
Registration date	Overall study status	Statistical analysis plan
06/11/2024	Completed	Results
Last Edited	2 2	Individual participant data
11/12/2024		[X] Record updated in last year

Plain English summary of protocol

Background and study aims

Khat is a green leaf with amphetamine effects commonly chewed in the Khat Belt region and the southern Arabian Peninsula. It is well-established in the literature that habitual khat chewing is associated with negative impacts on oral, general, and mental health. In the past, khat chewing was regulated by social norms, including the expectation that chewers should be over 18 years old and that khat chewing should be practiced after completing daily work. However, over the past 20 years, this behavior has spiralled out of control, with even school children engaging in khat chewing. It is well established that health-related risk behaviours begin in or before adolescence and schools have been used as venues for prevention risk behaviours, e.g., tobacco. Therefore, this study's main aim was to evaluate the effectiveness of an awareness programme on the adverse health risks of khat chewing (AHRKC) among secondary school students. In addition, the study aimed to explore the variables associated with post-intervention awareness.

Who can participate?

Students aged 15-22 years were included in the study if they attended public secondary schools in Aden City, were registered in the second level of study for the 2013/2014 academic year, had resided in Aden for at least the last 2 years, were willing to participate and be consented, and were of Yemeni nationality. Students with special needs were excluded due to a lack of funds to support their participation, as were those of non-Yemeni nationality.

What does the study involve?

Students are allocated to one of the groups of the study (intervention or control group). Both groups at the baseline phase filled out the same questionnaire about the awareness of the impact of khat chewing and data about participants was obtained.

The intervention started immediately after the baseline measurements. The intervention was conducted among the intervention group for a 3-month anti-khat campaign, highlighting the harm associated with khat chewing and involving an educational programme (lectures and seminars) and printed mass media (billboards, posters, brochures, and wall magazines). As there were no TV facilities in Aden schools, broadcasts were conducted using documentary films and motion pictures that interpreted factual material for educational or entertainment purposes. In

addition, announcements were made during morning assemblies. There were four billboards, 13 posters, two types of brochures (one for males, the other for females), and various wall magazines in the intervention schools delivering messages about the harmful effects of khat chewing. A documentary movie was produced using the data show technique to substitute for TV in schools without such facilities. Students were required to collect information about the khat plant from the internet to be displayed in the wall magazines and presented during the morning assembly. Additionally, a specialist in public health delivered an educational programme consisting of lectures and seminars. Each educational session lasted approximately 35 minutes and involved a PowerPoint presentation using the data show technique. Both groups were evaluated after 3 months regarding their awareness of khat chewing impacts on health using the same questionnaire used in the baseline phase.

What are the possible benefits and risks of participating?

All groups receive educational awareness about the adverse impact of khat on health. At the conclusion of the study, all intervention materials and sessions were delivered to control groups if they wished to benefit and to ensure ethical compliance. By taking part in this study there are no risks of physical injury or harm. The intervention consists of questionnaires that guarantee the confidentiality of the information obtained and all the guidelines of the Helsinki Declaration were followed.

Where is the study run from?

The study is run by the University of Aden and takes place in four public schools located in Khur-Maksar, Shaikh Outhman Al-Mualla and Al-Mansura in Aden, Yemen.

When is the study starting and how long is it expected to run for? January 2012 to December 2024

Who is funding the study? Investigator initiated and funded

Who is the main contact? Saba Kassim, skassim@taibahu.edu.sa

Contact information

Type(s)

Public, Scientific, Principal investigator

Contact name

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Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

Nil known

Study information

Scientific Title

Impact of mass media education campaign on school students' awareness of khat chewing adverse health risks: a pre-post experimental study in Aden, Yemen

Acronym

AHRKC

Study objectives

It is hypothesized that implementing a mass media education campaign would enhance school students' awareness of khat chewing's adverse health risks (AHRKC) compared to students in the control group and that this awareness would be associated with sociodemographic characteristics and awareness of AHRKC.

Ethics approval required

Ethics approval required

Ethics approval(s)

approved 26/01/2013, University of Aden Faculty of Medicine and Health Sciences Ethical Approval Committee (PO Box 878, Crater, Aden, 8916162, Yemen; + 967 (0)2 236625 / 231763; info@adenmedicalfaculty.com), ref: 20131026

Study design

Multicentered interventional double-blinded randomized controlled trial

Primary study design

Interventional

Study type(s)

Prevention, Quality of life

Health condition(s) or problem(s) studied

Prevention of khat chewing among school children

Interventions

Mass media education campaign on school students' awareness of khat chewing adverse health risks

This study was conducted in the city of Aden, Yemen. Four of the eight districts in Aden were randomly selected using a simple multistage sampling technique involving a lottery box. Subsequently, two of these four districts were randomly chosen to serve as intervention sites, while the remaining two were designated as control sites. As a result, Khur-Maksar and Shaikh Outhman were selected as the intervention districts, and Al-Mualla and Al-Mansura were selected as the control districts. The final step involved selecting students from both intervention and control schools.

At the beginning of the study both groups answer self-administered questionnaires about the adverse impacts of khat chewing on health. The intervention group for the subsequent three months are exposed to an awareness campaign about the impacts of khat. By the end of the 3 months both groups were assessed again about awareness of khat impacts using the same baseline questionnaire.

Intervention Type

Other

Primary outcome(s)

Awareness of the adverse effects of khat chewing, measured using a relevant questionnaire that was used by the International Tobacco Control at baseline and after 3 months

Key secondary outcome(s))

Factors associated with enhanced awareness of adverse health effects of khat chewing, measured using a relevant questionnaire that was used by the International Tobacco Control at baseline and after 3 months

Completion date

01/12/2024

Eligibility

Key inclusion criteria

- 1. Students attending public secondary schools in Aden City
- 2. Registered in the second level of study for the 2013/2014 academic year
- 3. Resided in Aden for at least the last 2 years
- 4. Yemeni nationality

Participant type(s)

Learner/student

Healthy volunteers allowed

No

Age group

Child

Lower age limit

15 years

Upper age limit

22 years

Sex

All

Total final enrolment

427

Key exclusion criteria

- 1. Students with special needs were excluded due to lack of funds to support their participation
- 2. Non-Yemeni nationality
- 3. Refused to be consented

Date of first enrolment

01/02/2013

Date of final enrolment

01/05/2013

Locations

Countries of recruitment

Yemen

Study participating centre Four schools in Aden city, Yemen

Aden Yemen 8916162

Sponsor information

Organisation

University of Aden

ROR

https://ror.org/02w043707

Funder(s)

Funder type

Other

Funder Name

Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan

The dataset generated during the current study will be available upon request from the principal investigator Dr Mohamed AlKaf (msakaff@gmail.com)

IPD sharing plan summary

Available on request

Study outputs

Output type Details Date created Date added Peer reviewed? Patient-facing?

Participant information sheet Participant information sheet 11/11/2025 11/11/2025 No Yes