Khat use and psychotic symptoms in a rural khat growing population in Kenya: A household survey

Why was the study done?

Khat has been grown and consumed in Kenya for a long time. Previous studies carried out on khat have not been exhaustive and lack scientific agreement on the effects of khat chewing globally and in Kenya. A previous 2014 MOH review of published work on adverse effects of khat revealed a scarcity of research with regard to health and social effects of long term use of khat. Following this, the Adhoc Parliamentary Committee on khat (*miraa*) commissioned KEMRI to carry out a study to shed light on the issue. Findings of this study were to inform stakeholders in developing strategies in the appropriate fields. The counties and the National government can utilize the information to develop appropriate guidelines and policies targeting the khat users and the larger community. The findings are also meant to help identify potential risks of regular Khat use, and promote harm-reduction strategies. It is also recognized that health professionals require greater awareness of khat use and any related health problems for better management.

What was done?

This recently published study was conducted in 2015. We selected 831 study participants residing in Embu and Meru County and included both adults and children. In the overall study we interviewed and assessed for different health parameters including: oral and dental health, sexual and reproductive health, mental health, etc. In addition, detailed interviews on schooling and other social parameters were assessed. In the current publication, we focus on mental health findings specifically psychotic symptoms subsequent publications will highlight other health parameters.

How was it done?

In the study we specifically identified areas where khat was typically grown. We then mapped out these areas in order to sample a representative picture of the area. Upon arrival in the selected villages, the research team visited local administrators (sub-chiefs, village elders) and briefed them on the study nature and goals. The village elders were key in identifying the selected households. The village elder introduced the study team and briefly explained the purpose of the visits. The interviews only commenced once informed consent/assent had been obtained from the study participants. This was done within the household at a quiet room or space and in private. In the occasion a household member was found to be unavailable during the first visit, at least 2 follow up visits on two separate occasions were made to maximize on response. Whenever there was complete failure to get the selected household, it was captured as a non-response. We interviewed study participants using questionnaires to gather information on psychotic symptoms, substance use, social, economic and personal information such as age, sex, marital status and family size. Psychotic symptoms assessed included: hallucinations (experiencing sensation that is not real or not experienced by others around us such as hearing voices, seeing persons who are not really there), strange experiences (experiencing a phenomenon that others would report to be strange), mania/hypomania(a mood that is abnormally elevated or elated without any good reason), thought control (feeling like ones ideas are being controlled/operated by an outside force) and paranoia(unjustified suspicion and mistrust of people or situations).

What was found?

Nearly half the study participants interviewed had chewed khat in their lifetime. For current use of khat, 34% of the people interviewed, reported to have chewed khat in the past 3 months. More males compared to females chewed khat. Similar to the preliminary report, we found that psychotic symptoms occurred more frequently among khat users compared to non khat users. Specifically, strange experiences and hallucinations were the psychotic symptoms that were notably higher. In addition to khat, alcohol and cigarette smoking were the substances predominantly used in the population. Khat chewers tended to have higher use of the different substances compared to non-users.

What it means?

As this was a snap shot kind of study it cannot conclude whether khat causes psychosis or whether people who have psychosis are more likely to use khat in this particular sample. The study however, does point towards a greater tendency to report psychotic symptoms among khat users. Therefore, there is an urgent need for additional studies to further investigate the link.

Dr. Linnet Ongeri,
Senior Research Officer,
Centre for Clinical Research,
Kenya Medical Research Institute.