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Alcohol Use Among Khat (Catha) Chewers in Kenya

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Summary

Among one hundred randomly selected outpatients at the Meru District Hospital in Kenya, 29 (28 men and 1 woman) were Khat chewers. Six of these were 'heavy' and 23 'moderate' users. Twenty out of 29 Khat chewers also used alcohol heavily. Consequences of this joint misuse of two potentially addictive drugs are discussed.

Introduction

For centuries, people of Eastern Africa and the Arabian peninsula have been using 'khat' (*Catha edulis*) mainly for its psychostimulant and socializing effects. The majority of the users are followers of Islam and are forbidden to smoke bhang (cannabis) or drink alcohol. However, khat chewing is not contraindicated on religious grounds and hence its popularity among other African and Asian Muslim countries, and here in Kenya. Again, in Kenya khat is chewed predominantly in the North-Eastern and Coast provinces where many Muslims live. The Meru district of Kenya borders khat chewing areas of the Republic and is the major khat growing area in Eastern Africa. Meru people are mainly Christians and are allowed to drink alcohol unlike the Muslims. Thus, Meru district in Kenya provides a unique environment where simultaneous khat and alcohol use can be studied.

Cathine (Δ nor-pseudoephedrine or DNE), (-)-cathinone and cathedulin are the main constituents of green catha leaves and shoots which are grown on the eastern slopes of Mount Kenya.¹ Perhaps the best quality of khat is grown in Kenya,

and it is exported to neighbouring African and Arab countries in large quantities. Cathinone is 7-10 times more potent than DNE, has amphetamine-like effects and is a mild CNS stimulant. Security guards, long distance lorry drivers and others who wish to keep awake at night or work long hours without fatigue very often chew khat. An association between excessive khat use and amphetamine-like psychosis has been reported.² However, mild or moderate khat use does not seem to cause psychosis.

A survey among khat chewers was conducted to find out the extent of alcohol use as many subjects were suspected to be misusing both drugs. We report the findings of our study below.

Methods and Subjects

One hundred patients in the age group 12-65 years were randomly selected from the general outpatient clinic queues at the Meru district hospital over a period of a fortnight in February 1984. All these subjects were waiting to see a clinical officer or a doctor for some physical disorder in these 'filter' clinics. Thus, the sample was drawn from a general hospital outpatient population. This is a primary health care facility. They were informed of the

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purpose of the exercise and all of them willingly consented to participate.

Information on all participants was collected on a semi-structured research protocol. It elicited details of demographic data, patterns and extent of drug use and medical history. Mental status assessment was conducted in terms of a standard psychiatric interview by one of us (OEO). All study subjects underwent a physical examination and were subjected to laboratory investigations, if indicated. OEO was assisted in collecting laboratory samples, obtaining demographic data and doing physical examinations by a doctor. The psychiatric interview took about 30 minutes. The data were analysed manually by a statistician.

For the purpose of this study, the following definitions were used:

(1) *Khat user*: is one who chewed the catha leaves at least once in 30 days preceding the interview. They were further subdivided into (a) heavy and (b) moderate users. Heavy users were those who chewed two or more 'kilos'* of khat daily for 10 or more days in one month. Moderate users took less than 2 'kilos' at least once a week.

(2) *Alcohol use*: the amount of alcohol consumed by the participant was measured in 'units of alcohol', one unit being equivalent to an intake of one-half litre of beer or *busaa* or a single whisky or *chang'aa*. (The *busaa* is locally fermented beer with a strength equivalent to commercial beers, while *chang'aa* is a locally distilled spirit with a strength equivalent to whisky.) Heavy drinkers were those consuming 6 or more units of alcohol 2-3 times per week. Others taking less than this were considered as social drinkers.

Results

Out of our sample of 100 patients (50 males and 50 females) 29 were *khat* chewers, 28 of these being males and only one was a woman aged 22 years. Among the 29 chewers, 27 were below the age of 49 years. There was no significant age difference between chewers and non-chewers. Heavy *khat* chewers were 6 and the remaining 23 were considered as moderate chewers.

Twenty of the 29 *khat* chewers also drank alcohol, 12 drank heavily and eight were social drinkers (see Table 2). Thus there was statistically significant

relationship between degree of *khat* chewing and degree of alcohol abuse ($p < .001$).

Table 1. Age Distribution

Age	Khat users	Non-users	Total (%)
Up to 19 years	6	4	10
20-49	21	56	77
50+	2	11	13
TOTAL	29*	71	100

$\chi^2 = 5.93$ d.f. = 2, $p > .05$.

* 28 males and 1 female (age 22 years).

Table 2. Relationship between Alcohol and Khat Use by Categories

Alcohol use	Khat users	Non-khat users
Nil	9(31.0%)	56(78.9%)
Moderate	8(27.6%)	9(12.7%)
Heavy	12(41.4%)	6(8.5%)
TOTAL	29(100.0%)	71(100.0%)

$\chi^2 = 22.34$, d.f. = 2, $p < .001$.

Discussion

Although *khat* has been used for centuries by Africans and Arabs, hardly any documented reports on *khat* chewing and simultaneous alcohol abuse appear in the literature.

Yambo & Acuda³ recently established a strong link between *khat* and alcohol abuse in the Kenyan youth. In older times, *khat* was mainly used on ceremonial occasions, predominantly by men but with recent social upheavals and changes in lifestyles after independence, more young men seem to have taken to *khat* chewing. In any case, *khat* chewing has always been a male prerogative. In this sample 96% of the chewers were males and 93% of the latter were under 37 years.

Meru district of Kenya is perhaps one of the few places on this continent where simultaneous use of alcohol and *khat* is prevalent. As Islam condemns alcohol use, such a study would not be feasible in heavy *khat* chewing areas such as Somalia and Yemen. Therefore, findings of this study are significant as they highlight polydrug use in a rural population. Another fact which needs to be considered is the opposite pharmacological action of these two drugs, ethanol and (-)-cathinone. Besides its socializing properties, *khat* is used for its

* A 'kilo' of *khat* is the commercial retail exchange unit. It is not related to the metric measures of kilogram.

psychostimulant action and anorexic effects especially by people working long hours. Heavy chewers need to use alcohol to counteract the stimulating effect and sleeplessness caused by (-)-cathinone when the long hours of work are over. Thus we have a group of young people who use khat to remain awake, increase their productivity or feel 'high' during the day and consume alcohol when they want to rest or to calm their nerves and get some sleep. Consequently, this population might be at risk of complications of both potentially dangerous drugs.

African governments have been ambivalent about banning khat use. During colonial times Kenya had restricted cultivation and trade in khat for medical or health reasons which have never been scientifically substantiated. Only recently Somalia has ventured to prohibit khat use for religious and socio-economic reasons.⁴ Apart from sporadic reports of suspected causal relationship between heavy khat use and psychosis no solid medical evidence has yet supported khat as the cause of any definite mental disorder. Often newspapers and politicians in this part of Africa debate the supposed

'harmful' effects of khat on human health and society and urge the rulers to totally ban the sale and cultivation of khat, whereas very little is suggested about alcohol—a potentially more dangerous drug.

Long term studies are needed to evaluate the possible combined effects and ill-effects of these two drugs.

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