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The habit of chewing Khat (Catha edulis) to experience its euphorizing and psychostimulant effects has prevailed for centuries among the inhabitants of the Horn of Africa and the Arabian peninsula. In recent years, air transport has removed the major obstacle to the diffusion of Khat, its perishableness. Khat is now air-freighted to Europe and we were able to buy some in Rome. We report the results of interviews with 20 members of the Somali community in Rome, who had continued their habit of chewing Khat whilst abroad. They asserted that they gathered together whenever possible, but preferably at weekends, to chew moderate quantities of Khat (one bundle, about 400 g). The customary habit of drinking tea or other soft drinks containing methylxantines during Khat sessions was maintained and very few subjects admitted drinking alcohol. In this small study sample, Khat chewing still seems to be a social event, as it is in Somalia.

Key words: Khat; chewing; Acculturation; Somalia; Italy

# Introduction

Chewing Khat (Catha edulis) is a widespread habit in some regions of the Horn of Africa and the Arabian peninsula. The pharmacological basis of this habit is the capacity of Khat to produce subjective effects, such as euphoria and elation, experienced by the consumer as rewarding. Because these subjective effects are associated with central effects, such as anorexia and insomnia, and peripheral effects, such as increased blood pressure, typical of psychomotor stimulants, Khat has been classified as an amphetamine-like drug (For recent reviews, see [1,2]). This view has been substantially confirmed by evidence that, both structurally and pharmacologically, the main active principles of Khat, cathinone and cathine, belong to the amphetamine class [1,2].

Nevertheless, pharmacological effects of Khat chewing do not alone explain why the habit is so popular. Khat is a social drug, usually consumed during parties that are an important part of community life and the social role of a Khat party is evident in its complex ritual, which is so typical of the local culture [3,4]. Khat taking behavior thus depends not only on the reinforcing psychostimulant properties of Khat, but also on deeply rooted cultural factors.

In its six or seven century long history the Khat habit has spread very little from Harar, the Ethiopian region where Khat is supposed to have originated [4]. Its diffusion may have been hindered by cultural differences; it is exceptional, for instance, to find Europeans who indulge in the Khat habit. However, the main drawback is undoubtedly that Khat must be consumed as fresh as possible and is usually unacceptable if harvested more than four days before chewing. We now know that this is because cathinone, the most potent active principle of Khat, is chemically unstable [5].

However, today, perishable goods can be quickly transported by air and in the last decade the Khat habit seems to have followed the stream of migration moving away from East Africa and the Arabian peninsula. Several 256

recent case reports describe the medical consequences of Khat ingestion in Great Britain [6-9] and the USA [10]. Having studied Khat chewing in Somalia [3,11,12], we were very interested to know whether this habit was maintained by Somalis living in Rome. Of the immigrant communities from developing countries, the Somali community was the most suitable for such a study. They are well accepted by the authorities and integrated with the local population; as a former Italian colony Somalia keeps close links with Italy, through an array of economic and educational programs that bring Somalis to spend time here.

## Method

Unless seeking help, people are usually unwilling to talk about their recreational use of psychotropic drugs, and obviously, even less willing when they are living in a foreign country. We did not therefore even attempt to study the epidemiology of Khat use in the Somali community in Rome, but, more pragmatically, investigated whether Khat is used in this community and how. To obtain this information, two of us (A.A.B. and A.F.A.), Somali physicians, contacted their acquaintances in the Somali community who had kept up the Khat chewing habit in Italy. Twenty of the Somali approached agreed to complete a questionnaire designed to obtain the following informations: (1) the demographic characteristics of the subjects: (2) medical drugs (such as analgesics) or recreational substances (Khat, tobacco, wine, beer, spirits) taken in the last year, or month, or week: (3) their previous pattern of Khat use in Somalia: (4) their pattern of Khat use in Rome: (5) the cost of Khat in Rome; (6) their opinion about the provenance of Khat on sale in Rome: (7) their ethical opinion on Khat. The only attempt we made to check their assertions regarding Khat consumption here was to see whether Khat was really available in Rome.

# Results

Table I shows the demographic characteris-

**Table I.** Background characteristics of Khat users in Rome. Age (years): 35 (range: 18-46). Sex: two female and 18 male.

	No.	%
Education		
Elementary school	2	10
Secondary education	7	35
High education	11	55
Occupation		
Unemployed immigrant	2	10
Student	3	15
Clerical	3	15
Professional	10	50
Business	2	10
Residence in Italy		
Period (months): 31.7 (range: 1		
Reason:		
Study	10	50
Work	7	35
Health care	1	5
Immigration	2	10

tics of the 20 subjects entered in the study. Most of them were educated people living in Italy temporarily for business reasons or to improve their professional competence. Only two subjects were immigrants and had a low educational level. All 20 subjects had taken Khat during their stay in Italy, thus continuing the habit they had adhered to in Somalia (Table II). The majority were smokers, whereas only three subjects had indulged in alcoholic beverages during the week preceding the interview. When asked for their opinion on the Khat habit, most of the subjects answered that Khat was a harmless stimulant like tea or coffee (Table III).

 Table II.
 Drug use declared in the previous year, month and week.

	Year		Month		Wee	Week		ł
	No.	%	No.	%	No.	%	No.	%
 Khat	3	15	0	0	17	85	20	100
Alcohol	1	5	1	5	3	15	5	25
Tobacco	1	5	0	0	15	75	16	80

Table III. Opinions on Khat. Subjects were considered to have a positive opinion on Khat when they confirmed the statement: Khat is a harmless stimulant like tea or coffee. The opposite statement was: Khat is a drug that is dangerous for the individual and the community.

	No.	%
Positive	14	70
Negative	5	25
Negative Uncertain	1	5

The subjects interviewed chewed an average of one bundle (called marduuf, in Somalia and weighing about 400 g) per session, whenever possible, although preferably during the weekend, and with friends rather than alone (Table IV). The customary soft drinks containing methylxanthines (tea and cola) were also drunk during the party. Alcoholic beverages were also taken by the three subjects who admitted to consuming alcohol during the week preceding the interview.

According to the consumers, the average cost of one marduuf was 60 000 Italian liras (approx. 50 US dollars). In their opinion, Khat was shipped to Rome from Kenya (direct or via London), North Yemen, or Israel. We confirmed that Khat was sold in Rome at the price stated by the consumers interviewed.

**Table IV.** Modalities of Khat consumption in Rome. Quantity per session: 1 bundle of approx. 400 g (range 1/3 - 2 bundles).

	No.	%
Temporal pattern		
Only at weekend	7	35
Whenever possible	13	65
Social pattern		
Only alone	1	5
Only with friends	12	60
Both alone and with friends	7	35
Beverages drunk with Khat		
Soft drinks alone	17	85
Alcohol alone	1	5
Both soft drinks and alcohol	2	10

#### Discussion

As far as we know, this is the first report about the use of Khat in Italy. Apart from the voluntary assertions of Khat consumers, the ease with which Khat could be bought on the street by contacting the right people convinced us of the existence of Khat trade and consumption in Rome. We did not consider it our responsibility to trace back the entry routes of Khat and did not try to check rumors that it passed the customs at Rome airport as 'floral stuff'. The subjects reported that Khat consumed in Italy is harvested in Kenya or in North Yemen, which are the most important producers of Khat. They reported that Khat may also come to Italy from Israel, a country into which Khat has been imported by refugees from Yemen and where now it 'is readily available, inexpensive and sold without restrictions' [13]. Unlike cathinone, cathine, is not illegal in Italy. Nevertheless, very few of the people we contacted were willing to admit their habit of chewing Khat. One reason of their reticence was fear that our study might result in Khat consumption being banned in Italy.

Besides Great Britain and U.S.A., Khat has now reached Italy. Since concern has been expresed about the economic and health consequences of Khat diffusion [14,15], our study might result in further restraints on Khat trade. We do not however agree with a 'zero tolerance' policy on Khat and think that, before taking steps to limit the trade of Khat, it is important to know to what extent its social role in countries where its use is endemic, is continued when it is consumed abroad. This important aspect has been stressed in a case report from USA, in which the authors speculated that the psychotic episode observed was due to consumption of Khat 'in a setting lacking social sanction and support' [10]. Our subjects appeared to use the same setting for taking Khat which they used in Somalia, gathering with compatriots for chewing sessions. The Khat party has thus remained a social event and is one way for the participants to keep their ethnic identity. In addition, few of the subjects regarded Khat chewing as drug abuse. This suggests that in these subjects, Khat chewing was a recreational habit, lacking the compulsive characteristics of drug addiction. On the other hand, it would be most interesting to know whether Khat chewing habit might restrain the diffusion of the abuse of more dangerous drugs. We did not attempt to find out whether the people interviewed also abused illegal drugs related or not to Khat, feeling that this very personal question would have further increased their reluctance to take part in the study. We did, however, ask if they drank alcohol and the majority did not. Of course, this does not allow us to conclude that Khat chewing impedes the spread of alcohol consumption in the Somali community in Rome. However, it is interesting to note that in Rome, Khat costs far more than alcoholic drinks and nearly as much as a dose of cocaine. In spite of this, Khat has buyers in Rome, suggesting that some people, like those we interviewed, may prefer Khat as a recreational drug.

Since cathinone resembles cocaine as a positive reinforcer, it has been suggested that Khat could in theory have a high potential for abuse [15]. We think that this speculation is untenable. First of all, the taste of Khat leaves is unpleasant enough to discourage most potential abusers. Secondly, the bulk volume of Khat limits the ingestion of cathinone and thus its psychotropic effects. Thirdly, cathinone is chemically unstable, difficult to synthesize, and hence unsuitable for marketing. Khat is, therefore, unlikely to follow the fate of Coca leaves, which were refused in Europe for chewing purposes, but provided their active principle for recurrent epidemics of abuse. The strength of an acquired habit may play a greater role than Khat's efficiency as a positive reinforcer regarding the preference for Khat over more powerful psychotropic drugs. Of course, adding the risk of legal prosecution to the high economic cost might induce people to abstain from Khat; but this does not mean that they will abstain from other psychotropic drugs.

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