## News

## Khat chewing in Yemen: turning over a new leaf

Khat chewing is on the rise in Yemen, raising concerns about the health and social consequences. Leen Al-Mugahed reports.

Among the many products found in the bustling markets of the Yemeni capital Sana'a are bundles of stripped branches covered by scraps of cloth or plastic, put there to preserve the freshness of the tender oval leaves, known locally as *khat*. Grown in the surrounding highland towns, khat is picked at dawn from groves of the tall-growing *Catha edulis* plant and by midday has found a buyer who that same afternoon will devote three to four hours to its mastication.

Khat chewing is a practice that dates back thousands of years in the Horn of Africa and the Arabian Peninsula where the khat plant is widely cultivated and known by a variety of names, including *qaat* and *jaad* in Somalia, and *chat* in Ethiopia. The chewing of khat leaves releases chemicals structurally related to amphetamines, which give the chewer a mild high that some say is comparable to drinking strong coffee.

There is some debate about where the plant originated, but wherever it came from it has certainly been a part of Yemeni culture for a very long time. In the words of Qahtan Al-Asbahi, implementation officer for the National Programme for Integrating Water Resources in Yemen: "There is no social event [in Yemen] without khat."

Sitting in animated groups, men and, increasingly, women (though never men and women together – that being the tradition in this Islamic country) talk and laugh while plucking the tender leaves from the branches and tucking them into the cheek, eventually forming a wad that can bulge almost to the size of a tennis ball.

It is estimated that up to 90% of adult males chew khat three to four hours daily in Yemen. The number for females may be as high as 50% or even higher as young women take up the habit; a recent study for the World Bank estimated that 73% of women in Yemen chew the khat leaf more or less frequently. Meanwhile, a staggering 15–20% of children under the age of 12 are also daily consumers.



Teenage boy in Sana'a chewing khat.

The fact that khat is not considered by the World Health Organization (WHO) to be a "seriously addictive drug", does not mean that its consumption is without physiological repercussions. "Khat chewers experience euphoria followed by depression, while people who are genetically predisposed are extremely vulnerable to psychosis," says Dr A A Gunaid, Faculty of Medicine and Health Sciences, University of Sana'a. Gunaid also notes that there have been many cases of khat chewers experiencing persistent hallucinations. Khat can also affect sleep, leading to rebound effects such as late awakening,

decreased productivity and day-time sleepiness.

The effect of khat on the cardiovascular system is rather less dramatic, but increased heart rate and blood pressure are common side-effects, making khat very harmful for hypertensive patients. Meanwhile, according to a recent study, khat chewing during pregnancy results in lower birth-weights. Khat is also known to be excreted in breast milk, but no studies have been done so far on how this affects nursing babies.

For Jamal Al-Shammi, head of a Yemeni nongovernmental organization known as the Democratic School,

the deleterious effects of khat are not limited to the consumer's body. "Khat chewing has its negative effect on the family too," he says. "It breaks down immediate family ties. Men chew alone, women chew alone and children are eventually left alone to do as they please with no adult supervision." This is a picture confirmed by Om Mohammed [name changed], an upper-middle class woman with a high-school education who has been chewing khat for 15 years. Om says her husband goes out after lunch to chew and doesn't return until way after midnight. For her, khat chewing is way of breaking the monotony of the day and of getting together with friends. As for her children, Om says: "I don't go out until they have had lunch and I have checked their homework, then I leave them with the maid; it's only three or four hours."

There is considerable pressure to chew, says Al-Shammi, himself a non-chewer, and not chewing brings with it social exclusion. He cites other khat-related problems, notably the lengths to which people go to support their habit. "People are willing to do anything," he says. "They will lose their dignity and take bribes to afford the cost of khat. Meanwhile some families deprive their children of basic food needs such as meat and fruits to be able to buy khat." Up to 50% of household income is thought to be allocated to the daily khat requirement of the head of the household.

While khat takes its toll on Yemeni families, the economy is also affected. For WHO's Dr M Taghi Yasamy, regional adviser for Mental Health and Substance Abuse for the Eastern Mediterranean Region, that impact is obvious: "Khat chewing causes insomnia that leads to waking up late the next morning, going to work late and poor work performance. Meanwhile the time spent chewing khat (four to five hours daily) can be considered hours lost to work."

Khat also distorts an already fragile economy with farmers ripping out fruit trees and coffee plants to replace them with the more lucrative crop. Between 1970 and 2000, the area devoted to khat cultivation ballooned from 8000 to 103 000 hectares in Yemen. Nearly 60% of the land cultivated for cash crops is devoted to khat growing. And khat doesn't just push out other more desirable crops, it also sucks in



Khat leaves

water. According to Qahtan Al-Asbahi between 27–30% of Yemen's ground water goes into khat irrigation.

Given the problems khat poses, it's not surprising that there is a growing consensus in Yemeni society that something needs to change. President Ali Abdallah Salih has gone on the record on a number of occasions discouraging the use of khat, but so far no presidential decree has been passed banning its use. Exactly how change should come is the subject of much debate.

Few believe that an outright ban would work. "It is quite possible that khat will be replaced with something more harmful such as opiates, opium and heroin," says Yasamy, arguing that while 80% of chewers might quit, a hard core could start looking for alternatives.

For Yasamy change will come through greater public awareness. "The most vulnerable groups, such as women and children, could be targeted and educated on the side-effects of khat," Yasamy says, adding that over time it should be possible to stigmatize khat chewing in the same way that cigarette smoking has been stigmatized elsewhere.

One of the main challenges in weaning Yemen off khat is finding alternatives to fill the void that would be left, and for this, Yasamy says, Yemen should find its own solutions.

WHO's Office for the Eastern Mediterranean held a regional consultation in 2007 that advised that adopting hard measures against khat is not the solution as it might lead to replacement with more harmful drugs and patterns of use, but that it should be possible to contain its use. For example selling khat to children should be prohibited and its availability to adults should be limited to certain hours of the day.

According to Al-Shammi one indication that Yemen is perfectly capable of finding alternatives is the Children's Parliament, which holds session in the Yemeni Parliament building. The parliament, which was founded by Al-Shammi, was established in 2000 to allow children's views to be heard and discussed and takes a strong line on khat chewing. "In order to join the parliament the child is not allowed to chew khat at all and if found chewing it is immediately expelled."

The parliament is also working with the people of Makula village near Sana'a to prevent children from chewing khat, an initiative that came about because of an incident involving an 11-year-old boy who choked to death while playing soccer with a wad of khat in his mouth. "This incident caused a huge stir in the village," says Al-Shammi, "and was the basis of a request by the Children's Parliament for the government to implement previous recommendations forbidding children under the age of 17 to chew and to encourage villages to pass an unwritten law to prevent children from chewing."

Yasamy says: "We hope that national initiatives including the Children's Parliament can help Yemen to eventually turn over a new leaf to prevent the harmful health consequences of khat."