Further research required to determine link between khat consumption and driver impairment

We read with interest the recent paper by Eckersley et al. on khat use and driver impairment in Ethiopia. The paper highlighted the increasing concern about the association between khat use and traffic accidents with drivers using khat to stay awake and alert. However, much of the information provided was anecdotal and, as yet, there is no clear evidence of a causal relationship between the use of khat and traffic accidents.

Recent research we have undertaken in Melbourne, the capital city of Victoria, Australia, suggests that east African migrants have brought with them the habit of consuming khat while working to stay awake and alert. Through our observations and discussions we identified that east African taxi drivers in Melbourne currently use khat for this purpose.

The increase in migration to Australia from east Africa over the past two decades, together with improved transport facilities, have led to the importation and use of khat in Australia, predominantly by east African community members.² In Victoria, individuals with a licence and permit can import up to five kilograms of khat per month for personal use. Within east African migrant communities in Melbourne there is a community divide on the issue of khat use and its effects on khat users and their communities. Concerns have been raised by some east African community members that khat use has increased substantially and that it is leading to family breakdowns, economic hardship and health problems.3 To understand these issues further, we conducted an exploratory qualitative study with 29 members of Melbourne's east African communities; some of whom reported chewing khat and some of whom were opposed to khat use.4

Most of our khat-chewing participants reported that one of the main reasons for using the drug was to improve concentration while studying or working. Several participants worked as taxi drivers or had friends who drive taxis and admitted that they themselves or their friends chewed khat on the job to help them stay awake during their shift. However, in our open-ended interviews there was no mention, positive or negative, of the effect of khat consumption on an individual's ability to drive. Our research did not produce any evidence to suggest a causal relationship between the use of khat and driver impairment.

While some east Africans in Melbourne have reported concerns that khat consumption leads to health and social problems, data from our study suggest that the most significant negative effect of khat use was that it takes individuals, usually men, away from their families. Nonusers, 77% of whom were female, spoke extensively of male chewers spending long periods away from the home to chew khat with their friends. Indeed, women (mostly wives and daughters of khat users) were the main groups of people critical of khat use. Some of our participants reported relationship breakdowns that they attributed to khat, but this was most directly linked to the male being away from the home for extended periods, rather than any specific

Driving under the influence of drugs is thought to be a major contributor to road fatalities in Victoria. Currently in Melbourne, police conduct random drug tests on motor vehicle drivers as one way of reducing traffic-related accidents and harm. A recent study of driver fatalities in several states in Australia found that drugs other than alcohol were present in over a quarter of the 3398 fatalities.⁵ Saliva screening can be used to detect for the active components of cannabis, ecstasy, amphetamines and methamphetamines with some precision. However, to the best of our knowledge, there is no testing

specifically for khat undertaken anywhere in the world.

We believe more robust evidence is needed about the health and social effects of khat use in general to inform decisions regarding the legal status of khat. Specifically, in the light of the recent work of Eckersley et al., more work is required to establish whether or not khat consumption actually impairs driving ability. If it does cause driver impairment as suggested by Eckersley et al., a new testing regime may need to be developed, especially in relation to commercial drivers such as taxi drivers. Anecdotal reports to suggest that khat use is associated with impaired driving ability do not establish a causal relationship. Further research is thus required to determine whether khat consumption is at all related to motor vehicle accidents outside settings where the use of khat is commonplace.

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References

- Eckersley W, Salmon R, Gebru M. Khat, driver impairment and road traffic injuries: a view from Ethiopia. *Bull World Health Organ* 2010;88:235–6. doi:10.2471/BLT.09.067512 PMID:20428394
- Al-Habori M. The potential adverse effects of habitual use of Catha edulis (khat). Expert Opin Drug Saf 2005;4:1145–54. doi:10.1517/14740338.4.6.1145
 PMID:16255671
- Fitzgerald J. Khat: a literature review.
 Melbourne: Centre for Culture, Ethnicity and
 Health; 2009. Available from: http://www.ceh.
 org.au/downloads/Khat_report_FINAL.pdf
 [accessed 6 May 2010].
- Feigin A, Higgs P, Hellard M, Dietze P. Khat use and its impact on African communities in Melbourne. *Drug Alcohol Rev* 2009;28(suppl 1):A19.
- Drummer OH, Gerostamoulos D, Chu M, Swann P, Boorman M, Cairns I. Drugs in oral fluid in randomly selected drivers. *Forensic Sci Int* 2007;170:105–10. doi:10.1016/j. forsciint.2007.03.028 PMID:17658711

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