"If I wanted to get married tomorrow the first thing I would do is I would buy loads of Khat and sit down with my father in law and we would have a good chat. Because, I cannot buy a bottle of wine for him. He is a Muslim man."

Khat user
Summary:

The Community Pharmacy Khat pilot was extremely successful with 281 points of contact delivered through community pharmacies, in Birmingham B11, during the three month pilot.

There is a definite appetite for this type of service, with an average 58 Khat users per month having face to face interventions with a community pharmacist, in their community and 53 Khat users per month encouraged to seek help through the referral pathway.

Community pharmacies are a non threatening community environment. They provide an ideal venue to deliver healthcare support to hard to reach communities especially when dealing with sensitive issues such as Khat consumption. Khat has deep cultural meaning for the communities, in which use it recreationally. Whilst the pilot did not take part in ideal time in the year, December being an especially busy time in community pharmacy due the build up to the Christmas celebrations; the pilot clearly demonstrated a need within the target community for this type of easy to access healthcare support. Khat usage is a localised issue in Birmingham and community pharmacies in ‘B11’ clearly demonstrated the need for such a support service.

Introduction:

Khat, qat, or "edible kat" is a flowering plant that is native to the Horn of Africa and the Arabian Peninsula. Among the Somali and Yemeni communities from these areas, Khat chewing has a history as a social custom dating back thousands of years

Khat contains a monoamine alkald called cathinone, an amphetamine-like stimulant, which is said to cause excitement, loss of appetite, and euphoria. In 1980, the World Health Organization (WHO) classified it as a drug of abuse that can produce mild-to-moderate psychological dependence (less than tobacco or alcohol), although WHO does not consider Khat to be seriously addictive.
BME research carried by KIKIT-PWR (2012), in conjunction with Birmingham Public Health (2013) needs assessment identified increasing concern over Khat usage in the Birmingham B11 Somali an Yemeni community

Identified concerns included health related harm to the individual and problems with dysfunctional family units, similar to issues around alcohol misuse.

Birmingham Local Pharmaceutical Committee (BLPC) secured funding from Birmingham Public Health to organise an implement a pilot project to the ascertain the community acceptance of a brief intervention and harm minimisation advice through the Birmingham B11 community pharmacies.

BLPC commissioned Pathways to Recovery (PWR) to deliver a 3 month pilot project working in partnership with the community pharmacists within the Birmingham B11 area, to provide brief intervention and harm minimization advice ,with additional healthy lifestyle advice to Khat users.

As part of the pilot pharmacists were trained by KIKIT Pathways to Recovery.

The aim of the training was to increase knowledge and awareness and promote harm minimisation techniques as well as to develop a referral pathway into treatment for Khat users. The training prepared pharmacists and front line staff to provide information, advice and brief interventions to Khat users their carers and families.

Service users who required further assistance in combating their Khat addiction were referred for a full assessment into treatment to KIKIT-PWR.

**Context:**

July 2013 saw Theresa May, the Home Secretary, defy the advice of her own advisers on drugs and announced that Khat would be made a Class C drug as soon as possible.

The Advisory Council on the Misuse of Drugs (ACMD) had undertaken a rigorous, objective and robust study of all the available evidence of the potential harms of Khat to individuals, families and communities. “The ACMD concluded that there was insufficient evidence of harms associated with the use of Khat to justify control under the Misuse of Drugs Act.”

Khat use has however has been linked with several short and long term health risks. These include increased heart rate and blood pressure, depression, insomnia, nightmares, and oral cancer.

Khat is a green leafy plant that is cultivated throughout eastern Africa and Yemen. It has approximately 70 strands and is known by various names including qut , chaat, chat, kaht, tchat, qaad, jaad, miraa, Kus es Salahin, Tchaad, Tschut, Tohat, Tohai, Gat, Qat. There are more than 70 different types of Khat in the world including common varieties such as Miraa from Kenya; Hawadaaye from Somalia; Kaad Methani Sabir from Yemen; and Harari from Ethiopia.

Khat is a tall plant (2.7 to 3.7 m) and grows best at high elevations. Its tender twigs and leaves are harvested almost year-round and freshly harvested Khat is wrapped in leaves and exported by air to neighbouring African countries as well as the UK.
Khat is a natural herbal stimulant derived from *Catha Edulis* from the family celastraceae (moonseed) and has an effect similar to speed and amphetamines.

According to the Advisory Council on the Misuse of Drugs, more than 2,500 tonnes of Khat, worth about £13.8m, was imported by the UK in 2011/12, bringing in £2.8m of tax revenues and a typical bundle of Khat will cost about £5.

Historically Khat was revered by the Ancient Egyptians as a type of food that was capable of releasing humanity’s divinity. The Egyptians used the drug to trigger metamorphic transmutations – or become god-like. In the 13th Century Khat’s main medicinal use was for treatment of depression.

In modern times, one of the most common forms of drug use and abuse in many East African nations involves chewing parts of the Khat plant.

Khat use has increased steadily over the last 50 years and has become a problem of significant social and medical importance.

Because of its social acceptability and euphoriant effects, Khat chewing often plays a dominant role in celebrations, meetings, marriages, and other gatherings. Khat use even has been prevalent in the Somali military.

It has been issued to soldiers in their daily rations with the intention of inhibiting their need for food and sleep, as well as increasing their aggression. Khat leaves have been used in traditional medicine for the treatment of depression, fatigue, hunger, obesity, and gastric ulcers.

Khat can be chewed or drunk and the taste is extremely bitter and so chewing sessions which can last between 3-5 hours are always accompanied with sweet drinks and fluids. A typical user will chew between 100 to 200g of leaves and tender stems in one sitting.

During a chewing session, the mouth floods with saliva, compelling the user to swallow, which would limit the effects. So users take a sweet drink to take away bitterness, continue to chew for a while, and then send the residue to the cheeks.
Once chewed, the leaf is deposited in the cheeks and spat out hours later. It is similar to chewing tobacco where the plant is held in the cheek so that the stimulants are released.

Yemenis, Somalis, Ethiopians, Kenyans regularly chew Khat – the key benefit over other narcotics is that it's not expressly forbidden in the Quran.

Planes full of Khat plants fly in to Heathrow Airport every week which are then dispatched to parts of country with large East African populations and sold legally in newsagents and corner shops.

In many communities Khat fulfils a social function.

“If I wanted to get married tomorrow the first thing I would do is I would buy loads of Khat and sit down with my father in law and we would have a good chat. Because, I cannot buy a bottle of wine for him. He is a Muslim man.”

Excess of Khat chewing may lead to family disintegration. The chewer often shows irritability and spends much of the time away from home. These facts and the failure of sexual intercourse after chewing impact upon family life. For some countries where Khat imports account for the loss of a sizable portion of the national income, there may be a serious economic balance of payments problem.

**Effects:**

Khat is a mild stimulant and has a similar effect to amphetamines. It can take effect within 15 minutes, and chewing sessions can last several hours.

The subjective effects of Khat include euphoria, intellectual efficiency, and alertness in most subjects, while others report only dysphoria and mild sedation. The expression of these effects appears to be affected by environmental factors.

Experimental users report feeling wired – talkative but anxious. Some equate it to drinking 3 pints and 4 espressos.

The psychotropc effects of Khat are caused by the amphetamine-like compounds, of which cathine is found in highest concentration. The stimulating effects of Khat are somewhere between caffeine and amphetamine.

It is mild and not as potent as alcohol – hence its appeal. It is comparable to chewing coca leaves but about a thousand times milder.

Central nervous stimulation by Khat is manifested by euphoria, increased alertness, garrulousness, hyperactivity, excitement, aggressiveness, anxiety, elevated blood pressure, and manic behaviour. This period of stimulation lasts for approximately 3 hours.

A depressive phase, including insomnia, malaise, and a lack of concentration, almost always follows.
The effects begin to subside after about 90 minutes to 3 hours, but can last 24 hours.

True psychotic reactions occur with much less frequency than with amphetamines. This is most likely because of the self-limiting dose of Khat, which does not permit blood levels of the active compounds to rise high enough for toxic psychosis to occur. However, paranoid (typically persecutory) delusions have been seen.

**Dependence:**

Clinical studies show physical dependence to Khat does not occur, and the mental depression, sedation, and social separation that may follow withdrawal are a rebound phenomenon rather than an abstinence syndrome.

The psychic dependence that occurs is less than that with amphetamines but still suffices to make daily use of Khat the norm.

Development of tolerance to the effect of cathinone is more rapid than to that of amphetamine, and there is a cross-tolerance between the effects of cathinone and amphetamine.

So it is unclear whether Khat causes tolerance, physical dependency, addiction, or withdrawal, but long-term users have reported mild depression, nightmares, and trembling after ceasing to chew Khat.

A study in Butajira, Ethiopia, where Khat usage is legal, showed that 80% of chewers used Khat to gain a good level of concentration for prayer, facilitate contact with God, and prevent them from doing bad things. Muslim religion, smoking, and a low income showed strong association with daily Khat consumption.

A further study in Scotland of 16 to 25 year olds attending a rave showed that Khat is one of the drugs of choice when attending one of these dance events. A marketing leaflet states that Khat is said to produce “feelings of euphoria, increased libido, talkativity, excitement, loads of energy, and a big Khat smile.” Khat juice is made by blending the plant with water and lemon and filtering the resulting mixture and is sold by the glass or as a tincture (alcohol extracted active ingredients).
**Training Objectives:**

Learn the socio-cultural significance of Khat as a recreational drug.

1. Identify the signs and symptoms of Khat use in particular amongst newcomer communities.

**Outcomes of the Training:**

By the end of the workshops, participants will have:

1. Understood the cultural context in which Khat is misused.
2. Gained up-to-date knowledge of Khat, its effects and risks.
3. Considered why people use Khat.
4. Developed a working knowledge of harm minimisation methods.
5. Gained an understanding of how to deliver brief interventions and encourage engagement and referral into treatment.

**The training included:**

1. One evening training session. Delivered to one pharmacist and one member of support staff from each pharmacy in the BIRMINGHAM B11 postcode area.
2. An information leaflet on the dangers of Khat use and how to conduct a brief intervention.
3. A leaflet for the general public giving information and guidance on Khat, its risks and how to seek help.
4. Report template for date collection, recording the number of interventions and enquiries received.
5. Referral form (online)
Population Information

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<th>All usual residents</th>
<th>Males</th>
<th>Females</th>
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<td>Total B11</td>
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<td>22555</td>
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</table>

B11 Population by Ethnicity

- White English: 1.50%
- White Irish: 10%
- White Gypsy/Romany: 9.40%
- White Other: 3.70%
- Mixed White/Black Caribbean: 1.0%
- Mixed White/Black African: 4.70%
- Mixed White/Asian: 4.80%
- Mixed Other: 42.60%
- Indian: 8.20%
- Pakistani: 4.30%
- Bangladeshi: 2.70%
- Chinese: 4.30%
- Other Asian: 1%
- Black African: 1.50%
- Black Caribbean: 10%
- Black Other: 1.50%
- Arab: 1.50%
- Other: 0.10%
B11 Population By Religion

- Christian: 70%
- Buddhist: 6%
- Hindu: 6%
- Jewish: 14%
- Muslim: 2%
- Sikh: 0%
- No religion: 0%
- Other: 0%
- Not stated: 0%
Pharmacy Pilot Data

Pilot Activity %

- Leaflets: 63%
- Advice requests: 19%
- Brief Interventions (BI/HM): 18%

Pharmacy Pilot Activity by Post Code

- 4DG
- 4LP
- 1AA
- 3NQ
- 4BS
- 4DG
- 4LE
- 1RD
- 1LU
- 1ND

- Total Leaflets
- Total Advice Requests
- Total Brief Interventions
### Pilot Activity

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### Activity by B11 Post Code Sector & Population

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<th>BI/HM</th>
<th>Population</th>
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</tr>
<tr>
<td>Sector 4</td>
<td>52</td>
<td>24</td>
<td>24</td>
<td>12,295</td>
</tr>
</tbody>
</table>
Outcomes

All community pharmacies in the Birmingham B11 postcode area; the pilot target area, were invited to participate in the Khat pilot. The majority of community of pharmacies (71%) attended training and joined the pilot. 50% of community pharmacies went on to complete and deliver the three month pilot, although another three pharmacies did submit data for at least one or more months.

A total of 176 face to face interventions with Khat users, their families, friends or carer’s were achieved during the three month pilot. Each intervention provided an opportunity to present information on the dangers of Khat use. Of these 30% of users received brief intervention/harm minimisation advice. Each brief intervention engagement gave an opening for referral to further treatment support with KIKIT Pathways to Recovery which includes counselling and psychosocial interventions and possibly medical assisted recovery support by their local GP.

Feedback

A post pilot feedback questionnaire gave the opportunity to participating pharmacist to provide comments and insights into the delivery of the Khat project.

The majority of pharmacists had some knowledge of local Khat use, and were able to profile the client group. They however did not feel sufficiently confident in providing advice on the dangers and consequences of long term Khat use before having undertaken the Khat pilot training. Following training all felt confident in being able to discuss Khat use with clients.

Pharmacist sighted that larger posters and perhaps external ‘A’ boards and more in shop promotional/marketing material would have helped increase public engagement with the project. They did however believe that the window posters and till top leaflets helped break the ice and had encouraged clients to talk about the issues they had with Khat. Pharmacist also commented that it may have been beneficial to provide literature in Arabic and Somali the languages of the main target group. Especially since chewing Khat is a traditional cultural pastime, which many of the older generation take part in.

It was also thought that it would have been productive to have advertised in Masjids and Community Centre to raise awareness in the community that a Khat healthcare project was being delivered.

All the pharmacists that took part considered the Khat pilot, to be a success;

- Pharmacist and support staff had been up skilled and were now confident
in delivering brief interventions to Khat users.

- They believed the local community would benefit by the availability of targeted healthy lifestyle advice
- They believed their pharmacies would benefit by the enhanced engagement with the local community.

All the pharmacists said they would be interested in taking part future Khat initiatives.

As for process related issues; pharmacist found the online submission method easy to use, although the pilot coordinators did need to remind pharmacist to make the monthly submissions. (A resource/ time management issue for future project work to consider)

**Discussion**

The three month Khat pilot provided a snapshot opportunity to gauge the appetite for information and support with respect to Khat use. Khat although not currently legislated under the MDA is none the less a substance that can cause serious harm to those who consume it, especially those who use it on a regular and prolonged basis. The harm is not only limited to the consumer, but much like alcohol can have a profound effect on social interaction and family dynamics.

**Conclusion and Recommendations**

The pilot has given an opportunity to not only gauge public interest but also to assess the interest of pharmacists who are at the frontline of delivering healthy lifestyle advice.

Results for this short pilot indicate that there is significant interest both amongst the public and healthcare professionals. It remains to be seen how effective the interventions are.

There needs to be back up support for signposting Khat users into treatment services.

Ideally further study and follow up would help to quantify the impact of the brief interventions made by pharmacists.

The Khat pilot gives a good indication of the interest of the local community for health interventions directed at Khat use. In isolation there will not be any meaningful or long lasting outcomes. Resources need to be applied if the Khat use agenda is seen as a serious health risk and social issue.

Further study designed to elicit the opinion of Khat users and the local community would help to refine the design and delivery of Khat use intervention.
services.

The local community pharmacy network has proved to be an effective vehicle for delivering health interventions. With effective resourcing, pharmacies have shown that they can deliver targeted meaningful interventions direct to the heart of local communities.

Public engagement with the Khat pilot has been encouraging, Khat users were able to access the service at a convenient time and location, which included out of hours and weekend access.
Appendix 1 Khat Poster

Khat
The Risks

Did you know chewing khat can cause...

- Teeth staining
- Weight loss
- Ulcers
- Cancers
- Breathing problems
- Depression
- Sleep problems

Get help today

For more information, help and guidance:
0121 448 3883  kik@pwrrecovery.org  www.pwrrecovery.org
Appendix 2: Khat Leaflet

About us
KIKIT- Pathways to Recovery
We are a culturally sensitive, community, outreach substance misuse recovery service.
We support substance misusers and families with complex needs in achieving their recovery, providing a holistic approach in dealing with their health issues.
KIKIT- PiW is a specialist BAME service, creating a bridge between service users, treatment providers and the community.
We can refer you into treatment, advice on your course of action and support you through your recovery journey, creating options and clear pathways to recovery!

Getting help
If you are concerned about your Khat, alcohol or drug use, or you are worried about a family member, please contact us today for a chat.
All discussions are confidential and we

KIKIT- Pathways to Recovery
0121 448 3883
info@piwrecovery.org
www.piwrecovery.org

What is Khat?
Khat is a leafy green plant, grown in Africa and Yemen.
It goes by various different names, among these are Kat, Qat, Ghat and Chat.
It is a stimulant with similar effects to amphetamine.
Stimulates speed up your mind and body, making the user more alert and energised.
Khat is used mostly in Africa, but it is becoming more common in Europe.
Sold in bundles, usually wrapped in banana leaves. Khat leaves are chewed or smoked. It can also be added to tea or food when dried.

“Young people have no idea about the dangers, they think because it's legal it must be ok, but it's not…”
Dr Erni Pasolli, Psychiatrist (BBC News)

Khat
Qat, Kat, Ghat, Chat
Information & Guidance

KIKIT- Pathways to Recovery
132 St Pauls Road
Birmingham
B5 5RD
www.piwrecovery.org
E: info@piwrecovery.org
T: 0121 448 3883

Is it safe?
Because Khat is a plant, some people think that it is safe to use. But using any drug involves risk.

Immediate effects
• Happy feeling
• More alert and energised
• Talkative
• Decreased appetite
• Increased heart rate, blood pressure
• Manic behaviour

Long-term effects
• Bleeding teeth
• Severe weight loss, anaemia
• Depression
• Infrequent hallucinations
• Incontinence
• Nightmares
• Severe reactions
• Increased risk of heart problems
• Oral cancer

And ultimately
• Death and social following acute coronary syndrome

Is it legal?
It has been banned in the USA, Canada, Norway, Sweden and most recently Netherlands, with other countries growing increasingly concerned.

On 3 July it was announced that Theresa May felt Khat was a serious concern and will ban Khat.
Khat is in the process of being treated as a class C drug, like amphetamine and ketamine.
Class C drugs carry 2 years in prison and fine for possession and up to 14 years for supply.

Is it addictive?
Yes.
Khat can make the user psychologically dependent (with craving and a desire to keep using in spite of potential harm). When some users stop using they can feel lethargic or mildly depressed and may have a withdrawal period with fine tremors and nightmares.
Acknowledgments

We would like to thank all the Pharmacists for their contribution and involvement in this Pilot; we would also like to thank Zahid Chisti, John Ryan, Birmingham Local Pharmaceutical Committee (BLPC) and Public Health Birmingham for commissioning the pilot.

Finally we would like to thank KIKIT Pathways to Recovery for delivering the training and managing the pilot.
References

ACMD Report, (2013) Khat: A review of its potential harms to the individual and communities in the UK paragraph 57


Griffiths, P., Gossop, M., Wickenden, S., Dunsworth, J., Harris, K. and Lloyd, C


