

Australian Indigenous HealthInfoNet
Alcohol and Other Drugs
Knowledge Centre

Summary of kava use among Aboriginal and Torres Strait Islander people



Core funding
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Australian Government
Department of Health

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Australian Indigenous HealthInfoNet

The Australian Indigenous HealthInfoNet's mission is to contribute to improvements in Aboriginal and Torres Strait Islander health by making relevant, high quality knowledge and information easily accessible to policy makers, health service providers, program managers, clinicians and other health professionals (including Aboriginal and Torres Strait Islander health workers) and researchers. The HealthInfoNet also provides easy-to-read and summarised material for students and the general community.

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Recognition statement

The Australian Indigenous HealthInfoNet recognises and acknowledges the sovereignty of Aboriginal and Torres Strait Islander people as the original custodians of the country. Aboriginal and Torres Strait cultures are persistent and enduring, continuing unbroken from the past to the present, characterised by resilience and a strong sense of purpose and identity despite the undeniably negative impacts of colonisation and dispossession. Aboriginal and Torres Strait Islander people throughout the country represent a diverse range of people, communities and groups each with unique identity, cultural practices and spiritualities. We recognise that the current health status of Aboriginal and Torres Strait Islander people has been significantly impacted by past and present practices and policies.

We acknowledge and pay our deepest respects to Elders past and present throughout the country. In particular we pay our respects to the Whadjuk Nyoongar peoples of Western Australia on whose country our offices are located.

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Summary of kava use among Aboriginal and Torres Strait Islander people

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Butt, J. (2019). Review of kava use among Aboriginal and Torres Strait Islander people. *Australian Indigenous Health Bulletin* 19(2).

Acknowledgements

Special thanks are extended to Dr Julia Butt, from the National Drug Research Institute, for her feedback on this *Summary*.

Suggested citation

Australian Indigenous Health/InfoNet. (2019). *Summary of kava use among Aboriginal and Torres Strait Islander people*. Perth, WA: Australian Indigenous Health/InfoNet.

This summary and more information about kava can be viewed at:
aodknowledgecentre.ecu.edu.au/kava

For a more detailed picture of Aboriginal and Torres Strait Islander health, please see the [Review of kava use among Aboriginal and Torres Strait Islander people](#).

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Ngurlu Jukurrpa (Native Seed Dreaming) by Linny Nampijinpa Frank

Nakamarra/Napurrurla women and Jakamarra/Jupurrurla men. The Jukurrpa is associated with a place called Jaralypari, north of Yuendumu. Lukarrara is a species of Fimbristylis, a grass that bears edible seeds in the winter-time. The seeds are traditionally ground on a large stone ('puturlu') with a smaller stone ('ngalikirri') to make flour. This flour is mixed with water ('ngapa') to make small seed cakes. In contemporary Warlpiri paintings, traditional iconography is used to represent the Jukurrpa, particular sites and other elements. In paintings of this Jukurrpa large concentric circles are used to represent Jaralypari and dots surrounding these circles are often depicting the 'ngurlu'.

What is kava?

Kava is a drug made from the roots of a plant, *Piper methysticum* Forst F., a member of the pepper family Piperaceae. The term 'kava' usually refers to the psychoactive drink made from its roots. The plant has been grown and consumed for ceremonial, recreational and medicinal purposes ^[1] for over 3,000 years across the Pacific. While known across the Pacific region as awa, kawa, kava, yaqona, grog, tigwa and sakau ^[2, 3], in Australia it is predominantly known as kava.

Kava is traditionally prepared as a drink in which the fresh or dried kava root is chewed, ground, or pounded, and mixed with cold water or coconut milk. It is typically shared from a communal bowl and drunk from coconut shells, which are passed around. In Australia, kava is most commonly dried and marketed as powder ^[4, 5]. Kava is imported as it is not known to grow in Australia ^[6].

Traditionally prepared kava is used by Pacific Islander migrants in a range of countries including the United States of America, New Zealand and Australia. In Australia, it is used by Pacific Islanders

(Tongan, Samoan and Fijian including Indo-Fijian communities) in all states and territories. In addition, kava is used by a small number of Aboriginal¹ communities in Arnhem Land, Northern Territory (NT). It is important to recognise that concerns related to kava use and kava related harms are restricted to eight major communities and several homeland communities in Arnhem Land. Concerns related to kava use do not extend to other Aboriginal or Torres Strait Islander communities.

In addition, kava is being used increasingly in western natural medicine as a treatment for anxiety and sleep disorders ^[1, 7, 8], and as an ingredient in social and recreational beverages ^[9].



The effects of kava on health

The World Health Organization (WHO) and the Food and Agriculture Organization (FAO) have reviewed the health effects of kava (including both traditional and therapeutic uses) and have determined that the overall potential of harm from kava is low, with negative events described as lethargy, nausea and headaches ^[9, 10]. While the overall harms and toxicity of kava are considered low, it is important to acknowledge that there is a lack of first-hand evidence, especially in relation to the long-term (chronic) effects of kava use. Concerns about the health effects of heavy kava use have been raised in Australia since the late 1980s ^[11, 12], and more recently in the Pacific although to a lesser extent^[13-17].

Data limitations

Most of the evidence on the health effects of kava are from descriptive studies that were conducted over a short time period. In many of the studies, a range of variables were examined for a small number of participants ^[18-21], which makes it difficult to conduct any detailed statistical examination of kava use.

¹ When referring to Australia's Indigenous people, the HealthInfoNet prefers to use the terms Aboriginal, Torres Strait Islander, or Aboriginal and Torres Strait Islander. However, if we are quoting from a publication that uses the word 'Indigenous' we will use that term. If you have any concerns you are advised to contact the HealthInfoNet for further information.

A review was conducted in 2011 by Rychetnik and Madronio [22] into the health and social effects of traditionally prepared kava (recreational kava use). The review found that the health effects caused by traditionally prepared kava use include: kava dermopathy (a skin condition), weight loss, liver problems (elevated enzymes) and nausea. In addition to these health effects, there are a number of other effects that have been potentially linked to kava use.

Kava dermopathy (skin condition)

Research has shown that after continued heavy use, kava drinkers are likely to experience kava dermopathy – a scaly skin rash (ichthyosiform eruption) sometimes known as ‘crocodile skin’ [10, 13, 23, 24]. Evidence shows that this skin rash is reversible if kava use is reduced or stopped [25]. There is currently not much information about the long-term consequences of this skin rash, how it progresses, or at what level of kava use it emerges.

Weight loss

Research conducted in Arnhem Land has shown a link between kava use, low body mass index (BMI) and weight loss [18, 20, 26]. A possible explanation for the relationship between kava and low BMI is that malnutrition may come from loss of time in food preparation, loss of appetite and some kava induced nausea [18, 20].

Liver function

The impact of kava on the liver is the most well studied and debated health effect of kava use [8, 27-29].

Kava use does affect liver function. In both therapeutic and recreational contexts, kava is related to increased levels of two liver enzymes [18, 27, 28, 30]. However, there is some evidence that these elevated liver enzymes return to normal if kava use is stopped. The possibility that continued high levels of kava use may permanently affect the liver cannot be ruled out [10], but moderate and short term use is not likely to cause permanent liver damage.

Nausea

Nausea has been identified as a short term consequence of kava use [31]. This nausea is potentially related to inflammation (irritation) of the stomach [32].

Effects on vision

Kava drinkers are sometimes described as having watery red eyes [13, 33]. A study in Tonga [15] reported 72% of ‘very heavy’ users and 57% of ‘heavy’ users experienced watery eyes from drinking kava. Another study in Arnhem Land [11] reported similar effects. In several studies, kava has been linked to other vision problems such as pupil dilation and blurred vision [13, 25, 34, 35].

Seizures

Seizures have been identified as a serious potential effect of kava use. It has been suggested that heavy kava use may cause seizures because of either toxicity or withdrawal. There is currently not much research on this issue, but the evidence that is available suggests a link between kava use and seizures (with cause not yet determined) [22, 36, 37].

Cardiovascular function

There is some evidence suggesting that kava use may have an effect on heart function. Kava consumption was linked to the deaths of several young sportsmen in Arnhem Land^[20], and a later review concluded that the use of kava may be a risk factor in the exercise context for ischemic heart disease^[38] (this has not been studied systematically). The systematic review concluded there was only evidence for an association between ischemic heart disease and kava use^[22].

Poor general health

Self-reported data from Arnhem Land and the Pacific suggest that people who use kava report poorer overall health than those who do not use kava^[18]. Furthermore, there is some evidence of an association between kava use and melioidosis (an infectious disease)^[39, 40] that may be related to poor immune systems^[20, 41]. The cause of the relationship between kava use and self-reported poor health is not clear; it may be linked to the way in which kava is used, where health is neglected and/or immune function is reduced.

‘Amotivational syndrome’ and lethargy

It has been suggested in the Arnhem Land^[42, 43] and Pacific contexts^[21, 44] that heavy kava use leads to tiredness, lethargy and apathy or a loss of interest in other aspects of life. This is referred to as a kava ‘amotivational syndrome’. It has not been studied systematically in Australia and further investigation across different cultural settings is needed.

Concern about heavy kava users neglecting family and community roles is often discussed in research and other discussions on the use of kava in Arnhem Land^[43, 45, 46]. It is possible that amotivation is caused by a mechanism that has yet to be identified, or regular, high-level kava use may take priority over other activities, which is consistent with consequences of drug dependence more generally (e.g.^[47]).

Ataxia, injury and driving

Ataxia (lack of voluntary coordination of muscle movements) and lack of coordination is a well-known consequence of kava intoxication^[3, 11, 48-51] that may be caused by the muscle relaxant properties of kava^[50, 52, 53]. There are concerns that ataxia may lead to accident or injury, particularly if someone is driving or operating machinery.

The impact of kava use on driving is of particular interest^[8, 48]. There is evidence to suggest that driving under the influence of kava could be a risk^[54-57].

Kava dependence

The available evidence suggests that some people do consume kava at levels consistent with a drug dependence, displaying symptoms like craving, neglect of roles in the family and community, difficulties controlling kava use, and continued use despite negative consequences from this use^[47]. For example, researchers in the Pacific^[20], and Australia^[12] describe heavy kava users as having an obsession with kava and prioritising kava over other needs like preparing and eating food. More research is needed about the prevalence of use and the risk of kava dependence. Despite this there is insufficient evidence regarding kava tolerance, and the presence and characteristics of a kava withdrawal syndrome.

Drug interaction effects

Like all drugs, there is a risk that combining the use of kava with other drugs may cause harms [10]. Because kava is a central nervous system depressant, its effects may increase when used with other depressants like alcohol or benzodiazepines. A study conducted with participants who had consumed alcohol, kava, or alcohol and kava found participants who consumed both alcohol and kava performed significantly worse than those consuming only alcohol [49]. Thus, consuming alcohol with kava may increase the negative mental effects of alcohol [58].

Recent research has suggested that kava also may restrict how some other drugs (including medicines) are metabolised (absorbed into the body) [59, 60]. Because of this, levels of other drugs and medications may rise to toxic levels in the body if kava is also consumed [8, 59, 61].

Risks associated with kava use practices

With all unregulated drugs there are risks related to the production (including storage), sale and consumption of the drug.

There is some evidence of risks related to the production of kava, including poor quality plant material in kava powder [4, 28, 62, 63] and concerns that pesticides may be present in harvested kava. Kava is a largely unregulated crop, and there is no monitoring of kava in Australia for pesticide or other contaminants, potentially leading to risks with contaminated kava.

There are also health effects linked to the way in which kava is prepared and consumed. Concerns that kava is often prepared and consumed in an unhygienic manner are well-known [11, 18, 64], as well as concerns that the prolonged kava drinking sessions may result in harms due to long periods of sitting, dehydration and not eating. There is more research needed on these risks.

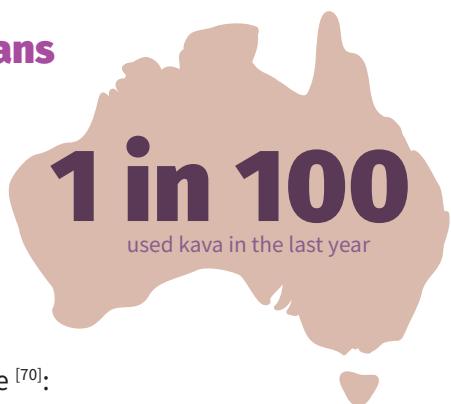
Understanding kava use in Australia

Prevalence of kava use in Australia

The National Drug Strategy Household Survey (NDSHS) has collected data on kava since 1998 which consistently show that since 2001 around 2% of the Australian population used kava in the previous 12 months [65, 66]. While the small sample sizes limit what conclusions can be drawn from the NDSHS, the results show that nationally kava is consumed by a very small section of the Australian community.

Kava use among Aboriginal Australians

Kava is not a drug of concern for the majority of Aboriginal and Torres Strait Islander people in Australia. Some limited data are available from the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) [67-69]. In the 2008 NATSISS, only 1.2% of respondents reported kava use in the past 12 months [70].



Males were more likely than females to report kava use [70]:



1.7%
of males reported
using kava in the
previous year.

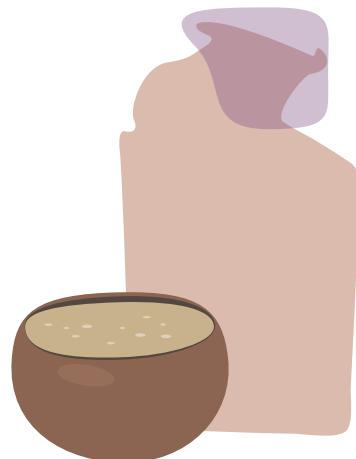


0.7%
of females reported
using kava in the
previous year

Kava use in Arnhem Land

Arnhem Land is located in the north east of the NT and includes the local government areas of West Arnhem and East Arnhem Land. The population of the region is approximately 16,000; 12,000 of these people are Yolgnu (Aboriginal) [71].

Despite low use at a national level, kava has been consumed by Aboriginal people in Arnhem Land since the early 1980s [72]. Concerns around high prevalence of use and related harms have been a focus and discussion of research since this period.



Kava use occurs in areas in both East and West Arnhem Land, but not in all communities. Eight major communities have a history of kava use: Yirrkala, Ramingining, Milngibi, Galiwinku, Gapuwiyak, Minjilang, Warruwi and Maningrida. It is also used in some Homelands communities near Ramingining and in the Laynhapuy Homelands, and has occurred at times on Groote Eylandt [45, 52]. Kava use has been observed at various times in other communities, but this is typically related to small groups linked to the main kava-using communities.

The use of kava, like other drugs and alcohol, is socially determined, and must be considered in this context. Aboriginal people experience greater disadvantage compared with non-Indigenous Australians on all social indicators, such as education, health and employment. As summarised by Gray and Wilkes [73] this is a result of the historical and ongoing impact of colonialism and dispossession [74]. Higher levels of harmful drug use are a result of this trauma, and contribute to poor health status and social issues [75].



Kava was introduced to Arnhem Land at Yirrkala in 1982 following a cultural exchange between the Yolgnu people and a Fijian community^[11]. It was thought that kava may provide an alternative to alcohol and reduce alcohol related harm.

Kava use quickly became common in Yirrkala and Warruwi and by 1984 had spread to Minjalang, Groote Eylandt, and later Gapuwiyak, Galliwinku, Millingimbi, Ramingining and the Laynhapuy and

Ramingining homelands. When it was introduced, both Aboriginal and non-Aboriginal people encouraged the use of kava as an alternative to alcohol^[12, 76, 77]. Alexander et al.^[11] commented that the support of kava use by churches and tacit government approval undoubtedly had an impact on prevalence and patterns of kava use, setting up favourable attitudes to kava and low expectations of harms. It also set the social context as people were encouraged to use kava during meetings and ceremonially, as it was regarded as a safe and socially acceptable substance. This context in which people were encouraged to drink kava instead of alcohol, rather than support communities to address the underlying determinants of alcohol-related harm is important to keep in mind.

In Arnhem Land, similar to the Pacific, kava is consumed in group settings with participants sitting in a circle and sharing kava from a communal central bowl^[43]. Groups include both males and females^[12]. A study conducted by Clough et al.^[43] identified that kava was used in social settings (card games, friends, household groups, people with regular income), settings with another purpose (ceremonies and celebrations and Elders circles), and occasionally people drinking kava alone.

The extent of kava use in Arnhem Land

When examining kava research conducted in Arnhem Land it is important to consider the context in which it was undertaken. The majority of this research was conducted between 1989 and 2002 when there were many changing regulations for kava. The social and geographical context of Arnhem Land also limits how research is conducted and interpreted^[78].

The majority of the research on kava in this region was conducted by Alan Clough and colleagues who have produced around 15 papers. Research by Mathews et al.^[18], Alexander et al.^[11] and reports by d'Abbs^[45, 52, 72] have also been important in describing the effects of kava in Arnhem Land. There has been little publicly reported research related to the use kava since the early 2000s and none since the end of kava licensing in 2007.

A graphic element consisting of a large, solid purple arrow pointing upwards. At the base of the arrow, there is a brown, rounded bowl containing a light-colored substance, likely kava root or powder. The arrow points towards the text below, which discusses the increasing prevalence of kava use over time.

This research shows that from the late 1980s until 2002 there was a steady increase in the number of kava drinkers and in the average amounts of kava consumed. Kava use was more common among males than females, but the number of females drinking kava increased over time^[52]. In communities in which kava use was present, around half or more than half of the males in these communities used it. The results also showed that those using kava were likely to do so at harmful levels (>400 g per week)^[18, 41, 52].

Two studies^[79, 80] looked specifically at younger adults and determined that kava use was somewhat lower than in the broader adult community, suggesting that kava use was more common among adults over the age of 30 years.



Kava is sometimes used in combination with other drugs. A 2002 study found that a number of participants used alcohol and kava in combination [78]. Kava consumption has also been found among people using petrol and cannabis, with one study finding that 38% of the young participants who sniffed petrol also reported kava use [79]. Another study found that 15% of cannabis users also reported kava use, and that 7% of cannabis users would look for kava if cannabis was unavailable [81]. This information highlights the need for intervention efforts to address the underlying factors behind all drug use, and not just individual substances.

Since 2006, there have been no published data about kava use in Arnhem Land. However, some information can be obtained through evidence of black market activity. NT police media and other media outlets report that kava seizures are ongoing and have been reported from 2007 until the current time [17, 82-86]. These seizures include large amounts (45 kg) that have been divided into deal bags, suggesting the demand for kava remains and that the black market for kava is organised and active. Despite the black market demand, there may be a decrease in kava use and its availability since import restrictions were imposed [87], however, there are still concerns about the harmful use of kava [83, 88]. As there are no statistics on the use of kava in Arnhem Land since 2009, there is a need for more current information.

Impacts of kava use experienced by Arnhem Land communities

Impacts of kava on health

Research on the use of kava in Arnhem Land between 1989 and 2002 shows that a large number of people drank more than 400 g per week (the level at which kava related harms may occur) [89], not surprisingly negative health effects have been noted. (There is no evidence that kava has had a positive impact on the health of Aboriginal people in Arnhem Land.) The harms that have been identified as the most common are [11, 18-20, 26, 37-41, 43, 52, 64, 76, 89, 90]:



kava dermopathy
(skin rash)



self-reported and clinician rated
overall poor general health



low body weight



redness of the eyes

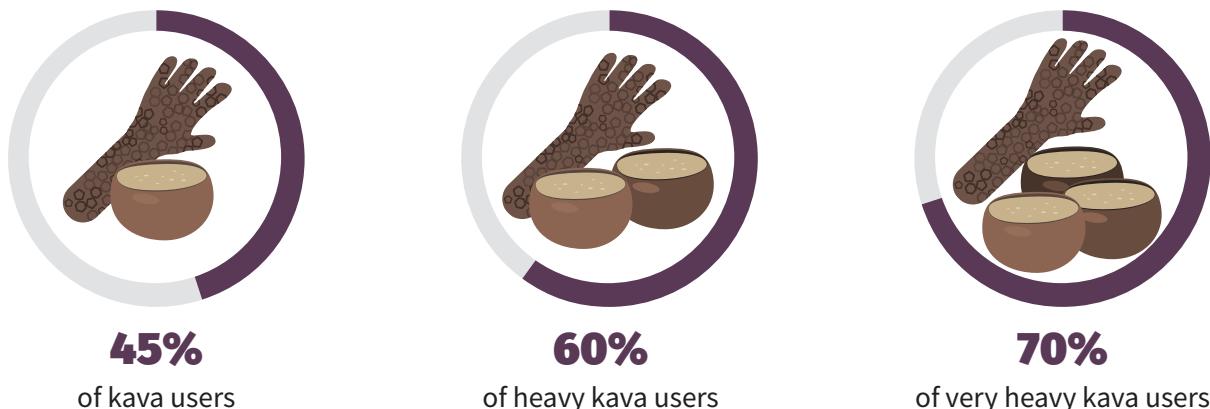


lethargy and 'amotivation'



raised liver enzymes

Descriptive studies investigating the health effects of kava show that many kava drinkers experience these negative effects^[18, 20]. For example, kava dermatopathy was identified in:



One study found elevated liver enzymes in 61% and low body mass index (BMI) in 32% of kava using participants^[20]. Another study found that participants who were either heavy or very heavy kava drinkers reported poor general health (36% and 39% respectively)^[18].

In addition to these impacts, there is some evidence that in Arnhem Land communities kava has been associated with decreased immune functioning (increased susceptibility to diseases)^[26, 40, 41], heart function^[18, 26, 38], and the risk of seizures^[37]. Other health concerns have been raised about poor hygiene practices (mixing utensils and bowls, and sharing drinking vessels) because of their potential to spread disease^[52], but there is not much evidence for these concerns.

There is not a lot of information about the current health impacts of kava in Arnhem Land communities. Some information collected through focus groups in Arnhem Land communities shows that there has been an apparent reduction in presentations to health services consistent with heavy kava use (such as kava dermatopathy)^[87]. However, kava remains available, there is still a demand for it and there are reports in the news media of groups who still use heavily and experience associated health harms^[83].

Impacts of kava on social and emotional wellbeing

The potential for kava to increase relaxation and decrease alcohol related harm were primary reasons for its introduction^[77]. However, research has shown that heavy kava use has had negative impacts on wellbeing^[45, 72]. Studies have demonstrated that heavy kava use negatively affects the social and emotional wellbeing of both individuals and families^[43, 45, 64, 89]. Some of the harms associated with increasing kava use include^[45]:

- family disruption (including the neglect of, and reduced supervision of children, lack of preparation of food, neglect of family hygiene, and neglect of family duties)
- a decrease in individual participation in employment, community and cultural activities
- economic impacts on individuals and families^[45, 89, 91].

There is no current information on the social harms caused by kava in Arnhem Land communities. Some evidence suggests that there are still heavy kava users in a few communities who are experiencing social harms, but this appears to have reduced^[83, 87]. There has been no research into the relationship between kava use and mental health in Arnhem Land communities, so no conclusions can be made about the effect of kava use on mental health.

Impacts of kava on community wellbeing

The impact of kava on community wellbeing has been a political topic since its introduction, with much discussion about its effects, both positive and negative. Whilst community solidarity was proposed as a benefit of kava use, outside of the kava ‘drinking circle’ there is not much evidence of community solidarity arising from kava.

Due to the high number of people using kava and the high volumes being used, whole communities have been affected by kava use. When large proportions of people use kava considerable amounts of time and money are spent on kava to the neglect of other things^[83, 92, 93].

Economic impacts on the whole community have varied according to changing regulations^[45]. For example, under the most recent licensing period kava retailed at \$150 per kilo – a price that is lower and more stable than the cost of black market kava. Current estimates are that kava sells for around \$1,000 per kilo^[84, 86], thus increasing economic effects for those who continue to use heavily. One study argued that the high numbers of users in small communities led to a cash drain^[89]. This was of particular concern when kava use was unregulated and illegal, because the cost of kava was higher and the money was leaving the community. When kava was under licence, the money spent on its use stayed in the community and was used on community priorities^[45]. Other economic effects such as reduced involvement in employment and an increased need for health services have also been linked to kava^[64, 94].



In considering the effects of kava on community wellbeing, it's also important to think about the relationship between kava and alcohol harms. It was originally thought that kava could be a positive replacement to alcohol, because its use is associated with fewer social harms such as violence. It is a common belief in Arnhem Land that kava reduces alcohol-related problems^[11]. It is argued that kava consumption results in relaxation whereas alcohol intoxication can result in aggression, so increased kava availability could lead to a reduction in alcohol related harm. There are also some concerns that if kava is not available then alcohol related violence may increase^[92, 95, 96].

There have been no systematic studies looking at the relationship between kava availability and alcohol related harm. In addition, descriptive studies in Arnhem communities have normally been conducted in communities where alcohol access is limited^[11, 18]. In these studies, alcohol related harm is described as reduced, but it is not clear if this is because of the availability of kava or the alcohol restrictions. An unpublished study^[64] compared alcohol related arrests in two Arnhem communities, one that used kava and one that did not. The kava-using community did not have less alcohol related arrests compared to the non kava-using community. The study concluded that alcohol related harms occur regardless of the use of kava in communities. It is important to note that although the physical harms caused by kava are less than those caused by alcohol^[97] the reality is that there is rarely a situation where only one is available. This makes the use of kava as an alternative to reduce alcohol related harm unlikely to be effective over the long term.

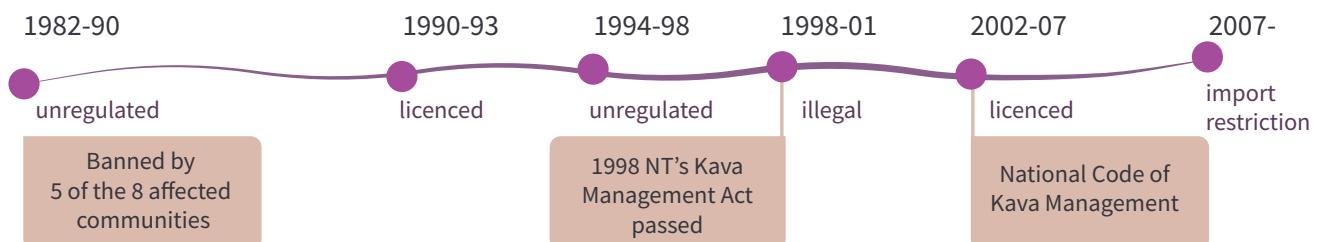
History of regulation in Australia and its impacts

Kava is a policy challenge for Australian authorities^[98] and the history of the regulations on kava are complex. In Australia, kava has been listed as a food substance, a botanical (substance obtained from a plant), a Schedule 4 drug, and a poison at different points in time. Because this summary mostly focuses on kava use in Arnhem Land, the information on regulation below will focus mainly on regulation in the NT.

The regulation of kava has effects on:

- patterns of use and related harms
- black market activity and related harms
- demand on organisations which address kava use and its harms (such as health organisations).

The implementation of regulations on kava can be an opportunity to increase community capacity and self-determination, however, they can also be a source of further harm.



Regulations pre 1982-1990 – Unregulated

Before 1982, kava was classified as a food substance in the NT and there were no regulations on sale or supply. When use of kava quickly increased, some communities implemented their own regulations that included putting limits on sales, banning children from using kava and banning it completely^[99]. At different times between 1982 and 1991, kava was banned in five of the eight kava-using communities because of local community decision making^[52]. Despite these bans, communities found it difficult to control sales as demand for kava increased and non-Indigenous kava sellers entered the market. During this time, kava use in the NT increased (both the number of people who used kava and how much people were using). In contrast, when kava first appeared in Western Australia (WA), Elders worked with the WA Government, to enact a kava ban and kava use did not take hold in WA communities^[45, 52].

Regulations 1990-1993

In May 1990, in response to public concern about kava use and research into health harms, kava was classified as a ‘dangerous good’. The classification enabled the NT to implement its own regulations; a kava licensing system was established under the NT Consumer and Fair Trading Act. The goal of this system was to decrease the use of kava and reduce kava-related harm^[52]. Under this legislation, the sale and supply of kava in the NT (outside of certain provisions)² was illegal but possessing kava was not. Because of this, it was hard for police to effectively stop a black market from developing.

² Under this licensing system, kava sales were permitted if the NT Minister for Health granted approval, at which point kava could only be sold by community-controlled organisations who were endorsed by licensees [79]. Licensees could only purchase kava from an agreed wholesaler. Five communities decided to sell licensed kava. Sales restrictions included age restrictions (>18 years) and a daily maximum of 50 g.

An evaluation of this legislation [52] concluded:

- the measures failed to reduce kava use
- there was a lack of responsible sale of kava
- there was a lack of resources and regulations to prevent black marketing of kava.

1993-1998 – ‘Regulatory hiatus’

Under the licensing system, kava use increased as did concerns about its health effects [52]. In 1994 the Commonwealth Government prohibited kava under the Food Standards Act. Licensing laws in the NT were no longer allowed under this new prohibition, so licensed retailers in the NT were no longer able to sell kava [99]. When this trade stopped, the sale of kava became illegal in the NT.

This time is sometimes described as a time of ‘regulatory hiatus’ [99] that allowed black marketers to appear and become established in Arnhem Land communities [89, 99]. In response to this, the NT Government requested an exemption from the Commonwealth decision so they could maintain the licensing system. The National Food Authority (NFA) conducted an inquiry into kava because of this request.

The NFA’s inquiry resulted in the release of a Draft National Kava Management Strategy. The goal of the legislation was to control use, not ban it, and to make sure people could still use kava for cultural reasons [6]. It had four components:

- a national system for restricting and monitoring the importation of kava
- the National Code of Kava Management (NCKM)
- a new addition to the Food Standards Code
- an option for states and territories to impose their own, more limiting legislation [6, 100].
- From 1998 to 2001 the legislation to put the NCKM into place was established.

2002-2007 - Second kava licensing period

Between the NCKM being developed and coming into effect, the NT Government passed the Kava Management Act (KMA). This Act banned the sale and consumption of kava except in licensed premises [101]. It was hoped that the KMA could achieve the following aims:

- the responsible sale of kava
- keeping money spent on kava in communities
- reduction in the black market
- funding of health promotion, intervention and research
- monitoring kava availability.

The NT licensing commission managed the Act by requiring licensees to have a kava management plan in place [102, 103]. These plans encouraged community self-management, and communities could develop their own regulations [91].

While some positive developments did occur during this licensing period [91], there is no evidence that kava-related harms reduced or the availability of kava declined [46, 91]. Unsafe amounts of kava were still being sold, kava sales increased, community harms remained, and there was no coordinated health response [99].

2007 and beyond - Importation restriction

In 2007, the Australian Government imposed restrictions on kava importation (bringing in kava from outside of Australia) [104]. Because of this, all legal sales in the NT stopped. Although there is currently a ban on the importation of kava, the Kava Management Act is still in force in the NT [104]. This Act includes the provision of punishments for possession and supply.

Currently kava remains on the prohibited and restricted imports list under the Customs (Prohibited Imports) Regulations 1956 Act [105]. The current kava import restriction is mostly the same as previous kava bans in Arnhem Land communities, and relies on law enforcement as the main way to reduce kava-related harm.

The lack of consultation prior to the current import restriction and its rapid implementation have had a negative effect on communities. It had negative financial effects because there was a big loss of income used for community benefit [106, 107]. It undermined community self-determination [106].

There were also a number of concerns raised about the ban. Concerns that the kava ban would lead to an increase in alcohol consumption were raised [107], but there has been no research into this issue. There were two other concerns linked to the quick end to licensed kava. Firstly, there was no increase to police presence to prevent the black market from coming back. Secondly, there were no extra resources provided to health and drug and alcohol services to assist people who were currently using kava.

There is not much evidence about the results of the ban. Informal reports suggest that it has been linked to reduction in overall kava availability and harms [87], but that heavy kava use still occurs - it is just more hidden [83].

Any efforts to decrease drug use must be accompanied by efforts to address the reason why people misuse drugs in the first place, including focusing on self-determination, education, health, employment and housing [73, 91, 108].

Future developments - 2019 and beyond

In January 2019, the Prime Minister, Scott Morrison, proposed changing the importation ban on kava [109, 110]. Some information [111] suggests that there may be a pilot program in which the amount of kava people can bring into Australia is increased from 2 kg to 4 kg per person. There are also some reports that the pilot program will allow states and territories to uphold bans that are currently in place [112]. Aboriginal communities in Arnhem Land were not consulted prior to the change being announced, and there are community concerns that it may lead to an increase in availability of kava and related harms.

Strategies to address kava related harm

Strategies to reduce harmful kava use in Arnhem Land have mostly focused on limiting the supply of kava through the different regulations discussed above. Current interventions in Arnhem Land communities are limited by a lack of funding and planning for drug and alcohol services, as well as primary health care in general, and the remoteness of the area^[113]. Existing health promotion resources about the effects of kava have not been evaluated and most are not currently available. Most of the interventions to date have been conducted by primary health care services and include regular screening for kava use, health checks for kava users, and training for health staff about the effects of kava use^[64]. Clinical protocols for kava were developed in 2004^[114, 115] and provide very brief screening advice for health practitioners. There are no specialised kava treatment services available in the NT, and there has been no training or resources provided since the import restriction was introduced. This means that health services may not be supported to deal with the changing levels of harm related to kava.

Because there is currently a lack of information on kava use, general best practice recommendations for alcohol and drug interventions in Aboriginal and Torres Strait Islander communities can be applied^[73]. Drug use is complex, and there are many underlying causes. Addressing it requires a wide-ranging approach that includes strategies to:

- address the reasons why people use drugs in the first place (the social determinants)
- prevent or reduce harmful alcohol or other drug use
- provide treatment for those who are reliant on alcohol or other drugs
- support people whose lives are impacted by others' harmful alcohol other drug use.

Controlling kava through regulating supply has been an important strategy in reducing harms from kava use. However relying on regulation alone to reduce supply is limited in effectiveness unless the reasons why people use kava are also addressed. Strategies are needed which also holistically address the health and wellbeing of individuals and communities.

Future directions

Some suggestions for future research and action include:

1. Ongoing high quality research into the effects of kava use on health and wellbeing across different settings
2. Updated data on the prevalence and pattern of kava use across Arnhem Land communities, with some attention on the relationships with other drug use such as alcohol and cannabis^[116]
3. Efforts to reduce harms linked with black market kava
4. Increase the availability of support for current kava users, and address the reasons why people/communities are using drugs in the first place
5. Ensure that the community are engaged in discussions around policy
6. Fund an evaluation of kava regulations.

Concluding comments

While there is a need for more data on the use of kava and its effects, the evidence we do have suggests that at low and medium levels of use kava presents a low risk for harm. When used in higher amounts, however, it has been linked to a risk of health problems.

This summary examined kava use in Arnhem Land - its history, use and effects on the health and wellbeing of individuals and communities. It highlights a lack of research, (especially recent research), however, the available evidence shows that kava has been used at harmful levels by a significant number of community members in kava-using communities between 1982 and 2002. During this time, kava-related health and social effects were seen at the community and individual levels. A lack of evidence from 2007 onwards means it is hard to examine the amount of kava use and its related harms. However, some information suggests that kava is still being used and harms experienced, but not at the same levels as between 1982 and 2002. Black market activity is ongoing and is linked with additional risks.

Kava has a complex history of regulation. There have been a number of different regulations applied in an effort to reduce the harms caused by kava use. Current laws prevent the sale of kava in Australia. This has reduced availability but a demand for the drug remains as does a well organised black market. This summary has also discussed how kava legislation has been applied, and highlights the need for policy to be developed in collaboration with the communities it applies to.

The summary highlights the need for an increase in services available to people who use kava. It also raises the need for policy approaches that take into consideration the underlying factors that lead to drug use. These approaches must be done in a way that ensures community ownership and self-determination to address not only kava use but the overall health and wellbeing of Arnhem Land communities.

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Why do a summary?

This summary provides key information on the use of kava among Aboriginal people in Australia. The summary begins by looking at how kava is used traditionally, its immediate effects on the body and an overview of the research on effects on health. The summary focuses on the use of kava in Australia; the history of its introduction to Aboriginal people and the impacts of kava on the health and wellbeing of Aboriginal Australians, with a particular focus on Arnhem Land (Northern Territory) communities because concerns about kava use and related harms are restricted to this region.

The summary discusses the regulation of kava in Australia, including the impacts these regulations have had on Aboriginal communities. The summary also investigates strategies to reduce kava related harms and concludes by discussing possible future directions for research and action for minimising further harm.

This summary draws on journal articles, government reports, national data collections and national surveys, the majority of which can be accessed through the HealthInfoNet's library database.