Kava (Piper methysticum): Untangling fact from fiction*1

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Note: The original presentation was accompanied by a PowerPoint presentation. The slides are included as Endnote and indicated using an asterisk, eg. *1.

Abstract:
Kava, in both its plant and drink form, is Pasifika’s ‘cultural keystone species’ and a potent icon of identity with some of its medicinal efficacy legitimised within Western pharmacology and research. However, for every positive concerning kava there appears to be a counterpoint: kava is being ‘abused’; kava causes liver damage; kava encourages men to stay away from home for lengthy periods negatively impacting the family; kava turns its drinkers into Zombies incapable of functioning the next day, etc. This presentation will address these claims while also seeking reasons as to what motivates kava criticism.

Introduction
Last year, in Auckland, the Pasifika Medical Association held a kava panel at their conference, drawing medical professionals and kava commentators from around the Pacific*3. One of these was Dr Ifiraimi Waqainabete, a surgeon from the Colonial War Memorial Hospital in Suva. He talked about the high numbers of young male Fijian kava drinkers who were coming to the hospital with liver abscesses. Now, even though Dr Waqainabete made it clear that it was not the kava that caused these abscesses, but poor water quality and hygiene, about 3 hours later, TVOne 6pm news⁴ presented the following. You can watch the video by going HERE. When presented like this, kava sounds dangerous. This report caused a lot of discussion and criticism at the conference, mainly because the article had made it sound like kava, and not poor water quality, was the cause of these liver abscess. I contacted the reporter and challenge her regarding this. Long story short, she advised that no correction or apology would be made.

It’s not only in the media that kava is misrepresented and made out to sound dangerous. Some peer reviewed publications also include myths and lies about kava*5. All of this makes
it difficult for academics, let alone ‘Joe public’, to work out fact from fiction, harm from health, positive from negative. This presentation will start by briefly explaining kava’s importance to our cultural practices. I will then address some of the misinformation, some of the myths about kava*6, and finish by briefly giving a few suggests as to why these kava as killer myths are created and in doing so, leave us with a challenge.

My presentation slides (attached as Endnotes and indicated with * and reference number, eg. 7) are full of references. I admit this is a little off putting but I have done this deliberately so as to demonstrate I haven’t made this stuff up. If you miss a reference or want me to clarify anything, please feel free to email me or come and ask me after.

Kava, yaqona, sakau, ‘ava, ‘awa’, as you know, is a drink made from the *Piper methysticum* plant and when you drink it*7, you feel relaxed, a little sleepy, but not drunk like when using alcohol. Pacific people have been using kava as part of cultural practices for more than 2000 years. We believe kava contains mana, so kava is often used to give power to cultural practices. Kava’s importance to us can be seen in the way we talk about it. For instance, ‘ava a tupu8 in Samoa; ‘Kava koe fonua, fonua koe kava’ in Tonga9, and wainivanua in Fiji10. Kava’s importance, and kava’s mana, can also be seen in its use as medicine. Lebot & Cabalion11 have put together a valuable table explaining how kava is used as medicine across the Pacific12. Kava as medicine is also recognised by European pharmacology. For instance*13, Europeans are now taking kava to lower stress14, European woman are taking kava to assist them during menopause15, and there is some good research looking at using kava to combat some cancer’s*16, namely ovarian, bladder and lung cancer17. It is because of kava’s cultural and medicinal importance that we have also taken kava with us to new lands such as NZ, Australia, Canada etc*18. This allows us to continue to use kava as medicine, and to support our cultural practices and assist talanoa. Kava’s ongoing use at home in the Islands and in our new homes in NZ, Australia etc means kava is recognised as one of our most dominant icon of identity19, something we Pacific Islanders are known for*20.

But sadly, as kava’s visibility has increased, so too has the growth of misinformation, the spread of myths and lies; some of it suggesting our cultural icon is some sort of killer*21. My goal today is to address some of these myths and lies, and by doing so, I hope to give you some truths to speak back when people misrepresent kava. There are many kava myths and lies. I am only going to speak to a few of the more common ones: I’m going to start small, here’s the first one:

“Kava looks awful and tastes worse”*22:

This was a comment that appeared in a newspaper article not that long ago but is something I hear at least once a month. I’m confused though as kava looks similar to milky coffee23 although I have never heard milky coffee described as “awful”. And there are some good tasting kavas. I occasionally drink one from Hawaii which tastes like unsweetened
chocolate\textsuperscript{24}. So why do people say these things about kava, that it looks like muddy water and tastes bad? I will tell you at the end. But here’s the thing, we don’t drink kava for the taste; it’s about culture, practice and connection\textsuperscript{25}, something most non-Pacific Islanders can’t understand\textsuperscript{26}.

Myth number 2: “Kava’s effects numb the drinker, induce sleep, and turn them into zombies”\textsuperscript{27}: A few months ago, this is how kava was described in a newspaper article. But experts describe kava as facilitating, or helping, ‘clear-minded’ discussion\textsuperscript{28}. Clear minded discussion is the opposite of how a strong numbing agent or potent anaesthetic that produces a zombie-like state works. Additionally, while kava does have soporific or sleep properties, pharmacologists say kava *helps* with sleep, it doesn’t knock you out and make you go to sleep\textsuperscript{29}. Kava’s effects are so light that many people who use kava for the first time say it does nothing\textsuperscript{30}. So idea’s that kava turn’s you into a zombie is an exaggeration and a myth. (Remember my kava drink-driving results; pretty good for numb sleeping zombies).

Third myth: “Kava is alcohol”\textsuperscript{31}: This is one of the most common misunderstandings about kava. Kava is not fermented and is certainly not an alcohol\textsuperscript{32}, but that doesn’t stop people from trying to tell me it is. So, to be clear, no, kava is not alcohol. Researchers blame Johanne Forster, a naturalist aboard Captain James Cook’s Endevour, for this myth. Johanne Forster gave kava it’s botanical name - \textit{Piper methysticum}. \textit{Methysticum} is the Greek word for ‘intoxicating’, or according to Forster, ‘intoxicating pepper’ - \textit{Piper methysticum}\textsuperscript{33}. When people think of ‘intoxicating’ they often think alcohol. Another researcher, Churchill\textsuperscript{34}, said that right from the beginning, when kava was first named, Forster made it sound like kava was an alcohol and this then made "it more difficult to correct the error". Professor Peter d’Abbs\textsuperscript{35} from the Darwin School of Medicine said it best when he stated, unlike alcohol, kava does “not lead to violent behaviour” and does “not befuddle the mind [or confuse your mind like alcohol] and can be used to stimulate ‘clear-headed’ discussion”\textsuperscript{36}.

Next myth: “Kava is addictive”\textsuperscript{36}: A few months ago, in a NZ newspaper\textsuperscript{37}, it said just this, that kava is addictive. Strangely, no, kava is not addictive and lots of scientists agree with this\textsuperscript{38}. Moreover, kava is used in some drug-addiction therapy programmes, as kava is recognised as being an “anti-craving agent”\textsuperscript{39}, taking away addictive urges or desires. This includes a programme in Tauranga NZ where kava has been used for the past six years to help alcoholics stop drinking. There is also a programme in Thailand where kava is used to help heroine addicts.

This can be confusing for outsider’s, who see us sitting and drinking kava for long periods. Many automatically think we must be kava-addicts or kava-holics. And to confuse them even more, they occasionally hear kava users call each other ‘kava-holics’. Because kava is an important icon of identity for Pacific Islanders, many kava drinkers consider the term ‘kava-holic’ a positive reference as this demonstrates their ‘enthusiastic’ engagement with their culture – “see, I can show you I’m Tongan/Samoan/Fijian coz I drink lots of kava”\textsuperscript{40}.
But just because you drink a lot of kava, or get called a kava-aholic, does not mean that kava is addictive.

Next myth: “Kava causes liver damage”\textsuperscript{41}: After the kava alcohol myth, this is probably the second most common misunderstanding about kava, to the point that it appears in some peer reviewed publications\textsuperscript{42}. Remember I mentioned that NZ newspaper article a few weeks ago. In that same article it also stated, kava “can injure the liver in healthy people”. This is not true, but where did this myth start?

The idea that kava might damage your liver first came about in early 2000 following reports in Western Europe that some patients who had taken kava tablets had died. This led to what is commonly known as the “European Kava Ban”, the banning of kava in a number of countries\textsuperscript{43}. That ban confused Pacific islanders who were asking, how come we aren’t all dead if kava ruins your liver. Fiji, Tonga, Samoa and Vanuatu got together and asked the World Health Organisation to look into this matter. The World Health Organisation’s first kava risk assessment was done in 2007.

The findings from that assessment also helped a 12-year court battle involving a large number of kava experts. The court case ended two year when the Federal Court of Germany\textsuperscript{44} ruled that liver damage from kava was so rare it was negligible, or nothing, and that the “European Kava Ban” and stories of death after taking kava tablets had misrepresented kava and damaged kava’s reputation. Or put simply, you are not likely to die after taking kava tablets and the European Kava Ban should never have happened.

The court case and the World Health Organisation never said kava was 100% safe, but they did look kava’s risk level. The looked at things like kava hepatotoxicity (liver damage) rates and compared these with Paracetomol/Panadol hepatotoxicity\textsuperscript{45}. In that study the researchers reported that kava is “dramatically” safer than these commonly prescribed over the counter pain medications.

Then last year the World Health Organisation did an updating to their 2007 kava risk assessment report and said: "On balance, the weight-of-evidence from both a long history of use of kava beverage and from the more recent research findings indicates that it is possible for kava beverage to be consumed with an acceptably low level of health risk."\textsuperscript{46} Put another way – the World Health Organisation said they were happy for people to drink kava as the risk is very low. However, the World Health Organisation does warn against drinking too much alcohol. And even though scientists believe kava is safer than commonly used drugs like Panadol, and others that kava is safer than alcohol, the myths and lies that kava damages the liver continues.

Next myth: “Frequent consumption of kava causes skin problems.”\textsuperscript{47} Yes, here is something I agree with. If you use large amounts of kava for a long time it can cause a drying of the skin (called ‘kava dermopathy’ or kanikani in Fiji; tino māvaevae in Samoa; lahelahea in Tonga). But the experts agree this is not harmful and will go away a week or so after you stop using kava\textsuperscript{48}. Even though the experts say ‘kava dermopathy’ is not harmful, some point to this skin condition as a visible sign that kava is dangerous.
In a similar manner to the term ‘kava-holic’, some people consider ‘kava dermopathy’ a positive demonstration of their ‘enthusiastic’ engagement with their culture – “see, you can tell I’m a real Islander coz I drink lots of kava and you can see it on my skin”*. What I find interesting though is that people often point to ‘kava dermopathy’ and say it is a visible demonstration of kava’s health danger*, but those same people never point out the blotchy face and bulbous red nose of the alcoholic, something we do know shows alcohol relate health risk.

Next myth: “Kava takes fathers away from their families”*: I hear this all the time and it reminds me of the first myth, that Kava “looks awful and tastes worse”, so will answer this in a similar way. You know that black box that sits under many TVs, it has the word ‘Sky’ written on it. It caused a friends marriage to split up as he spent entire weekends watching it, a father who was taken away from his family. Or what about another mate I have who surfs all the time, and his wife complaining he is never home being the father and husband he should be. Or the father who drinks alcohol and is never home. (PPT 42) People don’t blame the ‘Sky’ box, the surfboard or the bottle of beer, but for some reasons they like to blame kava – they say, 'Kava took my husband away, my kids father away'. Let me be clear, kava doesn’t take fathers away from their families, personal choice does! It’s your choice to go drink kava and leave the family, kava doesn’t make you go so don’t blame kava. Or people who say kava makes you sleep all day. No, kava doesn’t do that, you choose to sleep all day. I go out drinking kava until 3am but I still get up and do my jobs, I still go to work. Let’s stop blaming kava and instead put the blame in the right place - poor choice.

Ok, two more kava myths:

“Kava use is pagan and linked to witchcraft”: A number of Pentecostal Christian denominations and their Church members are very critical of kava, associating its use with the ancestral gods, anti-Christian practice, cannibalism, etc. I have been told that I shouldn’t drink kava because it’s against God, that kava is the devil’s drink. Some of those same people have also realised that non-Christians think pagan and witchcraft arguments are rubbish, so those same Christians have moved the argument to socially based ideas such as 'kava takes men away from their families', 'it causes liver damage', that kava’s dangers can be seen through skin rashes, it’s addictive and so on. By doing this, they have added to the misunderstandings, lies and inaccuracies about kava. The pulling down of traditional practices, such as kava, by some Pentecostal Christians’, is what social scientists call ‘diabolisation’. Diabolisation though is opposite to the beliefs of several mainstream Pasifika Christian denominations. For instance, the Methodist and Catholic Church’s believe kava’s accompanying respect values and unifying principals demonstrate “redemptive significance in the same manner as the Blood of Christ”*. This suggests then that kava use is linked to Christianity and not against it.

And finally we have what I call the ultimate kava lie, the biggest kava myth, and that is, “post-kava session sudden death syndrome”: The idea that kava might cause ischaemic heart disease (IHD) and result in “post-kava session sudden death syndrome” was first studied by Prof. Alan Clough in 2004*. At the end of that study, Prof. Clough reported that “There is no clear evidence for an association between kava use and IHD”. Additionally, he
said that “kava has been used for centuries by Pacific peoples with no evidence for an association with heart disease.” So it is clear, kava does not cause ischaemic heart disease and “post-kava session sudden death syndrome”.

But jump forward 9 years to a researcher called Barguil61. In his paper about kava dermopathy he makes a brief but sensational claim. He says that kava causes “post-kava session sudden death syndrome” and he back this up by sighting Prof. Alan Clough*62. So Barguil made up a lie about kava and then he used Prof. Alan Clough to support his lie, even though Prof. Clough said kava did not cause sudden death. Then Barguil added that 9 people had died as a result of “post-kava session sudden death syndrome” over a 13 year period in New Caledonia. He added, “No autopsies were carried out” and 6 of the 9 had been “heavy smokers, [had] severe hypertension, sleep apnoea, cardiac arrhythmia, asthma, [and/or a] family history of sudden death”. So what did these people really die of? No one knows. It seems like Barguil just doesn't like kava and decided to make up a story that kava causes death. The sad thing is, this lie was published in a peer reviewed journal, so people are reading this and believing a lie.

These are just some of the myths and lies about kava, not just presented in conversation but also on TV, in the newspapers and in peer reviewed publications, books. So what could be behind this?*63 Why the lies, discredit and targeted malignment of our Pasifika icon of identity?

Some of it is simply bad research while some in the media like to exaggerate, or create false news to grab your attention*64. Braun & Cohen stated, “As in the popular press, the medical press is prone to creating sensational headlines to attract interest, but this can lead to inaccurate assumptions.” The 2016 World Health Organisation kava risk assessment report is freely available online, but it seems some researchers and the media are not interested in truth. It would appear sensational headlines like “Kava causes liver damage”, or stories suggesting kava causes liver ulcers are a lot more exciting than the facts.

Another reason for the myths and lies is the ‘aesthetics of modernity’, or observable demonstrations of ‘primitive-ness’ in contrast to ‘proper’ modern civilised behaviour*65. ‘Aesthetics of modernity’ leads to comments like kava looks awful and tastes worse. Additionally, I have mentioned the diabolisation of kava by some Pentecostal Christians. But this diabolisation hints at a deeper reason for the kava as killer agenda, and that is modernity discourse and ideology*66, for example, the belief that medicine prepared in a laboratory is better than traditional medicine prepared in the village. Rates67 talks about this. He said that it was “the Industrial Revolution [starting 200 years ago] and the development of organic chemistry [that] resulted in a preference for synthetic products”. Then he tells us the reason behind this. He stated that this “preference” for drugs made in a laboratory is driven by “the economic power of the pharmaceutical companies... [and] industrialised western societies, in which drugs from natural resources were considered either an option
for poorly educated or low income people or simply as religious superstition”*68. So the powerful created this idea that their drugs are better to encourage you to buy them so they could get rich. Coomber & South69 said that even though traditional medicines are important to medical advancement, contemporary Western discourse continues to link the use of traditional medicines with abnormal behaviours of “backwardness or underdevelopment”*70.

Finally, Escobar71 states that this ‘us and them’, ‘primitive modern’, ‘backward versus developed’, this backward Pacific Island versus modern Europe belief is “a fictitious construct, an omnipresent... discourse... of power” created by the Eurocentric development pursuit to position anything deemed to counter modernity and economic development (things such as cultural practices and traditional medicines like kava in its natural form) as a threat that must be regulated or eliminated*72. If it doesn’t lead to more money for business, it must go. They don’t like medicine such as kava in its natural form because big business doesn’t make money off it.

The maligning of Kava as a killer, through discourse such as the myths I have presented, is essentially modernity framed prejudice and discrimination*73. The interesting thing though is that this discrimination can be selective. For instance, if kava is packaged into tablet form in a laboratory aimed at combating some of the diseases effecting modernity such as anxiety, addiction and cancer, its ok. Here’s my parting challenge: let’s ensure we present the facts about kava, reverse the mostly one sided mis-representation, to accurately present our icon of identity is more ‘cure’ than ‘killer’*74.

REFERENCES AND POWERPOINT SLIDES
Bio:

Dr. ‘Apo’ Aporosa is maternally related to the village of Naduri in Macuata, Fiji. He has a doctorate in Development Studies from Massey University (New Zealand) and over 20 years’ experience as a development practitioner in Fiji and New Zealand. Apo was awarded the 2016 New Zealand Health Research Council Pasifika Post-Doctoral Fellowship. He is based at The University of Waikato (Anthropology Programme/School of Psychology) where he is investigating driver safety following kava use at traditional consumption volumes.

Byron Suiali'I (21/9/17) explained, “in ceremonial practices, the ‘ava is referred to as ‘ava a tupu meaning, the drink of kings. This conveys the importance of Samoan rituals that symbolises chieftainship and ancestral connections. The best roots are reserved for the highest chiefs present. You could mention this in your talk linking similarity in traditionally held esteem for the processes. Remember that in Samoa, ‘ava ceremony is only done to honour chiefly people and esteemed visitors, unlike Tonga and Fiji, which is also forms part of the socialisation processes. It’s not an everyday occasion for Samoan people. It’s therefore important in your talk to consider this aspect of kava drinking among Samoan people. Interestingly, alcohol is loosely referred to as ‘ava”

Leni Lolohea (19/9/17) explained that in Tonga, ‘Kava koe fonua, fonua koe kava’ is a common reference for kava meaning, ‘Kava is land, land is kava’.

Aporosa (2014, p.68) explained that “wainivanua infers an ingestable representation of the land, people, culture and practices which is deeply rooted in their sense of identity and customary practices of the past.” (this can be downloaded from https://docs.wixstatic.com/ugd/bd81a7_f8e7611d020143dc90bee7050dd87593.pdf).


Lebot and Cabalion present a valuable table informed from across Pasifika in which they list symptoms and the appropriate kava preparation method for each condition.


Untangling fact from fiction:

**MYTH:** “Kava looks awful and tastes worse”

Kava is about cultural connectedness and practice and not “taste.”

Untangling fact from fiction:

**MYTH:** “Kava’s effects numb the drinker, induce sleep, and turn them into zombies”

**KAVA FACILITATES ‘CLEAR-MINDED’ DISCUSSION:**


**‘SLEEP AIDING’ AND NOT ‘SLEEP INDUCING’:**


Untangling fact from fiction:

**MYTH:** “Kava is alcohol”

**INTOXICATING PEPPER** - *Piper methysticum*:


**KAVA IS NOT ALCOHOL:**

Steinmetz, 1960:3; Singh & Blumenthal, 1997:36


Untangling fact from fiction:

**MYTH:** “Kava is addictive”


MediHerb AS AN ANTICRAVING AGENT:

KAVA USE IN ADDICTION THERAPY:


Suckling, L. (2017). Are herbal treatments for mental health issues myth or magic? Stuff.co.nz, April 6

http://www.stuff.co.nz/life-style/well-good/teach-me/91182913/are-herbal-treatments-for-mental-health-issues-myth-or-magic


Untangling fact from fiction:

**MYTH:** “Kava causes liver damage”

**EUROPEAN KAVA BAN LIFTED BY GERMAN FEDERAL COURT:**
Schmidt, M. (2014). German Court ruling reverses kava ban; German Regulatory Authority appeals decision. HerbalEGram, 11(7).

**HEPATOTOXICITY – LIVER DAMAGE**

**KAVA PARACETAMOL/PANADOL HEPATOTOXICITY STUDY:**
Kava is “dramatically” safer than Paracetamol/Panadol.

Schmidt, M. (2014). German Court ruling reverses kava ban; German Regulatory Authority appeals decision. HerbalEGram, 11(7).

“On balance, the weight-of-evidence from both a long history of use of kava beverage and from the more recent research findings indicates that it is possible for kava beverage to be consumed with an acceptably low level of health risk.”


**MYTH:** “Frequent consumption of kava causes skin problems.”

“... bloated, red-nosed drunks. As with initial aversion, cosmetic effect is not by itself sufficient to explain why Europeans spurn some drugs and adopt others.”


**Untangling fact from fiction:**

**MYTH:** “Kava takes fathers away from their families”

WE DON’T BLAME THESE...

... SO WHY DO WE BLAME THIS?

Kava doesn’t take fathers away from their families, personal choice does!


The diabolisation of indigenous religion by Christian churches and movements:


Meyer, B. 1992. ‘If you are a devil, you are a witch and, if you are a witch, you are a devil.’ The integration of ‘pagan’ ideas into the conceptual universe of Ewe Christians in Southeastern Ghana. Journal of Religion in Africa, 22(2): 98–132.


Untangling fact from fiction:

MYTHS AND FALLACIES — CONVERSATION, POPULAR PRESS AND PEER REVIEWED PUBLICATIONS:

Why?

- Bed/shoddy research:
  “As in the popular press, the medical press is prone to creating sensational headlines to attract interest, but this can lead to inaccurate assumptions.”


Untangling fact from fiction:

‘aesthetics of modernity’, or observable demonstrations of ‘primitive-ness’ in contrast to ‘proper’ modern civilised behaviour.


Untangling fact from fiction:

‘native’ & ‘primitive’

Untangling fact from fiction:

MYTHS AND FALLACIES — CONVERSATION, POPULAR PRESS AND PEER REVIEWED PUBLICATIONS:

Why?

- Diabolisation, modernity discourse and ideology:
  It was “the Industrial Revolution (starting 200 years ago) and the development of organic chemistry (that) resulted in a preference for synthetic products.”


Untangling fact from fiction:

MYTHS AND FALLACIES – CONVERSATION, POPULAR PRESS AND PEER REVIEWED PUBLICATIONS:

...is essentially modernity framed prejudice and discrimination.

Kava as ‘cure’ ≠ Kava as ‘killer’

Untangling fact from fiction:

CHALLENGE:

• present the facts about kava,
• reverse the one-sided misrepresentation,
• accurately present our icon of identity as more ‘cure’ than ‘killer’.