

Suki and tobacco use among the iTaukei people of Fiji

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Introduction

Over 50 years ago the Fiji Government began to clamp down on the marketing of cigarettes. Since then, a range of laws and policies have been put in place to encourage people to stop smoking. This report looks at suki and tobacco cigarette use today among the iTaukei people of Fiji¹.

The scientific evidence that smoking causes a large number of diseases is now overwhelming. Stopping smoking is one of the best things you can do to protect your health. But many people still smoke, either because they don't know how harmful smoking is, or they feel they need to smoke to cope with problems, or they have tried to quit but have found the cravings to smoke too strong to resist.

The Centre of Research Excellence: Indigenous Sovereignty & Smoking was established in 2018 to 1) advance the knowledge on indigenous tobacco use and how to more rapidly reduce the number of people using tobacco in a harmful way 2) add an indigenous view on addiction and how to change behaviour, and 3) we want to build indigenous capacity to respond to the harmful consequences of tobacco smoking.

There are over 370 million indigenous people across 90 countries in the world. We know a lot about tobacco use among the Māori of Aotearoa, Aboriginal and Torres Strait Islander people of Australia, the First Nations people of Canada, some Native American tribes and the Inuit in Greenland. Very little is known about tobacco use among the rest of the world's indigenous people.

Indigenous people are diverse culturally, but we have all faced challenges to our survival. Like New Zealand, Australia, the United States of America and Canada, Fiji was also colonised by the British, but sovereignty was returned to the Fijian people in 1970.

This report is the first in our series of country stories which seek to share indigenous peoples' views on tobacco and their solutions to the harms that result from smoking.

This story will be of interest mainly to iTaukei people. So, we have written this report for iTaukei people and have tried to avoid using scientific language and research jargon. This report should also be of interest to the leaders of Fiji, government officials, leaders in the councils and villages, and non-government organisations (NGOs) who want a healthier Fijian society.

In the following pages we first provide some information about Fiji and the people of Fiji for the international reader. We then present what statistics we found on the health status of the iTaukei. Our focus is on diseases most linked with smoking. This section also sets out how many people in Fiji smoke.

To understand more about why iTaukei people use tobacco, we needed to look back on the history of tobacco's introduction to Fiji. This is presented in section four. What we learned about suki (native tobacco) and its origins in India is included in this section.

In order to understand suki and tobacco use among the iTaukei we need to explain how important kava (piper methysticum) is. Kava and how smoking has become part of kava ceremonies is presented in the fifth section of this report. We then look at what has been done in Fiji to help people stop smoking.

Finally, we reflect upon what we learned and what gaps still exist. In the last section of the report we also propose some research ideas which we hope will be taken up by iTaukei and other Fijian researchers.

Although this report is not written in scientific language, we used common scientific study methods. A plain language explanation of what we did is appended at the end of this report.

About Fiji

About Fiji

Fiji is made up of 332 islands in the South Pacific. The two largest islands, Viti Levu and Vanua Levu, account for 87% of the landmass.

Fiji became a British colony in 1874 by annexation. Almost 100 years later on 10 October 1970, Fiji was returned to independence as the Dominion of Fiji. In 1987, the military government at the time declared Fiji a republic.² Today, Fiji utilises a parliamentary system of governance.

The People of Fiji

The indigenous people of Fiji called themselves Kai Viti (“the people of Viti”) or iTaukei (“the owners of the land”).

About 86% of the land in Fiji is owned by the iTaukei. This is unusual for countries colonised by Europeans and can be attributed to a decree in 1876 that prohibited the sale of Fijian land to non-ethnic Fijians.³

Most iTaukei live in tribally based and managed villages on tribal land. Villages are important culturally and have helped iTaukei maintain the centrality of family, their language and traditions. The iTaukei are strong in their culture and have held on to their language, with its many dialectical variations, which can change from village to village. Other official languages are English and Hindi.⁴ Many iTaukei who live in villages seek work close by if they can get it, though in rural areas employment is harder to find. Others living in villages either fish or engage in subsistence farming growing fruit, vegetables and kava. In urban settings, iTaukei are mostly employed in service occupations, as skilled, semi-skilled or unskilled workers.

Indo-Fijians

When the British were in control of Fiji they established sugarcane as a principal crop to help Fiji become economically self-sufficient. But they also needed labourers to work on the plantations as well as building and development projects. At that same time, the British also ruled over India, where land taxes had created extreme poverty amongst the people. Great Britain had just passed its Abolition of Slavery Act in 1833, ordering slavery to be gradually banned across all British

colonies so the British set up a new indentured labourer system to give Indian people work in other British colonies.⁵ The word ‘indenture’ was used to imply that workers were entering into a legal contract to work for a set period of time.⁶ In return the cost of their travel to whichever country needed labourers, their initial accommodation and healthcare was covered. Return travel at the end of their contract was also covered if they completed their commitment to work.

The indentured labourers system began in 1834, shortly after the ban on slavery, and continued until 1916. During that time about 1.2 million people were transported from the Indian states of Uttar Pradesh, Bihar, Madhya Pradesh, Haryana, Rajasthan, Punjab, Andhra Pradesh, Tamil Nadu and Kerala to various British colonies including Mauritius, Jamaica, Guyana, Trinidad and Tobago, Surinam, South Africa and Fiji.⁷



It is worth stating here that Mahatma Gandhi worked for many years to end the indentured system which he argued was not much better than slavery.⁸

The largest influx of Indian indentured labourers to Fiji occurred between 1879 and 1916. During this period, a total of 87 voyages transferred over 63,000 Indians from the states of Calcutta and Madras.⁹

Despite the long working hours and poor living conditions that the indentured labourers in Fiji experienced, 60% of them chose to remain in Fiji at the end of their contract.¹⁰ Unable to purchase land, many took up employment in agriculture, animal husbandry and small businesses and some leased land from iTaukei tribes and began growing sugarcane, tobacco, cotton and rice.³ As the descendants of Indian indentured labourers became integrated into Fijian society they became known as Indo-Fijians.

During the time that the British ruled over Fiji they imposed their Western ideas about race and class upon the society to ensure that European people were given the highest status. The iTaukei, especially the chiefs, were ranked second and Indo-Fijians were ranked below the iTaukei. This class system has strongly influenced Fijian politics since independence from Great Britain. At first, Fijian chiefs dominated the national political scene.³ Since then, there has been ongoing debate about how to protect the rights of iTaukei as the indigenous people of Fiji, while enabling non-indigenous Indo-Fijians and other settlers to participate fully at a societal and political level.¹¹

Population Statistics

In 2008, the population of Fiji (837,271) was made up of 56.8% iTaukei, 37.5% Indo-Fijians and 5.7% others (such as, Chinese, European and other Pacific Islanders).¹² Fiji's population in the 2017 census increased to 884,887, but due to collection errors no data on ethnicity has been released.¹³

During the years 1900 to 1950s, urban centres were mostly populated by South Asians and Europeans and most iTaukei lived in rural areas. Today, 40% of iTaukei live in cities and towns.¹⁴

iTaukei Health

As was the case with many other colonised indigenous peoples, diseases introduced by the colonisers during the 1800s killed many iTaukei. One example of the devastation caused by introduced disease was the measles epidemic of 1875. The colonial government decided not to quarantine a ship infected with measles even though the British knew how devastating the disease would be for an unexposed population. As a result, during 1875 to 1876 more than 40,000 Fijians, about one-third of the population, died.¹⁵

The death of so many iTaukei during the colonial years, and the influx of Indian workers resulted in iTaukei becoming a minority in their own country for about 50 years. It was only in the late 1980s that the iTaukei began to outnumber others in Fiji.¹⁶

Due to improvements in health care, people in Fiji now live on average up to about 69 years of age.¹⁷ Diseases caused by preventable behaviours such as smoking, contribute to cutting short the lifespan of Fijian men and women. Stroke and heart attacks (cardiovascular diseases) are the leading cause of death in Fiji. Other main smoking related causes of disease and death are emphysema, bronchitis and some cancers.¹⁸

Strikingly, 76% of all non-communicable disease deaths are due to cardiovascular disease. What is so striking about this is that over half of these deaths occur in adults aged 40-59 years.¹⁹ In many developed countries the majority of cardiovascular disease deaths occur in older adults aged 65 years and above. Smoking tobacco is strongly linked to cardiovascular disease.²⁰

Another cause of cardiovascular disease is the shift to a westernised diet and the introduction of processed and fast foods. Eating more unhealthy foods over recent decades has led to an increased number of iTaukei men and women putting on more weight than was previously usual. Overall, iTaukei are now reaching higher levels of overweight and obesity than the Indo-Fijians.²¹ Obesity and high blood pressure also contribute to the high rate of cardiovascular disease in the iTaukei. High blood pressure has increased among iTaukei men from 16% in 1980 to 41% in 2011, and among iTaukei women, high blood pressure has increased from 26% in 1980 to 37% in 2011.²¹



Above:
Tuberculosis billboard.

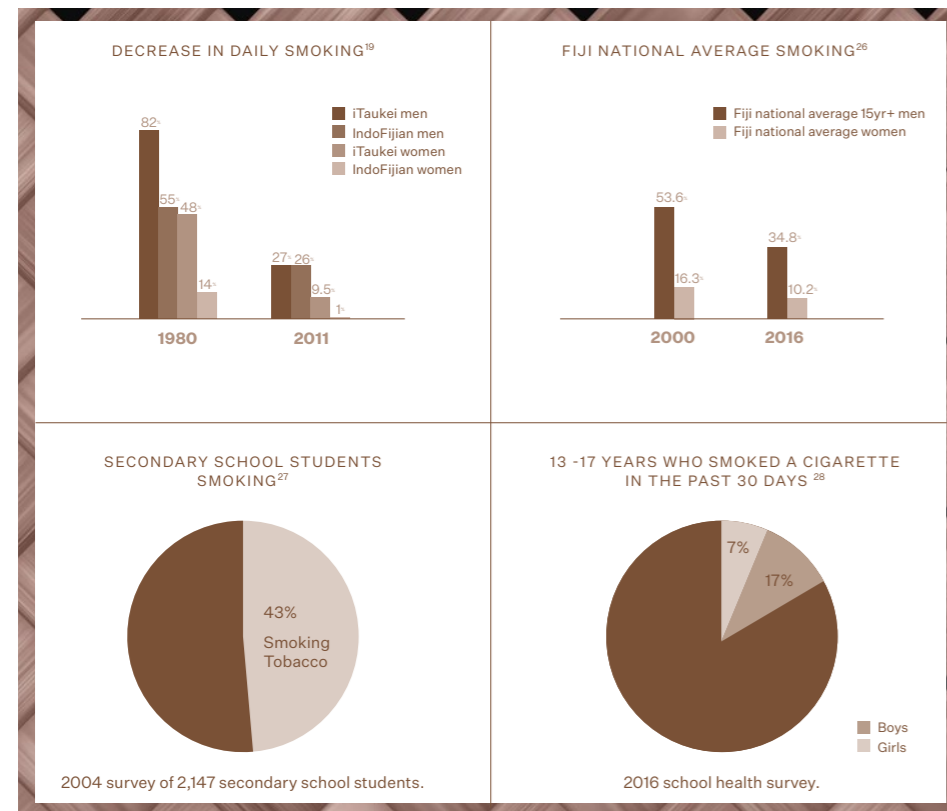
Smoking doesn't help! Not only can smoking cause high blood pressure, stroke, heart attacks and many cancers, smoking can make disease symptoms worse and can speed up progression of these diseases.

Another health concern in Fiji is tuberculosis. There are two main types of tuberculosis – latent tuberculosis infection and tuberculosis disease. Latent tuberculosis lives in the body without causing illness, whilst tuberculosis disease is caused by bacteria that attacks the lungs. It can also attack the lymph nodes, spine, brain and kidneys.²² Whilst tuberculosis has been in decline in Fiji, experts still consider it to be prevalent and a concern.²³ Smoking can increase a person's chance of contracting tuberculosis. Smoking can also interrupt and negatively affect treatment of tuberculosis.²⁴

Tobacco smoking among iTaukei men and women

Current and accurate statistics on how many iTaukei men and women smoke appear to be unavailable. Some reasons for not having these statistics are that reporting statistics separately for iTaukei and Indo/other Fijians has not usually been done. Many villages are remote and political upheaval has sometimes disrupted census taking. We note with interest that even if smoking questions were included in the 2017 census, due to collection errors no data on ethnicity can be aggregated or released.¹³

The most recent statistics on the number of people smoking in Fiji suggests that the number of adults aged 15 and over who smoke any tobacco product on a daily or non-daily basis has reduced since the year 2000.^{25, 26}



Cannabis Smoking

Marijuana use in Fiji is another factor worth noting.²⁹ The harm from smoking, as mentioned earlier in this section, is due to the tar and carbon monoxide in smoke itself, regardless of what is smoked. It is the act of inhaling smoke that does most of the damage. For example, breathing in smoke from open cooking fires is a major cause of respiratory disease in third world countries.³⁰ Therefore, inhaling smoke from a cannabis joint, which also contains tars and carbon monoxide causes some of the same problems.³¹

In Fiji, cannabis is a valuable cash crop, especially for economically restricted rural communities.³² A 2004 survey found 13% of secondary school students aged between 15-20 years of age were using marijuana.²⁷ Along with suki, marijuana was reportedly introduced to Fiji by indentured labourers from India.²⁷ Though marijuana use is illegal, Fiji's lush tropical landscape makes it both easy to grow and easy to conceal while growing.

Other drug use in Fiji

Drug use, in its broadest sense, is not new to Fiji. We mention other drugs here because some people who use other drugs often smoke tobacco as well, and dual use of harmful substances can increase a person's risk of smoking-related diseases especially if other drugs are smoked.³³

Fiji is a major shipping port in the Pacific and the Fiji Police and Customs officials are vigilant about both trafficking and importation of these drugs.³⁴ Serious illicit drug use such as cocaine, heroin, methamphetamine (p, meth) and ecstasy (MDMA) are not common in Fiji, but the Fiji Police are concerned that harder drug use may be increasing.³⁴

Alcohol

There is widespread awareness that alcohol causes a variety of social problems. Harmful patterns of use among young people and the resulting negative social impacts are raising concerns about increased risks of injury and alcohol-related disease.³⁵

Sale of alcohol is restricted to adults aged 18 years and over. Commercially produced alcohol – beer, wine and spirits – is consumed in almost all sectors of Fijian society. Consumption of home brew beer, with up to three times more alcoholic content than its commercial counterpart, is said to be widespread, especially among young men.³⁶

Estimates of alcohol use varies widely, but some commonly recognised trends are that there are a lot more male drinkers than female drinkers; men drink mostly in the company of other men and usually copious amounts of alcohol are consumed during drinking sessions; whereas women mostly drink during social occasions or in night clubs in the company of others. A particular concern is the growing rate of binge drinking (five or more drinks during a single session) among young people aged 12 to 20 years old.^{27,37}

Unlike kava, alcohol use occupies a marginal place in iTaukei life and customs. But drinking alcohol may be increasing in association with the increasing use of kava as a recreational pastime, rather than its more sacred use during ceremonial and traditional meetings. The drinking of alcohol (particularly beer) between intakes of kava is referred to as “wash down”.²⁷

Suki and Tobacco in Fiji

The history of tobacco in Fiji

We found one paper that said the tobacco plant existed in Fiji long before 1800. It was apparently used to control vermin and its use for smoking was unknown.³⁸

Suki

When the Indian Tamil indentured labourers came to Fiji, they brought tobacco seedling plants with them.³⁹ Over time they taught the iTaukei how to grow, cure and chew or smoke the plant.⁴⁰ This tobacco came to be known as “suki” or native tobacco.

Suki is air dried, rather than barn cured. It is then rolled into a black rope of tobacco known as “Fiji Twist”.⁴¹ The rope is then wound into a large bundle or roll as shown in the opposite photo.

At first suki was used only by men, but at some time in recent years women also began to smoke suki.

Although suki has been used since its introduction to Fiji, until recently its consumption had been declining due to the shift to buying tobacco company factory-made cigarettes. But government taxes to increase the price of factory-made cigarettes, along with the introduction of fines and many bans on smoking have, we learnt, caused many Fijians to switch back to smoking suki, which is much cheaper. Suki, we were told, is made from a different, stronger variety of tobacco plant. If this is true, then people would not need to smoke as much of it to get the same level of satisfaction. Some iTaukei also think suki is not as harmful because it is “organic” which could also be increasing the attractiveness of smoking suki instead of factory-made cigarettes.



Above:
Suki “rope” tobacco
for sale at Sigatoka
markets.

Tracing the origins of Suki in India

In March 2019, iTaukei village elder, Mr Setariki, and Dr Glover of the *Centre of Research Excellence: Indigenous Sovereignty and Smoking*, visited Madurai, India to trace the Indian origins of suki. Madurai is a major city located in India’s Tamil Nadu where many Indo-Fijians originated from. Situated on the banks of the River Vaigaia, Madurai has long been an agricultural hub, traditionally growing cotton and jasmine.

Dindigul (71 km north of Madurai) and Veda sandur (85 km north of Madurai) were areas where tobacco for making cheroot (suruti) was grown.

Cheroot are made from a variety of tobacco plant used for making chewing tobacco. The leaves are softer than the variety used for making cigars and cigarettes. In Veda sandur we had missed seeing the cheroot variety of tobacco growing because it is harvested in February. We did see a similar chewing tobacco plant and we saw harvested plants curing in the sun.



Mr Setariki recognised the tobacco leaves and said the curing method was similar to the process used in Fiji.

The major difference between Fiji and the Indian growing and curing process was that in India they can only grow one crop a year. In Fiji three crops of suki tobacco can be grown each year. The area of India we visited was very dry so the fields have to be irrigated. In Fiji the natural rain does all the work of watering the growing plants. Because of the hot desert-like environment in central India, tobacco seedlings have to be carefully and laboriously raised by hand in specially prepared seed beds. Typically, female labourers gently tend the seed bed every day, expertly pulling out the weeds which, at sprouting stage, only these women can spot. Mr Setariki shared how in Fiji, he could hand-scatter suki seeds or let them fall where they will, and they would grow without help.

To see cheroot being made we visited Bhavani – an area closer to a river. In Bhavani, the plant Mr Setariki recognised as similar to suki was still growing.

Above:
Harvested plants curing
in the sun.



Above:
A plant similar to suki
growing in Bhavani.





Above:
Cherroot being made in
a 'factory'.

Left:
Sun-cured harvested
plants.



Above:
Cherroot rolling hut.

Some harvested plants were also being sun-cured. The tobacco farmer then took us to one of his 'factories' where cherroot were being made. Though they did not make the tobacco rope like suki growers make in Fiji, the farmer confirmed this method was still used in another area of India. His cured tobacco was however similarly bundled and wrapped to keep it from drying out. In these cherroot-rolling huts, Indian men sat on the floor rolling cherroots which resembled the 'cigar' like roll-up iTaukei people had demonstrated for us in Fiji.

The farmer then took us to another 'factory', a large shed big enough to garage a tall harvester. In the opening to this factory Indian women in their brightly coloured saris sat on the ground pulling the browned sticky cured tobacco leaves from the plant's darkened stem.

Their hands worked fast twisting and pulling the leaves away to form a bundle. Mr Setariki recognised this method also and was able to expertly instruct Dr Glover in how to pluck the leaves from the stem.



Above:
Dr Glover plucking tobacco leaves from the stem.

Right:
Indian women at a 'factory' pulling cured tobacco leaves from the plant's darkened stem.



It was all the evidence Mr Setariki needed, and an enormously satisfying experience for him to visit these sites in India where the history he had been taught was confirmed.

The last part of the story about suki coming from India was to test if the plants were the same type. We could not have this test done in New Zealand without importing young uncured leaves and flowers which would be prohibited by NZ customs.

We did however, have other dried tobacco samples we had gathered, tested by the Institute of Environmental Science and Research (ESR) for nicotine content.

Mr Setariki had earlier told us that suki is “stronger” than the commercially packaged factory-made cigarettes. We took this to mean that suki had a higher nicotine content, though he could have meant the native suki was harsher on the throat.

ESR ran tests on some Fijian suki, a packet of Fijian bought B&H Red, some Indian cheroot, and a packet of New Zealand bought B&H Red. See table below.

Table 1. Nicotine content of suki, cheroots and factory-made cigarettes⁴²

PRODUCT	(MG/G)	%
Suki	33.0 – 46.3	3.3 – 4.6
Fijian cigarettes	33.2 – 44.3	3.3 – 4.4
NZ cigarettes	44 – 45.8	4.4 – 4.6
Indian Cheroot	42 – 53.6	4.2 – 5.4

ESR found that nicotine was not evenly distributed throughout each product. That is, there was a different amount of nicotine in different parts of the same sample. However, they did find a higher upper range of nicotine in the suki and the cheroot, compared to the Fijian factory-made cigarettes. We included the NZ B&H Red because previous research had found NZ tobacco had a high nicotine content. Fowles suspected that nicotine was being added to NZ roll-your-own tobacco to make it harder for people to quit.⁴³

The nicotine content in suki and cheroot is not manipulated in a “big tobacco company” factory. This is one of the reasons users of suki in Fiji see suki as “organic”; they suspect smoking the more natural suki or cheroot is not as harmful as factory-made cigarettes.⁴⁴

The ESR results did show that the New Zealand B&H Red was higher in nicotine content than the Fijian packet.

Big tobacco companies in Fiji

1973



The commercial tobacco industry in Fiji began with the creation of the Southern Development Company (SDC) in 1973 from the amalgamation of Carerras and the Fiji Tobacco Company by the Central Manufacturing Company (CMC).

1992



In 1992, the SDC became a wholly-owned division of the CMC.

2000



In 2000, British American Tobacco (BAT) purchased SDC's tobacco growing division from the CMC. In a partnership agreement, BAT-owned SDC is responsible for growing the tobacco by sub-contracted farmers and curing the tobacco leaf. Then CMC processes the cured leaf into cigarettes.⁴¹

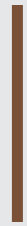
2004



In 2004, it was reported that about 251 small farmholders were being contracted to grow tobacco. On average they each grew 0.4 hectares (1 acre) of tobacco. Many of these farms are located in the Sigatoka Valley, often referred to as “the salad bowl” of Fiji.

Typically, these farmers grow tobacco on small blocks of land adjacent to their vegetable crops. The only large-scale block of tobacco is directly managed by SDC and uses a higher level of mechanisation. All leaf is processed at SDC's curing barns in Nadi and Sigatoka.⁴¹

2014



By 2014, Fiji was producing less than 1,000 metric tons of tobacco annually. Tobacco represents only a small fraction of Fijian agriculture, with only 0.14% of agricultural land being used to grow tobacco.⁴⁵

Smoking tobacco has become integrated into customs and traditional protocols over the hundred plus years that iTaukei have been smoking. It became common to expect visitors to present gifts of tobacco to villagers and iTaukei shrines as a gesture of gratitude for hospitality. Communal smoking also became an ordinary part of gatherings of a political and social nature, such as village meetings, and when drinking alcohol and taking part in kava drinking. Giving cigarettes as a thank you for favours, such as when people help in the garden is another example.⁴⁶

iTaukei use of tobacco cannot be understood without considering how smoking and kava are used together. In modern times, smoking a cigarette or suki is closely linked to kava drinking. The next section discusses kava.

Kava

Kava (yaqona in the indigenous Fijian language) is a Polynesian word meaning bitter. The roots of the kava plant (*piper methysticum* meaning “intoxicating pepper”) are made into one of the most common, sacred and treasured drinks in Fiji.

Kava is usually made from a 3 year old plant that is harvested for its roots. These are chopped, dried in the sun, then pounded into a fine brown powder. The powder is put in thin cloth bags and soaked in warm water to make the drink.

The importance of kava in Fiji cannot be underestimated. Participating in kava preparation, service and consumption influences a person’s mana – one’s authority, presence, prestige and respect. At the end of the working day, men, and sometimes women, sit cross legged around a kava bowl to discuss the day, make plans for the next day and share the latest news and gossip.⁴⁷

In many places in modern Fiji, kava is seen as a social beverage, and the sacred and ceremonial elements of the kava ceremony are not observed as strictly as they once were.⁴⁸

Kava has effects on both the mind and body. It is mostly known to be a muscle relaxant. The brain of course is also a muscle so kava does effect thinking, for example, by slowing reaction times. Combined with the relaxation effect, kava increases happy feelings, so conversation during ceremonial or social gatherings flows easily and as the night wears on, much laughter is enjoyed. This is one of the social benefits of kava. Kava also induces sleepiness which is mostly a good thing, but if people drink excessive amounts very late into the night, it can make it hard for people to get up and get going the next morning.^{49,50}



Above:
Kava roots for
sale at Sigatoka
markets.

What has been done
to stop smoking?

What has been done to stop smoking?

1960s

After the world news coverage of the 1964 United States Surgeon-General's report on the harmful effects of smoking, the Fiji Broadcasting Company did not renew its cigarette advertising contract.¹⁹

1980s

In the early 1980s smoking in all patient areas of government hospitals was banned.

1986

The Fiji Medical Association began a campaign to ban all cigarette advertising.¹⁹

1998

The Tobacco Control Bill passed. This included banning smoking in public places, prohibiting the sale of tobacco products to minors, establishing a system of health warnings on cigarette packs and eliminating tobacco sponsorship of sports.¹⁹

2003

Fiji signed up to the World Health Organisation Framework Convention on Tobacco Control.¹⁹ Actions taken in support of this convention include increased controls on smoking in public and private spaces, additional controls on sales, tobacco taxes, health promotion campaigns and declarations of tobacco-free villages.¹⁸

2012

By June 2012 a registration system for tobacco retailers was in place. Suki vendors were among the 5,000 tobacco retailers who became legally registered. Any person caught selling cigarettes without a registration certificate faces a fine up to FJ\$5,000.⁵²

To enforce all of these tobacco control measures, Fiji established a Tobacco Control Enforcement Unit (TCEU). The TCEU enforces tobacco control laws through the application of fixed penalty notices such as on the spot fines.⁵³

Case Story: The Nabila Health Project⁵⁴

Western smoking cessation methods had been tried and failed with the rural community of Nabila, a small village on the far western coast of Viti Levu, Fiji's largest and most populous island. Information about the health risks of smoking, presentations, psychological techniques and asking the church minister to set an example by abstaining, were all trialled unsuccessfully.

In 1986, a group of doctors began a health treatment and promotion program with the permission of the Nabila village authorities. Subsequent annual visits by the doctors demonstrated to the villagers that the doctors were committed to them. The medical team made an effort to make sure that the health promotion practices were consistent with iTaukei culture, traditions and beliefs about illness, and protocols.

In 1990, the small village of Nabila (approximately 238 people) developed and implemented a successful community-based stop smoking program. Cultural barriers were discussed with the village elders, whilst support for those who began to smoke again were managed through group support which drew on ceremonial means.

A combination of Western-based stop smoking methods and indigenous traditional rituals were used. These included social contracting through notices and in the media, use of rapid smoking, a group pledge and a formal tabu on smoking. All smokers gave up except excused elders and visitors.

Follow-up visits indicated sustained success. Relapses were attributed to supernatural consequences and were remedied by group and ceremonial methods. After 21 months the intervention was declared a success.

The result supported the need for stop smoking programmes to be designed in consultation with iTaukei leadership and for interventions to incorporate communal support and honouring of the spiritual and cultural beliefs of the iTaukei.

Conclusions

This report on tobacco and suki use among the iTaukei raised a number of questions.

There is evidence that smoking is contributing to iTaukei living shorter lives than their Indo-Fijian neighbours. Smoking also increases the risk of many diseases and can make symptoms of disease worse if people are overweight, have type 2 diabetes or tuberculosis. Up to date statistics on how many iTaukei men and women smoke is needed. It would be good to know if smoking rates vary depending on whether people live in cities or villages, and whether smoking is higher on more remote islands of Fiji.

To design effective stop smoking programmes, it would be useful to know whether people are chewing or smoking suki or if they are just smoking factory-made cigarettes. Also, does what people smoke vary by age? We were told that more iTaukei women are participating in kava ceremonies now than in previous times. Does this mean that women are also smoking more than they used to? If more women are smoking, are they also smoking while pregnant?

There is very little research on the relationship between kava drinking and smoking. Given the effects of kava on the mind and body, and the effects smoking has on the mind, there is a possibility that the effects interact. Tobacco smoking could be counteracting the relaxing effect of kava that makes people feel sleepy. This would enable kava drinkers who smoke to stay awake and more alert and they would then be able to drink kava longer in to the night. It could be useful to understand this interaction in case the relationship between kava drinking and smoking makes it harder for people to quit tobacco.

It is well known in many other countries that drinking alcohol and smoking goes together. Little is known about the effects of combining drinking kava, smoking tobacco and drinking beer to ‘wash down’.²⁷

The numbers of people smoking marijuana should be monitored. There is a chance smoking marijuana could increase as commercial cigarettes become more unaffordable.

It was interesting to learn that suki is sometimes chewed rather than smoked. Whilst not completely safe, chewing tobacco is less harmful than smoking tobacco. The iTaukei have been chewing and smoking suki for at least 140 years. Modernity and international pressures to ‘develop’ are seeing the iTaukei way of life change, but that change will take time – and it will occur as they say in Fiji, according to “Fiji time”. Complete abstinence from smoking will not happen rapidly by Western or World Health Organisation standards. In the meantime, an iTaukei solution might be to shift back to suki, as they appear to be doing. Better yet, would a move back to chewing suki be possible?

It is really up to the iTaukei, and indeed, all sovereign peoples to work out for themselves what solutions they would choose to reduce the harms smoking is doing to their people’s health. A first step is to ensure iTaukei have the facts about how many of their people smoke and how many are being harmed.

It is important that foreign Western methods for stopping people smoking, such as, high taxes, fines, and criminal convictions do not end up doing more harm than good to the iTaukei. There needs to be recognition that time is not lived at the same pace across all peoples in the world. Communities transitioning from a pre-industrial agricultural village and tribal lifestyle, to a largely imposed Western European “modernity” need time to learn, adjust and decide for themselves what and how they want to change. To force the process denies indigenous people’s their right to protect their culture and beliefs. To punish indigenous people for not obeying Western public health demands to immediately stop smoking, to stop drinking alcohol and to stop drinking kava carries on the colonising mindset.

The Nabila Health Project stands as a shining example of what can be achieved when health promotion programmes are designed in conjunction with the communities, for them to implement themselves, with support from experts if required. Future work should seek to build local iTaukei capacity to design and trial stop smoking programmes that respect iTaukei cultural and spiritual beliefs, and that recognise the wisdom of the elders and village processes.

Endnotes

1. Many older records refer to the indigenous peoples of Fiji as “Fijians” or “indigenous Fijians”. A 2010 decree stipulated that iTaukei be used as the name for the original and native settlers of Fiji in all official documents and laws. The word Fijians now refers to all citizens of Fiji.
2. Lawson S. Fiji’s foreign relations: Retrospect and Prospect. *The Commonwealth Journal of International Affairs*. 2015; 104: 209-20.
3. Howard MC. *Fiji: Race and Politics in an Island State*. Vancouver: University of British Columbia; 1991.
4. Tent J. A profile of the Fiji English lexis. *English World-Wide*. 2001; 22: 209-45.
5. Drescher S. The Historical Context of British Abolition. In: Richardson, D, London Frank Cass editors. *Abolition and Its Aftermath: The Historical Context 1790–1916*. London: Frank Cass; 2013.
6. Aapravasi Ghat Trust Fund. An overview of History of Indenture [Internet]. [place unknown]: Aapravasi Ghat Trust Fund; [date unknown; cited 2019 June 11]. Available from <http://www.aapravasighat.org/English/Resources%20Research/Documents/History%20of%20Indenture.pdf>
7. Rai S. Girit Focus Articles. Australian newspaper Indian Links Girit Link. 2004 August. Available from http://girit.org/?page_id=884
8. Singh, S. Remembering Gandhi’s forgotten satyagraha to free bonded labourers from the British. *India*. 2017 March 28 [cited 2019 June 10]; *Daily O*: Available from <https://www.dailyo.in/politics/gandhi-satyagraha-indentured-labourers-british-raj/story/1/16398.html>
9. Vanita. Girit 14 May 2014, it been 135 years, and we pay tribute to over 60,500* Giritiyas, of Fiji. 2014 May 14 [cited 2019 June 10]. Fiji. 2014. Available from <http://girit.org/?p=1388>
10. Gillion K. *Fiji’s Indian migrants: a history of the end of indenture in 1920*. Melbourne: Oxford U.P.; 1962.
11. O’Sullivan, D. Between Indigenous Paramountcy and Democracy: How Differentiated Citizenship and the UN Declaration on the Rights of Indigenous Peoples Could Help Fijian Self-determination. *Aust J Politics Hist*. 2018; 64: 129-41
12. Fiji Bureau of Statistics. *Census of Population and Housing*. Suva, Fiji: Fiji Bureau of Statistics; 2019.
13. Fiji Bureau of Statistics. *Statement on Ethnicity*. Suva, Fiji: Fiji Bureau of Statistics; 2018.16.
14. Phillips T, Keen M. *Sharing the City: Urban Growth and Governance in Suva, Fiji*. SSGM Discussion Paper 2016/6. Canberra: The Australian National University; 2016.
15. Cliff A, Haggett P, Ord J, et al.: *Spatial diffusion: an historical geography of epidemics in an island community*. Cambridge: Cambridge University Press; 1981.
16. *Countries and Their Cultures*. Fiji [Internet]. [place unknown]: Countries and Their Cultures; [2019; cited date 2019 June 10]. Available from <https://www.everyculture.com/Cr-Ga/Fiji.html>
17. Ligairi J, Silatolu AM, Tukana I. NCD related deaths between 2012-2014: A retrospective descriptive study. *Fiji Journal of Public Health*. 2017; 6: 64-66.
18. Snowdon W, Waga G, Raj A, et al. Non-communicable diseases and health system responses in Fiji. *Health Policy and Health Finance Knowledge Hub (Working Paper 34)* Melbourne: The Nossal Institute, University of Melbourne. 2013
19. Linhart C, Tukana I, Lin S, et al. Declines and plateaux in smoking prevalence over three decades in Fiji. *Nicotine Tob Res*. 2017; 19: 1315-21.
20. Witter T, Poudevigne M, Lambrick DM, et al. A conceptual framework for managing modifiable risk factors for cardiovascular diseases in Fiji. *Perspect Public Health*. 2015; 135: 75-84.
21. Linhart C, Tukana I, Lin S, et al. Continued increases in hypertension over three decades in Fiji, and the influence of obesity. *J Hypertens*. 2016; 34: 402-9.
22. Ministry of Health and Medical Services, World Health Organisation, Fiji National University, et al. *Fiji TB Manual*. 4th Edition. [internet]. Fiji: Ministry of Health and Medical Services; 2017 [cited 11 June 2019]. Available from <https://www.health.gov.fj/PDFs/Manual/Fiji%20TB%20Manual%204th%20Edt%202017.pdf>
23. World Health Organization. *WHO report on the global tobacco epidemic 2017*. World Health Organization; 2017. Available from https://www.who.int/tobacco/surveillance/policy/country_profile/fji.pdf
24. Leung CC, Yew WW, Chan CK, et al. Smoking adversely affects treatment response, outcome and relapse in tuberculosis. *Eur Respir J*. 2015; 45: 73845.
25. Use of smokeless tobacco (e.g., chewing tobacco or suki, use of snuff or snus) is not counted.

26. World Health Organization. Towards Healthy Islands: Pacific Noncommunicable Disease. World Health Organization; 2013.
27. Puamau E S, Roberts G, Schmich L, et al. Drug and Alcohol Use in Fiji: A Review. *Pac Health Dialog*. 2011; 17: 165-71.
28. Khalif M. Global School-based Student Health Survey: Fiji Islands 2016 [Internet]. WHO South Pacific Office; 2016 [cited 2019 June 10]. Available from https://www.who.int/ncds/surveillance/gshs/gshs_fs_fiji_2016.pdf
29. Connell, J. 'The Fiji Times and the good citizen: constructing modernity and nationhood in Fiji'. *Contemp Pac*. 2007; 9: 85–109.
30. Mahesh PKB, Gunathunga MW, Jayasinghe S, et al. Breathing with an enemy in the kitchen: a narrative review of the concepts on cleaner energy, respiratory effects of indoor air pollution due to cooking and the potential way forward. *Journal of the College of Community Physicians of Sri Lanka*. 2018; 24: 2.
31. Kaufman TM, Fazio S, Michael D, et al. Brief Commentary: Marijuana and Cardiovascular Disease—What Should We Tell Patients? *Ann Intern Med*. 2019; 170: 119-120.
32. Schmic L, Power R. Situational analysis of drug and alcohol issues and responses in the Pacific 2008-09. Canberra: Australian National Council on Drugs; 2010.
33. Ellickson PL, Tucker JS, Klein DJ. High-risk behaviors associated with early smoking: Results from a 5-year follow-up. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine* 2001; 28: 465-73.
34. Quinn J. Reducing drug harm in Fiji. *Matters of Substance*. 2012 May; 22:2. Available from <https://www.drugfoundation.org.nz/matters-of-substance/may-2012/reducing-drug-harm-in-fiji/>
35. Kessaram T, McKenzie J, Girin N, et al. Alcohol use in the Pacific region: Results from the STEPwise approach to surveillance, Global School-Based Student Health Survey and Youth Risk Behavior Surveillance System. *Drug Alcohol Rev* 2016; 35: 412-423.
36. Ministry of Health for the Alcohol Advisory Council of New Zealand Research (ALAC). Na tabili kavoro: The place of alcohol in the lives of Fijian people living in Aotearoa New Zealand. Sector Analysis (Wellington); 1997. Report No.: 4.
37. Wynn JB. Fiji [Internet]. [place unknown]: New Industries; [date unknown; cited 2019 June 11]. Available from <https://education.stateuniversity.com/pages/466/Fiji.html>
38. Parham, RHB. Fiji Plants, their Names and Uses. *J Polyn Soc*. 1941; 50: 81-96.
39. Gokhale BG. Tobacco in Seventeenth-Century India. *Agricultural History*. 1974; 48: 484-492.
40. Setariki A, personal communication, 2018.
41. Farm Consultancy Services. Child labour in Fiji's tobacco growing industry. Lautoka, Fiji: Farm Consultancy Services; 2004.
42. Institute of Environmental Science and Research (ESR), 2019. Method: Each sample was opened and the tobacco was chopped up with a scalpel. Acid was added to approximately 50 mg of tobacco. This mixture was sonicated and heated, before twice diluting with acetonitrile and centrifuging to remove any solid particles. The extracts were analysed for nicotine content by Liquid Chromatography Spectroscopy (LC/MS). Each sample was analysed three or four times.
43. Fowles J. Mainstream Smoke Emissions from 'Roll-your-own' Loose-leaf Tobacco Sold in New Zealand. A report for the Ministry of Health including an Appendix Report by the US Centers for Disease Control and Prevention. [internet] New Zealand: Institute of Environmental Science and Research Limited ("ESR"), 2008. [date unknown; cited 11 June 2019]. Available from <https://www.health.govt.nz/system/files/documents/publications/smoke-emissions-rollyourown.pdf>
44. Indian Cheroot Smoker, personal communication, Madurai markets, 2019.
45. Tobacco Atlas. Fiji [Internet]. 2019 [cited 2019 June 10]. Available from <https://tobaccoatlas.org/country/fiji/>
46. Karalus LE, Binoka DT, Karalus N. Knowledge, Attitudes, Behaviour and Needs of Pacific People on Tobacco Smoking and Quitting. Wellington, NZ: Ministry of Health; 2010.
47. Aporosa S. Yaqona (Kava) as a Symbol of Cultural Identity. *Locale: The Australasian-Pacific Journal of Regional Food Studies*. 2014; 4 :79-101.
48. McDonald D, Jowitt A. Kava in the Pacific Islands: a contemporary drug of abuse? *Harm Reduction Digest* 9. *Drug Alcohol Rev*. 2000; 19: 227.
49. Thompson R, Ruch W, Hasenohrl RU. Enhanced cognitive performance and cheerful mood by standardized extracts of *Piper methysticum* (Kava-kava). *Hum Psychopharmacol*. 2004; 19: 243–50.

50. Tomlinson M. A Consuming Tradition: Kava drinking in Fiji. *Expedition*. 2006; 48: 8-17.
51. Linhart C, Naseri T, Lin S, et al. Tobacco smoking trends in Samoa over four decades: can continued globalization rectify that which it has wrought? *Global Health*. 2017; 13: 31.
52. Talei F. 5000 tobacco, suki sellers get legal. *Fiji Sun* [Internet]. 2012 June 28 [cited 2019 June 10]. Available from <http://fjisisun.com.fj/2012/06/28/5000-tobacco-suki-sellers-get-legal/>
53. Ali N, Chand D, Bonnar M, et al. Strengthening Tobacco Control Enforcement in Fiji. *Fiji Journal of Public Health*. 2017; 6: 29.
54. Groth-Marnat G, Leslie S, Renneker M. Tobacco Control in a Traditional Fijian Village: Indigenous Methods of Smoking Cessation and Relapse Prevention. *Soc Sci Med*. 1996; 43 :473-477

Appendix A: Research Method

This section describes the steps we took to find the information that is presented in this report.

First, we searched online for scientific papers, World Health Organisation and Fiji Government documents that would tell us about the history of Fiji, how Fiji was colonised and how things have changed since the British withdrew. We needed to understand about the geography, iTaukei customs and values and religious practices, how Fijian society is structured and the economic trends to help us understand why people smoke. We also looked for information on how many people smoke. The next step was to find statistics on the health of iTaukei. We have put together a list of all the publications we read and will make this available on our website.

When we couldn't find up to date statistics on current tobacco use, we wrote to the Fiji Health Department to ask for their help. Next, we visited Fiji to see for ourselves how prevalent smoking was. In Fiji, we met with Mr Naidu, Head Researcher of the National Research Unit, Ministry of Health to confirm we had the latest tobacco use statistics. While in Suva, the capital of Fiji, we looked for 'no smoking' signs that confirmed smoking was being discouraged.

In Sigatoka we walked through a market and learned about suki from a stallholder. We bought a sample of suki for testing. We also drove up into the hills above Sigatoka to see tobacco growing and we came across a British American Tobacco site. We asked for a tour of their facility to learn more about how tobacco growing is part of the Fiji economy, but unsurprisingly, they said no.

A tour guide we spoke to was most informative. She was able to tell us a lot about local smoking patterns and where tobacco and suki was being grown. She invited us to her village to learn more from her father about the history of suki.

When other iTaukei people at our hotel, or that we met on our day trips, heard of the reason for our trip they often talked to us about their own experience with tobacco. This is how we met Mr Setariki.

Upon return to New Zealand, we searched for information on suki in India. We found that suruti (cheroots) was the most likely Indian origin of suki. To confirm this, we put together a study tour with a team of experts and translators, including Mr Setariki. In March 2019, we travelled to Madurai in India to see cheroot tobacco being grown, cured and rolled.

Because Mr Setariki had told us that suki was “stronger” than Fijian factory-made cigarettes, we collected samples of suki, cheroots and Fijian factory-made cigarettes to have the nicotine content tested.

Throughout the trip we wrote field notes and took photos to capture our observations and thoughts on what we were learning.

As this story evolved, we realised it is of greatest interest to the iTaukei people. This story is theirs and this is the reason we have written the report for them, rather than writing it in a scientific way using a lot of research jargon.



