

Young people and cannabis in the western pacific region

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Introduction

The UNODC World Drug Report for 2009¹ estimated that the number of people worldwide who used cannabis in 2007 was between 143 and 190 million persons, with the highest levels of use occurring in North America and Western Europe. The report also noted the recent decline in use among young people in developed countries.

The Pacific Island states, which form part of the World Health Organisation's (WHO) Western Pacific region (WPR), are made up of people of Melanesian, Micronesian and Polynesian backgrounds. In addition, countries such as Fiji and the Solomon Islands include a significant number of people of Chinese and Indian origin. Many of the Pacific Island States and Territories (PICTs) are characterised by high rates of unemployment, rural to urban drift and a very high youth population (in many cases over fifty percent of the population is under 20 years of age). In relation to poverty, and notwithstanding significant growth and prosperity, a number of countries report percentages of the population living below \$US 1 per day.^{2,3}

In 2006 the Australian National Council on Drugs (ANCD) published a commissioned report on drug use in the Asia and Pacific Region,⁴ which has been updated during 2009 for the PICTs². Both reports identified a number of factors common to situations where there have been rises in illicit drug production or use. These included:

- rapid economic growth
- inequitable distribution of the benefits of such growth, with increased gaps between rich and poor, and differential ability to participate in the formal economy
- political upheaval, with resultant external migration, creating both human flows for drug trafficking and disenfranchised populations without access to the formal economy
- inadvertent results of law enforcement and interdiction operations, moving drug trafficking routes, especially overland cross-border and coastal, to involve new populations
- corruption, and its role in the maintenance of power among ruling political elites
- poverty and political disenfranchisement, operating through the above processes or on their own

Cannabis is grown in a significant number of PICTs, it is cheap, readily available, use is generally widespread and it remains the key illicit drug of concern.² The Burnet Institute report² noted data that suggested that there were in the vicinity of one million cannabis users in Papua New Guinea (PNG), and up to 350,000 daily cannabis users. The cannabis strains *Niugini Gold* and *Spak Brus* which are grown in many of the islands are regarded as being among the most potent available worldwide.

Cannabis use also appears to have become part of youth cultures in the PICTs. The Burnet Institute report² indicated that there appeared to be an increasing number of unemployed 15-30 year olds in Vanuatu who smoke cannabis as a pastime ('kilim taem'). There is also a suggestion of cannabis use occurring among reggae and hip-hop music fans and performers in Vanuatu.

There is also concern within the PICTs about the relationship between regular, heavy cannabis use, mental health (predominantly psychoses) and violence. It is a region with a higher than world average population growth rate and proportion of children under 15.⁵ While cannabis use appears to be increasing, especially among the youthful population of the region, reliable data to inform trends are scarce. A report by Buchanan-Aruwafu⁶ on HIV risk and vulnerability in the Pacific has indicated that heavy cannabis use by young people in the Pacific is linked to poor health, accidents and violence, crime, unwanted and unprotected sex, teen pregnancies, STIs, and mental health problems.

Supply reduction

While there have been attempts at crop eradication in some areas within the PICTs, the success of this approach and other supply reduction strategies has been limited. This is in part due to cannabis production being a non-labour intensive activity, with a shorter growing cycle than some other crops (e.g. cassava), and because it provides a reliable source of income in vulnerable economic circumstances.²

Increasingly, the PICTs are becoming transshipment routes for a number of illicit drugs. In addition, there are increased concerns about links with other organized crime activities, such as gun running. There is also intra-regional movement of drugs, notably the shifting of cannabis between Samoa and American Samoa, and movement between Fiji and other nations.²

What then is known of cannabis use among young Pacific Islanders?

The National Drug and Alcohol Research Centre (NDARC) recently completed a review of adolescent substance use and responses in the WHO Western Pacific Region.⁷ While data from the PICTs requires cautious interpretation, there was more recent data available for young people than the East and South-East Asian sectors. Data collection in the PICTs has included use of some standardised instruments including the Youth Risk Behaviour Survey (YRBS) and the Second Generation Surveillance Survey (SGSS).

The Youth Risk Behavior Survey (YRBS) is routinely used by CDC and monitors six categories of priority health-risk behaviours among youth, in this case in schools, including behaviours that contribute to unintentional injuries and violence; tobacco use; alcohol and other drug use; sexual behaviours that contribute to unintended pregnancy and sexually transmitted diseases, including human immunodeficiency virus infection; unhealthy dietary behaviours; and physical inactivity.⁸

The Second Generation Surveillance survey is regarded as best practice in HIV surveillance where the population groups surveyed are dependent on the epidemic state of the individual country. SGSS combines the existing HIV/STI case reporting with HIV zero-surveillance among selected higher risk groups, STI prevalence surveys among pregnant women and behavioural surveillance surveys among vulnerable populations, such as youth, using a questionnaire which provides information on demographic characteristics, sexual risk behaviours, alcohol and other drug use, HIV knowledge, attitudes and access to testing, and STI history. For this round of PICT surveys, questionnaires were based on surveys developed by the Family Health International Organisation, and modified for use in the Pacific by the University of New South Wales, WHO and the Secretariat of the Pacific Community.⁹

While the use of such measures represents a large step forward, there may also be unexpected consequences from their use. In addition, data have been collected and edited by various government ministries and departments, NGOs and research centres; each from a different perspective and data analysis and interpretation that all may introduce unmeasured error. Questions regarding the same substance, means of use and associated behaviours have been

asked in different ways, even within the same country and by the same groups. Data also vary as to year of collection and age of participants. Unfortunately, no relevant data was available for Fiji, French Polynesia and PNG.

Table 1 displays available data for ‘ever use of cannabis’ by youth with wide age range differences. It can be seen that rates vary considerably, but typically are far higher than those for Australia, with, in some cases, nearly two thirds of young males surveyed reporting that they have tried cannabis (e.g. Northern Mariana Islands, Palau and Vanuatu), and over 50% of young females in Palau and the Solomon Islands.

Table 1

Ever youth cannabis use in selected countries

Country	Sample	Year	Male %	Female%
Australia	Household Survey 14-19 n=1549	2007	18.0	22.1
American Samoa	YRBS School students n=3625	2007	25.3	10.6
Cook Islands	Second generation IBBS (youth aged 15-24) n=258	2006	46.8 <i>total – for males and females</i>	46.8 <i>total – for males and females</i>
Fed States Micronesia	YHBL n=1516	2001	12.5 <i>total – for males and females</i>	12.5 <i>total – for males and females</i>
Guam	YRBS School students n= 1610	2007	49.9	40.6
Marshall Islands	YRBS School students n=1522	2007	22.4	5.5
New Caledonia	Second generation IBBS (youth aged 15-24) n=292	2005	54.8	42.5
New Zealand	Secondary school students n=9107	2007	27.2	26.8
Northern Mariana Is	YRBS School students n=2292	2007	61.0	48.7
Palau	YBRS School students n=732	2007	64.3	55.6
Solomon Islands	Second generation IBBS (youth aged 15-24) n=592	2008	53.7 <i>total – for males and females</i>	53.7 <i>total – for males and females</i>
Tokelau	Second generation IBBS 15-24 n=207	2007	37.0	13.0
Tonga	Second generation IBBS (youth aged 15-24) n=387	2008	24.0 <i>total – for males and females</i>	24.0 <i>total – for males and females</i>
Vanuatu	Second generation IBBS (youth aged 15-24) n=301	2008	67.1	28.8
Wallis and Fortuna	Second generation IBBS (school youth aged 15-24) n=199	2006	15.3	12.6

Sources: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21

Table 2 shows available data for ‘recent use of cannabis’. ‘Recent use’ is defined as use in the last month in these surveys. Again, it can be seen that rates vary considerably, but some tend to be higher than those for Australia. Over 40% of young males reported ‘recent use’ of cannabis in Palau, Solomon Islands and Vanuatu, and over 40% of young females in the Solomon Islands.

Table 2

Recent youth cannabis use in selected countries

Country	Sample	Year	Male %	Female%
Australia	Household Survey 14-19 n=1549	2007	8.0	6.3
American Samoa	YRBS School students n=3625	2007	15.2	5.6
Cook Islands	Second generation IBBS (youth aged 15-24) n=258	2006	6.5 <i>total – for males and females</i>	
Guam	YRBS School students n=1610	2007	25.6	20.5
Marshall Islands	YRBS School students n=1522	2007	14.1	3.2
New Zealand	Secondary school students n=9107	2007	16.5	14.8
Northern Mariana Is	YRBS School students n=2292	2007	37.5	26.3
Palau	YRBS School students n=732	2007	43.7	33.0
Solomon Islands	Second generation IBBS (youth aged 15-24) n=592	2008	44.7 <i>total – for males and females</i>	
Tonga	Second generation IBBS (youth aged 15-24) n=387	2008	16.5 <i>total – for males and females</i>	
Vanuatu	Second generation IBBS (youth aged 15-24) n=301	2008	43.2	17.1

Sources: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21

Table 3 displays available data for use of cannabis prior to age 13. It can be seen that rates tend to be particularly high for males in Guam, Northern Mariana Islands and Palau.

Table 3

Tried cannabis before age 13

Country	Sample	Year	Male %	Female%
American Samoa	YRBS School students n=3625	2007	11.0	3.1
Guam	YRBS School students n=1610	2007	20.2	9.9
Marshall Islands	YRBS School students n=1522	2007	6.0	3.0
Northern Mariana Is	YRBS School students n=2292	2007	27.5	12.3
Palau	YRBS School students n=732	2007	29.0	9.4

Source:⁸

Of those who reported cannabis use, Table 4 shows how many who claim they have used cannabis on school premises. It can be seen that rates are between 28 and 42% for males in all countries listed and 19-30% for females.

Table 4

Ever used cannabis on school premises

Country	Sample	Year	Male %	Female%
American Samoa	YRBS School students n=3625	2007	30.2	23.6
Guam	YRBS School students n=1610	2007	42.0	30.7
Marshall Islands	YRBS School students n=1522	2007	28.5	19.7
Northern Mariana Is	YRBS School students n=2292	2007	42.3	29.9
Palau	YRBS School students n=732	2007	28.3	29.0

Source:⁸

Prevention and treatment

Virtually no information was available outside of Australia and New Zealand on evidence-based prevention and treatment interventions. Much of what could be termed ‘substance use prevention’ is provided via campaigns that address other health issues, such as HIV/AIDS and the prevention and control of non-communicable disease. These tend to be disseminated via mass media campaigns, signage, public pledges to be drug free, and a myriad of pamphlets and posters which promote abstinence and stress the health and social consequences of drug use and or punishments for this activity. No substantive evaluations of such approaches or their impact on subsequent substance use have been identified.

There was a paucity of information received or recovered on regional treatment interventions of any form. This does not mean that they do not exist, but that information was not provided, accessible or available. There appears to be no randomised controlled trials or other outcome studies, except for those in Australia. Where treatment was mentioned outside of Australia, it mainly comprised of use of various components of existing mental health service provision – which is itself very limited in the Pacific.

Conclusions

Levels of cannabis use among young people in the PICTs are uneven but widespread, and frequently occurring at much higher levels than those of similar aged young people in Australia. Concerns are emerging that what was once thought of as a non-problematic substance, is now being associated with mental health concerns and violence among young people.^{2,6}

There is an urgent need for routine data collection on patterns and consequences of cannabis and other drug use in PICTs. In addition, this must include widespread coverage of the PICTs, and be implemented systematically by agencies free from potential bias. There is a need for countries to ensure that available data can be disaggregated by age and sex, and that specific sub-populations of concern are surveyed (in particular Most at Risk Adolescents – MARA). It is recognised that this can be a costly task, but routine surveillance of adolescent and youth risk behaviours is essential if effective preventive and treatment interventions are to be developed to address cannabis and other substance use-related behaviours (such as accidents, unplanned pregnancies and other risk-taking behaviours, violence, crime and lack of participation in education, training and employment) and the spread of Blood Borne Infections (BBIs) and Sexually Transmissible Infections (STIs). Standardised surveys have been implemented in some sections of the region (e.g., the YRBS and Second Generation Surveillance Surveys), but these are mainly of young people in schools and have not often been repeated to gain information on emergent trends.

Buchananan-Aruwafu⁶ recommended a way forward to improve data on youth in the Pacific. She concluded that there is a need for a focus on systematic repeated surveillance surveys of young people’s drug use (both in and out of school), with probability sampling so that trends can be monitored, understood and tracked over time, and for mixed methodologies to be used (i.e., both quantitative and qualitative studies).

‘Buchananan-Aruwafu added that various data collection methods were required, for example, random samples and qualitative studies, as convenience samples have limited value. Youth to youth mixed quantitative and qualitative research methodologies were recommended, with specific qualitative data collection from samples of youth involved in higher risk groups. ‘... Qualitative interviewswould complement and create more understanding about what behavioural surveillance results mean, beyond the numerical percentiles of these behaviours, which can be devoid of meaning and context for behavioural change interventions’ (pp 50-51).

Routine schools surveys are used by a number of PICTs, and there could be benefit in attempting to standardise these to some extent, while allowing for country or sub-region/population-specific questions. The YRBS and Second Generation Surveillance surveys are yielding results that cannot be compared, raise questions as to validity, and may need to be re-considered. The WHO Global School-based Student Health Survey (GSHS) has some advantages as regards to substance use, and WHO, in conjunction with others, might review school and youth surveys and implement a study in some countries of special concern within the region to identify ‘best questions – best survey’. If there was routine use of standardised instruments, trend data on cannabis, other substance use and related difficulties could more easily emerge and inform responses.

For cannabis specifically, the Burnet Institute report² noted that most cannabis users in the PICTs indicated that they were introduced to the drug by friends or school-mates and virtually nobody was introduced to the drug by a stranger. The implication of this pattern of initiation into cannabis use is that campaigns directed at traffickers are insufficient, as cannabis is widely available and use is widespread. As for other regions, strategies are also needed that recognise the realities of the social networks within which people initiate cannabis use.

There is a significant lack of evidence-informed prevention efforts. It would be helpful to explore a diversity of evidence-informed interventions within the PICTs, and ensure evaluation in relation to impact on substance use among adolescents. Interventions that might be most relevant could include school-based (with community linkage), web-based, targeted interventions at workplaces and for specific sub-populations (e.g. MARA).

Recent reviews to inform school-based prevention targeting cannabis have also explored the ‘what does and does not work’ dilemma. The National Cannabis Prevention and Information Centre (NCPIC) has provided guidance for school-located prevention. See: <http://ncpic.org.au/assets/downloads/ncpic/publications/bulletins/bulletin-6-cannabis-use-prevention-methods-in-australian-schools.pdf>

In relation to school-based programs, CLIMATE Schools is a promising classroom-based intervention that originally targeted alcohol and cannabis use, but now includes a psychostimulant module. The CLIMATE Schools programs which are based on a harm minimisation approach have two important components; the first component involves students completing an interactive computer-based program, with the second consisting of a variety of individual, small group and class-based activities. These activities include role plays, small group discussions, decision making and problem solving activities and skill rehearsal, all of which have been identified as being central to program efficacy. See: <http://ndarc.med.unsw.edu.au/>

MAKINGtheLINK is a newly developed curriculum-based programme for schools to promote helpseeking for cannabis use and mental health problems, based on research and developed in collaboration with teachers and students. By seeking help early, young people are less likely to develop long-term consequences as a result of mental health and substance use issues. Research indicates however young people are reluctant to seek professional help and tend to keep their problems to themselves or turn to their friends, parents or teachers for support – people who often don’t know what to do. It is not uncommon for young people to believe that they should be able to sort out their problems on their own, or be too embarrassed to talk about them. They are also worried about the confidentiality of information they give a professional. Existing school resources tend not to address with students how to overcome these barriers to helpseeking nor focus on improving helpseeking skills for substance use and mental health. MAKINGtheLINK aims to increase staff and students’ confidence and intention to facilitate professional helpseeking for young people and reduce barriers to professional helpseeking for cannabis and mental health problems. See: <http://ncpic.org.au/workforce/teachers/making-the-link/>

There is also a need to explore diverse sites for prevention and screening activities – such as schools, dormitories and other out-of-home accommodation used by students and workers, workplaces that employ young workers and other sites such as seafarer/marine colleges in the Pacific and other vocational training establishments. There are seafaring training institutions in nearly all of the ten countries, including Solomon Islands, Kiribati, Tonga, Tuvalu, Fiji, FSM, Marshall Islands, Samoa, and Vanuatu. Some of these students, trainees and workers could be trained as Peer Educators.

The recent NDARC survey of the WPR⁷ indicated that there are particular concerns about links between regular, heavy cannabis use and mental health disorders (predominantly psychoses), and violence in the Pacific Island states that need detailed mixed methodology exploration.

The Burnet Institute report² also noted that among those interviewed, cannabis was smoked in ‘joint’ form rather than in a pipe or ‘bong’ as in some other countries. While daily or near daily cannabis smoking was rare, a substantial proportion of those interviewed reported signs of dependence on cannabis, suggesting that opportunities exist for working with cannabis users who want to reduce their consumption levels or to abstain. There is a need to trial appropriately adapted variants of brief interventions that have demonstrated efficacy in developed countries.

Research on brief interventions for adolescent substance users is beginning to accumulate, mainly in North America and Australia. In Australia, the adaptation for adolescents and young people of adult brief interventions for cannabis use is being developed. The Adolescent Cannabis Check-Up has been trialled and found to be effective.^{22, 23, 24} The approach is now being piloted with young cannabis users with more complex needs. More information can be obtained from: <http://ncpic.org.au/>

The need for low cost and easily accessible early and brief interventions for high risk cannabis users in the region is urgent. Current research on telephone, mail and web-based intervention options may reveal a promising approach for adoption among the region.

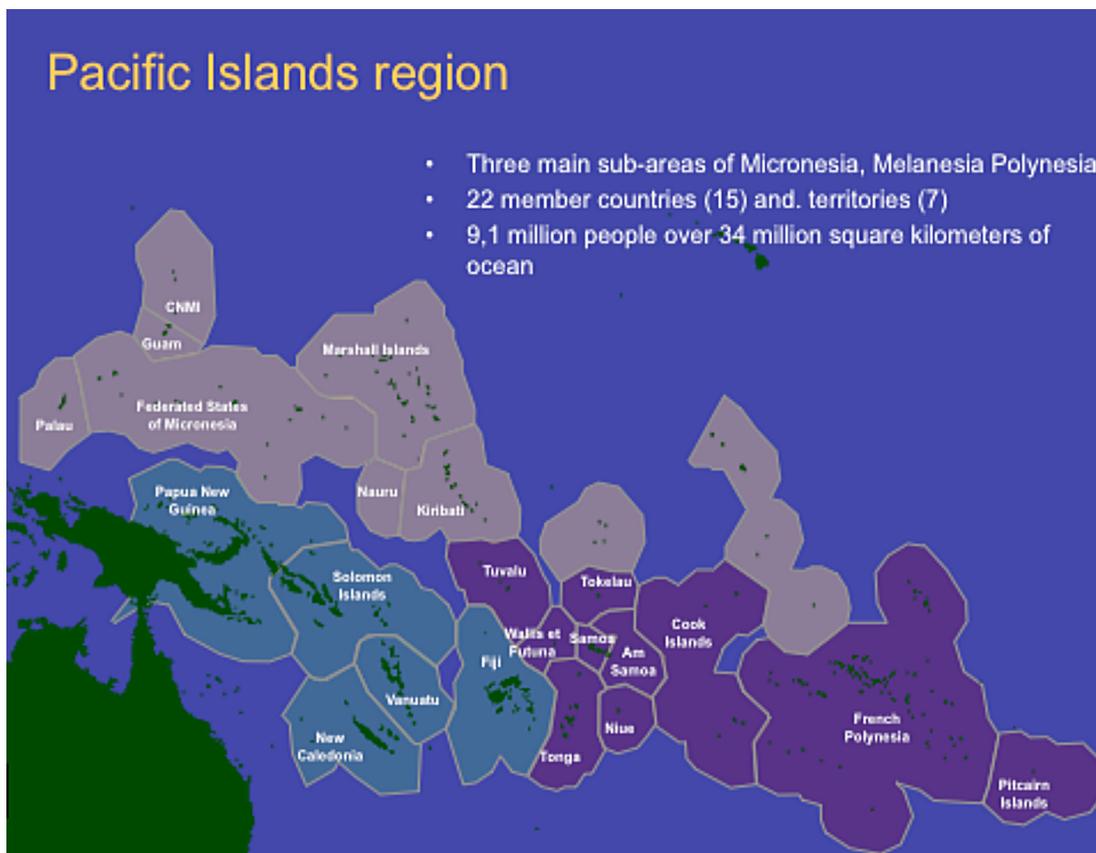
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Appendix 1



Map Pacific Islands Region²⁵

Appendix 2

Population estimates Pacific Islands, and Australia and New Zealand.

Country	Population	Population ages 10-19 years
American Samoa	68,200	No estimate available
Australia	21,097,100	2,827,000
Cook Islands	21,100	No estimate available
Fiji	860,740	175,000
French Polynesia	259,800	47,000
Guam	167,370	32,000
Kiribati	93,710	No estimate available
Marshall Islands	58,980	No estimate available
Micronesia, FS	108,030	No estimate available
Nauru	14,540	No estimate available
New Caledonia	244,600	44,000
New Zealand	4,027,950	620,000
Niue	1,550	No estimate available
Northern Mariana Islands	84,000	No estimate available
Palau	20,230	No estimate available
Papua New Guinea	6,500,000	1,480,000
Pitcairn Islands	50	No estimate available
Samoa	186,650	47,000
Solomon Islands	495,030	116,000
Tokelau	1,530	220
Tonga	109,000	23,000
Tuvalu	9,650	No estimate available
Vanuatu	233,030	54,000
Wallis and Fortuna	15,260	No estimate available