BMJ Open Exploring the implementation of the framework convention on tobacco control in four small island developing states of the Pacific: a qualitative study

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ABSTRACT

Objectives: To determine what variables influence the implementation of the Framework Convention on Tobacco Control (FCTC) in small island developing states of the Pacific and how they affect its success or failure. To explore how barriers can be overcome and opportunities utilised to ensure an effective FCTC implementation in the Pacific Islands.

Design: A mixed methods, multiple case study consisting of primarily qualitative data in the form of semistructured interviews, document analysis and opportunistic observation.

Setting: Field visits were undertaken to collect data in the Cook Islands, Vanuatu, Palau and Nauru. The key informants were interviewed in the major cities or islands of each respective country: Rarotonga, Port Vila, Koror and Nauru.

Participants: Purposive sampling was used to select 39 informants, whose roles were associated with FCTC implementation. Most of the participants worked in health-oriented positions in the government and non-government organisations.

Results: Each country made a significant progress towards FCTC implementation. Overall, strong policy content, public support and limited pro-tobacco coalition activity were conducive to FCTC implementation, but the challenges were evident in the form of limited capacity, limited antitobacco coalition activity and limited political commitment outside the ministries of health in each country.

Conclusions: Further efforts are needed for full FCTC implementation, through building capacity and using resources effectively, growing commitment to FCTC beyond the health sector, fostering growth in antitobacco coalition activity, exploiting the limited pro-tobacco activity that may be present and garnering public support for tobacco control. These lessons may be particularly important for other small island developing states in the Pacific and developing countries elsewhere.

BACKGROUND

Framework Convention on Tobacco Control

The WHO's Framework Convention on Tobacco Control (FCTC) was developed in

Strengths and limitations of this study

- A mixed methods, multiple case study design allowed for an in-depth exploration of FCTC implementation that has not been produced thus far in the Pacific Island region. It provides a connection between global FCTC developments and what is happening on the ground in four countries, accounting for the 'implementation gap'.
- The conceptual framework on implementation has been used for the first time in a public-health-oriented study, which assists the validation of the framework and provides an example of how political science theory can be used for public health purposes.
- Although some countries share common characteristics, each is unique, meaning that caution should be exercised in generalising these findings to other countries.
- The sample size was small due to the qualitative nature of this research project. The participants from the ministries of health were strongly represented, while the participants from the tobacco industry were poorly represented. While this reflects the proportion of actors who played a role in FCTC implementation in the countries examined, some degree of selection bias may exist.

response to the globalisation of the tobacco epidemic,¹ particularly in the developing countries. FCTC entered into force in 2005. Much of the recent global tobacco control discourse is focused on its implementation, as evident in the UN High Level Meeting on Non-communicable Diseases.² FCTC has brought tobacco control higher on the agenda internationally, which is indicative of the significant progress that has been made in fighting the global tobacco epidemic. Many developing countries sought to introduce comprehensive tobacco control legislation since ratifying FCTC. Despite this, the challenges to FCTC implementation have

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been noted in China,^{3–6} India,⁷ Nepal,⁵ Ecuador,⁸ Ghana,⁹ Malawi,¹⁰ Tanzania⁵ and the African region in general.¹¹ The range of barriers experienced include a lack of capacity and resource constraints, tobacco industry interference, limited antitobacco civil society involvement, limited political commitment and awareness in government officials, limited local research and monitoring and rural–urban disparity. In contrast, FCTC implementation has been very successful in Thailand, partially due to its prominent antitobacco advocacy.^{5 12}

Tobacco use and FCTC in the Pacific Islands

Despite their remoteness in a vast expanse of ocean, the Pacific Islands have not been spared by the global tobacco epidemic. Tobacco use prevalence rates vary between countries, but are typically high and more than that of neighbouring Australia and New Zealand.^{13 14} This and the resultant non-communicable disease burden have created a strong imperative for the development of the evidence-based tobacco control provisions in FCTC in the Pacific Islands.

All Pacific Island nations ratified FCTC by May 2006 and many, including those of interest in this study, have since developed national tobacco control legislation. Despite the recent emphasis on FCTC implementation, there is little evidence in the Pacific that explores the variables that affect it, how they may shape its success or failure, and how barriers can be overcome and opportunities can be utilised to ensure an effective implementation. This is in contrast to many (larger) developing countries, where such research has been produced. There is generally a paucity of theory-based evaluation¹⁵ which would allow asking ‘why’ questions, rather than remaining descriptively outcome oriented.

Adding to the challenge of implementing a comprehensive international treaty, all independent Pacific Island nations are also described as small island developing states (SIDS). The Barbados Program of Action for the Sustainable Development of SIDS recognised the distinct social, economic, political and environmental context of SIDS as a result of their smallness, remoteness, isolation and developing status.¹⁶

METHODS

While earlier FCTC implementation research remained largely post hoc descriptive, we felt a need to apply a more rigorous heuristic device to identify and explain the implementation issues. Thus, a theoretical framework from political science, Najam’s¹⁷ 5C Protocol, guided the mapping of interrelated clusters of variables that affect implementation. The 5C Protocol claims to have general applicability in that it could be used to analyse policy implementation in various domains, at multiple levels and in developing and developed countries.¹⁷ The five critical interlinked variable clusters that affect implementation are:

- ▶ The content of the policy—the goals, causal theory and methods in the policy (ie, FCTC and national tobacco control legislation);
- ▶ The institutional context through which the policy travels and by whose boundaries it is limited;
- ▶ The commitment of those entrusted to carry out implementation to the policy content;
- ▶ The capacity of implementers to carry out the desired changes;
- ▶ The clients and coalitions whose interests are enhanced or threatened by the policy, and the strategies they may employ to influence implementation.¹⁷

FCTC implementation was explored broadly and this study covered all substantive FCTC provisions. However, because considerable advancement and WHO guidelines have been made early on in regard to several key cost-effective articles,^{18 19} some emphasis was placed on: Article 6—price and tax measures to reduce the demand for tobacco; Article 8—protection from exposure to tobacco smoke; Article 11—packaging and labelling of tobacco products and Article 13—bans on tobacco advertising, promotion and sponsorship (TAPS).

This multiple case study incorporated a mixed methods, though primarily qualitative, approach. The selection of cases, in the form of independent nations, was based on the extent to which it would be possible and feasible to conduct research in each country and the extent to which they are representative of Pacific SIDS.

The researcher undertook field visits to each country for 10–14 days, and attended a regional tobacco control conference, to collect data. Thirty-nine semistructured, in-depth interviews were conducted, along with document analysis and opportunistic observation.

Purposive sampling was used to select potential informants, whose roles had some involvement in FCTC implementation process, to participate in interviews. Interview questions were based on the aforementioned variable clusters that affect FCTC implementation and specific to the participants’ roles in their country. An example is: “How would you describe the current level of capacity of your organisation to carry out the changes desired in FCTC? Why is this at the level it is?” The range of informants included 27 from the government (primarily in ministries of health), 10 from health-related non-government organisations (NGOs), 1 from a trade-oriented NGO and 1 as a seller of tobacco with political affiliations. A total of 47 potential interviewees were approached, attributing to an 83% response rate. Participant representativeness is significantly skewed towards government informants, but this reflects the balance of stakeholders related to FCTC implementation in the countries examined, as in most cases it was government-led. Interviews were audio recorded and transcribed verbatim. All interviews were conducted between June and October in 2011.

A total of 129 documents were analysed. Their inclusion was based on whether their content was associated with FCTC and/or the national tobacco legislation implementation process in the four countries. Documents included

legislative proceedings, FCTC implementation reports, tobacco monitoring studies and reports, organisational reports, media reports, newsletters, presentations, meeting notes and personal communications from a variety of relevant individuals and organisations. Documentation was collected from May 2011 to September 2012.

Data were analysed using NVIVO, a computer-assisted qualitative data analysis program. Data were coded in conceptual categories with guidance from the theoretical framework and research questions. Codes relating to the variables that affect implementation were structured in up to four hierarchical branches, which ranged from overarching codes that were generally deductive and based on the 5C Protocol, to more narrow codes that were inductive and emerged from common themes in the data. Analysis was performed in the context of each country and then followed by a cross-case synthesis.

RESULTS AND DISCUSSION

Cook Islands

The Cook Islands is a very small polynesian nation made up of 15 islands spread across an area of ocean almost two million square kilometres. The majority of its approximate 20 000 people live on one island—Rarotonga. Since ratification of FCTC in 2004, the Cook Islands Tobacco Products Control Act, passed in 2007, is compliant with the key articles of FCTC. Most provisions have since been implemented and more recently the country has focused on enforcement and maintaining compliance to this legislation. The key implementing agencies had institutionalised most of the Act's provisions, but further progress in enforcement was needed, particularly towards smoke-free environments. The Cook Islands Ministry of Health engaged with some NGO representatives through its Tobacco Control Working Group, the central antitobacco coalition group in the country.

Capacity was the most significant challenge to comprehensive FCTC implementation:

I would say that we have insufficient capacity to carry out this Tobacco [Products Control] Act because we have too much on the plate and this is an added [responsibility]... but we are trying our best to accommodate it within our restricted capabilities, in terms of staffing as well as funding. We don't have any other form of support. Whatever we have, we have to do with that. (Cook Islander informant)

Furthermore, institutional networks between the Ministry of Health and the government departments outside of the Ministry of Health were typically not strong. Commitment to FCTC was seen as robust from the Ministry of Health and at the parliamentary level by informants, but lacking in non-health government departments. A primary example of this was a Ministry of Health proposal for taxes on tobacco products to be earmarked for health promotion purposes being rejected by the Ministry of Finance and Economic Management. An additional challenge was that the Tobacco Control

Working Group had experienced some inactivity in the time preceding interviews, limiting its ability to advocate for tobacco control and educate the community.

Informants suggested that the public was relatively supportive of the legislation which presented an opportunity. Overall, although there was room for improvement, it was found that most FCTC provisions including tax increases, the majority of types of smoke-free public places, large pictorial health warnings covering 50% of tobacco packages and bans on TAPS have reached the vast majority of the local population.

Vanuatu

The Republic of Vanuatu is a Melanesian nation consisting of 83 islands and a population of around 240 000 people, most of whom reside in rural locations. Vanuatu ratified FCTC in 2005 and its Tobacco Control Act was passed in 2008. There have been significant delays in developing regulations based on the Act, however, which were still pending in 2012:

People know some parts of [the Tobacco Control Act], but the full implementation of it—not yet, because most of the things in the Act rely on the regulations to [be] fully [implemented]. So the regulations are the thing that is always the stumbling block for implementation of this full Act. (Ni-Vanuatu informant)

The Act itself is compliant with the key articles of FCTC, and although officers have been appointed for enforcement since the Act's passing, the lack of regulations meant that the enforcement of the Act was still in its infancy. Informants suggested that there would be some difficulty legislating and enforcing prohibitions on locally grown tobacco in the country, which can subvert FCTC provisions and tends to be grown on a small scale by rural and remote farmers in the country. A significant barrier was the limited Ministry of Health staff on the ground having competing demands for their time. Aside from the customs department, attaining commitment to FCTC from the departments outside of health was also challenged. Furthermore, no NGOs that had a direct focus on tobacco control existed, meaning that antitobacco advocacy and community awareness were left to under-resourced government agencies. Pro-tobacco advocacy was limited to a few importers and occasional visits of foreign personnel from British American Tobacco and Philip Morris. Recently, a Singaporean-based tobacco company has attempted to start up manufacturing operations in the country, which the Ministry of Health advocated against. Informants indicated that public support for such opposition was favourable.

With numerous challenges in Vanuatu, only modest progress has been made in the form of introducing and creating awareness of the Tobacco Control Act, tobacco taxation increases, health warnings covering 30% of tobacco packages, enacting bans on TAPS and banning smoking in public places. The enforcement of the latter,

as well as other FCTC provisions, is likely to expand once regulations are finalised.

Palau

The Republic of Palau is a Micronesian archipelago with approximately 20 000 people. The majority of its population is located in the islands of Koror and Babeldaob which are connected by a road bridge. Palau ratified FCTC in 2004, but only passed its tobacco control legislation in 2011, which was not fully compliant with the key articles of FCTC, as it does not mandate health warnings on cigarette packages, and allows for smoking areas in hospitality venues and hotel rooms.ⁱ

The most significant barrier to FCTC implementation in Palau indicated by informants was commitment, particularly at senior levels of the government and the departments outside of health, which was evident in some aspects of the proposed and FCTC-compliant tobacco control bill being weakened in Congress:

[The tobacco control bill] passed by both Houses of [Congress], was referred back by President Toribiong on February 11, 2011 with several suggestions for amendment. These suggestions generally reflect the concern that the stringent restrictions on tobacco usage contained in this bill will have the effect of ostracising visitors, particularly those from Asian countries, who smoke and expect to be permitted to smoke in restaurants and bars²⁰

Palau's staff and resource capacity was less restrictive, as the Ministry of Health was strongly facilitated by the US Centers for Disease Control and Prevention (CDC) funding. The Coalition for a Tobacco-Free Palau was active and was the strongest source of NGO activity among the countries examined. Some informants speculated that there may be some tobacco industry interference outside the public realm, but this could not be substantiated with direct evidence.

Owing to the newness of the legislation which is not fully compliant to the key FCTC articles, several provisions, including packaging and labelling and smoke-free bars and restaurants, have not yet reached the public in Palau. However, bans on TAPS did come into effect as a result of the recent legislation, and the government has expressed an intention to scale up FCTC efforts in future. The relatively favourable position in terms of capacity and an active antitobacco coalition also suggest that despite some significant challenges thus far, there is a scope for future improvement in the country.

Nauru

The Republic of Nauru's approximate 10 000 people live on one small island in Micronesia. Nauru ratified FCTC in 2004 and passed its Tobacco Control Act, which is

almost fully compliant with the key articles of FCTC, in 2009. Several FCTC provisions had been implemented approximately 1 year before interviews and during data collection, FCTC implementation efforts were largely focused on up-scaling enforcement. Informants indicated that departments outside of the Ministry of Health had not fully adapted to the legislation. Commitment to FCTC was evident in the Ministry of Health, although competing demands to tobacco control also consumed the workload of staff. Capacity in the form of funding and staffing, particularly towards enforcing the Act was the most significant barrier to FCTC implementation:

For the time being, what I see [as a barrier to FCTC implementation] is the human resource—the staff... the Ministry of Health has limited staff in number and as well as in skill. So in implementing [FCTC-based] strategies, we have these limited options to manage the human resources. So there's—for example, like the health promotion officer, they have to coordinate many things and we only have one officer. So those kinds of human resource constraints—this is the main barrier I see. (Nauruan informant)

There was no antitobacco NGO activity as NGOs in this area were non-existent, although there was also very limited pro-tobacco advocacy evident. Informants suggested that the public were reasonably supportive of tobacco control measures. Although FCTC-based legislation had only been in place for a reasonably short period of time before interviews, it appeared that many of its provisions, in particular packaging and labelling, bans on TAPS and smoke-free public places had begun to reach the public, which is a positive sign in the early stages of FCTC implementation in Nauru.

Cross-country synthesis

Despite ratifying FCTC in a similar time frame, the four countries were at varying stages of implementation, with the Cook Islands most advanced, followed by Nauru, Vanuatu and Palau. Table 1 shows the extent to which the key FCTC articles have been written into the national legislation of each country.

National legislative compliance with the key FCTC articles is a starting point to FCTC implementation. However, even from this starting point, room for improvement in the countries examined is still evident, particularly in the case of Palau. The key informant interviews and observation revealed that Articles 6, 11 and 13 have been implemented in each country with little challenge. These articles generally tend to be self-enforcing and require relatively little capacity and institutional adaptation once legislated. Most other articles require significantly more enforcement, capacity and institutional adaptation, hence they are more subject to the implementation processes that occur after national legislation has been developed.

Of primary interest in this study is FCTC implementation process as a whole, particularly after national

ⁱThere are some proposed amendments to Palau's tobacco control legislation under its new governing administration, but these were yet to come into fruition before publication of this article.

Table 1 Country compliance with the key FCTC articles*

Key FCTC article	Cook Islands: Tobacco Products Control Act (2007) and Regulations (2008)	Vanuatu: Tobacco Control Act (2008)	Palau: RPPL 8–27 (2011)	Nauru: Tobacco Control Act (2009) and Regulations (2009)
Article 6: price and tax measures†	Import levy of NZ\$279.50/1000 cigarettes ²¹ (approx. US\$4.70/ pack‡)	Excise of US\$10 per 1000 cigarettes (approx. US\$0.20/ package), plus import levy of 10% of value, plus VAT of 2.5% ²²	Import tax of US\$2/pack ²³	Data not available
Article 8: protection from exposure to tobacco smoke	Comprehensive ban on smoking in the government facilities, public places, workplaces, restaurants and licensed premises (includes partially enclosed)	Comprehensive ban on smoking in the government facilities, public places, workplaces, restaurants and licensed premises (includes partially enclosed)	Comprehensive bans on smoking in educational, sports and healthcare facilities. Bans on enclosed workplaces only. <i>No bans in designated enclosed smoking areas in restaurants</i>	Comprehensive bans on smoking in the government facilities, public places and workplaces. After 4 years and 3 months, bans on smoking in all grounds of restaurants and licenced venues (includes partially enclosed)
Article 11: packaging and labelling§	Ban on misleading descriptors Health warnings: ► Cover at least 50% of tobacco package; ► Are written in English and Cook Islands Maori; ► Are rotated	Ban on misleading descriptors Health warnings: ► Cover at least 30% of tobacco package; ► Are written in Bislama, English and French; ► Are rotated	<i>No existing legislation on health warnings or misleading descriptors</i>	<i>No ban on misleading descriptors</i> Health warnings: ► Cover at least 30% of tobacco package; ► Are Written in English; ► Are rotated
Article 13: bans on TAPS	Comprehensive bans on TAPS	Comprehensive bans on TAPS	Comprehensive bans on TAPS	Comprehensive bans on TAPS

Italicised text: provision does not meet the minimum requirements under FCTC.

*Information on the legislation has been simplified in this table for basic comparative purposes only and has not been reviewed by lawyers from each country. Please refer to the relevant pieces of legislation for a comprehensive and legally binding description of tobacco control legislation.

†There are no explicit minimum taxation requirements under FCTC and many countries taxed tobacco products before it came into force. Furthermore, tobacco taxation is legislated outside of the acts mentioned.

‡Calculated assuming a package size of 20 cigarettes/package and an exchange rate of NZ\$1=US\$0.84 as per 17 October 2013.

§Misleading descriptors are descriptions on the tobacco package that are false, misleading or create an erroneous impression that the product is less harmful. Examples include 'light' or 'mild' cigarettes.

FCTC, Framework Convention on Tobacco Control; TAPS, tobacco advertising, promotion and sponsorship.

legislation has been developed. Common facilitators and barriers were evident and are shown in table 2 below.

Recommendations and conclusion

Build capacity and utilise resources effectively

The sector-wide lack of capacity found in three countries in conjunction with studies elsewhere^{8 9} indicates that this is a common occurrence for the developing countries internationally. In the Cook Islands and Vanuatu, the capacity for enforcement in rural and remote areas was a concern, which was also found in several developing countries.⁵ Currently, two major institutions financing tobacco control in the developing countries—the Bloomberg Initiative and the Bill and Melinda Gates Foundation—give preference to nations with a high tobacco use prevalence,²⁴ rather than those with smaller population sizes, meaning that Pacific Island nations have a very limited access to this funding.

A type of global funding mechanism for FCTC implementation has been flagged as a potential way of addressing the lack of capacity.²⁵ Support had been provided by bilateral and multilateral agencies in this study, but the funding sourced is overwhelmed by the amount of funding that is needed. If funding cannot be sourced for comprehensive FCTC implementation, then scarce resources must target the most cost-effective FCTC provisions, meaning that Articles 6, 8, 11 and 13 are paramount. Comprehensive tobacco control solutions seen as standard in larger and developed countries may have to be reshaped to suit the context of SIDS, which has been advocated for health policy in general.²⁶

Grow commitment to FCTC beyond the health sector

The lack of commitment to tobacco control in the government departments outside of the ministries of health has also been a significant concern in studies on FCTC

Table 2 Synthesis of major common factors that affect FCTC implementation in the Cook Islands, Vanuatu, Nauru and Palau

	Common facilitators	Common barriers
Content	▶ The goals, causal theory and methods of FCTC and resultant tobacco control legislation as a whole were seen as appropriate, achievable and effective, especially in the case of cost-effective provisions	▶ Some FCTC provisions were seen as somewhat ambitious and/or difficult to achieve in light of limited capacity
Context	▶ Institutional networks among staff and departments within the ministry of health departments, and networks with external agencies, were supportive in all cases	▶ Institutional networks between the key actors in the ministries of health and the government departments outside of health tended to be weak ▶ Institutional networks between the ministries of health and NGOs were not evident in countries where antitobacco NGOs did not exist (Vanuatu/Nauru)
Commitment	▶ Ministry of health commitment tended to be favourable, although competing health issues was a limiting factor	▶ Commitment at the ground level was hindered by competing issues (Cook Islands/Nauru), and rurality/remoteness (Vanuatu and to some extent the Cook Islands) ▶ Whole-of-government commitment is challenged in departments outside of health. Commitment from the ministry of finance or equivalent, police authorities, legal departments to FCTC provisions from all countries tended to be weaker
Capacity	▶ Mandated authority for staff within the Ministry of Health to enforce FCTC provisions facilitated implementation in the Cook Islands, Vanuatu and Nauru ▶ External agencies, including the WHO, Secretariat of the Pacific Community, Australian Agency for International Development, New Zealand Aid Programme and the CDC, provided assistance towards FCTC implementation	▶ A lack of staff and funding/resources were major barriers in the Cook Islands, Vanuatu and Nauru, and to a lesser extent in Palau. The tobacco control focal point typically consisted of one person ▶ Sustainable funding mechanisms for tobacco control (ie, earmarking taxes to health promotion/tobacco control) have not been achieved in any of the four countries examined
Clients & Coalitions	▶ Very limited public pro-tobacco coalition activity existed, which can partially be attributed to limited tobacco manufacturing presence ▶ The public has generally supported tobacco control regulation, as indicated in each of the countries examined. There has been no public protest or attempts to disrupt FCTC implementation	▶ Antitobacco NGOs did not exist in Vanuatu or Nauru, and a coalition group was inactive for some time in the Cook Islands. In situations where NGOs did exist, there was limited funding and a strong reliance on volunteers

CDC, Centers for Disease Control; FCTC, Framework Convention on Tobacco Control; NGO, non-government organisation.

implementation in China,⁴ Ghana⁹ and Ecuador.¹⁰ Despite a whole-of-government/health in all policies approach being advocated in light of FCTC implementation and health promotion, results suggest that much work still needs to be carried out to improve whole-of-government institutional networks and commitment. The ministries of health need to take the lead and collaborate with other departments in the government where possible. Documented evidence on the burden of tobacco use on the lives of local citizens, and how addressing this burden would suit the interests of other government departments (ie, increasing taxation in respect to a ministry of finance) may facilitate whole-of-government commitment.

Foster growth in anti-tobacco coalition activity

Limited antitobacco coalition activity was found in studies of other developing countries.^{5–8} In the countries examined, it was due to the non-existence of tobacco control-oriented NGOs, and where they did exist, a strong reliance on a small number of volunteers was found. It is possible that this is underpinned by the small populations and limited institutional capacity of SIDS,²⁷ resulting in limited advocacy and coalition activity in health policy implementation.²⁶ However, the Coalition for a Tobacco-Free Palau and the Cook Islands Tobacco Control Working Group proved to be strong forces for antitobacco coalition activity, facilitated by highly knowledgeable and skilled personnel, supportive organisational networks, access to a limited amount of funding, close-knit relationships with government actors which can be more accessible in the Pacific Island nations²⁸ (and perhaps SIDS in general) and localised evidence of the harms of tobacco use. It is important that for these avenues are exploited where possible. It is also crucial for government actors to recognise that this absence may leave a vacuum in terms of antitobacco advocacy and community awareness.

Garner public support for tobacco control

The popularity of FCTC itself in terms of the number of ratifying countries signifies that its content and client support is strong internationally. As populations in this study were generally supportive of tobacco control, it may be beneficial to empower those who are affected by FCTC provisions to a greater extent in decision-making.²⁹ This could be achieved by facilitating a more deliberative approach through acquiring local knowledge, disseminating information and networking with and providing capacity support to civil society actors and ground level implementers. This may also mean that the barriers such as lack of political commitment or industry interference are subverted, and it will also appreciate the context of the local situation so that the scarce resources do not get misallocated.

Exploit limited pro-tobacco activity in SIDS

The absence of prolific industry influence in the countries examined is unlike that of some of the larger

countries including China,^{3–6} India,⁷ Thailand¹² and several African nations.^{10–11} This may be due to the absence of tobacco manufacturing which could be affected by remoteness from global markets and lack of economies of scale, a common factor among SIDS internationally.²⁷ This is not to suggest that industry activity is absent, but rather that there is a proportionally less motivation and financial reward for a multinational tobacco company to mobilise comprehensive and coordinated action against tobacco control legislation in countries with very small populations in comparison with countries with tens of millions or more, which may serve to benefit the ministries of health and antitobacco coalition groups in these countries.

Each of the Pacific Island nations in this study made inroads into FCTC implementation. There are numerous challenges that hinder its full implementation, but some benefits have been experienced thus far and further growth is foreseeable, which is likely to lead to a reduction of the substantial burden of tobacco use. The detail on variables that affect FCTC implementation and recommendations here is important to consider for many other SIDS and the developing countries seeking to implement FCTC. Policy implementation theory, and Najam's 5C Protocol in particular, is a useful resource to conduct an explorative and in-depth analysis of FCTC implementation.

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REFERENCES

1. WHO. *WHO framework convention on tobacco control*. Geneva: WHO, 2005.
2. UN. Sixty-sixth General Assembly: Non-communicable diseases deemed development challenge of 'epidemic proportions'. New York. 2011 [cited 11 August 2012]. <http://www.un.org/News/Press/docs/2011/ga11138.doc.htm>

3. Lv J, Su M, Hong Z, *et al.* Implementation of the WHO Framework Convention on Tobacco Control in mainland China. *Tob Control* 2011;20:309–14.
4. Yang G-H, Li Q, Wang C-X, *et al.* Findings from 2010 Global Adult Tobacco Survey: implementation of MPOWER Policy in China. *Biomed Environ Sci* 2010;23:422–9.
5. Sussman S, Pokhrel P, Black D, *et al.* Tobacco control in developing countries: Tanzania, Nepal, China and Thailand as examples. *Nicotone Tob Res* 2007;9(Suppl 3):S447–57.
6. Wan X, Ma S, Hoek J, *et al.* Conflict of interest and FCTC implementation in China. *Tob Control* 2012;21:412–15.
7. Schwartz RL, Wipfli HL, Samet JM. World No Tobacco Day 2011: India's progress in implementing the Framework Convention on Tobacco Control. *Indian J Med Res* 2011;133:455–7.
8. Albuja S, Daynard RA. The Framework Convention on Tobacco Control and the adoption of domestic tobacco control policies: the Ecuadorian experience. *Tob Control* 2009;18:18–21.
9. Owusu-Dabo E, McNeill A, Lewis S, *et al.* Status of implementation of the Framework Convention on Tobacco Control in Ghana: a qualitative study. *BMC Public Health* 2010;10:1.
10. Otanez MG, Mamudu HM, Glantz SA. Tobacco companies' use of developing countries' economic reliance on tobacco to lobby against global tobacco control: the case of Malawi. *Am J Public Health* 2009;99:1759–71.
11. Tumwine J. Implementation of the Framework Convention on Tobacco Control in Africa: current status of legislation. *Int J Environ Res Public Health* 2011;8:4312–31.
12. Charoencan N, Mock J, Kungskulniti N, *et al.* Success countering tobacco company interference in Thailand: an example of FCTC implementation for low- and middle-income countries. *Int J Environ Res Public Health* 2012;9:1111–34.
13. Rasanathan K, Tukuitonga CF. Tobacco smoking prevalence in Pacific Island countries and territories: a review. *N Z Med J* 2007;120:U2742.
14. Eriksen M, Mackay J, Ross H. *The tobacco atlas*. 4th edn. Atlanta and New York: American Cancer Society and World Lung Foundation, 2012.
15. Birckmayer JD, Weiss CH. Theory-based evaluation in practice: what do we learn? *Eval Rev* 2000;24:407–31.
16. UN, ed. Report of the Global Conference on the Sustainable Development of Small Island Developing States. *Global Conference on the Sustainable Development of Small Island Developing States*, 25 April–6 May 2004. Bridgetown, Barbados, 1994.
17. Najam A. *Learning from the literature on policy implementation: a synthesis perspective*. Laxenburg, Austria: International Institute for Applied Systems Analysis, 1995.
18. WHO. *WHO report on the global tobacco epidemic, 2009: implementing smoke-free environments*. Geneva: WHO, 2009.
19. Shibuya K, Ciecierski C, Guindon E, *et al.* WHO Framework Convention on Tobacco Control: development of an evidence-based global public health treaty. *BMJ* 2003;327:154–7.
20. Toribiong J. Re: House Bill No. 8–8-1, HD2, SD2, CD1, PD1. In: *President of the Senate*, ed. Koror, Palau: Office of the President, 2011.
21. Tangaroa E. Cook Islands: Third Implementation Report; 2012 [cited 17 October 2013]. http://www.who.int/entity/fctc/reporting/party_reports/CookIslands_2012_report_final.pdf
22. Rory J-J. Vanuatu: First Implementation Report; 2012 [cited 17 October 2013]. http://www.who.int/entity/fctc/reporting/party_reports/vanuatu_2012_report.pdf
23. Oseked RB Sr. Palau: Third Implementation Report; 2012 [cited 8 September 2012]. http://www.who.int/entity/tobacco/framework/cop/party_reports/palau_report.pdf
24. Bloomberg Initiative Grants Program. About the BI Grants Program; 2009 [cited 1 October 2012]. <http://www.tobaccocontrolgrants.com/Pages/2/About-the-BI-Grants-Program>
25. Callard C. Follow the money: how the billions of dollars that flow from smokers in poor nations to companies in rich nations greatly exceed funding for tobacco control and what might be done about it. *Tob Control* 2010;19:285–90.
26. McNaught A. Health policy and its implementation in small island developing states in the British West Indies. *Int J Health Plan Manag* 2003;18:313–28.
27. Briguglio L. Small island developing states and their economic vulnerabilities. *World Dev* 1995;23:1615–32.
28. Allen M. *Overseas development assistance programs for tobacco control: a best practice report featuring New Zealand*. Geneva: WHO, 2009.
29. Townsend B, Martin E, Löfgren H, *et al.* Global Health Governance: Framework Convention on Tobacco Control (FCTC), the Doha Declaration, and Democratisation. *Adm Sci* 2012;2:186–202.