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The Impact of Tobacco Consumption in Jamaica

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Abstract: *Tobacco is a formidable public health problem due to its major effects on morbidity and mortality. The study examine the cases of tobacco-related chronic diseases that were discharged from Government hospitals in Jamaica and extent to which trade issues impact Jamaica's ability to comply with the provisions stated in the World Health Organization Framework Convention on Tobacco Control (WHOFCTC) (Articles 6, 8, 11, 12 and 15) and the Port of Spain Declaration for Chronic Non-Communicable Diseases (POSDCND). This study is informed by quantitative and qualitative approaches. The former used data which were obtained from the Statistical Institute of Jamaica, the Jamaica Customs Department and the Ministry of Health. With regard to the latter, key stakeholders, were interviewed by the researcher, using a two-page, nine-item, open-ended data collection instrument. In addition, the conceptual model was analyzed with a view to determine any association between tobacco and international forces such as trade, conflict and international cooperation/health diplomacy, and human security. Jamaica experienced steady increase in the number of tobacco-related chronically ill cases, who were discharged from public hospitals over the years 2006 (2,255), 2007 (3,000) and 2008 (3,893). Although trading (import and export) of the product has seen reduction in weight (1,343,028.08 kg in 2006, 1,172,138.00 kg in 2007, 973,460.00 kg in 2008 and 774,150.00 kg in 2010), the cost fluctuates, reporting 2007 as the highest sum (US$8,569,973.68). There is an imbalance between tobacco trade and public health objectives because of the conflict between the WHOFCTC principles and the World Trade Organization (WTO) rules. It means therefore that international health forces are indicative of government's capacity to adhere to international health agreements such as the WHOFCTC and the POSDCND.*

Keywords: Tobacco, smoking, chronic, disease, trade

1. Introduction

The smoking of tobacco-related products has wreaked serious public health and socio-economic concerns

throughout the World. In both developed and developing countries tobacco is currently a major cause of preventable disease and deaths. Worldwide, the use of tobacco is claiming the lives of approximately six million people per year (World Health Organization, 2009a), including more than 600,000 non-smokers who die from exposure to second-hand tobacco smoke (Oberg *et al.*, 2011). The death toll from tobacco use is expected to increase to eight million a year by 2030 (World Health Organization, 2010) and there will be up to one billion tobacco-related deaths during the 21st century, many of which will be from developing countries if the current trend continues unchecked (World Health Organization, 2011a).

Tobacco use is an important modifiable risk factor and causes one in six of all non- communicable diseases such as cancer, cardiovascular diseases, chronic respiratory diseases and diabetes mellitus. Almost six million people die from tobacco use each year, both from direct tobacco use and second-hand smoke. By 2020, this number will increase to 7.5 million, accounting for 10 million deaths (World Health Organization, 2011b). The tobacco smoking population of Jamaica represents approximately 14.5% of the 15-74 age cohort (Wilks *et al.,* 2008), thus contributing to chronic disease deaths (>56%) (Ministry of Health, 2011). Tobacco-related chronic diseases place a 6% demand on the country's Gross Domestic Product (GDP) (Ministry of Health, 2011), as well as impact public health expenditure by 45% (Pan American Health Organization, 2010). In essence, tobacco-related illnesses impact Jamaica's socio-medical and economic fabric in terms of treatment cessation interventions and other human security issues.

Tobacco smoking is not unique to Jamaica. There are approximately 1.1 billion individuals throughout the world who smoke; 800,000 of whom are from the developing world (including Latin America and the Caribbean) (World Climate Report, 2011). Similar to Jamaica, this practice is most prevalent among those who are 15 years and older (World Climate Report, 2011). In order to reduce the health dilemma and financial burden caused by tobacco consumption (particularly smoking) in Jamaica, the Government officially

agreed to the stipulations of international health policies such as the World Health Organization Framework Convention on Tobacco Control (WHOFCTC) and the Port of Spain Declaration on Chronic Non-Communicable Diseases (POSDCNCD).

The study examines cases of tobacco-related chronic diseases of persons discharged from Government hospitals in Jamaica during the period 2006-2008; the weight and cost of legal tobacco trading in Jamaica during the period 2008-2011 and the various categories of tax (percentage) charged on tobacco-related products that enter Jamaica upon the port of entry. This study aims to provide evidence-base information relating to trade issues which are likely to impact Jamaica's ability to comply with the provisions (Articles 6, 8, 11, 12 and 15) stated in the WHOFCTC and the POSDCNCD; provide novel insight relating to Jamaica's adherence to the said specific principles under the WHOFCTC and the POSDCNCD; document evidence-based approaches that will aid policy-makers in developing appropriate tobacco legislation and provide guidance regarding multi-national arrangements and strategic health policies; as well as, document the harmful effects of tobacco trade on Jamaica.

2. Materials and Methods

This study was informed by the Tobacco Control Conceptual Model for Jamaica (2011), which comprises components such as WHOFCTC, tobacco, trade, World Trade Organization (WTO), POSDCNCD, public health objective, conflict, international cooperation, health diplomacy, human security and Doha Declaration. This model was partially adopted from the International Health Model of the Leaders in International Health Programme, "Edmundo Granda Ugalde", 2009 and forms part of the qualitative analysis of this study.

Data were collected (over a 4-week period) from the Statistical Institute of Jamaica, the Ministry of Health and the Jamaica Customs Department. The information comprised tobacco trading (import and export), tobacco-

related chronic diseases (by demographic characteristics) and tobacco taxation at port of entry.

The study was also informed by evidence that has been reported by academic research, policy documents, legislations, international agreements, position papers, strategic plans, and health agendas. In addition, qualitative information has been gathered (during August and September, 2011) via interview/discussion (using a data collection instrument) with key stakeholders from the Ministry of Health (including the National Health Fund), the Customs Department, the Heart Foundation of Jamaica, and the Jamaica Coalition for Tobacco Control (JCTC). In an effort to facilitate the process, the PAHO/WHO (Jamaica Office) sent letters to the interviewees on behalf of the researcher. This was followed up with phone calls by the researcher, who made the necessary appointments.

The two-page, nine-item, open-ended instrument (interview/discussion sheet) bears seven overarching considerations; namely: tobacco trading issues; tobacco consumption; trading and policy conflicts; impediments to adherence; strategies for compliance; public health, and socio-economic impacts. The face-to-face interviews/discussions covered general trade issues relating to domestic and external production, the power and/or autonomy of the trade industries, self interest, resistance (if any) to the WHOFCTC and POSDCNCD, compliance measures and challenges, as well as other likely concerns.

The objective of the discussion was to determine the extent to which trade issues (during the 1990s - 2000s) are impacting Jamaica's ability to comply with the provisions stated in the WHOFCTC (Articles 6, 11, 12, 13 and 15) and the POSDCNCD, and how this has impacted the country's public health and socio-economic realm.

Snowball sampling method was used, especially given the nature, purpose and intended outcome/aim of this paper. The data are being analyzed, using Microsoft Excel and manual count, thus calculating frequencies and cross tabulation.

3. Results

Quantitative Analysis

Quantitative Analysis

Table 1 represents cases of tobacco-related chronic diseases that were discharged from Government hospitals in Jamaica (including the quasi University Hospital of the West Indies) during the period 2006-2008. Overall, there has been a steady increase (2,255, 3,000 and 3,893) over the three years. The year 2008 reported the most cases (3,893) of tobacco-related chronic diseases, affecting more males (1,524) than females (941). The likelihood of males who are ≥60 years old, suffering from tobacco-related illnesses (relative to their female counterparts), increases by 48% when compared to the likelihood level of those in the 31-59 age cohort. This is prevalent in heart disease (458 and 405 cases respectively), followed by chronic obstructive pulmonary disorder (400 males). Males represented the highest number (1,625 in 2006, 1,692 in 2007 and 2,283 in 2008) of reported cases of tobacco-related chronic diseases that were admitted at Government hospitals, when compared with their female counterparts (630 in 2006, 1,309 in 2007 and 1,610 in 2008). To be more specific, males bare a proportionately higher burden of illness than females, averaging 58%. The incidence of lung cancer was highest among the three types of cancers given in the study being highest in the 60 years and older aged group followed by the 3-59 year age group. The incidence of lung cancer was highest in 2008 and among more males than females.

Table 2 shows the weight and cost of legal tobacco trading (import and export) in Jamaica during the period 2008-2011. The country has experienced steady decline in weight, with no report made for 2009. Although the highest weight (1,343,028.08 kg) regarding import and export of tobacco was witnessed in 2006, it was the following year that reflected the highest value (US$8,569,973.68), which includes the cost of insurance and freight.

In relation to import, the periods 2006-2007 and 2007-2008 reported percentage change of 12.5% and 17.0% respectively, while export represented 43.1% decline. Tax is one of the methods that governments use as a means for tobacco control (an initiative of Article 6 of the WHOFCTC), and so Table 3 delineates the various categories of tax (percentage) charged on tobacco-related products that enter Jamaica upon the port of entry. Far less tax was imposed on unmanufactured tobaccos, when compared to those that were manufactured. Substitute manufactured tobacco products did not, however, attract additional stamp duty.

Qualitative Analysis

The responses from the stakeholders are as follows:

The conflict between the WTO and WHOFCTC is void of ethical principles because too many people are dying from tobacco-related illnesses, hence public health objectives should far outweigh trading of tobacco products.

Owing to the fact that health warning packaging and labelling are viewed as barriers to trade, it could be considered one of the methods of over restrictions (under WTO) to meeting public health objectives that are implied under the WHOFCTC and POSDCNCD.

Public health objectives could be met if there are pictorial labelling (Article 11 under the WHOFCTC); and if limitations were to be placed on duty-free imports of 200 sticks of cigarettes per passenger. Restriction is a farce, as Government representatives are sometimes seen at the same table with members of the tobacco companies, often poised for the media. For example, on the Carreras Tobacco Company's banner, entitled "Carreras Youth Smoking Prevention Campaign", there were the logos of the Ministry of Education (Government), the Child Development Agency (Government) and Carreras (tobacco company). According to the respondents although there may be good intention for anti-smoking collaboration (for the <18 year olds), such episodes send mixed messages to the persons at the various literacy levels, as it is viewed that there exist, friendly relationship between the Government and the tobacco

companies, hence encouragement to smoke more. Government also continues to accept gifts from the tobacco company. This kind of alliance could compromise the Government's policy position to adhere to the WHOFCTC and the POSDNCD. Another impediment to restriction is the recent roll-your-own tobacco. This is a tobacco/cigarette retail channel in Kingston, Jamaica where persons can hand-roll their own cigarette sticks the way they want.

It was noted earlier that the Government of Jamaica continues to apply Article 6 in order to curb tobacco consumption, and by extension, its related chronic illnesses. The revenue from tobacco taxes cannot cover the cost of tobacco-related illnesses. Health care cost is never close to tobacco cessation tax, as the former is much higher. Eighty percent (80%) tobacco tax goes toward consolidated fund, while 20% towards the provision of medications for specific chronic illnesses; infrastructural development for the Ministry of Health (buildings and equipment) as part of the Primary Health Care renewal; and healthy lifestyle programme (facilitate testing education at health fairs) under the National Health Fund (National Health Fund, 2011). Rates (on cigars, cigarettes, cheroots, cigarillos) as at September 22, 2011 represent 30% on import duty; 17.5% General Consumption Tax (relates to individual imports for personal use) or 22.5% (relates to commercial imports by registered taxpayers); Special Consumption Tax is J$10.50 per stick; Customer User Fee 2%; Environmental Levy 0.5%; Standard Compliance Fee 0.3%. With respect to smoking tobacco (containing tobacco), snuff (containing tobacco) and homogenized or reconstituted tobacco would attract the following tax: import duty 30%; additional stamp duty 56%; General Consumption Tax 17.5% or 22.5%; Special Consumption Tax 12%; Excise Duty 23%; Customs User Fee 2%; Environmental Levy 0.5%; and Standard Compliance Fee 0.3% (Jamaica Customs Department, 2010).

According to Jamaica Coalition on Tobacco Control (JCTC), the cost of care far outweighs that of the tax collected from tobacco sales. Currently, the leading cause of death is heart disease, stroke and cancer, to which tobacco makes a major contribution. Heart disease contributes to 6%

mortality, hypertension and diabetes contributes 30% in ≥30 years old and 60% in ≥60 year olds, while diabetes is 30%-35% (Jamaica Coalition on Tobacco Control, 2011). Such percentage contributions to mortality (owing to hypertension and diabetes) are as a result of the vascular complications involved (Jamaica Coalition on Tobacco Control, 2011). These are also part of the 27% disability adjusted life years lost for the Caribbean (Jamaica Coalition on Tobacco Control, 2011). Tobacco consumption (especially smoking) also impacts child and maternal health (Millennium Development Goals [MDGs], 4 and 5 respectively). Tobacco consumption is also not the only avenue for chronic illness, but also tobacco farming and production (human security perspective). The latter also impacts climate change, thus implicating both human and wild life.

Despite ongoing education and public awareness regarding tobacco-related harm (adherence to Article 12), by tobacco control advocates such as the Ministry of Health, the Heart Foundation of Jamaica, the Jamaica Coalition on Tobacco Control, the aforementioned illnesses may be avoided, if there were the enactment and implementaton of a legislation which bans smoking in public places (Article 8). Nevertheless, there are inhibitors to Jamaica not fully complying with specific principles under the WHOFCTC; some of which are:

1. A lack of political will: The fact that the Government, after having signed the WHOFCTC, promised farmlands to tobacco farmers, as well as continue to compromise itself by accepting big sponsorships (motor vehicles and technological equipment for the Jamaica Constabulary Force) speaks to a lack of political will.

2. A lack of international cooperation and health diplomacy: There seems to be no sanction against any country who signs on important international health agreements (WHOFCTC, POSDCND) and do not comply with the principles to which it has made its commitment. So far, Jamaica has only complied with labelling in the form of texting, which is 33% compliance under the WHOFCTC, which prefers picture format (50%).

3. Revenue over public health objective (conflict): The Doha Declaration aims to strike the balance between public health and Agreement on Trade-Related Aspects of Intellectual Property Rights. In addition, the fact that Government owes tobacco company $2.7 billion (from having lost court case), this leave scope for efforts to meet public health objective to be diluted. The constant flood of the market by tobacco products, spells increase in revenue for the Government of Jamaica (GOJ). With respect to Article 6, The Jamaica Customs Department (JCD) has put in place, tax regime from the point of entry. Because of the high tax on tobacco, many persons resort to smuggling. High tax is placed on tobacco, cigarette and cigars. Airline passengers are allowed 200 sticks of cigarettes duty free upon landing. It is prohibited for duty free items to be sold on the local market, save for the in-bond shops which are licensed to sell to tourists. Smoking tobacco from Cuba is granted duty free access under CARICOM. The Government of Jamaica also needs to look out for the small tobacco companies that are operating underground. While their 'underground' operations are not public, flyers relating to these companies are seen from time to time. The cost of cigarettes in the stores are at reasonable prices of J$20.00 per stick (US$0.23).

4. No Law: The banning of smoking in public places in Jamaica is yet to be enacted (non-adherence to Article 8). The concern was that if smoking should be banned in public places such as restaurants, then it may occur at home, where some families denounce this act in the interest of their children's health.

4. Discussion

Every year, approximately five million people throughout the World succumb to tobacco-related chronic illnesses. It is estimated that between 2011-2030 eight million will die and one billion over the 21st century (Amos and Haglund, 2011). It therefore means that tobacco trading and consumption lend themselves to seriously impacting human security in

terms of causing chronic illnesses and disruption of socio-economic wellbeing. Research has found that out of 60% chronic disease deaths worldwide, the Caribbean is ranked among the highest in the region of the Americas (Ministry of Health, 2011). The findings of this study showed that of the number of cases of tobacco-related chronic diseases that were discharged from Government hospitals in Jamaica during the period 2006-2008, there was a steady increase over the three years with the most reported tobacco-related chronic diseases in 2008 with more males affected than females. Furthermore, the likelihood of males who are ≥60 years old, suffering from tobacco-related illnesses increases by 48% when compared to the likelihood level of those in the 31-59 age cohort.

In this study, the major tobacco-related chronic disease is heart disease followed by chronic obstructive pulmonary disorder (COPD). Data from several studies indicate that tobacco smokers have 2-3 fold higher relative risk of coronary heart disease, 1.5 times for stroke, 1.4 times for COPD and 12 fold risks for lung cancer. These risks have an age-gradient with higher relative risk (5-6 times) in the younger age groups, and are similar for men and women (Peto *et al.,* 1994; Parish *et al.,* 1995) and decreases rapidly after quitting smoking (Rosenberg *et al.,* 1985). Even exposure to second-hand smoke increases the risk of developing and progression of atherosclerosis (Law *et al.,* 1997). A study of impact of tobacco related diseases in Bangladesh shows that 41% of eight selected tobacco related diseases (ischaemic heart disease, lung cancer, stroke, oral cancer, cancer of larynx, COPD and pulmonary tuberculosis) were attributable to tobacco (World Health Organization, 2007).

In this study, males represented the highest number of reported cases of tobacco-related chronic diseases that were admitted at Government hospitals, when compared with their female counterparts. A large multi-centric study in India concluded that smoking imposes a higher risk for COPD among men, while second hand smoke exposure was an important risk factor among women who were not

significantly exposed to solid fuel combustion (Jindal *et al.,* 2006).

Tobacco causes at least 16 different types of cancer. It is most closely associated with lung cancer; the world's leading cause of cancer deaths, accounting for nearly one in five cancer deaths (NCD Alliance, 2011). In this study the incidence of lung cancer was highest among the three types of cancers given in the study being highest in the 60 years and older aged group followed by the 31-59 year age group. The incidence of lung cancer was highest in 2008 and among more males than females. Tobacco use is known to cause several cancers of the throat and oral cavity, as well as cancer in diverse sites, such as the bladder, kidney, stomach and uterine cervix. Smokeless tobacco causes oral and other cancers, hypertension and heart disease (NCD Alliance, 2011).

The qualitative analysis noted the impact of tobacco use on maternal and child health. To be more specific, with regard to the former, research has shown that when a pregnant mother smokes, she increases her risk of abruptio placentae, placenta previa (World Health Organization, 2010a) and spontaneous abortion (Van Muers, 1999). She is less likely to produce the right amount of milk in her breast, when compared to a non-smoking woman of similar gestation status (World Health Organization, 2010a). In addition, her infant of the pregnant smoker is likely to suffer low birth weight; becomes still born; could encounter sudden infant death (World Health Organization, 2010a); could be at risk of Attention Deficit Hyperactivity Disorder (ADHD) when born and congenital malformation (Van Muers, 1999). The infant would also be deprived of the right amount of oxygen because nicotine reduces uterine placenta blood flow owing to its nature as a vasoconstrictor (Van Muers, 1999).

Tobacco use also impedes economic and social development. Economic impacts of tobacco use on productivity and health care are disproportionately felt by the poor since they are much more likely than the rich to become ill and die prematurely from tobacco related illnesses. One half of the smoker die from their tobacco use, and half of the deaths occur in economically productive

years from 35 to 69 years. A systematic review conducted by World Health Organization (WHO) to find out the link between tobacco and poverty (MDG 1) has shown an inverse relationship between income level and tobacco use prevalence, and its related consequences (World Health Organization, 2011a). In low income countries, purchase of tobacco can divert up to 10% of the total household expenditure (World Health Organization, 2011b). Tobacco users from low income families spend up to 40% of their income on smoking at the cost of their basic needs which, in turn, thrust them deeper into a vicious cycle of poverty (World Health Organization, 2011b). Tobacco smoking has the propensity to wreak poverty in two ways such as the income used to purchase tobacco-related products could be channeled elsewhere (food, education, health care, entrepreneurship, and other quality of life) instead of on cigarette, and the suffering from tobacco-related illness could impact productivity (stifle earning opportunity) and drain micro-economic resources.

In examining the various categories of tax (percentage) charged on tobacco-related products that enter Jamaica upon the port of entry, far less tax was imposed on unmanufactured tobaccos, when compared to those that were manufactured. Substitute manufactured tobacco products did not, however, attract additional stamp duty. This adds to the Government's coffer and does not include tax charged at the level of point of sale. The imposition of tax on tobacco-related product is likely to encourage illicit trading. Illegal tobacco seized by the Jamaica Customs Department over a three-year period (2009-2011), represents 906,896, 283,591 and 125,045 respectively (Jamaica Customs Department, 2010).

Research has shown that despite the tax collected, far less is spent on tobacco control measures (warning labels, cessation services, public education, anti-tobacco mass media advertising) (International Resource Centre, 2011). The Government of Jamaica collect nearly US$133 billion in tobacco excise tax revenues each year, but spend less than US$1 billion combined on tobacco control – 97% of this amount are spent by high-income countries (International

Resource Centre, 2011). Further, tobacco tax policies are undermined by illicit trading (International Resource Centre, 2011). Under the WHOFCTC, picture warnings indicate 50% coverage of the principal display area of the package, while text writings on the labels/packages represent 33% (World Health Organization, 2005). Jamaica is in compliance with the latter, but the print is very small and not conducive to very legible reading. The use of picture label has been favourable in that it has (a) helped persons at various levels of the education ladder to be aware of the dangers of smoking; (b) reduced tobacco consumption; and (c) borne no cost to governments, but the tobacco companies instead (Framework Convention Alliance, 2011). Uruguay has been noted to be the leader in tobacco warning labeling, covering 80% of the packages. This contributed to 8% reduction among adult smokers over a three-year period (from 33% in 2006 to 25% in 2009) (Framework Convention Alliance, 2011).

In addition, three of the Jamaican Government's common initiatives to curb this serious determinant of public health (tobacco smoking) are tax imposition on tobacco-related products; warning labels on the packages of these products; and education about the dangers of tobacco. These initiatives represent Articles 6, 11 and 12 of the WHOFCTC, and Principles of the POSDCNCD. Full implementation the WHOFCTC strategies in reducing tobacco use and preventing chronic non-communicable diseases would avert 5.5 million deaths over 10 year in 23 low income and middle income countries with a high burden of non-communicable diseases (Asaria *et al.,* 2007). The FCTC implementation will have immediate health and economic benefit because reduction in exposure to tobacco smoke, both direct and second hand, will reduce the burden of cardiovascular diseases within one year and thus health expenditure (Lightwood and Glantz, 1997). Smoke-free laws are expected to reduce lung cancers, illness from heart diseases and respiratory symptoms (Doll and Hil, 1954). Policy entity and advocacy groups such as the Ministry of Health, the Heart Foundation of Jamaica, the Jamaica Coalition on Tobacco Control fulfill the mandate of Article 12 under the WHOFCTC. Public awareness and other educational activities relating to the dangers of tobacco are

demonstrated via workshops, seminars, mass media campaign, health fairs, research, working group meetings, press releases, pamphlets and collaborations/partnerships.

Under the POSDCNCD, heads of governments had committed to enact legislation (relating to tobacco and alcohol) that would address tax increase on tobacco and alcohol products; the banning of both cigarette and alcohol sales within geographic proximity of schools; the banning of smoking in schools; the banning of smoking in all government buildings and on public transportation; banning of cigarette advertising (Caribbean Community, 2007). The enactment of such an important legislation for Jamaica would possibly enable the Government of Jamaica to achieve one of its 15 national outcomes much earlier than the prescribed time of 2030: a healthy and stable population by 2030 (Planning Institute of Jamaica, 2009).

With regard to the Tobacco Control Conceptual Model for Jamaica (2011), tobacco trade agreement could be violated if technical barriers to trade become over-restrictive in order to achieve public health objectives (Weissman, 2011). Aggressive anti-tobacco education campaign and pictorial warning labels could be seen as examples. Some countries routinely choose not to enact legislation of various kinds because of concern that proposed laws could conflict with their international trade obligations even when those concerns are misplaced (Weissman, 2003). Breaches under the WTO could result in tobacco companies endeavouring to challenge governmental regulations directly and seek compensation for profits lost due to rules that do not comply with strict investment obligations (Weissman, 2003). If the laws of a particular country is not consonant with the rules of the WTO, it may have to change its laws, or face trade sanctions or fines equal to the amount of the harm (measured as lost market opportunities) to other countries (Dispute Settlement Understanding, 2003). It means therefore that if the negotiations in trade and services do not succeed, the industry will seek action through the triennial review of the agreements on technical barriers to trade (Zeigler, 2008).

In examining Jamaica versus Carreras Limited, the Government of Jamaica owed the tobacco company J$2.7 billion because of the overturn of a revenue court ruling relating to tobacco tax issue (Jamaica Observer, 2010; Roache, 2010; Jamaica Observer, 2011). Therefore, the public health objectives may not be achieved, as the government may desire to not disturb the thin line between trade and health. This could hamper government's adherence to the WHOFCTC, and the POSDCNCD.

The evidence in this study shows that despite the initiatives relating to international cooperation and health diplomacy, this is sometimes compounded by the actions (sponsorship to the Government by the tobacco company), which wreaks potential for regulatory capture. Sponsorship is denounced by the WHOFCTC (Article 13), as this is seen as possibly increasing the consumption of tobacco products.

The absence of certain provisions to which governments had committed (for example, tobacco control legislation, pictorial warning labels) compounds compliance that would foster good international cooperation. Health diplomacy is also not always exercised when regional states do not collaboratively practice that which they had agreed to at the international level.

On the point of Trade versus Human Security, this bears relationship with tobacco consumption and production. Tobacco consumption causes illnesses such as heart disease, periodontal gum disease, emphysema, cancer, peripheral arterial/vascular disease, etc); while production causes neuropsychiatric effects, anaemia and green tobacco sickness, such as anaemia, fluctuated heart rates, excruciating abdominal pain, weakness, dizziness and nausea (Action on Smoking and Health, 2010) to tobacco farmers, owing to nicotine having penetrated the skin. It also contributes to climate changes because of its gases (methane, nitrous oxide, carbon dioxide), substances (chlorofluorocarbons) and wastes (toxins, nicotine).

The Doha Declaration aims to strike the balance between trade and health in relation to unfavourable tenets that could affect public health. In so doing, developing countries

(including Jamaica) adopted a strategy relating to public health and Trade-Related Aspects of Intellectual Property Rights (TRIPS). These countries advocated against unfavourable tenets under the WTO rule, particularly the TRIPS Agreement (regarding negative impact of intellectual property on the cost of pharmaceutical drugs). It also advocates protecting public health and enhancing access to medicine, as well as recognizing the right of Members to allow the production without the consent of the patent holder to address public health needs in another country, under Article 30 of the TRIPS Agreement (Corea, 2002). In the case of this study, the matter of access to medicine by tobacco-related chronically ill patients could be impeded if drugs are too expensive or does not meet their financial capacity.

5. Conclusion

There is an imbalance between tobacco trade and public health objectives because of the conflict between the WHOFCTC principles and the WTO rules. While Jamaica has adhered to Articles 6, 12 and 15 of the WHOFCTC, it is assumed that partial compliance to Article 11 (warning labels) and the non-implementation of Article 8 (legislation) are serious impediments to effective tobacco control. Other impediments are the blurred line of demarcation between the Government and the tobacco company; and the lack of policy dialogue regarding the 'Roll-Your-Own' tobacco retail channel enhances trade and increases the likelihood of consumption, hence chronic non-communicable diseases. Tobacco consumption also impacts human security in terms of health, socio-economic well-being and climate change.

Recommendation

Advocacy to the policy makers for strengthening policies and practical approach to enforcement must be given a high priority. At the same time, capacity of law enforcers on the tobacco control laws must be enhanced and public education campaigns on compliance of the law intensified.

- Further research should be done to determine whether the Jamaican Government's adherence to

Articles 6, 11, 12 of the WHOFCTC has reduced tobacco consumption since its ratification of the Convention in 2005.

- With regard to Article 11 (Warning Labels), the Government of Jamaica should aim for at least 50% compliance, thus reflect pictorial warning (example – Appendix 8), especially for the sake of persons who are illiterate and otherwise oblivious of the dangers of tobacco smoking.
- Strong linkage should be made between health and the environment as an indicator in national policies and strategic plans, taking into consideration, the factors of tobacco smoking and production.
- Incorporate into the National Development Plan 2030, the matter of tobacco-related chronic diseases as an indicator. Link such indicator with MDGs 1, 4 and 5, as the relationship with tobacco-related consumption is evidenced earlier in this paper.
- In enabling international factors to reducing tobacco consumption in Jamaica, an urgent legislation, banning smoking in public places and access to youth should be enacted and implemented.

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Table 1: Cases of Tobacco-Related Chronic Disease in Jamaica, 2006-2008

	Year 2006						Year 2007						Year 2008					
	Male				Female		Male				Female		Male				Female	
	<=19	20-30	31-59	60+	<=19	20-30	31-59	60+	<=19	20-30	31-59	60+	<=19	20-30	31-59	60+	<=19	20-30	31-59	60+
Cancer:																				
Lung	0	3	156	211	0	3	20	77	0	3	74	164	0	0	21	46	1	2	150	245	0	2	44	67
Thyroid	0	2	3	0	0	3	7	4	0	0	0	1	0	3	0	8	0	0	7	3	1	1	23	14
Esophagus	0	0	14	31	0	0	3	0	0	0	10	20	1	4	3	12	0	0	16	44	0	3	14	17
Cardiovascular Disease	0	0	1	8	0	1	3	3	0	0	7	17	0	1	6	36	2	2	13	28	1	0	18	38
Stroke	0	0	1	0	0	0	0	5	0	0	1	1	0	0	1	2	0	2	15	0	2	1	11	0
Aneurysm	0	0	4	2	0	1	4	4	0	1	4	2	0	1	3	0	0	5	5	5	0	1	8	4
Coronary Heart Disease	0	0	0	120	0	0	0	153	0	0	0	177	0	0	0	108	1	2	71	180	0	3	67	178
Chronic Obstructive Pulmonary Disorder	0	1	34	300	2	0	31	82	0	1	46	276	1	2	56	56	0	0	0	400	0	0	0	82
Emphysema	0	2	7	6	0	0	2	1	1	2	2	7	0	0	1	1	0	0	0	10	0	0	0	2
Bronchitis	11	0	2	3	12	2	2	1	17	0	1	2	6	4	0	5	10	1	1	1	0	1	6	6
Coronary Artery Obstruction	0	0	49	89	3	1	46	123	1	4	69	110	3	1	78	135	145	4	8	5	128	1	1	1
Emphysema	2	6	5	3	2	3	5	2	4	2	12	0	1	1	1	0	0	1	68	138	0	3	64	127
Heart Disease	21	11	120	370	17	16	167	366	33	11	171	420	26	15	170	370	25	9	184	458	21	36	167	405
Sub-Total	34	25	405	1,161	36	30	301	263	56	24	397	1,215	38	32	388	881	184	28	547	1,524	162	54	453	941
Grand Total	2,235						3,000						3,803											

Source: Ministry of Health (2010).

Table 2 - Tobacco Trading in Jamaica, 2006-2010

Years	Trade Type	Weight (Kg)	US$CIF
2006	Import	1,341,463.08	7,633,039.34
	Export	1,565.00	71,636.56
Total		**1,343,028.08**	**7,704,675.90**
2007	Import	1,171,292.00	8,513,207.79
	Export	891.00	56,765.89
Total		**1,172,138.00**	**8,569,973.68**
2008	Import	955,571.00	7,487,599.00
	Export	17,889.00	203,400.00
Total		**973,460.00**	**7,690,996.00**
2009	Import	Not reported	7,081,660.73
	Export	Not reported	56,488.64
Total		**-**	**7,138,149.37**
2010	Import	771,035.00	7,688,641.00
	Export	3,115.00	60,133.00
Total		**774,150.00**	**848,774.00**

Source: Statistical Institute of Jamaica (2010).

Table 3 – Categories of Tobacco Tax

Description	ID	ASD	GCT	EXCD	SCTA	SCTS	SCF	ENVL	CUF
Tobacco not stripped/stemmed	-	-	0.175	-	-	-	-	0.005	0.02
Tobacco partly or wholly stripped/stemmed	-	-	0.175	-	-	-	-	0.005	0.02
Tobacco refuse	-	-	0.175	-	-	-	-	0.005	0.02
Cigars, cheroots and cigarillos containing tobacco	0.3	-	0.175	-	-	10.5	0.003	0.005	0.02
Cigarettes containing tobacco	0.3	-	0.175	-	-	10.5	0.003	0.005	0.02
Cigarettes containing tobacco substitutes	0.3	-	0.175	-	-	10.5	0.003	0.005	0.02
Cigars, cheroots, cigarillos of tobacco substitutes	0.3	-	0.175	-	-	10.5	0.003	0.005	0.02
Smoking tobacco* containing tobacco of any proportion	0.3	0.56	0.175	0.23	0.12	10.5	0.003	0.005	0.02
Smoking tobacco containing tobacco substitute of any proportion	0.3	-	0.175	0.23	0.12	10.5	0.003	0.005	0.02
Homogenised or reconstituted tobacco	0.3	0.56	0.175	0.23	0.12	10.5	0.003	0.005	0.02
Snuff containing tobacco	0.3	0.56	0.175	0.23	0.12	10.5	0.003	0.005	0.02
Snuff containing tobacco substitute	0.3		0.175	0.23	0.12	10.5	0.003	0.005	0.02
Tobacco manufacturers, nesoi, tobacco extracts and essences	0.3	0.56	0.175	0.23	0.12	10.5	0.003	0.005	0.02

Source: Jamaica Customs Department (2010).

Key: ID = Import Duty; ASD = Additional Stamp Duty; GCT = General Consumption Tax; EXCD = Excise Duty; SCTA = Special Tax Advolrem; SCTS = Special Consumption Tax Specific; SCF = Standard Compliance Fee; ENVL = Environmental Levy; CUF = Customs User Fee.

* The term 'smoking tobacco' means the manufacturing of tobacco for use in pipes or for making cigarettes.