Results from an evaluation of

compliance knowledge and attitudes related to the 100% smoke-free law in bars and restaurants in Kampala - Uganda

A Report by the Emerging Leaders on the KOMPLY Smoke-free Project

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Supporting African governments to build and sustain capacity for tobacco control through technical, institutional and cross sector support.

Report on an evaluation of compliance, knowledge, and attitudes related to the 100% smoke-free law in bars and restaurants in Kampala, Uganda

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The KOMPLY Smoke Free Collaboration Project

This is the first report from a project that was conceptualised and conducted by the KOMPLY Collaboration, an international team of health advocates, clinicians and researchers.

The team members were brought together by the World Heart Federation's Emerging Leaders program that took place in Bangalore India in March 2016. The main goal of the program is to contribute toward improving global cardiovascular health and reduced global cardiovascular disease [1].The program is aligned with the World Health Organization's "25 x 25" target of reducing the risk of premature (<70 years) mortality from cardiovascular disease and other non-communicable diseases by 25% by 2025 [2]. The KOMPLY team was assembled based on a keen interest among the members to reduce the exposure to secondhand tobacco smoke, particularly in vulnerable regions such as Africa.

The Centre for Tobacco Control in Africa (CTCA) is the lead organization for the KOMPLY Collaboration project; however, the group worked in parrtnership with the University of Makerere to carry out the data collectionduring the initial phases of the project.

The KOMPLY WHF Emerging Leaders Team

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ACRONYMS

APHEA	Agency for Public Health Education Accreditation
COPD	Chronic Obtructive Pulmonary Disease
CSOs	Civil Society Orgaization
CTCA	Centre for Tobacco Control in Africa
FCTC	Framework Convention on Tobacco Control
KCCA	Kampala Capital City Authority
NCDs	Non-Communicable Diseases
NEMA	National Environmental Management Authority
$PM_{2.5}$	Particulate Matter of diameter 2.5
RSPs	Respirable Suspended Particles
SHS	Second Hand Smoke
TAPS	Tobacco Advertizing, Promotion and Sponsorship
TSP	Tobacco Smoke Pollution
USEPA	United States Environmental Protection Agency
WHF	World Heart Federation
WHO	World Health Organization

Executive Summary

Background

Almost 6 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% of all deaths. Smoking is estimated to cause about 71% of lung cancer, 42% of chronic respiratory disease and nearly 10% of cardiovascular disease.

Aims and methods

This report focuses on the first stage of the KOMPLY project, where we aimed to evaluate the level of compliance with Uganda's new smoke-free law in hospitality venues in Kampala. Compliance was assessed using systematic observational data collection at 222 venues, and measurement of tobacco particulate matter ($PM_{2.5}$) at 108 venues. Knowledge of, and attitudes towards the legislation were also assessed among 222 venue owners and employees. Lastly, we conducted in-depth interviews with representatives from civil society organisations to explore possible ways of enhancing compliance with the smoke-free legislation.

Key findings

- Smoking was observed in 17.8% of venues, and almost half (47.1%) had visible cigarette remains inside the venue.
- 30.8% had some unregulated form of "no smoking" signage.
- More than one-third (35.6%) had a designated smoking area inside the venue.
- The majority of venue staff (57.2%) felt they had not been adequately informed about the smoke-free law.
- In venues that allowed indoor smoking, the average indoor air quality levels were hazardous (267.64µg/m3), while venues without active indoor smoking had moderate air quality levels (29.55µg/m3).
- Civil society representatives identified that the continued sale of shisha at hospitality venues was a particular problem. Suggestions for enhancing compliance included: activities to increase public awareness of the legislation (e.g. using radio), and educating and supporting hospitality staff to assist them with making their venue smokefree (including education to counter misperceptions about the law's negative impact on businesses).

Recommendations

1. The Ministry of Health should institute a coordinated enforcement system to facilitate compliance with the smoke-free law.
2. The Ministry of Health should provide guidelines to the hospitality industry and train enforcers to increase compliance with smoke-free law among the hospitality industry.
3. Civil Society Organizations should support compliance of smoke-free law through creating awareness among the hospitality industry and the public.
4. The Ugandan Government must enact WHO FCTC Article 5.3 against any form of Smokefree policy interference by the tobacco industry or any other commercial entity that works on behalf of the tobacco industry.

1 Overview

1.1 KOMPLY

A Project to Support Compliance with the Smoke-free Law in Bars and Restaurants in Kampala, Uganda

In July 2015, Uganda passed the Tobacco Control Act 2015, a comprehensive set of regulations that included a 100% smoke-free law that prohibiting smoking within 50 meters of all public spaces. The law took effect May 19, 2016. The KOMPLY Project is an ongoing study with a pre-post design that is currently evaluating compliance with Uganda's comprehensive smoke-free law among hospitality venues (bars, pubs, and/or restaurants) in Kampala Uganda, using both objective and subjective measures. The overall project objective is to evaluate and communicate the level of compliance with the indoor 100% smoke-free law to the public, policymakers, government officials (the Ministry of Health Uganda), Civil Society Organizations (CSOs), and other public stakeholders so as to facilitate and enable the government and CSO's to advocate for stronger compliance of the smoke-free law though the development of resources, skills, and tools.

KOMPLY Emerging Leaders with WHF Faculty

This first report presents intial findings of the extent of compliance with the smoke-free law in Ugandan hospitality venues. As seond-hand smoke (SHS) exposure is high in Ugandan hospitality venues (in 2013 an estimated 62.3% of adults who visited bars, pubs or nightclubs were exposed to tobacco smoke) [3] and there are no surveillance systems for routinely measuring exposure to SHS, the KOMPLY Project was developed to assess the level of compliance with Uganda's 100% smoke-free law in hospitality venues in Uganda's capital city, Kampala.

2 Introduction

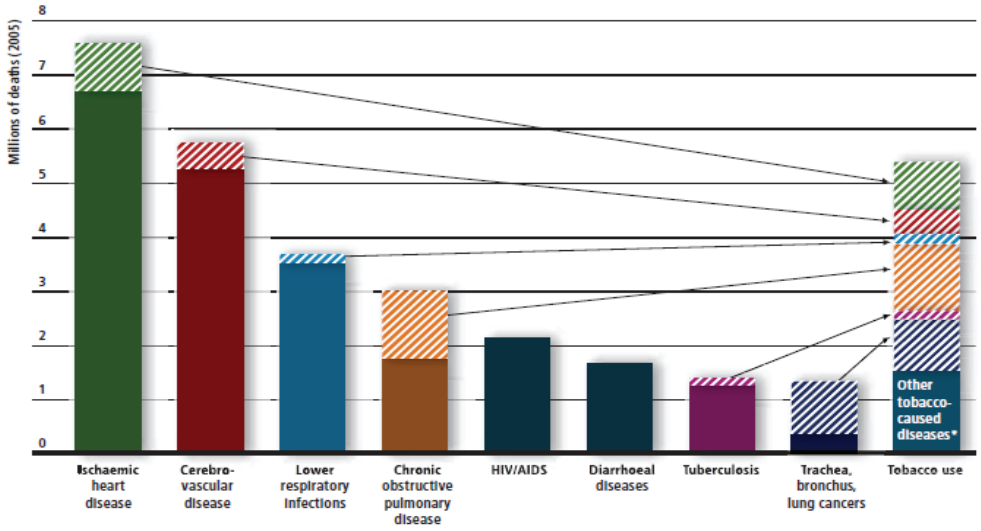
2.1 Smoke-Free Policies

A central component of effective tobacco control

Tobacco smoke pollution (TSP), also known as second-hand smoke (SHS), is recognized throughout the world as a significant cause of premature death and disease. SHS has more than 7000 chemical compounds, and of these, 250 are harmful and over 60 are carcinogenic [4]. There is strong scientific evidence that links SHS to the development of non-communicable diseases (NCDs), particularly heart disease, lung cancer, and other respiratory illnesses, as well as health problems in infants and children, such as sudden infant death syndrome and asthma.[5]

Globally, a third of adult non-smokers and 40% of children are regularly exposed to the harmful effects of SHS [6] Tobacco smoke kills around 6 million people each year (tobacco is a risk factor for six of the eight leading causes of death in the world)[7], and it is estimated that 600,000 non-smokers die directly annually from SHS exposure [8]. Therefore a key intervention in reducing the burden of tobacco smoking-attributable deaths is to protect people from exposure to SHS. Notably, smoke-free environments not only protect non-smokers [9], but also encourages smokers to quit [10].

Figure 1 Tobacco smoke is a significant risk factor for six of the eight leading causes of global deaths



Source: A Policy Package to Reverse the Tobacco Epidemic, MPOWER. 2008 [7].

In response to the globalization of the tobacco epidemic, the World Health Organisation Framework Convention on Tobacco Control (WHO FCTC) [11]treaty was adopted in 2003 and came into force in 2005. The WHO FCTC is an evidence-based public health treaty that obligates 180 Parties (179 countries plus the European Union as of January 2017) to implement a broad array of evidenced-based supply and demand-reduction tobacco control measures in order to reduce tobacco use. One such demand-reduction measure, Article 8, was adopted at the Second Conference of the Parties in 2007 and established the core principles for achieving 100% smoke-free environments, including monitoring and evaluation of enforcement of legislation [12]. The Guidelines to Article 8 recommend that all Parties achieve "universal protection" from exposure to tobacco smoke within 5 years of the WHO FCTC coming into force for the Party. Guidelines to the WHO FCTC are intended to assist Parties in meeting their obligations under the treaty. Guidelines for Article 8 recommend a comprehensive ban on smoking in public places and workplaces, without exemptions.

Figure 2: WHO FCTC Article 8 Guideline's Seven Principals

- **Require total elimination of tobacco smoke without exemptions**
- **Protect all people from exposure to tobacco smoke**
- **Use legislation that is simple, clear, and enforceable, not voluntary measures**
- **Provide resources for implementing and enforcing the law**
- **Include civil society as an active partner in developing, implementing and enforcing legislation**
- **Monitor and evaluate smoke-free laws**
- **Strengthen and expand protection if effectiveness**

Comprehensive smoke-free laws are among the most effective tobacco control strategies available [13], and are the only way to protect non-smokers from involuntary exposure to SHS. The strong implementation of Article 8 has been shown to significantly reduce or eliminate SHS in key public venues [13], help smokers quit, and reduce tobacco-related illnesses, hopsitalizations, deaths, and healthcare costs [14-16]. Moreover, scientific evidence from multiple countries has shown that these smoke-free laws have little or no negative economic effects on business [13]. Several studies estimate that 10% of total tobacco-related economic costs are attributable to second-hand tobacco smoke exposure [17]. For example, in the China, Hong Kong Special Administrative Region, where there is a high burden of SHS and no comprehensive full smoking ban in public places, the cost of direct medical care, long-term care and productivity losses attributable to second-hand tobacco smoke exposure is approximately US$ 156 million annually (2008 data).

Studies have consistently shown that comprehensive smoke-free policies can result in an overall 40% reduction in SHS exposure, and up to an 80-90% reduction in high-exposure areas [18]. Moreover, a study in 2006 demonstrated that non-smoking adults were exposed to 5-10 times less SHS if they live in countries with comprehensive smoke-free laws as compared to places that did not have this legislation [19]. This study also underpins the cirtical importance for comprehensive laws rather than partial or voluntary laws. Among non-smoking adults living in counties with extensive smoke-free law coverage, 12.5% were exposed to SHS, compared with 35.1% with parital or limited coverage, and 45.9% with no law.

Air quality studies conducted by several expert researchers have shown that comprehensive smoke-free laws lead to dramatic reductions in indoor air pollution in public places. For example, in a study in 2008 that included 32 countries, the levels of $PM_{2.5}$ were on average 87% lower in countries with comprehensive smoke-free laws in comparison to countries without comprehensive smoke-free laws in effect [20]. Of great importance, it should also be clear, that there are no exceptions to a smoke-free law, and evidence shows that partial laws are ineffective. Only a comprensive smoke-free law is 100% effective [21].

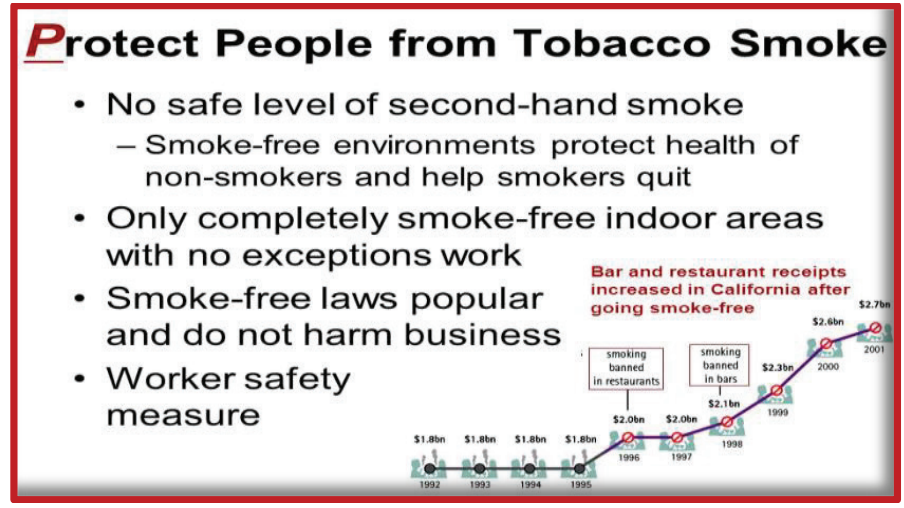
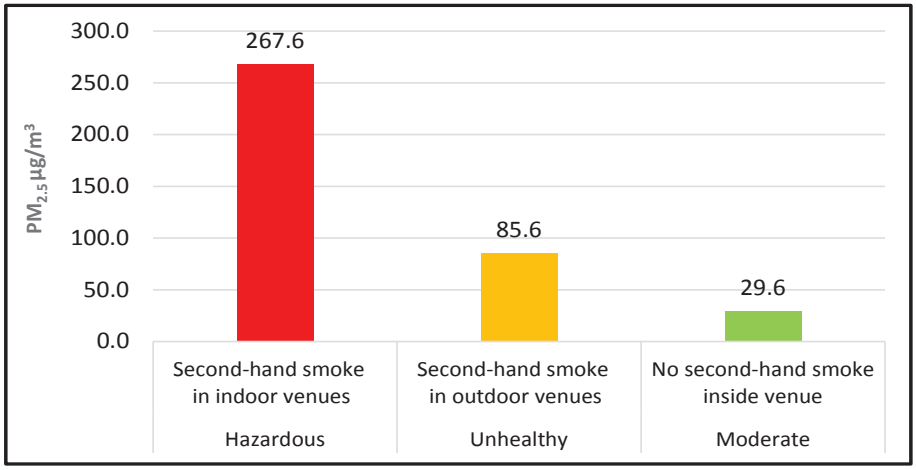
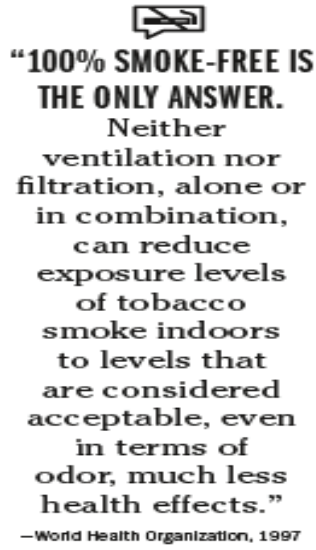


Figure 3: Difference in indoor air quality (tobacco smoke pollution) between partial and comprehensive laws



Source: Lee et al. 2009 [21]



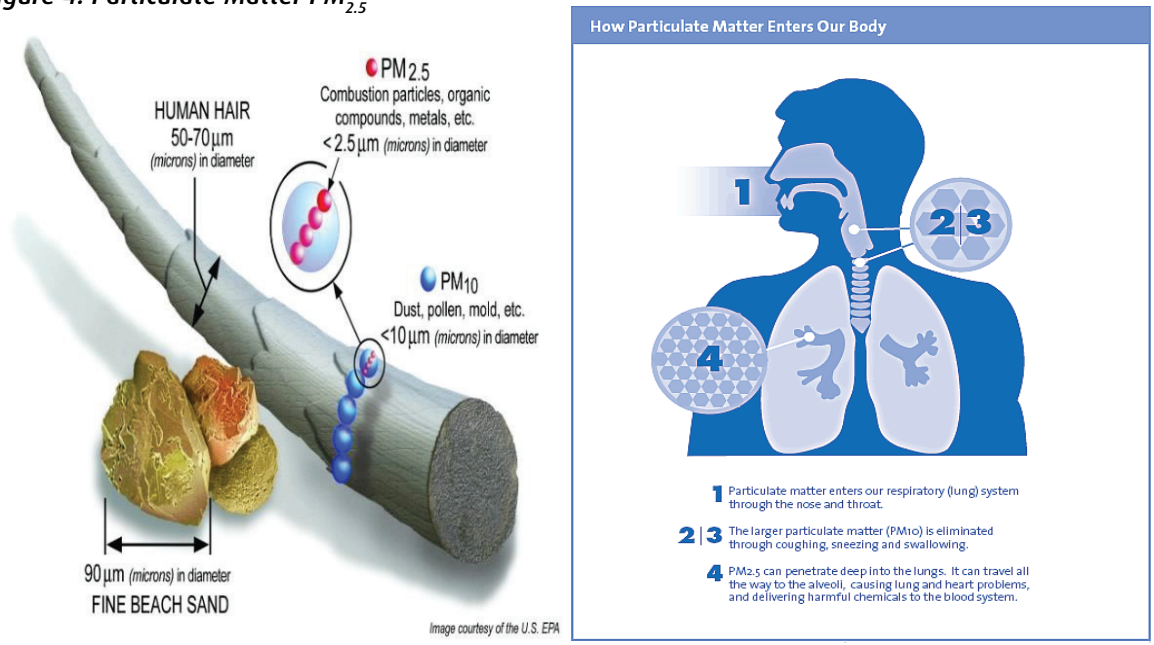
2.2 Measuring Air Quality, $PM_{2.5}$

Particulate Matter (PM) is a composite combination of extremely small particle and liquid droplets that get into the air. The major components of PM are sulfate, nitrates, ammonia, sodium chloride, black carbon, mineral dust and water. It consists of a complex mixture of solid and liquid particles of organic and inorganic substances suspended in the air. The most health-damaging particles are those with a diameter of 10 microns or less, (≤ PM10), which can penetrate and lodge deep inside the lungs. Chronic exposure to particles contributes to the risk of developing cardiovascular and respiratory diseases, as well as of lung cancer. Air quality measurements are typically reported in terms of daily or annual mean concentrations of PM10 particles per cubic meter of air volume (m3).

Routine air quality measurements typically describe such PM concentrations in terms of micrograms per cubic meter (µg/m3). When sufficiently sensitive measurement tools are available, concentrations of fine particles ($PM_{2.5}$ or smaller), are also reported.

During smoking, $PM_{2.5}$ is generated by incomplete combustion of tobacco.
Measurement of the fine particulate matter of diameter less than 2.5 microns ($PM_{2.5}$) has regularly been used as a marker of SHS concentrations in air over the past two decades [22, 23]. SHS is a mixture of particle phase and gaseous compounds that are linked to a variety of ill-health outcomes in those exposed [24]. Most particles produced from tobacco smoking are less than 1µm in diameter thus enabling $PM_{2.5}$ (fine PM less than 2.5 µm) to normally be used as metric for measuring SHS. Some studies suggest that between 80% and 90% of cigarette smoke is invisible to the human eye [25] and smokers are often not aware of the concentrations of smoke generated by their activity with many considering actions such as opening window to reduce the level of SHS in their homes [26].

Figure 4: Particulate Matter $PM_{2.5}$



2.2.1 Health Effects of $PM_{2.5}$

Several studies have demonstrated that fine PM is a risk factor for increased respiratory and cardiovascular morbidity and mortality [27, 28] leading to the WHO to develop PM outdoor and indoor air quality guidelines [29]. The use of $PM_{2.5}$ as a marker has made it possible for the public health community to successfully communicate indoor SHS concentrations. There is a close, quantitative relationship between exposure to high concentrations of small particulates ($PM_{2.5}$) and increased mortality or morbidity. Conversely, when concentrations of small and fine particulates are reduced, related mortality will also go down, if other factors remain constant [30-32]. Small particulate pollution such as $PM_{2.5}$ has health impacts even at very low concentrations, indeed no threshold has been identified to which no damage to health is observed. There is recognised evidence connecting Second-hand Smoke (SHS) exposures to poor health outcomes. SHS exposures in adults have been linked to consequences such as chronic obstructive pulmonary disease [33], deficits in lung function, increased risk of adult-onset asthma [34], and increased risk of lung cancer [35]. Harmful health consequences from exposure to air pollution are a global challenge and of widespread concern. Public health is seriously threatened by exposure to ambient and indoor particulate matter (PM). Epidemiological studies have established that long-term exposure is associated with lung cancer and other pulmonary and cardiovascular diseases [36, 37].

2.2.2 Guidelines on $PM_{2.5}$ Measurement

WHO and the US Environmental Protection Agency (USEPA) have defined guideline limits for air pollution that should not be exceeded to maintain and protect public health. WHO provides Air quality guidance for $PM_{2.5}$ including; 10 mg/m3 annual mean and 25 mg/m3 24-hour mean. These limits are intended to achieve the lowest concentrations of PM possible. Similarly, the US EPA provides guidelines for Air Quality Index and these have been adopted globally as a suitable guidance for Indoor Air Quality in enclose spaces, as shown in Table 1.

Table 1: US EPA Air Quality Index

$PM_{2.5}$ µg/m^3	AQI	Advice
35	Unhealthy for sensitive groups	Heart/lung disease and elderly/ children advised to reduce prolonged exertion
65	Unhealthy	Heart/lung disease/elderly/children avoid prolonged exertion; everyone reduce prolonged exertion
150	Very unhealthy	Heart/lung disease avoid all physical activity; everyone avoid prolonged exertion
250	Hazardous	Heart/lung disease remain indoors; everyone avoid physical activity

These guidelines provide interim targets for concentrations of PM10 and $PM_{2.5}$ aimed at promoting a gradual shift from high to lower concentrations, hence leading to reductions in risks to acute and chronic health effects from air pollution.

2.2.3 Magnitude of Pollution in Africa and Uganda

WHO, 2014 estimated the contribution of air pollution mortality as seven million deaths worldwide in 2012; 3.7 million due to ambient air pollution (AAP) and 4.3 million due to indoor air pollution, making air pollution one of the global public health risks.

There is limited data on the magnitude of air pollution in Africa and Uganda. WHO data base provides an average of $PM_{2.5}$ for Africa at 78 µg/m3, which is three times the normal limit. In Uganda, data on air pollution is very limited. There is one study by Bruce j. Kirenga, July 2015; which estimated the mean 24-hour $PM_{2.5}$ concentrations for Kampala and Jinja at 132.1 µg/m3.

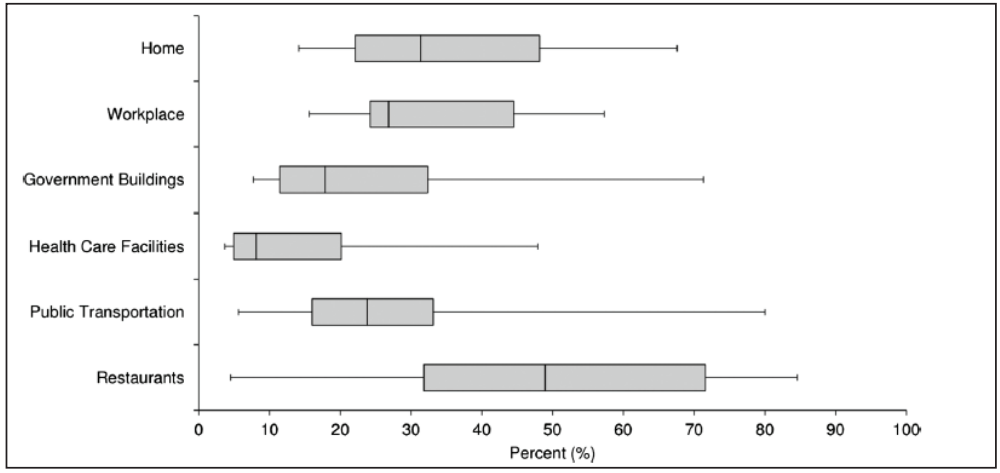
2.2.4 Air Pollution Policy Framework in Uganda

The Uganda National Environment Act 1995, provides for prevention and control of air pollution and based on this Act the National Environment Authority (NEMA) developed air quality regulations. However, the regulations are silent on tobacco as a source of pollution. In addition, after a court case by one of the citizens, NEMA formulated the Tobacco Control guidelines to prevent exposure to second hand smoke, which was repealed by the Uganda Tobacco Control Act, 2015, which provides for 100% smoke free environments in all public indoor places.

2.3 Second-hand smoke in hospitality venues

In countries without a comprehensive smoke-free policy implemented, coupled with strong compliance to the law, people working in hospitality venues are the occupational group at highest risk of SHS exposure compared to all other public places [38, 39], especially in low (LIC) and middle income (MIC) countries [40-42]. Moreover, bar and restaurant workers absorb considerable amounts of SHS and often experience greater respiratory symptoms than other workers [43]. After the implementation of smoke-free law, studies have shown rapid improvements in the respiratory health of hospoitality workers [9, 44-46].

Figure 5: Non-smokers exposed to secondhand smoke in 14 countries in Public Places



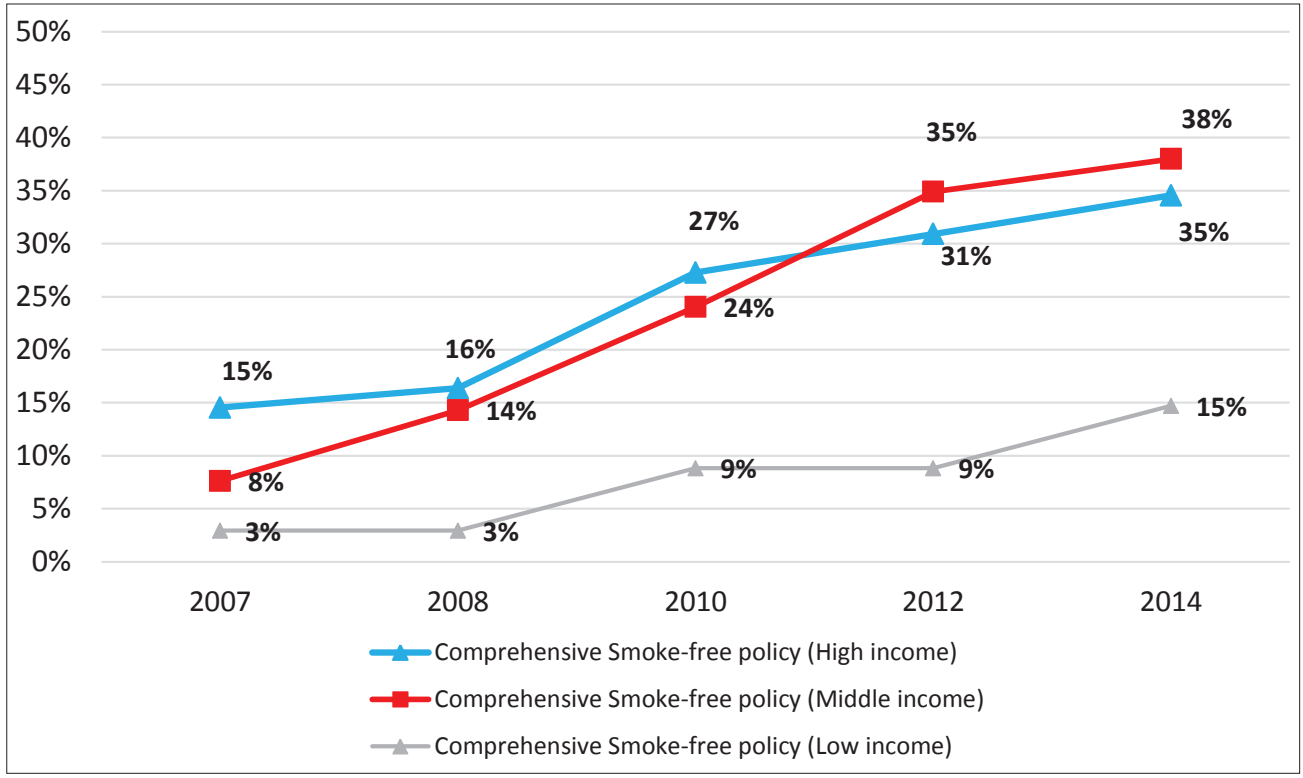
Source: King, 2013.

Box and whisker plots of the percentage of non-smokers exposed to secondhand smoke in 14 countries,† by location of exposure—Global Adult Tobacco Survey: Bangladesh, Brazil, China, Egypt, India, Mexico, Philippines, Poland, Russia, Thailand, Turkey, Ukraine, Uruguay, Vietnam. Note: Lower, middle, and upper ends of boxes represent 25%, 50% and 75% percentiles, respectively. Whiskers represent minimum and maximum country for each location.

2.3.1 Smoke-free Legislation in Restaurants, Pubs and Bars

FCTC guidelines include coverage for all hospitality venues; however, the data show that globally, restaurants, bars and pubs are poorly covered compared to other types of public places (WHO, 2009). As of 2014, only 1/3 of these venues are legally protected from exposure to SHS. At the most recent WHO measure (2014) only 5 (15%) low-income countries had a comprehensive 100% smoking ban in restaurants.

Figure 6: Countries with 100% Smoke-free Legislation in Restaurants (2014)

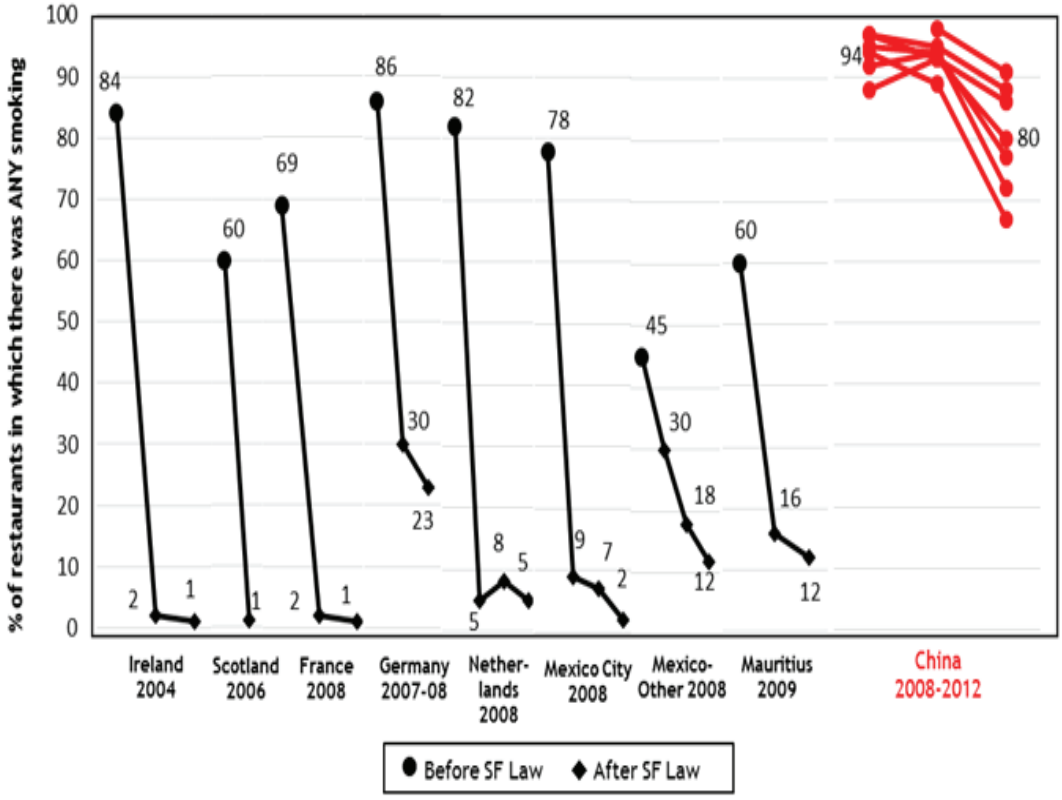


Source: WHO report on the global tobacco epidemic, 2015 [47]

The International Tobacco Control Policy Evaluation (ITC) Project has extensively examined smoking prevalence observed in restaurants among several countries prior to the implementation of smoke-free legislation and after the policy was implemented. The results have demonstrated a dramatic reduction in observation of smoking by study respondents in countries that have smoke-free legislation in restaurant venues [41]. Although there are smoke-free policies in some cities in China, compliance is poor and thus reflected in Figure 6 [41], where smoking is still observed in restaurants at extremely high rates. These findings underpin the importance of strong smoke-free laws in order to reduce smoking in public places.

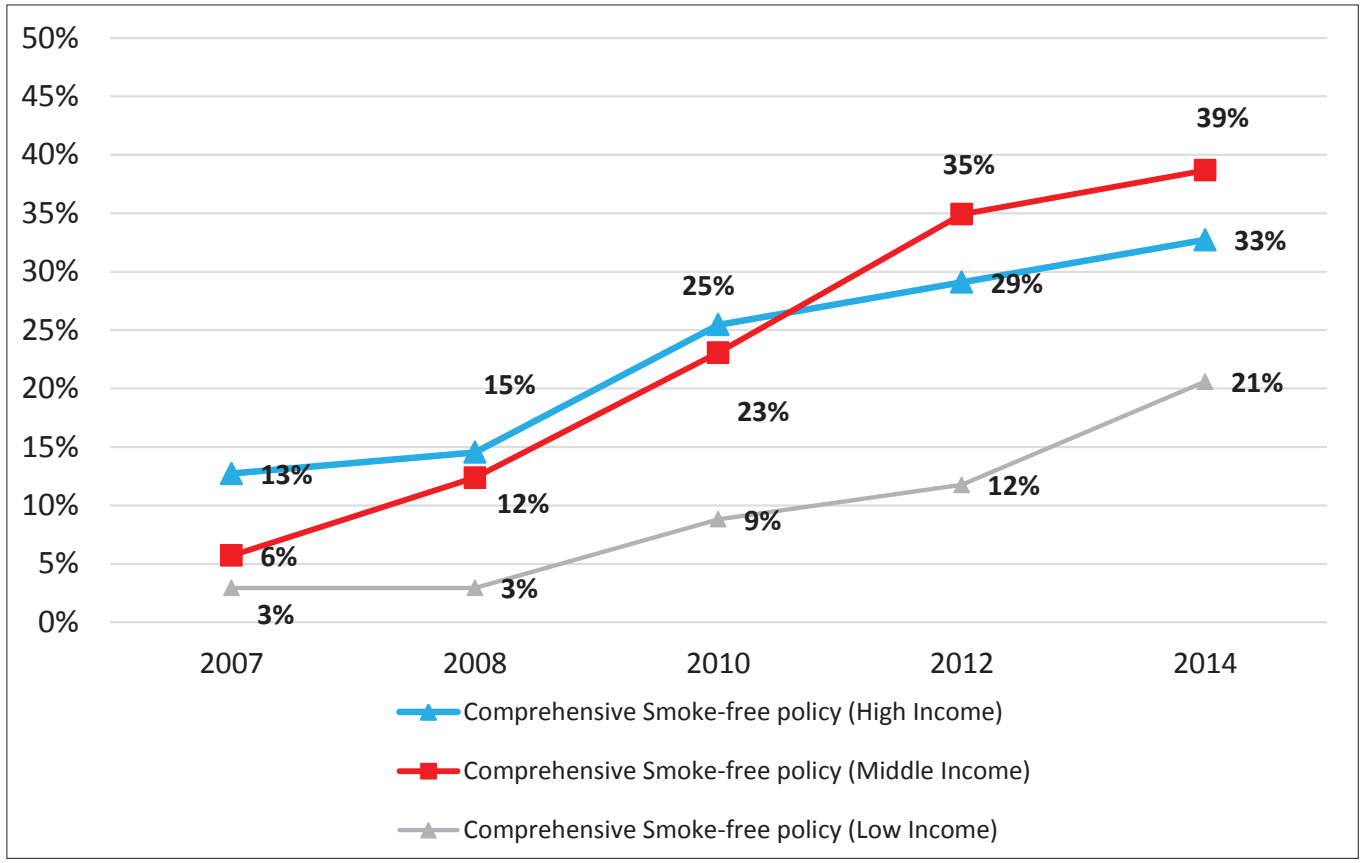
Figure 6. Smoking Prevalence Observed in Restaurants in 7 ITC China cities from 2008 to 2012 compared to other countries before and after comprehensive smoke-free laws: Ireland (2004), Scotland (2006), France (2008), Germany (2007-08), Netherlands (2008), Mexico City (2008), Other Mexican Cities (2008), and Mauritius (2009).

Figure 7: Smoking Prevalence Observed in Restaurants in 7 ITC China cities from 2008 to 2012



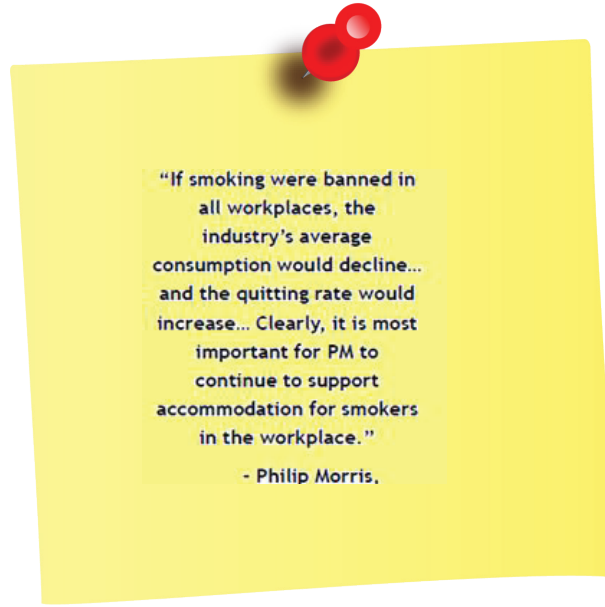
As of 2014, only 64 countries had comprehensive smoking bans in bars and pubs. Again, like restaurants, low-income countries are lagging behind both high and middle income countries.

Figure 8: Countries with 100% Smoke-free Legislation in Bars/Pubs (2014)



2.3.2 Implementation Challenges

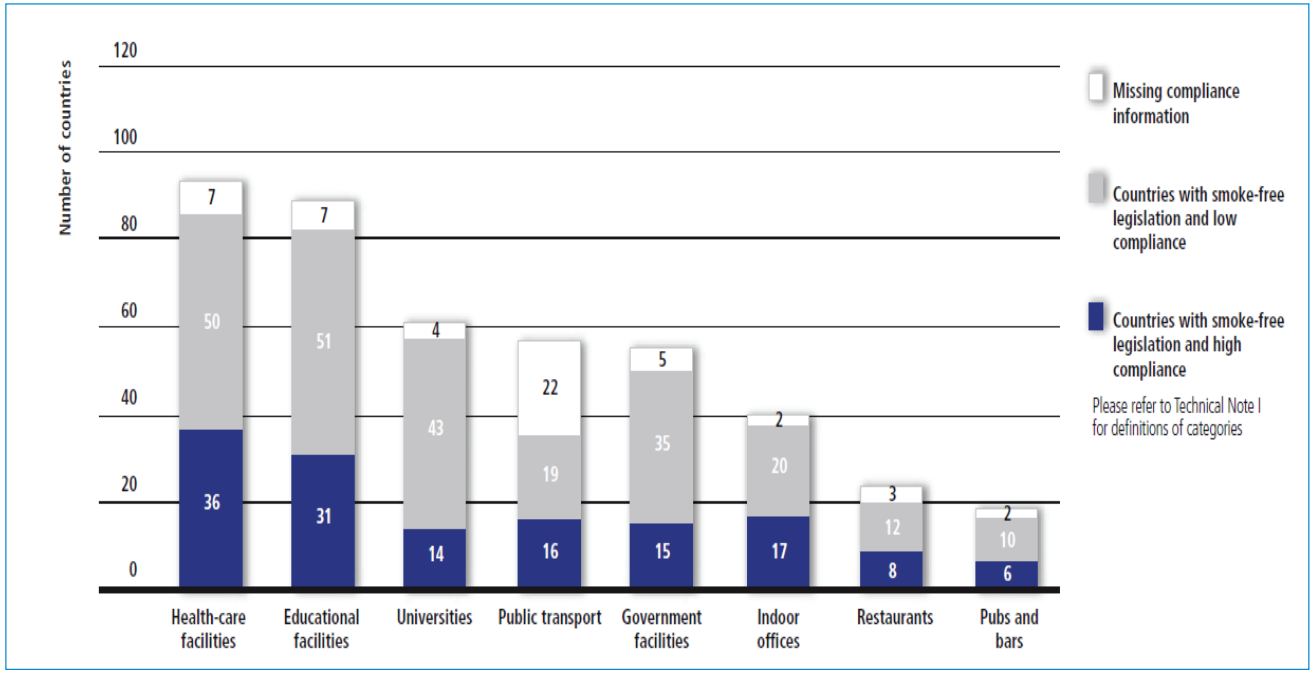
The adoption of 100% smoke-free policies is a critical strategy to reversing the tobacco epidemic. There remain however several key challenges in the implementation of smoke-free laws. In addition to the many political and economic challenges in many countries (particularly in low income nations), another significant challenge for the implementation of smoke-free laws is interference from the tobacco industry [48]. The tobacco industry has enacted ways to effectively delay or obstruct the implementation of smoke-free policies. In particular, hospitality venues (such as hotels, bars and restaurants) would lobby in favor of partial or no restrictions to smoking based on falsified industry research and incentives provided by the industry. In addition the tobacco industry develops programs geared to influence policymakers, media and the public through pro-industry conducted research [48, 49]. Despite the plethora of evidence that supports the effectiveness of comprehensive smoke-free air laws, only 18% of the world is protected by comprehensive smoke-free policies [47], mainly due to industry interference with evidence-based research and policymaking. However the FCTC obligates nations that have ratified to implement and expand smoke-free policies, thus over recent years, there has been much success in the forward movement of Article 8. There is however much more work to be done and obstacles to overcome.



2.3.3 Enforcement and Compliance with Article 8

The magnitude of reductions in smoke in public places is related to the strength and comprehensiveness of Article 8 policies [7](WHO, 2008). While nearly 50 countries have implemented smoke-free legislation at the highest level possible (in-line with article 8 guidelines), many countries fall short when it comes to enforcement of, and compliance to, these laws [7](See Figure 9.). While the terms are related, there are two distinct meanings, where compliance is the "degree to which a law (or other legislative instrument) is being obeyed" and enforcement includes "activities undertaken to increase compliance. Enforcement generally refers to the use of inspections and application of sanctions for non-compliance to increase compliance [50]" . Thus even though smoke-free legislation may be in place (prohibits smoking in indoor/enclosed workplaces, all indoor/enclosed public places, and (ideally) in outdoor workplaces and public places), the law will not be successful (public will be inadequately protected from SHS) without high compliance.

Figure 9: Level of compliance among countries with smoke-free legilsation



Source: 2009 GTCR.

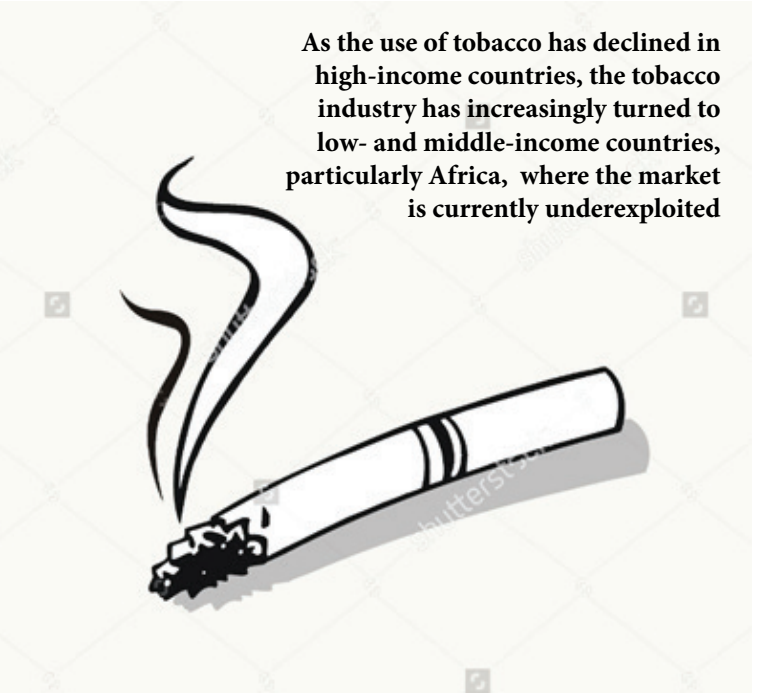
Notably, not only is the presense of a smoke-free law important; however this does not reflect a de facto smoke-free environment. Strong enforcement of a smoke-free law and it's regulations is the only way to guarantee the law's success, and to fully be effective in eliminating SHS from public places. The Article 8 Guidelines recommend that effective smoke-free legislation should clearly identify the legal duties and responsibilities of business establishments and specify sufficiently large penalties to deter violations. Legislation should provide a clear enforcement infrastructure including identifying which authorities are responsible for enforcement and a system for monitoring compliance through a process for inspection of businesses and for prosecuting violators. Legislation should also specify a role for the public in monitoring compliance and reporting violations. Enforcement activities in the period immediately following the law's implementation, in combination with a campaign to educate business owners, are critical to the law's success [12].

3 Tobacco Control in Uganda

Tobacco smoking in Africa receives little global attention. With Africa's decades of struggles with infectious diseases, poverty, internal civil wars and corrupt governments in many countries on the contient, tobacco control has not been a high priority. At this time, African countries are in the early stages of the tobacco epidemic; however Africa's population has grown substantially and will only continue to grow, and with that tobacco smoking prevalence and consumption will only increase the current 77 million adult smokers will grow steadily over the next century and Africa will follow the path of all other global regions across the various stages of the tobacco crisis. As tobacco smoking prevalence declines in high-income countries, increasing attention has turned to the growth cigarettes in middle- and low-income countries (Jha & Chaloupka, 2000; World Bank, 1999).The time is ripe for the tobacco industry to turn its' attention to this underexploited vulnerable region, and Africa has the greatest potential [48].

While Africa lags behind much of the world in tobacco control, one country has notably taken action. The Ugandan Parliament passed a law in July 2015 that has brought Uganda into line with the strongest tobacco control policies around the world. This

As the use of tobacco has declined in high-income countries, the tobacco industry has increasingly turned to low- and middle-income countries, particularly Africa, where the market is currently underexploited



ground-breaking law will support some of the toughest restrictions on the distribution, sale and use of tobacco products currently in place and position Uganda as one of the leaders in tobacco control in the region. This milestone legislation comes following a four-year onslaught from the tobacco industry to block the passing of stricter tobacco control in Uganda [51].

This law, which came into effect on May 19, 2016, includes a 100% smokefree public areas where smoking is not permitted within 50 meters of public spaces, and a complete ban on shisha (waterpipes) which has gorwn in popularity in the region.

This landmark Tobacco Control Act has been put into action to prevent an increase in tobacco smoking prevalence (including shisha), protect people from SHS in public places, where it has been estimated in 2013 that 20.4% (0.5 million) of adults who worked indoors had been exposed to secondhand smoke in their workplace in the past 30 days [3], and to dramtically reduce the morbidity and mortality burden of tobacco smoking, where tobacco accounts for 26% respiratory system cancer deaths and 14.0% of deaths due to other respiratory diseases [52].

While Uganda has moved forward and implemented a strict smoke-free ban in all public places, there is currently no governing body enforcing the smoke-free policy as the Uganda Ministry of Health has not yet finalized regulations of the law. Generally, public establishments must volunteer to comply with the law until enforcement is fully organized and becomes mandatory. Addtionally, there is no published research on the extent of voluntary compliance with the smoke-free law in Ugandan hospitality venues. As SHS exposure is high in Ugandan hospitality venues (in 2013 an estimated 62.3% of adults who visited bars, pubs or nightclubs were exposed to tobacco smoke, GATS,[3], and there are no surveillance systems for routinely measuring exposure to SHS, the KOMPLY Project was developed to assess the level of compliance with Uganda's 100% smoke-free law in hospitality venues in Uganda's capital city, Kampala.

KOMPLY'S PROJECT OBJECTIVES

1. Assess the level of compliance with the smoke-free law in hospitality venues through systematic objective observations;
2. Test the air quality by measuring the levels of tobacco particulate matter (PM2.5) in both indoor and outdoor venues;
3. Explore knowledge, opinions and support of the smoke-free law among hospitality venue staff and owners; and
4. Examine the perceptions of compliance with the smoke-free law among key civil society organization members

4 Methods

The KOMPLY Project is an ongoing study with a pre-post design that is currently evaluating compliance with Uganda's comprehensive smoke-free law among hospitality venues (bars, pubs, and/or restaurants) in Kampala Uganda, using both objective and subjective measures.

The current study presents the cross-sectional baseline findings (post-smoke-free law implementation, but pre-enforcement of the law), and is the first report of the extent of compliance in the early phase of the comprehensive smoke-free law.

There were three distinct components to this project, with separate objectives and methods detailed below.

Assess the level of compliance with the smoke-free law in hospitality venues through systematic objective observations

Objective 1: To assess the level of compliance with the 100% indoor smoke-free law in bars and restaurants in Kampala Uganda by documentation of the presence or absence of signage and other proxy indicators of smoking in selected bars and restaurants in Kampala, Uganda after implementation of the law (May 19th, 2016).

4.1 Method used to assess level of compliance

A two-stage stratified sampling procedure was used to obtain hospitality sites stratified by divisions in Kampala. A random proportionate sampling procedure was applied to obtain the number of establishments to be studied per division. A total of 222 establishments were selected for the study.

Between 29 June 2016 to 7 July 2016 a checklist was used to gather systematic objective observations of: the average number of people in each venue, the presence of active smoking, and other observations such as the presence of no-smoking signage, ashtrays, discarded cigarette remains, designated smoking areas etc.

Objective 2: Test the air quality by measuring the levels of tobacco particulate matter (PM2.5) in both indoor and outdoor venues.

4.2 Method used to measure Air Quality, $PM_{2.5}$

The TSI SidePak AM510 (TSI Inc, CA, USA) fitted with a $PM_{2.5}$ size-selective impactor was used to measure mass concentration of $PM_{2.5}$ in a period of weeks in June/July 2016. The SidePak was calibrated before the start of measurement each day and the airflow rate set at 1.7 l per minute. The SidePak was zero calibrated using the High-Efficiency Particulate Air (HEPA) filter. Clean grease was also applied to the impactor before each experiment to make sure the impactor stayed clean.

The SidePak logged $PM_{2.5}$ concentrations at 1 minute intervals. SidePak was set to a calibration factor of 0.295 to cater for the differences in particle characteristics, including density, size distribution and/or index of refraction of SHS particulate [53].

The SidePak Personal Aerosol Monitor uses a built-in sampling pump that draws air through the device, and the PM in the air scatters light emitted from a laser. Based on the scattering of light and application of an impactor to remove particles larger than 2.5 micrometres, the device logs airborne concentrations of particulate matter every minute expressing the output in mg/m3 thus determining the real-time concentration of $PM_{2.5}$.The PM monitor was calibrated for tobacco-related PM [53].

The monitor was placed in a small bag with a plastic tube connected to the inlet protruding to the outside to allow air to be pulled into the device. Researchers went to hospitality venue as customers and carried out sampling in an unobtrusive manner. Consent was therefore not asked from the venue managers; however researchers carried an official letter describing the study plus evidence of ethical approval and contact details. Data collection was carried out at a table or space within each venue that was as central as possible, at least 1 meter away from any doors, windows, or obvious potential sources of $PM_{2.5}$. Observational measurements such as; number of "burning" cigarettes, number of burning shisha pipes, other possible sources of smoke like candles were recorded in addition to $PM_{2.5}$ in order to yield data comparative data, on a time-activity diary template every 15 minutes from entry to departure the data.

The SidePaks were switched on 5 minutes before entering the venue to start the logging process at the beginning of each series of visits and were left to measure and log 1-minute particle number concentrations for the duration of the sampling process. The air quality measurement was conducted continuously for a minimum of 90 minutes inside each venue and the device left running for 10 minutes after leaving the venue to allow $PM_{2.5}$ measurement in outdoor air to provide comparative data. Exact entry and exit time for each venue and time spent outside in ambient air were recorded.

was guided by a common protocol from Rosewell Institute, which was applied to assess and record the levels of $PM_{2.5}$ at the participating study sites [54].

A total of 108 establishments were selected using a simple random sampling technique from a representative sample drawn from the 5 Divisions in Kampala based on size, existence type and location. To measure the level of $PM_{2.5}$ at each study site a SidePACKTM Personal Aerosol Monitor AM510 was used to record levels of RSPs.

Fieldworker visited selected sites at its peak time between 6pm and 12 midnight and record the $PM_{2.5}$ reading for 90 minutes and then conduct the observational checklist for compliance.

Real-time data on fine particulate matter ($PM_{2.5}$) levels was measured over a 4-hour period with 15-minute average exposure, peak exposure and percentage of time when concentrations exceed threshold levels expressed. Data were collected between July and August 2016.

Objective 3: Explore knowledge, opinions and support of the smoke-free law among hospitality venue staff and owners.

4.3 Structured Interview Method

Structured interviews were conducted with hospitality venue employers or employees to explore: (1) knowledge of the 2015 Uganda Tobacco Control Act, including the new comprehensive smoke-free law; (2) attitudes, beliefs and opinions related the newly implemented smoke-free law; and (3) personal compliance with the smoke-free law. In each of the selected establishments, one interview was conducted.

Objective 4: To assess the needs of tobacco control advocates in Kampala, Uganda, in relation to helping them to advocate for stronger compliance of the smoke-free law. Additionally, discussions ensued about the perceptions of compliance with the smoke free law among key civil society organization members.

4.4 Qualitative Interview Method

One-on-one qualitative interviews with representatives of tobacco control CSOs to determine their understanding of the new law, and how to enhance advocacy efforts.

Semi-structured face-to-face interviews that explored participants' perception on the level of compliance, opportunities and suggestions for improving compliance, and barriers and challenges associated with implementing the smoke-free law were conducted among key stakeholder organisations based in Kampala. A total of twelve interviews were conducted, with fourteen respondents. Participants typically held leadership positions, including Executive Directors, Founders, Advocacy Officers and Programs Directors within their organisations.

5 Results

Summary

Active smoking was observed in 17.8% of venues, 30.8% had some unregulated form of "no smoking" signage, and 47.1% had visible cigarette remains inside the venue. Among survey respondents, 57.2% felt that they had not been adequately informed about the smoke-free law; however, 90% were in in support of the ban. Nearly all respondents (97%) agreed that the smoke-free law is needed to protect the health of hospitality venue workers, and the majority of respondents (68%) disagreed that the law will cause financial losses at their own establishment. With regard to penalties for violations, 42.8% of respondents were aware that there will be penalties for violations if someone is caught smoking indoors on the premises.

The average indoor air quality levels were hazardous (267.64µg/m3), while venues without active smoking were moderate (29.55µg/m3).

SUMMARY OF VISITED BARS AND RESTAURANTS IN KAMPALA

Overall, 222 hospitality venues were visited in July 2016, with nearly equal representation among all five Divisions in Kampala. Among these establishments, the majority were small in size (49%), were not enclosed (65%), were permanent structures (90%). Among interviewees representing each establishment, half (49%) were venue managers, followed by severs/waiters (34%) and owners (17%).

Table 2: Characteristics of Hospitality Venues

222 Hospitality Venues, Number (%)

City Division in Kampala	
Central	41(18.5)
Lubaga	50 (22.5)
Kawempe	42 (18.9)
Nakawa	42 (18.9)
Makindye	47 (21.2)
Designation of Interviewee in Venue	
Owner	37 (16.7)
Manager	108 (48.6)
Server or waiter	75 (33.8)
Other	2 (0.90)
Venue Size*	
Small	108 (48.6)
Medium	58 (26.1)
Large	56 (25.2)
Type of Venue	
Bar/pub	133 (59.9)
Restaurant	6 (2.7)
Restaurant and bar	81 (36.5)
Other	2 (0.9)
Nature of Venue	
Enclosed/ Indoor facilities	66 (29.7)
Both indoor and outdoor facilities	11 (4.9)
Not enclosed/Outdoor facility only	145 (65.3)
Structure of Venue	
Permanent structure	201 (90.5)
Semi-permanent	16 (7.2)
Make-shift structure	5 (2.2)

*measured by how many people can sit in this establishment: 1 – 50 = Small, 51 – 100 = Medium,More than 100 = Large

5.1 Observational Indicators of Smoking in visited Hospitality Venues

When venues were visited during prime-time hours, smoking was observed in 39 (18%) of bars and restaurants, with the smell of tobacco on the premises in 69 (39%) of establishments. Just over a quarter (28%) of establishments had a designated smoking area sign. One-fifth of venues had tobacco products that were visible for sale and nearly half had visible cigarette remains. Just over one quarter (28.5%) of establishments had signage for designated smoking areas; however, 79 sites (35.6%) had visible designated smoking areas (where smoking were seen smoking). While the new 100% smoke-free law in Uganda has strict requirements for the size, format, content, and placement of no smoking notices, none of the establishments met these regulation requirements.

Table 3: Compliance Among 222 Hospitality Venues: Observational Indicators of Smoking in visited Hospitality Venues.

Indoor smoking visible	17.8%
Smell of tobacco smoke	39.2%
Tobacco products are visible for sale	20.4%
Tobacco products are displayed	14.5%
Designated smoking area inside the venue	25.6%
No-smoking signs and/or posters visible within 3m	16.7%
Smoking cues present (e.g. ash trays)	12.7%
Remains of smoking (e.g. cigarette butts) present	47.1%

EXAMPLES OF NO-SMOKING SIGNAGE

5.2 Particulate Matter 2.5 Measurement in Bars and Restaurants in Kampala

The average $PM_{2.5}$ calculated for the entire subsample of 108 study sites (108/222= 49%) was 171 µg/m3. Hospitality sites that had enclosed structures had an average $PM_{2.5}$ concentration of 267.64 µg/m3 compared to average concentration of 85.60 µg/m3 for study sites which had open structures as shown in Table 4. Among hospitality sites without active smoking, the average concentration was 29.55 µg/m3.

The air quality in venues that allowed smoking indoors, was "Hazardous" with a measurement of 267.64 PM2.5µg/m3

Table 4: Average $PM_{2.5}$ Concentrations µg/m3

Second-hand Smoke	% of venues sampled	$PM_{2.5}$ µg/m3	Air Quality Rating ($PM_{2.5}$ range)
No second-hand smoke	22%	29.55	Moderate (15.5 - 40.4)
Second-hand smoke in outdoor venues	16%	85.60	Unhealthy (65.5 - 150.4)
Second-hand smoke in indoor venues	62%	267.64	Hazardous (250.5 +)

$PM_{2.5}$: $PM_{2.5}$ particles are air pollutants with a diameter of 2.5 micrometers or less, small enough to invade even the smallest airways and are scienti cally known to cause respiratory and cardiovascular illness.

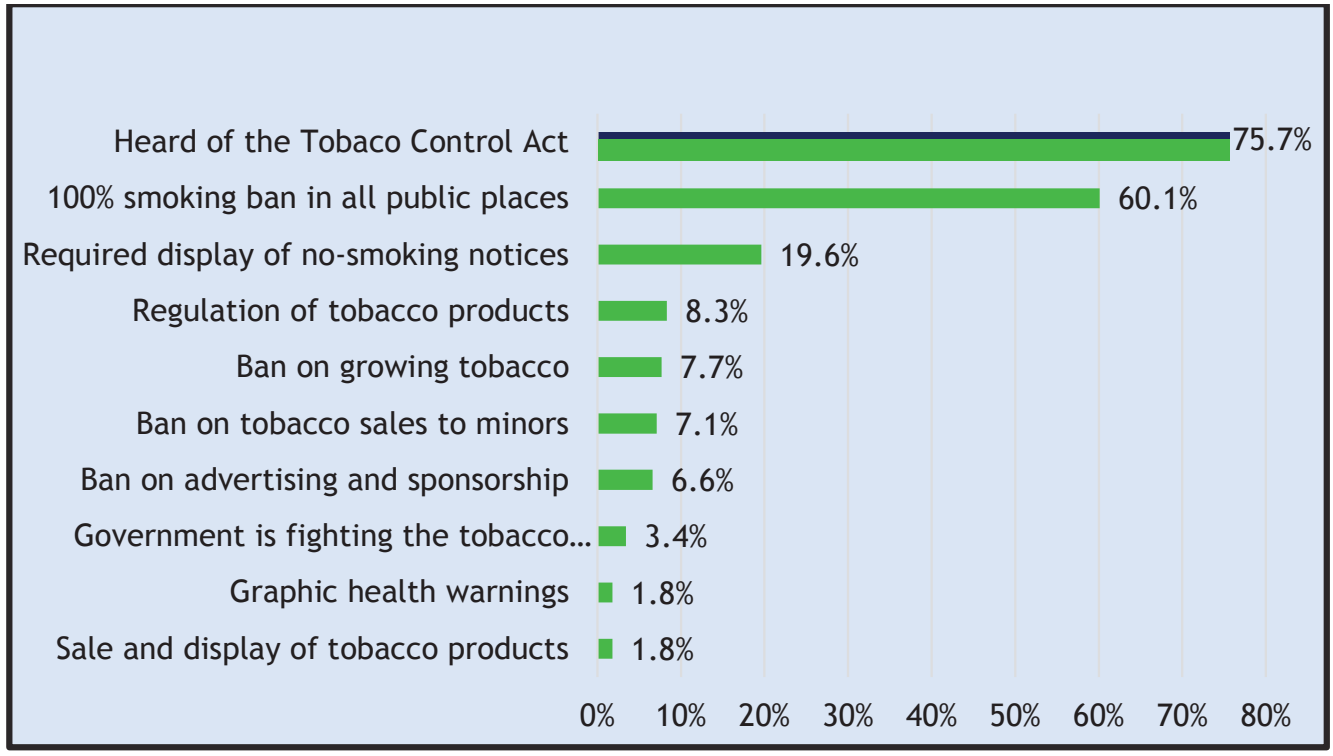
5.2.1 Challenges with $PM_{2.5}$ Measurement

1. Assessment of levels of exposure was done over 2 hours as opposed to 24 hours. This was mainly due to limited resources and the sensitivity of the study.
2. Researchers were sometimes inconvenienced at venue entrances by security guards, because they didn't understand the device.
3. Researchers had to revisit some of the venues to reassess exposure because the SidePak accidently switched off during the process of disguising it within the venue.

5.3 Knowledge of Uganda's 100% Smoke-Free Law

Among the 222 hospitality establishments, 1 staff member per site was interviewed about their knowledge of the Uganda Tobacco Control Act, 2015. Overall, 76% of interviewees reported having heard of the Act. Among those who were knew of the Act, awareness of the policy content of the Act was low. Knowledge of the 100% smoke-free law (60%) was the highest, and the requirements for graphic health warning labels on tobacco packaging and the ban on the sale and display pf tobacco products inside shops was the lowest (2%).

Table 5: Knowledge of the Uganda Tobacco Control Act (2015) and the Tobacco Control Policies within the Act.



Note: all responses regarding the policy contents of the Tobacco Control Act are among those that were aware of the Act (168, 75.7%).

Notably, 29% of venue staff reported that they were adequately informed about the smoke-free law, where only 41% reported that they were aware that this law includes that all public places must be 100% smoke free. Out of all the possible means to receive information about the smoke-free law, the majority reported that the media (including social media, television and radio) provided the most information to them.

5.4 Attitudes towards Uganda's 100% Smoke-Free Law in July 2016 (Post-policy, Pre-enforcement)

Generally, the hospitality interview respondent's attitudes towards the smoke-free law were positive. Nearly all of the respondents either strongly supported (46%) or supported (44%) the new smoke-free ban in all public places.

Table 6: Employers and Employees Opinions Towards about the 100% Smoke-free Ban in Bars and Restaurants

When asked 'what are some challenges do you foresee in ensuring that this establishment is 100% smoke free?', 39% reported 'minimal assistance from enforcement authorities', 28% said 'loss of cliental (smokers)', 21% felt that they would suffer from loss of revenue (e.g. partitioning, signage, paying fines, stock), and 10% said that they would not have the funds for painting no-smoking signage. More than a quarter of respondents (29%) said that they do not foresee any challenges in enforcing the smoke-free law.

5.5 Compliance towards Uganda's 100% Smoke-Free Law among Hospitality Sites

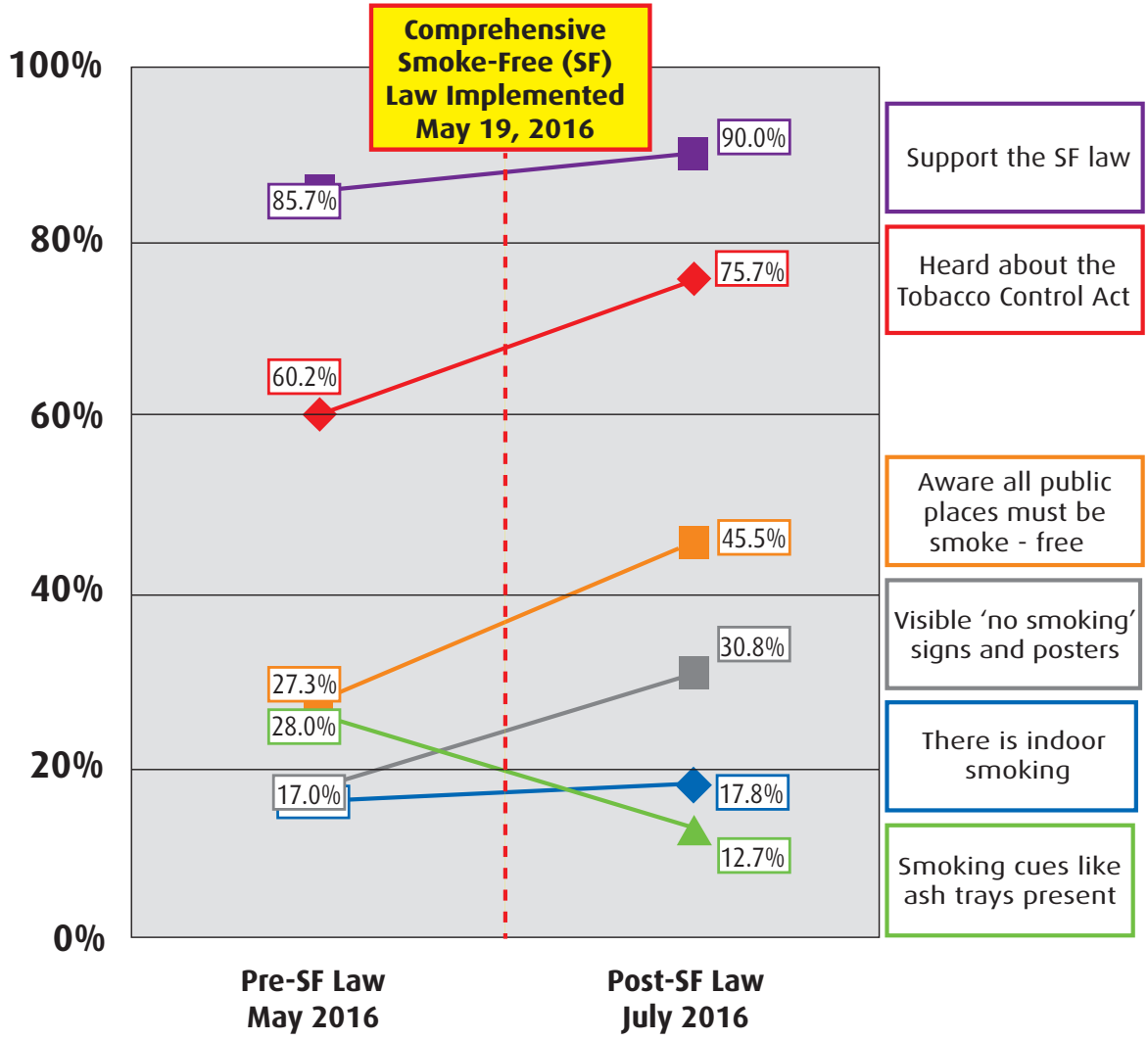
Among the 222 hospitality establishments, 78.4% reported that smoking is not allowed in any indoor areas (18.9% reported that smoking is allowed at least in some indoor areas of the venue). Interestingly, when asked "what do you do in case someone smokes in a place they are not supposed to smoke", 33.9% said that they would ask the person to go to the designated smoking area, 38.3% would ask the person to stop smoking, 32.4% would ask the person to leave the establishment, and 13.5% would not do anything. With regard to penalties for violations, 42.8% of respondents were aware that there will be penalties for violations if someone is caught smoking indoors on the premises. Finally, when asked if no smoking signage should be displayed on their premises, 68% of respondents agreed that signs should be available, but that their establishment did not yet have these signs as required by law.

Table 7: Compliance Towards Uganda's 100% Smoke-free Law in July 2016

Which of the following best describes the indoor smoking policy at your own establishment?	**%**
Smoking is allowed anywhere/ No policy	10.8
Smoking is allowed only in some indoor areas	8.1
Smoking is not allowed in any indoor areas	78.4
Declined to answer	2.7
What do you do in case someone smokes in a place they are not supposed to smoke?	**%**
Ask the person to go to the designated smoking area	34.0
Ask the person to stop smoking	38.3
Ask the person to leave the premises	32.4
Do nothing	13.5
Declined to answer	5.9
Are you aware that there will be penalties for violations if someone is caught smoking indoors in public places including bars and restaurants?	**%**
Yes	42.8
No	39.2
I don't know	18.0
Do you think that no-smoking signs should be displayed on these premises?	**%**
The smoking signs are already available here	20.7
Yes, they should be available, but we do not have signs	68.0
No, they are not necessary	5.9
Don't know/ Not sure	3.6
Declined to answer	1.8
Whose responsibility should it be to display no-smoking signs at bars and restaurants?	**%**
The Ministry of Health	28.8
Kampala Capital City Authority (KCCA)	20.3
The owner of the premises	76.6
Tobacco companies	1.4
Don't know	0.5
Declined to answer	0.5

Figure 10: Comparison of pre and post SF Law compliance

The change between pre and post measures in compliance, knowledge, and attitudes related to the 100% smoke-free law in bars and restaurants in Kampala, Uganda



5.6 Interview Discussions with Civil Society Organization Members

Presentation of the results is structured as follows; perceptions about compliance, reasons for low compliance and suggestions for increasing compliance specifically engaging hospitality venues, educating the public and enhancing enforcement and key compliance challenges.

5.6.1 Characteristics of CSOs and type of activities involved in

A total of twelve interviews were conducted, with fourteen individuals participating. Participants included Executive Directors, Founders, Advocacy Officers and Programs Directors. The CSOs that participated focused on various health advocacy areas including tobacco control, human rights, reproductive health, communication, NCDs and HIV/AIDS. Their target populations included; youth, women, children and the general population.

5.6.2 Perceptions about compliance

Participants reported that the level of compliance with the smoke-free law in bars and restaurants was low, with smoking still occurring regularly in these venues:

> *"...people haven't even started complying, businesses are continuing as usual..." (Health advocacy CSO)*

Many bars and restaurants continue to allow designated smoking areas on-site and this may reflect a lack of understanding about the nature of the law:

> *"...people still think that public places or hospitality areas need to gazette certain areas for smoking, which is not the case with the law because this law burns [bans] smoking in public places entirely" (Tobacco Control CSO)*

Compliance with the ban on shisha products was described as very low:

> *"The smoking of shisha we still have a problem with, but shisha is burnt [banned]... the problem is finding even in the smoke-free area you are still taking shisha" (Health CSO)*

Compliance was said to vary according to the type of venue, for instance large hotels with established brand names tended to comply, whereas smaller, local bars did not:

> *"..if you look at the places that are in the Central Business District of Kampala, we have very, very low levels of compliance, except for the upper income level eating places. But otherwise, the drinking places, the entertainment places, compliance is very little." (Communication CSO)*

5.6.3 Reasons for low compliance

There was a lack of knowledge about the smoke-free law among the public, and among bar and restaurant proprietors, and even implementation agencies:

> *"..one of the challenges is that implementing agencies themselves have not really understood what the law is about, and it is even worse to the public.." (Tobacco Control CSO*)

A common suggestion was that the Ugandan Government tended to be poor at implementing and enforcing legislation generally:

> *"The level of compliance hasn't been good and this has always been a general problem when it comes to implementation of some of these laws within the structures of the Government" (Youth health CSO)*

A history of poor implementation of laws in a country such as Uganda has implications because if the public do not believe that the law will be properly enforced, there is little motivation to comply:

> *"..it has not been implemented yet, and the people we have shared with don't think it will be implemented, so they are not complying... people are just taking advantage by the fact that it has not been done" (Youth education CSO)*

Some insinuated that it was too early in the process of law implementation to expect compliance, and hoped that compliance would increase post-enforcement:

> *"First of all the law really came into force in May, it is now October, so we have barely five months of the implementation of the law, so probably it is too early to make conclusions about the levels of compliance" (Health communication CSO)*

The problem of shisha use at bars and restaurants was identified, and it was reported that proprietors sold shisha as a strategy to attract young customers to their establishment:

> *"...before the law was passed... if I remember correctly, more than 62% of the surveyed public places and entertainment places like bars and eating places especially bars, in and around Kampala, like Wakiso, Mukono, Kampala, Entebbe, were serving shisha... They didn't say that they get a lot of money out of it actually,and what they said was that it is attraction to client. They get money from the drinks but this is an attraction to the young clientele." (Health communication CSO)*

5.6.4 Suggestions for increasing compliance

The most common suggestion for improving compliance with smoke free laws in bars and restaurants was educating and sensitising key stakeholder groups, which included the agencies responsible for enforcement, hospitality venue proprietors, and the general public.

"..we need to bring the people who are going to help in enforcing these laws on board, through awareness and education. And one of them of course is Police, we need really to train police on this particular law, and make them aware. And then we also need to do the same with the restaurants and other public places, places where smoke-free is really intended for.." (NCD Advocacy CSO).

5.6.5 Engaging hospitality venues

For venue proprietors, specifically, participants believed there was an important role for civil society organisations in helping to implement the law, and that this role could involve education, and stakeholder engagement:

"We should have a deliberate effort to reach out to... owners and managers of public places, so that we impart knowledge about the Act and tell them what their role is in enforcement of this law. We could probably develop some simplified materials for public place owners and managers, and then distribute them to those places but also talk to them and here the challenge they are facing so far... And I think we can do this hand in hand with the enforcement agencies..." (Tobacco Control CSO)

It was suggested that the education needed to include the health risks of smoking, details of the law (e.g. the 50m stipulation, signage requirements, penalties), roles and responsibilities of venue staff, and evidence to dispel the myth that hospitality businesses would suffer if they became smoke-free:

"I have heard talk of not having shisha or not having tobacco around our premises lowering the pleasure or lowering the number of people who will come, which is not true. There is enough research all over the world to educate, but we need to bring this to the attention of these people. They also must know the consequences for non-compliance because a lot of people... they are not aware that the consequences will be serious..." (Health communication CSO)

Information for bar and restaurant owners also needed to explicitly convey that shisha was now illegal:

"...what we need to do, is to cause the mindset in those restaurant people who have got shisha, that it is illegal and they are trading in illegal things. As far as shisha is concerned, we need to do something like that." (NCD Advocacy CSO)

In terms of the best ways to educate bar and restaurant employees, suggestions included group activities such as monthly meetings, workshops, sports activities, engaging the Unions and/ or Associations that represent hospitality employees, helping business proprietors map out action plans or a smoke-free policy, and developing simple, visual educational tools for bars and restaurants.

5.6.6 Educating public

Participants reported that there was also a need for widespread education to the general public about the health risks of smoking, and about the smoke-free law specifically. Ensuring the public understand the law was seen as a crucial step before compliance could be achieved:

> *"When you are talking about a smoke-free law in Uganda, are people aware about it? Do they know what is entailed within the law and how can they contribute as citizens within the country towards promoting the law? I think these are the things we need to see very clear, yah..." (Youth CSO)*

A range of different target groups, and the appropriate means by which they could be reached, were identified. For instance, educating children and youth through school-based activities and reaching women through antenatal health facilities. Radio was very commonly suggested as an effective medium to reach the general public, in part because many do not read English well. Disseminating messages into communities via local leaders (e.g. church and mosque leaders and local political leaders) was also suggested as an effective method of health education:

> *"First the messages should be simplified, and then they have to be translated to the local languages because most people are either illiterate or semi-literate, there are those who cannot read. And then in terms of channels I think the radio will be better because almost all part of this country at least they listen to radio stations and a bit of person to person is necessary. The community Balazas [community meetings] where those implementing the law can meet community members and talk to them about the law, I think it can be effective..." (Tobacco Control CSO)*

Other means of communicating with the public included television, billboards and social media (although it was suggested the latter may only reach younger, more educated, urban populations). One participant suggested exploring the potential for M-Health (i.e. health education via mobile phones).

> *"..maybe the other thing that we need to explore, which I have seen in a couple of the studies I have done, is trying to see how to use M-Health mobile connection... I think over 70%...of Ugandans now have got mobile phones. Whether somebody is poor or not poor, people have got "kabiriti" [brand of cheap cellphone]... they have these cheap phones. We just need to see, how should we utilize this mobile phone kind of the thing as you begin to send information as in as far as health is concerned?" (NCD Advocacy CSO)*

Overall, civil societies groups considered themselves as having a key role to play in educating the public:

> *"Awareness creation, sensitization, and dissemination, we are civil societies and our role is clearly outlined, our job as advocates is to make as much noise about this issue.." (Youth CSO)*

5.6.7 Enhancing enforcement

Although increasing awareness of the law is a crucial first step in improving compliance, there were other suggestions on how to enhance enforcement efforts. These included the enactment of penalties (e.g. fines, suspension of licence) for breaches of the legislation:

"...the punishment that is stipulated in the law should be implemented... if there is enforcement... we are likely to see the levels of compliance rise..." (Health Advocacy CSO)

It was also suggested that any application of penalties should be publicised by the media as a deterrent for future breaches. Other elements of effective enforcement were identified as surveillance and regular visits by the environmental police to venues to warn hospitality staff that the law would be enforced:

"...the moment you talk to them - to the manager - you need a follow up, so you need to make a follow up about such things otherwise people take things for granted so the problem is also if people take things for granted, then people will not understand what you are doing, yeah so notification needs to be taken on a frequent basis." (NCD Advocacy CSO)

The possible roles that civil society groups could take included advocacy - both for the enactment of penalties for bar and restaurant owners that breached the law, and also for tougher penalties if compliance remained low:

"..as civil society we are supposed to keep on reminding whichever government body that is supposed to enforce this law we say look here this beautiful law was enacted. We sit down and tell them that you know what is missing? There is something that has not been enforced. I mean, you know, 'Pull up your string to enforce it'..." (Health CSO)

"..perhaps we could either lobby or advocate for [the] consequence to be a bit tougher or more threatening to the bar owners. Because however much some people you educate them, they may not be affected so maybe if the law is more threatening to the bar owners and businesses, we could advocate for that." (Youth advocacy CSO)

Lastly, it was also suggested that the agencies responsible for enforcement required education and training about the smoke-free law:

"We need to bring the people who are going to help in enforcing this law on board, through awareness and education. And one of them of course is Police. We need really to train the Police on this particular law." (NCD Advocacy CSO)

One participant described the possible reasons for a lack of enforcement, and alluded to the possibility of bribery between hospitality venue owners and enforcement agencies:

"...our enforcement bodies probably are under-staffed, under-motivated, under-paid so I wouldn't blame them entirely for not being interested. Also their level of education on the matter. Do they know the harmful effect of smoking? Yeah. Because they are not motivated, they are not educated, they may easily be paid off by the bar owners." (Youth advocacy CSO)

The implication of this is the need for better education of the enforcement agencies and stronger Government leadership to prevent instances of bribery.

6 Report Summary

5.6.8 Key challenges

One of the main challenges identified in sensitising the public and hospitality workers about the smoke-free law was interference from the tobacco industry. The industry was said to propagate messages that undermine the Tobacco Control Act, and the importance of countering these myths was identified:

> *"...we have an enemy that is against the law, and makes the intention of the law to delay, and that is the tobacco industry. The tobacco industry is deliberately misleading the public, and these owners and managers of public places, and part of the public. So they have been given misleading information about the law, and it is up to us now to go out and out counter that misinformation." (Tobacco Control CSO)*

In addition to tobacco industry misinformation, other key challenges identified included Government delays with establishing enforcement processes and structures:

> *"..the other challenge is that the regulations is that development of enforcement process is delayed, and yet some of the activities cannot kick off until the regulations have been adopted. Another one related to that is that the law control committee is not yet in place, and the process to nominate members of the committee is delaying, I think those are the key or main challenges we have.." (Tobacco Control CSO)*

Additionally, a key problem was a relative lack of action in the CSO sector in contrast to the level of discussion about the problem:

> *"One problem with Uganda is that we do not actionalize our things. Many workshops, but, as I speak now so many people are in workshops, so many people are in conferences but we do not actionalize. We leave things on the table." (Health CSO)*

Participants identified a range of different types of support that they felt was needed for their organisation and the wider sector, to achieve better compliance. These included financial resources for education and dissemination, research and data about the harm of tobacco, capacity building within tobacco control, and partnerships and coordination with other agencies and other sectors such as the media.

6.1 Summary of Key Findings

Overall, our findings suggest that in the early phase of Uganda's new comprehensive smoke-free policy, before enforcement and well-defined regulations, the level of compliance in hospitality venues settings in Kampala was suboptimal. Almost half of the venues visited had evidence of smoking on-site, and active smoking was observed at almost one-fifth of venues that were visited.

The measurement of PM2.5 suggests that SHS was present at the majority of bars and restaurants in Kampala; of particular concern was that 62% of the venues had SHS present at levels categorised as hazardous (267.64 µg/m3). Encouragingly, most venue managers and employees were supportive of the smoke-free law, though the majority felt they had not been adequately informed about the law, and around 40% believed their business would be negatively affected by the smoke-free policy. The interviews with CSOs indicated that the ongoing sale and consumption of shisha was a particular problem at hospitality venues in Kampala, and these stakeholders put forward various ways to enhance compliance with the smoke-free law. These suggestions included widespread public education, activities to engage with venue owners, and advocacy to the Government for better enforcement.

6.2 Implications

There is no risk-free level of SHS: even brief exposure can cause immediate harm [9]. The World Health Organisation has consistently recommended complete comprehensive smoke-free laws with no exceptions in order to protect workers and the public from SHS. Ventilation and designated smoking areas, whether separately ventilated from non-smoking areas or not, do not reduce exposure to a safe level of risk[12]. The World Health Organisation states that complete enforcement of smoke-free laws is critical to establishing their credibility, especially immediately following their enactment [12]. A period of non-enforcement of the new smoke-free legislation may risk undermining the integrity of the smoke-free law and compliance with the law.

The World Health Organisation's guidelines on the implementation of smoke-free laws [12]) make a number of recommendations to enhance compliance with smoke-free laws, including active and public enforcement of the law in the period directly after smoke-free law implementation (e.g. unannounced inspections by the appropriate government agency). The timeliness of enforcement is argued to be crucial, since once a high level of compliance is realised, the maintenance of smoke-free public places becomes largely self-enforcing. In particular, placing the responsibility for enforcing smoke-free places on facility owners and managers is suggested as the most effective way to ensure that the smoke-free laws are enforced. Assessing and publicizing the lack of negative impact on business following enactment of smoke-free legislation will further enhance compliance with and acceptance of smoke-free laws.

WHO guidelines also suggest that educational campaigns to ensure high levels of public awareness are important, and that these should include the following key messages:

1. The harm caused by second-hand tobacco smoke exposure;
2. The fact that elimination of indoor smoke is the only science-based solution to ensure complete protection from exposure;
3. The right of all workers to be equally protected by law; and
4. That smoke-free environments do not adversely affect economic interests, particularly those of the hospitality industry; rather, the evidence indicates economic benefits for all sectors in addition to any health benefits achieved.

6.3 Recommendations

1. The Ministry of Health should institute a coordinated enforcement system to facilitate compliance with the smoke-free law.
2. The Ministry of Health should provide guidelines to the hospitality industry and train enforcers to increase compliance with smoke-free law among the hospitality industry.
3. Civil Society Organizations should support compliance of smoke-free law through creating awareness among the hospitality industry and the public.
4. The Ugandan Government must enact WHO FCTC Article 5.3 against any form of Smokefree policy interference by the tobacco industry or any other commercial entity that works on behalf of the tobacco industry.

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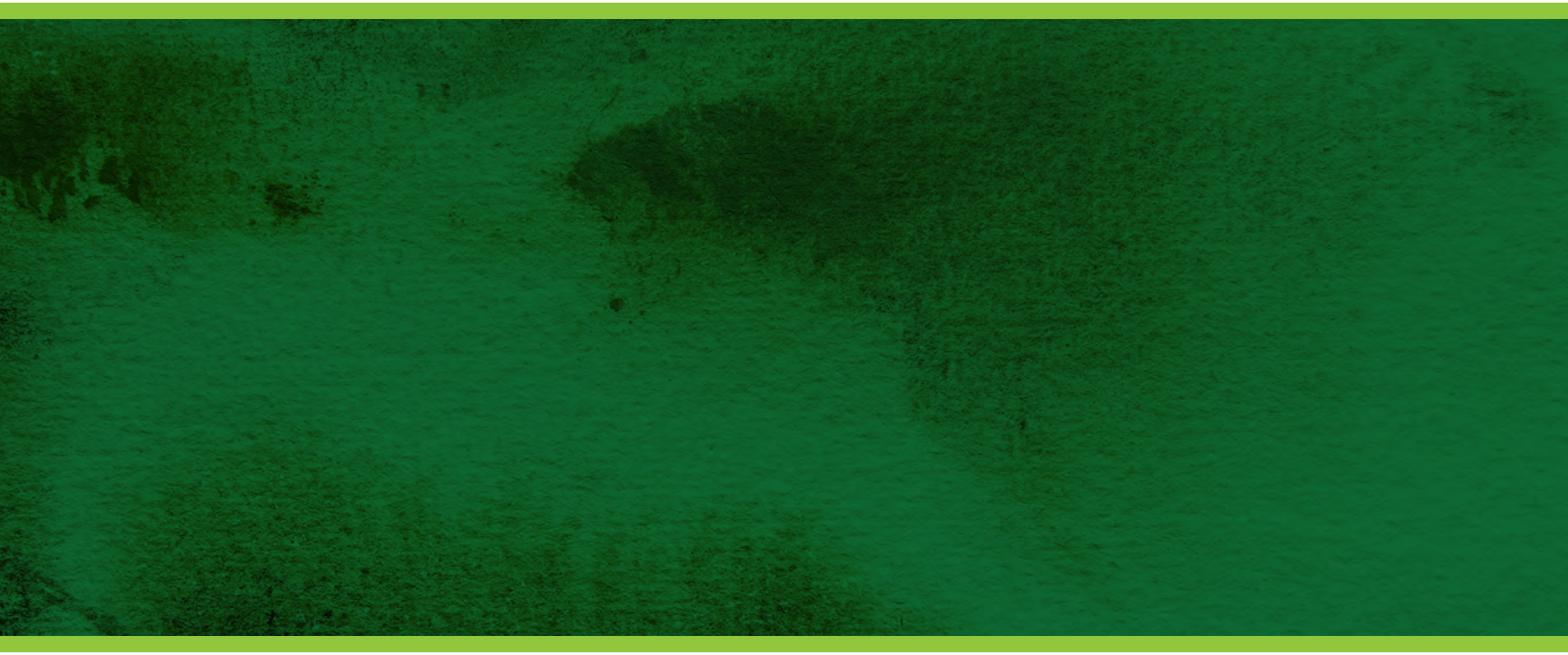

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