

## CORE ADULT TOBACCO SURVEY: BAGUIO CITY, PHILIPPINES 2012

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**Abstract:** The Core Adult Tobacco Survey (CATS) is developed from the Philippine Global Adult Tobacco Survey (GATS), which was a nationally representative household survey of all non-institutionalized men and women aged 15 years and older. Its main objective is to determine tobacco smoking prevalence at the city level. Baguio City has shown its determination to the anti-smoking campaign but there were no local baseline data to evaluate its effectiveness. There were 100 households included in the study and 162 individual respondents completed the interview. The overall prevalence of current cigarette smoking is 27.2%. The prevalence of second hand exposure at home is 45.1% and at work is 27.2%. Exposure to any cigarette advertising is 34% and exposure to any cigarette promotion is 32.1%. Health warnings on cigarette packages was noticed by 97.7% of the smokers during the past 30 days, but only 60% of them reported that the warnings led them to think about quitting. The prevalence of smoking in the city was almost similar with the prevalence of smoking in the country. This baseline prevalence provides useful information to the policy makers for reviewing policies and program formulation.

**Keywords:** GATS; CATS; smoking; Baguio City

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### Introduction

The overwhelming deaths from tobacco around the globe today became one of the biggest public health threats. Tobacco kills more than 7 million people a year of whom more than 6 million are users and ex users and 890,000 are nonsmokers exposed to second-hand smoke. Almost 80% of the more than one billion smokers around the globe live in low- and middle-income countries. Burden of tobacco-related illness and death is heaviest in these low and middle income countries. Tobacco users who die prematurely are leaving their families, raising the cost of health care and hindering economic development. (World Health Organization 2017b). If current trends continue, tobacco deaths will continue to rise and by 2030 it can kill more than 8 million people worldwide each year. Unless urgent action will be taken, tobacco-related illness and death could reach to a billion.(World Health Organization 2011b). Thus the World Health Organization continues its fight against the global tobacco epidemic. (World Health Organization 2017b).

WHO developed Framework Convention on Tobacco Control (WHO FCTC) in response to the globalization of this epidemic. (World Health Organization 2017c). “This is the first treaty negotiated under the auspices of the World Health Organization. It is an evidence-based treaty reaffirming the rights of all people to the highest standard of health. It represents a paradigm shift in developing a regulatory strategy to address addictive substances; in contrast to previous drug control treaties, the WHO FCTC asserts the importance of demand reduction strategies as well as supply issues. This treaty came into force on February 27, 2005.” (World Health Organization 2003). This was developed by countries in response to the global tobacco epidemic. It investigates some of the causes of this epidemic, like the complex factors with cross-border effects, such as trade liberalization and direct foreign investment, tobacco advertising, promotion and sponsorship beyond national borders, and illicit trade in tobacco products. (World Health Organization 2015). It is a legally binding global treaty that sets the foundation for countries to enforce and manage tobacco

control programs so that the growing epidemic is properly addressed. As of May 2011, 173 Parties covering 87% of the world's population has joined WHO FCTC making it one of the most rapidly embraced treaties in United Nations history. (World Health Organization 2011a)

The Philippines is one of the 173 countries actively participating in the negotiations of the WHO FCTC having signed the Treaty on 23 September 2003 and ratified on 6 June 2005. The Philippines is serious to fulfil its obligations to WHO FCTC and have developed an effective national tobacco control program. (World Health Organization 2010). Since 2008, the country has embarked on working continuously with various government 3rd International Conference on Public Health offices and affiliated agencies and societies to promote policies that set standards for 100% smoke-free environments.

Health consequences of tobacco use became one of the big public health problems in the Philippines. According to the Global Burden of Disease (GBD) Seattle, WA: Institute for Health Metrics and Evaluation (IHME), "over 103,600 Filipinos die from smoking-related diseases each year, more than 23% of male deaths and 12% of female deaths (18.6% overall)." (Global Tobacco Free Kids 2017) Approximately, there are 10 to 11 Filipinos dying every hour in the Philippines due to tobacco. In the Tobacco and Poverty Study in the Philippines, "total costs of illness for the four smoking-related diseases studied were estimated at USD 6.05 billion using the Smoking Attributable Morbidity and Mortality and Economic Costs (SAMMEC) figures, while Peto-Lopez estimates yielded a more conservative but still substantial loss of USD 2.86 Billion" (Punzalan, Felix *et al.* 2013). This is an overwhelming burden to the budget of the country.

There is an urgent need to counteract the tobacco epidemic. Countries must have the political will to adopt and enforce MPOWER. WHO FCTC has provided the participating countries a package of six evidence based tobacco control measures called "MPOWER" to aid them fulfil their obligations. "The MPOWER package consists a set of six key and most effective strategies for fighting the global tobacco epidemic: 1) Monitoring tobacco consumption and the effectiveness of preventive measures; 2) Protect people from tobacco smoke; 3) Offer help to quit tobacco use; 4) Warn about the dangers of tobacco; 5) Enforce bans on tobacco advertising, promotion and sponsorship; and 6) Raise taxes on tobacco." (Kaleta *et al.* 2009). "MPOWER is an acronym which stands for: M- Monitor tobacco use and prevention policies; P- Protect people from tobacco smoke; O- Offer help to quit tobacco use; W- Warn about the dangers of tobacco; E- Enforce bans on tobacco advertising, promotion and sponsorship and R- Raise taxes on tobacco." (WHO 2015)

Good global monitoring in the implementation of this MPOWER should be established. Strong national and international monitoring is essential for the fight against the tobacco epidemic to succeed. Recent data from WHO Tobacco Free Initiative on the MPOWER states that: "M: half of countries – two in three in the developing world – do not have even minimal information about tobacco use. P- Only 5% of the global population is protected by comprehensive national smoke-free legislation. O- National comprehensive services supporting cessation are available only in 9 countries, representing 5% of the world population. W- Just five countries, with 4% of the world's population, meet the highest standards for pack warnings. E- Only 5% of the world's population currently lives in countries with comprehensive national bans on tobacco advertising, promotion and sponsorship. R- Only four countries, representing 2% of the world's population have tax rates greater than 75% of the retail price." (WHO 2017)

Countries should have a well-established monitoring to ensure the success of the five other policy interventions in the MPOWER package. Only through accurate measurement can problems caused by tobacco be understood and interventions be effectively managed and improved. "Comprehensive monitoring informs the leaders of governments and civil societies how the tobacco epidemic harms their countries, and helps them allocate tobacco control resources where they are most needed and will be most effective. Monitoring also shows whether policies are working and how they should be tailored to the needs of different countries, and to different groups within countries. Good monitoring systems must track several indicators, including (i) prevalence of tobacco use; (ii) impact of policy interventions; and (iii) tobacco industry marketing, promotion and lobbying." (WHO 2008)

“The World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), and Canadian Public Health Association (CPHA) developed the Global Tobacco Surveillance System (GTSS) to assist all 192 WHO Member States in collecting data on youth and adult tobacco use. The flexible GTSS system includes common data items but allows countries to include important unique information at their discretion. It uses a common survey methodology, similar field procedures for data collection, and similar data management and processing techniques. The GTSS includes collection of data through three surveys: the Global Youth Tobacco Survey (GYTS) for youth, and the Global School Personnel Survey (GSPS) and the Global Health Professional Survey (GHPS) for adults.” (Audera-lopez *et al.* 2005)

A new component of this GTSS was launched recently in February 2007. The Global Adult Tobacco Survey (GATS) is a nationally representative household survey which enables countries to collect data on adult tobacco use and key tobacco control measures. Results from the GATS will assist countries in implementing other components of the MPOWER. Countries will also be able to compare results of their survey with results from other countries. (Centers for Disease Control and Prevention 2016). “The GATS is initially established in the following 16 low- and middle-income countries where more than half of the world’s smokers live and that bear the highest burden of tobacco use: Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico, Pakistan, Philippines, Poland, Russian Federation, Thailand, Turkey, Ukraine, Uruguay and Viet Nam.” (World Health Organization 2017a).

In the Philippines, this survey was first implemented in 2009, and repeated in 2015. During the six year period between the two GATS surveys, “the Philippines has made significant progress in reducing tobacco use and implementing various tobacco control initiatives, including: restructure of excise taxes to increase the tax on tobacco products on an incremental basis; development and implementation by local government units of tobacco ordinances compliant with the Framework Convention on Tobacco Control (FCTC); development of a recognition system “Red Orchid Awards for 100% Tobacco Free Environment” for local government units, government agencies and hospitals complying with FCTC obligations; placement of graphic health information on billboards, tarpaulins, and posters; development and implementation of the National Tobacco Control Strategy (2011-2016) to accelerate implementation of FCTC; implementation of 100% smoke free policies on the premises of government agencies, health facilities, educational institutions, public terminals, public conveyances and public places; and, implementation of the total prohibition of tobacco advertising, promotion, and sponsorship by local government units.” (P. WHO 2015).

#### ***GATS 2009 to 2015***

“Tobacco use prevalence significantly decreased among adults from 29.7% in 2009 to 23.8% in 2015 [from 49.5% to 41.9% among males; from 10.1% to 5.8% among females]. This represents a 19.9% relative decline in tobacco use prevalence [15.3% decline for males; 42.8% decline for females]. The prevalence of current cigarette smoking among adults significantly decreased from 27.9% in 2009 to 22.5% in 2015 [from 47.2% to 40.1% among men and from 8.8% to 4.9% among women]. The percentage of current smokers who are interested in quitting (60.4% in 2009 to 76.7% in 2015) and the percentage of smokers who made quit attempts in the last 12 months (47.9% in 2009 to 52.2% in 2015) both increased significantly. However, the proportion of smokers who successfully quit in the past 12 months largely remained unchanged from 2009 (4.5%) to 2015 (4.0%). The percentage of current cigarette smokers who thought of quitting smoking because of health warnings on cigarette packages increased significantly from 37.4% in 2009 to 44.6% in 2015. There was a significant increase in the percentage of adults who noticed anti-cigarette smoking information at any location (80.1% in 2009 to 83.2% in 2015). Exposure to secondhand smoke (SHS) in homes (54.4% in 2009 to 34.7% in 2015) and in the workplace (32.6% in 2009 to 21.5% in 2015) declined significantly. Among all public places for which data were collected, the largest decline in exposure to SHS occurred in government buildings (25.5% in 2009 to 13.6% in 2015).” (P. WHO 2015)

Baguio City, is one city in the country which has started its anti-smoking campaign since 1966. This city is serious in the global fight against tobacco. It has its own city ordinance prohibiting smoking in public places. However, this city has never collected any baseline data to monitor its progress. The city depends on the

GATS data to evaluate effectiveness in the implementation of its city ordinances. However, Baguio City may be different from all other cities/provinces of the countries in terms of its tobacco consumption for the following reasons: Baguio a) is a destination for tourists, b) is an education center c) has cooler environment d) has increasing numbers of call centers. e) Has anti-smoking campaign since 1966. This study investigated the prevalence of tobacco smoking in the city for the first time, tracked tobacco control indicators, and compared results with the national surveys conducted in 2009 and 2015.

## Methodology

This is a cross sectional household survey conducted on April to May 2012 aimed to produce city level estimates. The questionnaire (Core Adult Tobacco Survey) used was developed mainly from Global Adult Tobacco Survey (GATS) and provided by the World Health Organization. The questionnaire consists of two sections: Section A –(Background characteristics) Questions covered the following: sex, age, civil status, education, and work status; Section B – (Core Adult Tobacco Questionnaire); It consists of 9 questions covering the following: current patterns of tobacco use (daily consumption, less than daily consumption, not at all), former/past tobacco consumption (daily consumption, less than daily consumption, not at all), consumption of smokeless tobacco; patterns of smoking inside the houses (daily, weekly, monthly, less than monthly, never); exposure in the last 30 days in the workplace; questions related to advice to quit smoking by health care provider in the last 12 months; reaction to health warning labels on cigarette package; questions regarding exposure to pro-tobacco advertisement on media such as: television, radio, billboards, posters, newspapers/magazines, public walls, and exposure to any kind of promotions connected with tobacco. The reference period for the questions in the media section is within the last 30 days.

Baguio City is a highly urbanized area in Northern Luzon comprising of 319,000 residents from 129 districts. (Philippine Statistics Authority 2013). The target population for the survey included all men and women aged 15 years and over who were residents of Baguio city. Tourists or transient residents were not included. The verbal consent of all respondents was obtained at the start of the interview. Respondents were assured that all answers in the survey will be used only for research and analysis and cannot be used for any other purpose and that their identifying data, such as name and address, will never be associated with their interview responses.

Sample size determined using a 10% precision, where confidence level is 95% and proportion is at 0.5. (Lemeshow,S. *et al.* 1990). One hundred respondents were targeted. Twenty districts were chosen by simple random sampling from a list of 129. Five households from each of the 20 barangays were interviewed. Overall, there were 100 households included in the study from the following districts: Asin Road, Dizon Subdivision, Country Club Village, Camdas, Greenwater Village, Irisan, Lower Quirino Hill, City Camp Proper, Lourdes, San Roque, Bayan Park, Modern Site East, Hillside, P Burgos, Ambiong, Bakakeng, Loakan, Rock Quarry, Happy homes, Happy Hollow, South Drive, and New Lucban. The overall household response rate was 96%. From the 100 households, 162 individual interviews were completed. The individual response rates were 98.7%.

## Results

### Demographic Characteristics

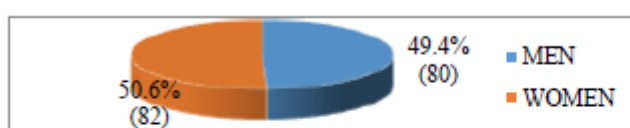


Figure 1 Percent Distribution of Individual Respondents by Sex: Core Adult Tobacco Survey (CATS), Baguio City 2012  
3rd International Conference on Public Health

Overall, for adults aged 15 and over, 49.4% were men and 50.6% were women. (Figure1) Highest percent of individual respondents were aged 25-44 years old (34.6%) and lowest for 65 years and above (7.4%), while percent of respondents aged 15-24 years and 45-64 years were 33.3% and 24.7% respectively. (Figure 2).

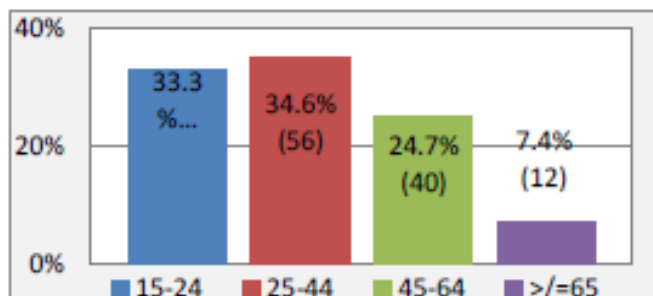


Figure 2 Percent Distribution of Individual Respondents by Age: Core Adult Tobacco Survey (CATS), Baguio City 2012

Half of the respondents are married (51.9%), 42% are single, 2.5% separated and 3.7% are widows. (Figure 3)

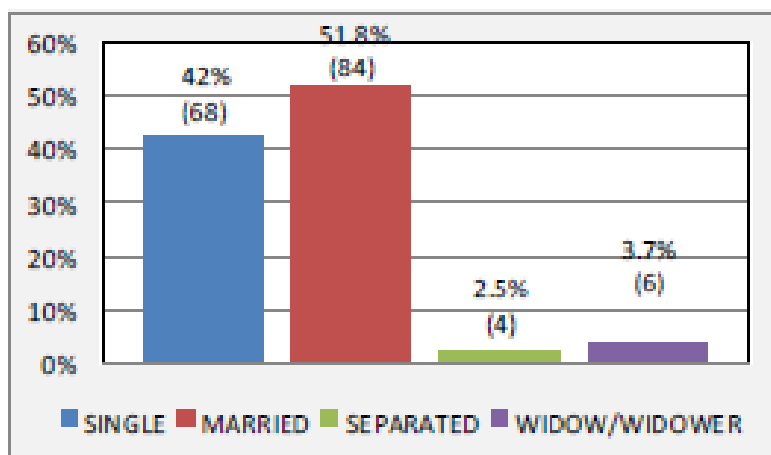


Figure 3 Percent Distribution of Individual Respondents by Civil Status: Core Adult Tobacco Survey (CATS), Baguio City 2012

Almost half of the respondents are college graduate (40.1%), one-fourth are college undergraduate (25.9%), 22.8% are high school graduate, 5.6% are high school undergraduate, 4.3% are elementary graduate and 1.2% have finished post graduate schooling. (Figure 4)

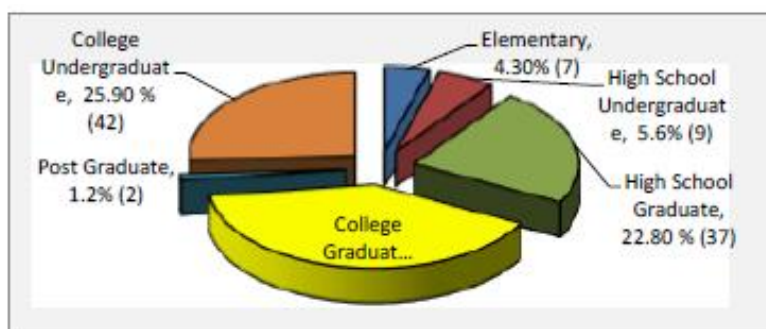


Figure 4 Percent Distribution of Individual Respondents by Educational Level: Core Adult Tobacco Survey (CATS), Baguio City 2012

Most of the respondents are working in private establishments 32.7%, 17.3% are students, 11.7% are housekeepers, 8.6 % are working in the government, 8% are self-employed, 6.2% are retired, 5.6% are

unemployed but able to work, 4.9% are working in private households, 3.7% are employers in family-owned business, and 1.2% are working with pay in a family-owned business. (Figure 5)

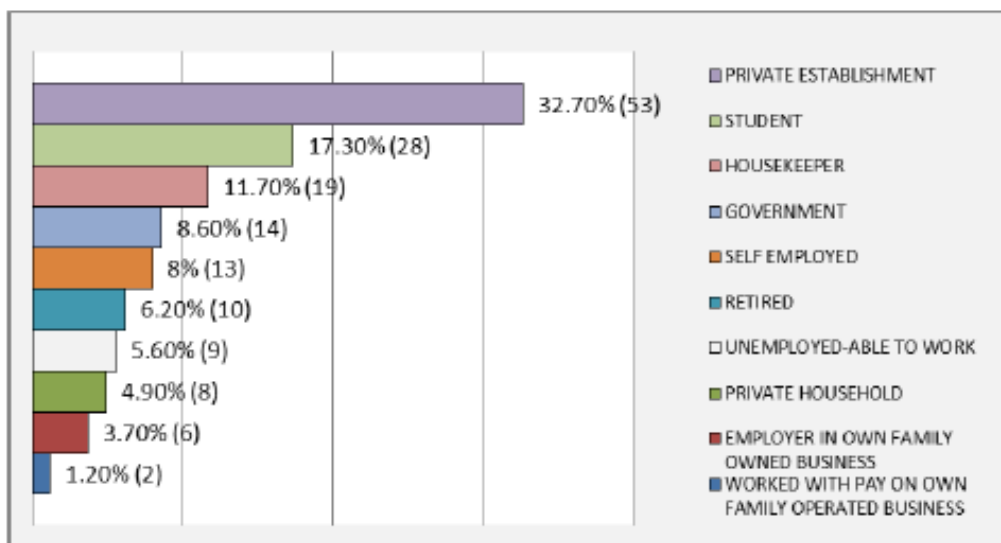


Figure 5 Percent Distribution of Individual Respondents by Work Status: Core Adult Tobacco Survey (CATS), Baguio City 2012

### Prevalence of Tobacco Use

Among adults 15 years or older, 27.2% were current tobacco smokers representing the 87,000 Baguio City residents. (Figure 6) Men (42.5%) were more likely than women (12.2%) to smoke tobacco. Overall, 24.7% were daily tobacco smokers. For men, 40% were daily smokers (representing 94.1% of all male current smokers) and 9.8% of women were current daily smokers (representing 80% of all female current smokers).

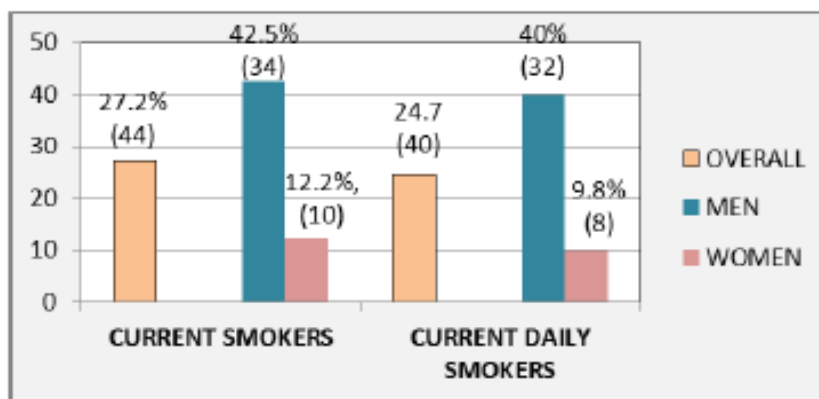


Figure 6 Percent Distribution of Adults 15 years and older by smoking status and sex: Core Adult Tobacco Survey (CATS), Baguio City 2012

Daily smoking was highest among aged 15-24 (35%, 14), high school graduates (35%, 14), and working in private establishments (37.5%, 15). (Table 1). Non Smokers were highest among those aged 25-44 years old (36%, 42), college graduate (45%, 53) and working in private establishments (31%, 36). (Table 1) 3rd International Conference on Public Health

### Smokeless Tobacco

One hundred percent of smokers are using the manufactured type of tobacco and nobody is using smokeless tobacco.

### Secondhand Smoke Exposure

Among adults in Baguio City, 45.1% reported daily exposure to secondhand smoke inside their homes, approximately 144,000 Baguio City residents, 6.2% reported at least weekly exposure, less than 1% reported at least monthly and 3.7% reported less than monthly exposure. Almost half of the respondents reported that smoking is not allowed inside their homes. (Figure 7).

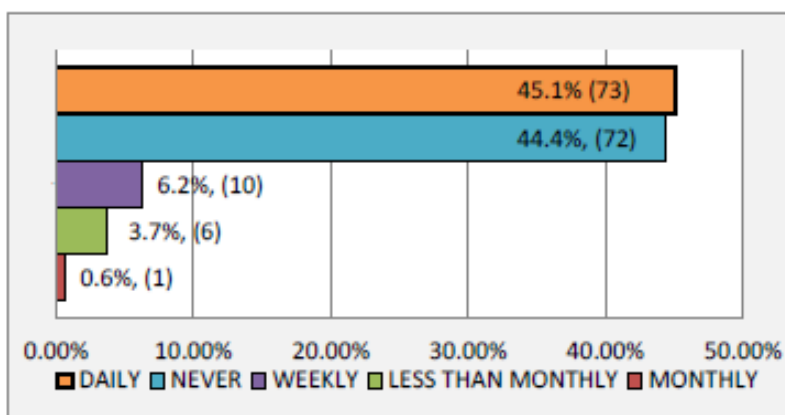


Figure 7 Secondhand smoke exposure at home: Core Adult Tobacco Survey (CATS), Baguio City 2012

For non-smokers, 33.1% reported that someone smoked daily inside their home; and 5.9% reported someone smoked at least weekly, 5.1% reported someone smoked less than monthly inside their home. More than half of the nonsmokers reported no secondhand smoke exposure inside their home. (Table 2).

Table 2 Percentage distribution of adults 15 years and older who are exposed to tobacco smoke at home by

current smoking status: Core Adult Tobacco Survey (CATS), Baguio City 2012	Daily	Weekly	Monthly	Less than monthly	Never	Total
Current Smoking Status						
Daily	80% (32)	5% (2)	2.5% (1)	0	12.5% (5)	100% (40)
Less than daily	50% (2)	25 (1)	0	0	25% (1)	100% (4)
Not at all	33.1% (39)	5.9% (7)	0	5.1% (6)	55.9% (66)	100 (118)
	73	10	1	6	72	162

Out of the 162 residents, ninety nine were working and, about 27.2% of them (27) reported that they were exposed to tobacco smoke at their indoor workplace. (Figure 8)

Almost half of smoking exposure at work is in private establishments (48.1%), 29.6% are in family owned business (self-employed/employer/working with pay for the family business), 22.2% are in private household, and no one working in the government reported smoking exposure. (Table 2).

Table 1 Percentage distribution of adults 15 years and older according to smoking status by selected Characteristics	Smoking Status			Total
	Daily	Occasional	Current Non smokers	
Overall	24.7% (40)	2.45 (4)	72.85 (118)	100% (162)
<b>Age (years)</b>				
15-24	8.6% (14)	0.6% (1)	24.1% (39)	33.3% (54)
25-44	6.8% (11)	1.85% (3)	25.95% (42)	34.6 % (56)
45-64	8.1% (13)	0	16.6% (27)	24.7% (40)
>/=65	1.2% (2)	0	6.2% (10)	7.4% (12)
100% (162 )				
<b>Education</b>				
Elementary	1.2% (2)	0.6% (1)	2.5% (4)	4.3% (7)
Graduate				
High school	0.6% (1)	0.6% (1)	4.4% (7)	5.6% (9)
Undergraduate				
High school graduate	8.6% (14)	0.6% (1)	13.6% (22)	22.8% (37)
College	6.8% (11)	0.6% (1)	18.5% (30)	25.9% (42)
Undergraduate				
College Graduate	7.4% (12)	0	32.7% (53)	40.1% (65)
Post Graduate	0	0	1.2% (2)	1.2% (2)
100% (162)				
<b>Work Status</b>				
Private Household	1.8% (3)	0	3.1% (5)	4.9% (8)
Private Establishment	9.25% (15)	1.2% (2)	22.2% (36)	32.7% (53)
Government	1.8% (3)	0	6.8% (11)	8.6% (14)
Self employed	0.6% (1)	0.6% (1)	6.8% (11)	8% (13)
Employer	0.6% (1)	0	3.1% (5)	3.7% (6)
Worked with pay in family owned	0.6% (1)	0	0.6% (1)	1.2% (2)
Student	3.7% (6)	0	13.6% (22)	17.3% (28)
Housekeeper	3% (5)	0	8.7% (14)	11.7% (19)
Retired	1.2% (2)	0	5% (8)	6.2% (10)
Unemployed but able to work	1.9% (3)	0.6% (1)	3% (5)	5.6% (9)
100% (162)				



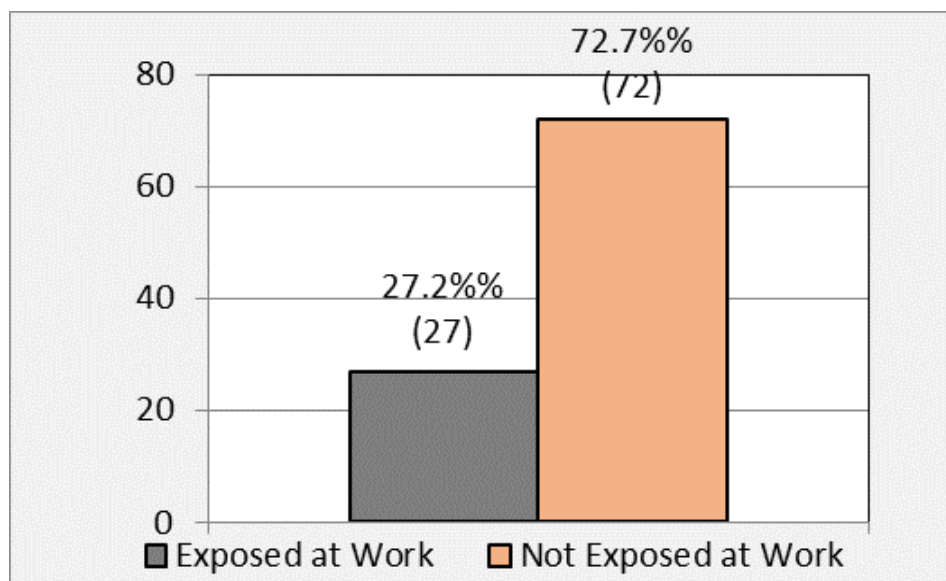


Figure 8 Secondhand smoke exposure at \*work: Core Adult Tobacco Survey (CATS), Baguio City 2012

\*work- enclosed area

### Cessation

Among current manufactured cigarette smokers (44), 97.8% or 43 of them noticed health warnings on cigarette packages during the past 30 days. 60% of these smokers reported that the warning labels on cigarette packages led them to think about quitting and 40% reported that it did not lead them to thinking of quitting. (Figure 9).

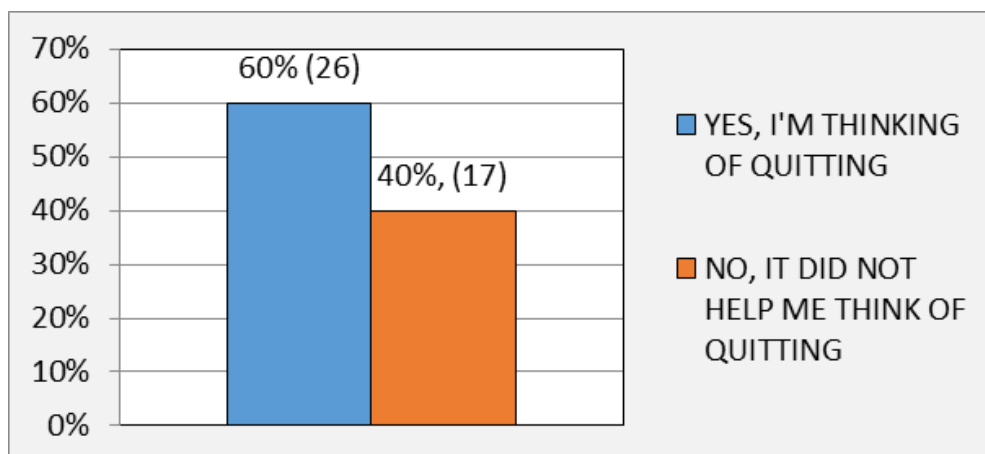


Figure 9: Percentage of smokers' response on the Health warnings on cigarette packages: Core Adult Tobacco Survey (CATS), Baguio City 2012

All men noticed the health warnings and 92.3% of the women noticed the health warnings. (Figure 10)

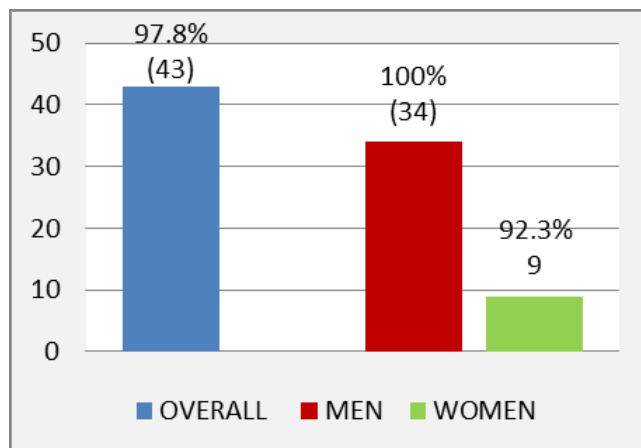


Figure 10: Percent Distribution of Current Manufactured Cigarette Smokers who noticed Health Warnings on Cigarette Packages: Core Adult Tobacco Survey (CATS), Baguio City 2012

Among the smokers, only 56.8% (25) visited any healthcare worker in the past 12 months. Among these 25 smokers, 68% (17) received brief cessation advice from a healthcare worker while the 32% (8) did not receive any cessation advice. (Figure 11)

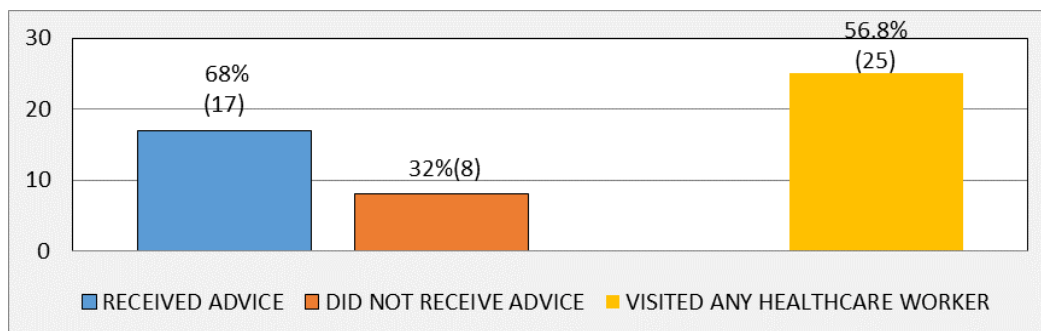


Figure 11: Percentage of smokers who received brief cessation advice from a healthcare worker\*: Core Adult Tobacco Survey (CATS), Baguio City 2012 \*doctor/nurses/dentist/midwife/caregiver/respiratory therapist/allied health

**Media**

Overall, 34% of adults noticed pro-cigarette marketing in the last 30 days (Figure 12). Having seen pro-cigarette marketing advertisement was higher among men (37.5%) than women (30.5%).

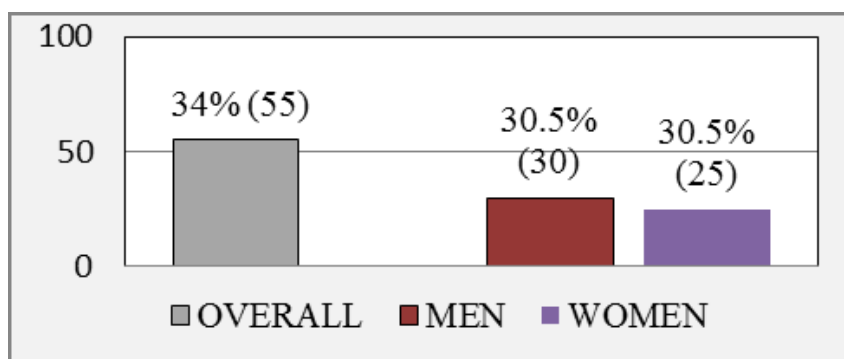


Figure 12: Percent of Respondents by Sex Who Noticed Pro-Tobacco Advertisements: Core Adult Tobacco Survey (CATS), Baguio City 2012

Overall, 32.1% of adults in Baguio city noticed any tobacco sponsorship or promotion in the last 30 days, (Figure 13). Men (35%) were more likely than women (29.3%) to notice any tobacco promotion.

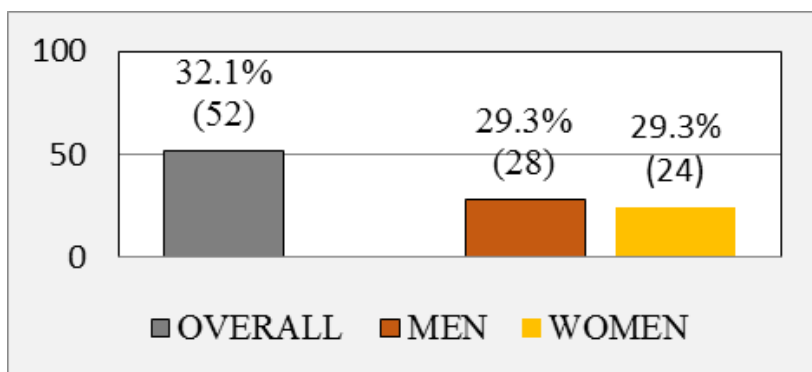


Figure 13: Percent of Respondents Who Noticed Cigarette Sponsorship or Promotion: Core Adult Tobacco Survey (CATS), Baguio City 2012

**CATS VS. GATS 2009, 2015**

Table 4 Comparison of some of the selected results of GATS and CATS Characteristics/indicators	GATS, 2009	CATS, 2012 Baguio city	GATS, 2015
Prevalence of current smokers	27.9%	27.2%	22.5%
Males	47.2%	42.5%	40.1%
Females	8.1%	12.2%	4.9%
Secondhand smoke exposure at home	54.4	45.1%	34.7%
Secondhand smoke exposure at work	32.6%	27.2%	21.5%
Percentage of current cigarette smokers who thought of quitting smoking because of health warnings in cigarette labels	37.4%	60%	44.6%
Percent distribution of smokers who received brief cessation advice	76.5%	68%	56.5%
Percent distribution of respondents who noticed cigarette advertising in the last 30 days	53.7%%	34%	40.5%
Percent distribution of respondents who noticed cigarette promotion in the last 30 days	74.3%	32.1%	58.6%

## Discussion

Discussion of the key result areas is in accordance with the MPOWER policies which were covered in the CATS questionnaire.

*Monitor- Monitor Tobacco use and Prevention policies.* The prevalence of current cigarette smoking among adults showed men (42.5%) were 3.5 times as likely as women (12.2%) to smoke, with an overall prevalence of 27.2%. These findings show increased proportion of women compared with GATS conducted in 2009. The smoking prevalence has significantly dropped during the 2015 survey at 22.5%.

*Protect- Protect people from tobacco smoke.* The prevalence of second hand exposure at home is 45.1%. Among those who were working, 27.2% reported that they were exposed to tobacco smoke at their indoor workplace. Government workers disclosed that they were never exposed at their workplace because of the strict implementation of smoke-free policy at their workplaces. Almost half of smoking exposure at work is in private establishments (48.1%), specifically coming from the following establishments: construction, computer shop, water delivery, and call center, 29.6% are in family owned business mostly small stores and 22.2% are in private household. Results from GATS shows exposure to secondhand smoke is higher for all workers (32.6%) in 2009 but has dropped in 2015 to 21.5%

*Offer- Offer help to quit tobacco use.* Among those who visited any health care provider, CATS reported that only 68% were given brief cessation advice and 32% were not even asked about their smoking habits. In 2009 GATS, 67.5% were asked if they smoked and 76.5 were advised by the health care provider to quit. GATS 2015 reported lowest percentage of smokers who received brief cessation advice at 56.5%.

*Warn- Warn about the dangers of tobacco.* The percentage of current cigarette smokers who thought of quitting smoking because of health warnings on cigarette packages is higher in CATS (60%) as compared with 2009 GATS (37.4%) and 2015 GATS (44.6%).

*Enforce- Enforce bans on tobacco advertising, promotion and sponsorship.* Exposure to any cigarette advertising, in the last 30 days is lowest in CATS (34%) as compared with GATS in 2009 (53.7%) and in 2015 (40.5%). Similarly, exposure to any cigarette promotions is lowest in CATS (32.1%) compared with GATS in 2009 (74.3%) and in 2015 (58.6%).

*Raise- Raise taxes on tobacco.* The Core adult Tobacco survey did not include this indicator in its questionnaire.

## Conclusion

During the six year period, 2009-2015, the country has made a progress in its fight against the tobacco epidemic. There was a significant reduction in the prevalence of tobacco smoking and second hand exposure at work and at home. Comparing GATS 2009 and 2015 alone, remarkable success can be seen in the changes of the control indicators. There was a reduction in advertising and promotion exposure and a significant increase in those who thought of quitting because of the health warning labels. However, there was a significant reduction of healthcare workers advising brief cessation advice.

Comparing CATS and GATS, the exposure to tobacco advertising and tobacco promotion is lower among Baguio residents. Percentage of current cigarette smokers who thought of quitting smoking because of health warnings in cigarette labels was also highest in CATS survey. This is the result of the established and strict implementation of the city ordinance within the city compared to other parts of the country.

## **Recommendation**

**Monitoring-** This survey is a good start for Baguio City Tobacco Control Surveillance System. Information from this survey would be useful for the basis of future success of the city. The local government of Baguio should continue to support what has been started by allocating budget and designating a team to monitor progress of interventions within the city. Survey with larger study population is recommended to include majority of the districts and should be done on a yearly basis. Future surveys should include the following: number of interested smokers in quitting, the number of quit attempts made, successful strategies done by ex-smokers, secondhand smoke exposure in public places and the awareness of the presence of smoke cessation clinics in the city. Wealthy and poor districts should also be compared in terms of their tobacco consumption.

**Protect-** The success of 100% smoke free within the government offices maybe attributed to the fact that Baguio city has more than 40 years of anti-smoking campaign which started in 1966. The Civil Service Commission Memorandum Circular No. 17 series of 2009, mandating all government agencies to adopt and promulgate 100% SMOKE FREE policy has been fully complied with as far as this survey is concerned.(Commission 2009). Despite, the admirable control in the workplaces, smoking is still a burden to almost half of the population. Among adults in Baguio City, 45.1% reported daily exposure to secondhand smoke inside their homes. This is due to the fact that the existing policies do not address smoking in the residences. Republic act 9211, or the "Tobacco Regulation Act of 2003," and the existing anti-smoking ordinance of the city "ordinance 8 series of 2008" do not address secondhand smoke exposure at home.. Further, the city ordinance of Baguio City prohibits public smoking and encourages smoking within ones' residence and private vehicles. This will further aggravate the situation of the population being exposed to secondhand smoke in their homes. Amendments to the ordinance should include secondhand smoke exposure at homes to protect other family members especially the children from the harm of tobacco. It should also include strict implementation of SMOKE-FREE WORKPLACE in private establishments to include all small enterprises as long as there is a threat of secondhand exposure to the public. Surveillance system should be well established in monitoring these private establishments.

**Offer-** WHO FCTC recommends in Article 14 that Parties implement best practices to promote cessation of tobacco use and implement the treatment of nicotine addiction. (World Health Organization 2017c). Relative to Program" as well as the "Smoking Withdrawal Clinics" under the DOH. (Republic of the Philippines 2003).

The survey shows that only 68% were given brief cessation advice and the rest were not even asked about their smoking habits. This just shows that the healthcare providers of Baguio city are not serious with the global fight against tobacco and not well equipped with the smoke cessation strategy. The tobacco dependence management is new to the medical field and strategies to address this have yet to be passed on to the health care professionals. The Health care workers of Baguio city must include smoking history as part of the medical consultation and physical examination. The Department of Health should conduct local trainings for doctors of the city to be equipped with the latest strategy of tobacco control. A specific local referral system should be outlined and implemented.

**Warn-** The result of the survey shows that shows 97.7% of Baguio residents noticed health warnings on cigarette packages during the past 30 days. Yet, only 60% reported that the warning labels on cigarette packages led them to think about quitting. The country during this time has yet to comply with the obligation to FCTC's provisions for implementation of the graphic health warning. Variations of warnings is also recommended to include some helpful facts like "Smoking causes Oral Cancers" or "Second hand smokers are equally at risk as smokers."

**Enforce-** This survey shows lower percentage of respondents who noticed tobacco advertisements and promotion as compared with the national survey. However, despite the MPOWER strategies, one third of the respondents noticed advertising and promotion. According to the Comprehensive Anti-smoking ordinance of Baguio City, "the National Police (PNP) is tasked with the proper and vigorous implementation of the

ordinance.” With the present police-population ratio, (1:572), (Tupas 2017) this is not feasible and impossible. The work is a burden to most of them since they have been commissioned to maintain peace and order, to investigate and prevent crimes, and other related functions. To effectively discharge this mission to its constituents and to protect the health of the community, it is essential that the mayor of the city delegate officers other than PNP to help to implement these legal obligations. Amendments of the existing ordinance should include the “E” policy of MPOWER and include other citizens in the implementation.

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