

# Pharmacy Students' Experiences on Smoking Cessation Campaigns at a Tertiary Government Hospital

Edwin Ruamero Jr. 1\*, Monet Loquias<sup>2</sup>, Charles Mandy Ayran<sup>2</sup>

\*Corresponding author's email address: ecruamero1@up.edu.ph

<sup>1</sup>Department of Pharmaceutical Chemistry, College of Pharmacy, University of the Philippines Manila

<sup>2</sup>Department of Pharmacy, College of Pharmacy, University of the Philippines Manila

# RESEARCH ARTICLE

#### **Abstract**

**Background and Objectives:** Smoking cessation campaigns aim to raise awareness on the dangers of tobacco use and provide help for successful abstinence. Fourth year students of the UP College of Pharmacy implemented activities to promote smoking cessation among patients and clients at a tertiary government hospital. This paper aimed to describe the students' experiences on their project at the hospital during their Hospital Pharmacy course. Key learnings, challenges, and recommendations for the project's improvement, as well as their perceptions on current smoking cessation programs of the government were, likewise, determined. **Methods:** The students' activities were documented and described. A descriptive quantitative design using a self-administered online questionnaire was used to determine challenges, key learnings, and recommendations while content analysis was applied on open-ended questions to determine the frequency of responses in common themes identified. Perceptions on current smoking cessation campaigns were also summarized using frequency statistics.

Results: The five approved projects implemented by the students were (1) setting up of smoking cessation booths, (2) display of posters within the hospital premises, (3) distribution of leaflets and reading materials, (4) playing of smoking cessation campaign videos, and (5) the creation of a social media page. Most of the students were challenged in scheduling and delegation of tasks (81.4%) and delays in project implementation (57.6%). They also realized the difficulty of stopping smoking (74.6%) and that it has various root causes (72.9%) that need to be addressed. To improve the project, students recommended collaborations with the hospital (79.7%) and the Department of Health (84.7%) to further smoking cessation programs. Lastly, they perceived that the current smoking cessation program is inadequate or underutilized.

**Conclusion:** Smoking cessation programs require a multi-sectoral approach to be effective and sustainable, and students can be active partners in their implementation. Pharmacy student smoking cessation-led activities can complement government programs on smoking cessation. Moreover, students can apply what they have learned about smoking cessation while preparing them for their future role as pharmacist-counsellors.

**Keywords:** smoking cessation, pharmacy students, hospital pharmacy, pharmacy education

# Introduction

The health and economic burden of tobacco smoking continues to persist globally. The World Health Organization (WHO) estimates that around 6 million people die of tobaccorelated diseases annually and is predicted to increase to more than 8 million by 2030 [1]. Moreover, tobacco use has significant economic impact on direct and indirect costs for both health systems and the society [2]. In a report by the Global Health Observatory, there are more than 1.1 billion smokers [3] while in the Philippines, there are about 15.9

million smokers in 2015 as reported by the Global Adult Tobacco Survey [4]. Efforts to control tobacco epidemic and its ill-effects all over the world have been set in place. Guided by WHO's six proven policies namely (1) monitor tobacco use and prevention; (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, collectively known as MPOWER policy package, countries across the globe can reverse the negative effects of tobacco use [5]. Philippine data suggest that there was a reduction in tobacco



use since 2009 using the MPOWER strategy but nearly a quarter of the country's population continued smoking in 2015 [4]. In fact, in a paper published by the Global Burden of Disease (GBD) Tobacco Collaborators in 2015, the Philippines ranked 10th among countries, such as China, India, USA, Russia, Japan and others in terms of size of smoking population, both sexes and ages 10 years and older [6].

To further strengthen the government's efforts in its war against tobacco smoking, the Department of Health instituted the National Smoking Cessation Program through the issuance of Administrative Order No. 122 with the aim of reducing the prevalence of smoking and related health risks associated with its use [7]. Just recently, President Rodrigo Roa Duterte signed Executive Order No. 26 [8] banning smoking in public and enclosed places, further strengthening the Tobacco Regulation Act of 2003. The victory for a smokefree country is far from reality and the success of this fight does not rely on government efforts alone. A collaborative, multi-sectoral approach is key to successful and sustainable tobacco cessation programs [7].

Despite numerous efforts to curb smoking by the government, accessible resources to encourage and support smoking cessation among medically underserved patients are limited. Moreover, using only self-help materials for smoking cessation is inadequate and it is recommended that this strategy be combined with counselling and pharmacotherapy [9]. With patient counselling as an important tool in smoking cessation endeavors, the role of pharmacists is underscored. Several studies conducted in other countries have shown that pharmacists have a valuable role in the provision of information to patients or clients in terms of pharmacologic and nonpharmacologic approaches to quit smoking [10,11,12,13,14]. In the Philippines, there are no published articles yet specific for Filipino pharmacists and pharmacy counselling services on tobacco cessation in various health care settings. Some of the published local researches were mainly about tobacco use among students [15]; behavior and practice in general population and health care professionals including reasons for failure of quitting [16] and burden of smoking in the Philippines [17,18]. A paper published by medical doctors Reyes and Fernandez in 2001 [19] discussed the experience of the UP-Philippine General Hospital in terms of the Stop Smoking Program's (SSP) effectiveness in patient abstinence but there is no mention of the pharmacist's involvement in the program.

It is also notable that in other countries, student-run smoking cessation clinics that provide an effective option to help individuals achieve smoking abstinence [20,21,22,23] are available, but to date, there is paucity of data or published articles on pharmacy student-driven efforts on smoking cessation from various pharmacy schools in the country.

The DOH is anticipating that the increase in the number of people who would quit smoking and will need health advise through smoking cessation clinics [24]. Hence an opportunity for collaboration with other government and non-government institutions is expected. In January 2017, the UP College of Pharmacy came up with a series of activities for smoking cessation with the aim of coming up with service provision for both students and staff and collaborative tobacco smoke-free campaigns. A faculty-point person for spearheading smoking cessation activities was sent to Mahasarakham University (MSU), Thailand for training and observership of the University's smoking cessation. This was followed by training on Pharmacist-led Smoking Cessation Workshop organized by the Philippine Pharmacists Association in partnership with the UP College of Pharmacy. Smoking cessation training was also extended to the students wherein a visiting professor from MSU facilitated a lecture-workshop on Pharmacotherapy of Nicotine Dependence, as well as Smoking Cessation Services by Pharmacists for the students taking up Pharmacy 154 (Dispensing and Incompatibilities) and Pharmacy 155 (Hospital Pharmacy). Lastly, students were assigned to create a project on smoking cessation campaign for their Hospital Pharmacy special project in line with smoking cessation endeavors of the college.

This paper aimed to report the students' experiences on the implementation of their smoking cessation activities at a tertiary government hospital. Challenges, key learnings, and recommendations about their project were also asked as part of the overall evaluation of the special project. Finally, it also described the students' insights about the government and the hospital's smoking cessation efforts.

# Methodology

Study Design

The students' activities were documented and described. A descriptive quantitative design using a self-administered online questionnaire was used.

Sources of Data and the Pharmacy 155 Special Project

Fourth year UP College of Pharmacy students taking up Hospital Pharmacy (Pharmacy 155) during their Second Semester, Academic Year 2016-2017 were informed by the



faculty that the theme for the special project is on smoking cessation. Fifty-nine students were divided into five (5) groups and were given one week to brainstorm about specific activities that they want to implement to promote smoking cessation in the hospital. Each group submitted proposals that were reviewed by the faculty and were also consulted with the college's smoking cessation point-person for technical advice prior to implementation. After approval, the smoking cessation activities were coordinated with the hospital to secure permit for the conduct of the project. A total of one and a half months was spent for the entire project from brainstorming until implementation. Student activities ran from 1st week of April until 2nd week of May 2017. At the end of the project, each group presented its accomplishments and was asked to provide feedback and evaluation using an online form.

#### Instrument and Data Collection

An online self-administered questionnaire using a Google Form® was utilized to evaluate the students' activity. Students were asked to identify the challenges encountered, learnings, and recommendations to further improve their smoking campaign project. Awareness on smoking cessation programs by the government was asked using a dichotomous question while a 5-point Likert scale was used for their perceptions about current smoking cessation programs.

#### **Analysis**

Descriptive statistics of students' responses were generated from Google Form® while content analysis was applied on open-ended questions to determine the frequency of responses in common themes identified. Perceptions on current smoking cessation campaigns were also summarized using frequency statistics.

#### Results

The five approved projects for implementation were (1) setting up of smoking cessation booths, (2) display of posters within the hospital premises, (3) distribution of leaflets and reading materials, (4) playing of smoking cessation campaign videos and, (5) creation of a social media page.

Two (2) smoking cessation booths were placed near the outpatient and main pharmacy. These were manned by five to eight students that served as counsellors for interested patients and clients of the hospital. Other members of the group took turns in manning the booths to make sure that

there was a counsellor available from 9 AM to 4 PM. In these booths, students assessed the level of the patient's nicotine dependence using the Fagerstom Test. They also provided clients with non-pharmacological recommendations to aid tobacco addiction and referral to the hospital's smoking cessation clinic for those who are ready to quit. Reading materials that were created by other groups were also distributed in these booths.

Posters and leaflets in local language were assigned to another group. They specifically chose the local language so that patients will easily understand the message. The posters containing infographics discuss the dangers of smoking in the human body and the importance of guided quitting (Figure 1). One poster came up with a simple acronym "S.T.O.P" (Figure 2): Sabihan ang pamilya sa iyong plano (tell your family members about your plans of quitting); Talikuran ang iyong bisyo (renounce your vices); Obserbahan ang side effects (observe the side effects); Pumunta sa pinakamalapit na heath center (visit the nearest health center). Students came up with the S.T.O.P acronym to provide a simple yet comprehensive information for patients that can be easily recalled. A total of 30 posters were displayed in different spots in the hospital frequented by patients such as the health services department, main and outpatient department, pharmacy, and the smoking cessation clinic.

Another group distributed informational materials to patients. The pamphlet was entitled "Paano Tumigil sa Paninigarilyo" (How to Quit Smoking), a 16-page document written in local language that highlighted effective pharmacologic and non-pharmacologic means of smoking cessation and how a pharmacist can help in the process. It also contained statistics about tobacco smoking, graphic images of a smoker's body, and negative health and environmental effects of smoking. Students also seized the opportunity to give mini- lectures using the material while patients were waiting for their turn to be called for their appointment.

The two to three minute videos made by students were simultaneously played at the television sets located at the outpatient and main pharmacy. Three videos have different themes. The first one is a short story of a character named Vincent, a smoker who had difficulty quitting at first and only decided to quit when one of his friends died because of lung cancer. It also talks about family support which helped the main character to be successful in smoking cessation. The second video is about the economic cost of smoking a cigarette. It showed how much a long-time smoker could have saved or could have possibly acquired such as a gadget, car, or dream



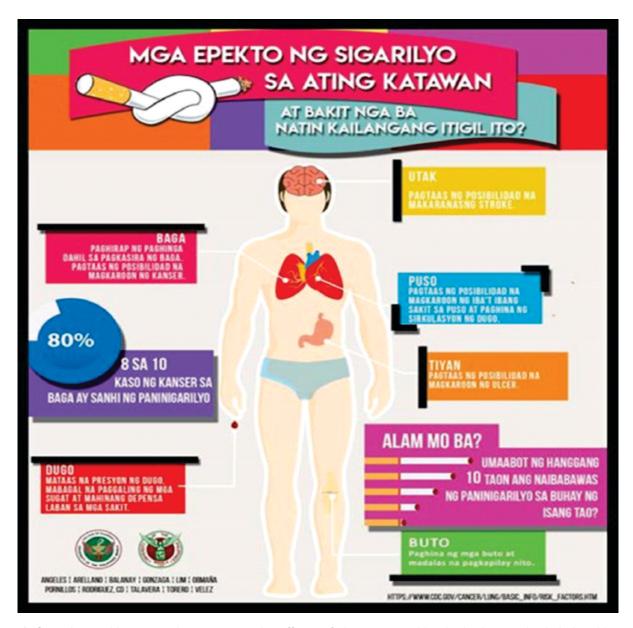


Figure 1. Sample smoking cessation poster on the effects of cigarette smoking in the human body in local language

house if the smoker saved money instead of buying cigarettes. The third video detailed the stages of quitting tobacco smoking and emphasized on hotlines to be contacted and where to find smoking cessation clinics for further inquiries.

Lastly, a social media page (Figure 3) on Facebook™, entitled "Smoking Cessation UPCP" was created in collaboration with all the groups. The videos, reading materials, posters and leaflets that were used in the hospital were uploaded in this page. Students used the social media so that their smoking cessation drive could have a broader reach. From the time it was launched until June 7, 2017, the page reached a total of 8,368 people, 5,452 post engagement, and 3,758 video views according to exported data from Facebook™.

All of the pharmacy students described their experience on their smoking cessation campaign through an online survey. Of the 59 respondents, 50.8% were taking up BS Pharmacy, 68% (32) were females and aged 19-26 years.

The challenges, according to the students are summarized in Table 1. By grouping the recurring themes of the students' responses, 4 major categories of challenges were identified and frequencies of responses were tallied. In planning the project, students have had difficulties because of differences in schedules between groupmates. This somehow affected their coordination and the type of tasks that will be assigned to each group member because was dependent on the students' availability. Another challenge is the delayed





**Figure 2.** Poster entitled S.T.O.P- a simple acronym to help patients successfully quit smoking

response and coordination of the hospital with the students' proposed activities. The delayed approval of their activities resulted in the delayed implementation of their project, thus, shortening its planned duration. Striking a balance between an informative and creative ways of information drive was also a challenge. To come up with a smoking cessation material that is simple, catchy, and will sustain the interest of its target audience is something that is not easy to conceptualize, according to students. Patient or client engagement is also difficult. Students speculated that patients are either shy, do not have time, or are plainly hesitant to go to booths or listen to mini-lectures.

Key learnings based on students' responses are summarized in Table 2. Students realized that stopping smoking is not easy; people may be interested to stop but they have limited information on where to go and who to ask. Moreover, smoking has multi-dimensional root causes and deeper understanding of those causes can lead to better interventions. Students learned that there are available smoking cessation clinics but they are underutilized or under-promoted. In connection to this, since counselling is an important component of their campaigns, pharmacists and even pharmacy students can have an important role in information dissemination and proper guidance to patients.

The students' recommendation to further improve smoking cessation programs, especially in a hospital pharmacy setting, are summarized in Table 1. Majority of the recommendations centered on partnerships or collaboration with the hospital and the DOH. According to students, this will help raise awareness to more people in and out of the hospital. Other frequent recommendations were better planning, allotting more time for conducting the project, and evaluating the target audience or patients to assess the campaign's effectiveness.

Majority of the students (89.8%) were aware of the government's program on smoking cessation while 11.9% were unaware. Table 2 shows the students' perceptions on the programs that are implemented for smoking cessation and the involvement of the hospital, schools and students. Majority of them disagreed that the government's program on smoking cessation is effective and is consistent with their disagreement that the hospital's smoking cessation campaign is adequate. Most of them believed that the hospital pharmacy is a venue where patients can access information about quitting smoking. It is clear that all of the students agree on the role of academic institutions and pharmacy students be involved with smoking cessation campaigns.





Figure 3. Social Media Page for Smoking Cessation Created by UP College of Pharmacy Students

Table 1. Challenges, key learnings, and recommendations of students in the smoking cessation project

Challenges*	Frequency and percentage of response (%)		
Planning the project -difficulty in scheduling group meetings -difficulty in delegation of tasks Delays in implementation of the project Ensuring information simple, catchy, and will sustain interest Low engagement of patients/clients	48 (81.4) 34 (57.6) 24 (40.7) 20 (33.9)		
Key learnings*			
Quitting smoking is not easy Smoking has multi-dimensional root causes and deeper understanding of those causes can lead to better interventions Smoking cessation clinics are underutilized or under-promoted Pharmacy students and pharmacists can be important resources of information regarding smoking cessation	44 (74.6) 43 (72.9) 40 (67.8) 38 (64.4)		
Recommendations*			
Partnership with the college and the hospital on smoking cessation programs Collaboration with the Department of Health (DOH) Better planning Project evaluation by patients	50 (84.7) 47 (79.7) 41 (69.5) 38 (64.4)		

<sup>\*</sup>multiple answers were identified per student



Table 2. Students' perception on smoking cessation campaigns

	Response (%), n=59				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The government's smoking cessation program is effective	3 (5.1)	15 (25.4)	0 (0.0)	37 (62.7)	4 (6.8)
The hospital's smoking cessation campaign is adequate	1 (1.7)	25 (42.4)	0 (0.0)	28 (47.5)	5 (8.5)
The hospital pharmacy is a place where patients can obtain information about smoking cessation	38 (64.4)	0 (0.0)	0 (0.0)	18 (30.5)	3 (5.1)
Academic institutions should be involved in smoking cessation campaigns	51 (86.4)	8 (13.6)	0 (0.0)	0 (0.0)	0 (0.0)
Pharmacy students should be involved in smoking cessation campaigns	47 (79.7)	12 (20.3)	0 (0.0)	0 (0.0)	0 (0.0)

# **Discussion**

It should be noted that this was the first smoking cessation project under the Hospital Pharmacy course. Previous projects primarily revolved on drug management cycle in hospitals — from drug selection, procurement, distribution, and use. Grouping all students and having them work together to promote the smoking cessation initiatives of the college has been an effective active-learning strategy as evidenced by the students' feedback on their key learnings. Moreover, the application of this team-based learning developed by Larry Michaelsen [25], was of value in this endeavor.

The over-all planning of the project was the top challenge for the students. Given a short time line for the project along with conflicting schedules, students have to maximize their time and manpower, a challenge consistent with the findings of Howell et al in 2012 among Irish occupational therapy and psychology students running student-led clinics [26]. Although the hospital has been supportive of the student activities, unforeseen delays due to late approvals were beyond the students' control. Students recommend better planning as solution to the top 2 challenges stated while considering the National Smoking Cessation Framework detailing smoking cessation services and the hospital's ongoing program for better coordination and possible collaboration. While partnerships or collaboration among the college, the hospital and DOH were top recommendations, these cannot fix the administrative problems that students faced, especially in the planning stage. However, collaboration, alongside with capacity building, is encouraged to strengthen linkages to drive the success of smoking cessation programs as recommended by Lando during his presentation at the WHO meeting on Global Policy for Smoking Cessation [27].

The creation of a print material with a simple, yet, effective message is another challenge. While it has been proven to aid in smoking cessation and increase quit rates compared to no intervention, the effect is likely to be small, according to a systematic review by Lancaster and Stead in 2002 [28]. Nevertheless, WHO and DOH have recommendations and available resources on which print materials can be based to suit the target clients.

Students identified low patient engagement as the least of the four main challenges they encountered. While active engagement is a requirement in effective smoking cessation treatment [29], results of the study by Cunningham in 2014 showed that smoking cessation counseling less engaged patients is still effective and concluded that low patient engagement and greater passivity during medical encounters is evidence of unwillingness to quit [30].

Students agreed that the hospital's pharmacy and the pharmacists should be involved in smoking cessation. This concurred with the findings of the 2005 pilot study conducted among third year health profession courses by The GTSS Collaborative Group on 10 countries, including the Philippines [31]. While it is evident in other countries that pharmacists and even pharmacy students have active participation in smoking cessation programs through patient assessment, planning and counseling, these services are seldom seen in the Philippine setting. This is primarily because pharmacy counselling services often involve medication management,



ensuring medication adherence, and promoting rational and safe use of drugs. Moreover, through this endeavor, student-pharmacists were empowered to be more cognizant about their future roles as health care providers and advocates of public health.

The integration of videos and social media as a form of information drive is notable. The result of the student's responses in their view of the effectiveness of the government's as well as the hospital's smoking cessation campaigns were insufficient, according to them. This is probably due to the fact that today's learners are more visual and use of online medium as means of communication or information source is mainstream. The utilization of social media in the students' smoking cessation drive is particularly useful as a means of advertising their campaign and expanding its coverage. This is coherent with the findings of Bakersville and colleagues published in 2015, stating that digital or social media platform can complement Smoker's Help Line cessation service among adults who seek help in quitting tobacco use [32].

While the smoking cessation activities of the students were successfully implemented, the number of people reached, demographics, and patient feedback were not documented. This is due to time constraints and because documentation was not initially included in the planning of the activities. Moreover, the effects of the students' intervention in raising awareness among patients and clients in the hospital cannot be assessed. Nevertheless, the students' experiences will serve as a guide for future endeavors of the course in terms of smoking cessation activities.

# **Conclusion**

Smoking cessation programs require multi-sectoral approach to be effective and sustainable, and students can be active partners in their implementation. This paper highlighted the efforts of Pharmacy student-led smoking cessation activities that empowered students to become health advocates through raising awareness of people, especially those who are smokers deciding to quit or perhaps non-smokers who know people who want to quit but do not know how to start or where to get help. From this activity, students had an opportunity to apply what they have learned about smoking cessation. Moreover, this also prepares them for their future role as pharmacist-counselors and collaborators with other health professionals in the promotion of public health.

It is recommended that evaluation of student-led smoking cessation activities from the target client's perspective be

done to determine its quality and impact in the overall goal of tobacco control. Predictors of smoking cessation and impact of smoking cessation counseling by pharmacists or pharmacy students with or without medical intervention on quit rates should also be investigated.

# **Acknowledgments**

The authors wish to thank the Philippine General Hospital for their support on the implementation of the project in the hospital, the Philippine Pharmacists Association and Mahasarakham University for their collaborative efforts with the UP College of Pharmacy on this endeavor. Special thanks to all Phar155 students for their efforts in the smoking cessation campaign.

### References

- 1. WHO report on the global tobacco Epidemic. Warning about the dangers of tobacco. 2011.
- Rezaei S, Akbari Sari A, Arab M, Majdzadeh R, & Mohammad Poorasl A. Economic burden of smoking: a systematic review of direct and indirect costs. Medical Journal of the Islamic Republic of Iran, 2016;30:397.
- WHO Global Health Observatory (GHO) data.
   Prevalence of tobacco smoking. 2015.
- 4. Global Adult Tobacco Survey. 2015.
- 5. WHO Global Report on the Tobacco Epidemic. MPOWER: Six policies to reverse the tobacco epidemic. 2008.
- Reitsma MB, et al. Smoking prevalence and attributable disease burden in 195 countries and territories, 1990–2015: a systematic analysis from the Global Burden of Disease Study 2015. The Lancet, 2015;389(10082): 1885 - 1906.
- 7. Department of Health. Strengthening the enforcement of tobacco control initiatives under Republic Act 9211. DOH Health Policy Notes, 2008;3(2).
- 8. Executive Order No. 26.
- Shershneva M, Cohen A, Larrison C, Detzler K, Ales M.
   Smoking cessation: a community-based approach to continuing medical education. Translational Behavioral Medicine, 2014;4(4): 391–397.9
- 10. Mcrobbie H, Mcewen A. Helping Smokers to Stop: Advice for Pharmacists in England. National Institute for Health and Clinical Excellence. 2005.
- Kennedy D, Giles J, Chang Z, Small R, Edwards J. Results of a Smoking Cessation Clinic in Community Pharmacy Practice. Journal of the American Pharmaceutical Association, 2002;42(1):51-56



- 12. Poh PY, Ng C . A 4-year Follow-up evaluation of a Pharmacist-managed smoking cessation programme with emphasis on effectiveness of different treatment modalities. Tob. Prev. Cessation. 2016;2(76)
- Goniwiecz M, Llingas E, Czogala J, Koszowski B, Zielinska-Danch W, Sobczak A. The Role of Pharmacists in Smoking Cessation in Poland. PubMed Central: Eval Health Prof. 2010 Mar. 2009; 33(1): 81–95.
- 14. Philbrick AM, Newkirk EN, Farris KB, McDanel DL, Horner KE. Effect of a pharmacist managed smoking cessation clinic on quit rates. Pharmacy Practice, 2009;7(3): 150–156.
- 15. Guevarra JP, Cordova RQ, Mercado CE, Asaad AS. Tobacco use among fourth year Bachelor of Science in Public Health (BSPH) students of the College of Public Health: University of the Philippines Manila, academic year 2012-2013. J Community Health. 2014;39(5):886-93. doi: 10.1007/s10900-014-9866-2.
- Tan MA and Dy-Agra, G. Smoking behavior and practices and smoking cessation in the general population and among health care professionals in Metro Manila. Phil. J. Internal Medicine, 2009;47: 129-135.
- 17. Punzalan FER *et al*. Smoking burden in the Philippines. Acta Medica Philippina. 2013;47(3): 28-31.
- 18. Bilano VL. Smoking attributable burden of lung cancer in the Philippines: a comparative risk assessment. The Lancet. 2013;381: S15.
- 19. Reyes RI, Fernandez LC. Smoking cessation intervention in a tertiary hospital: The UP-Philippine General Hospital stop smoking program experience. Phil. J. Internal Medicine. 2001;39: 337-341.
- Lough LE, Ebbert JO & McLeod TG. Evaluation of a student-run smoking cessation clinic for a medically underserved population. BioMed Central. 2011;4, 55.
- 21. Der DE, You YQ, Wolter TD, Bowen DA & Dale LC. A free smoking intervention clinic initiated by medical students. Mayo Clinic Proceedings. 2001;76(2):144-151.
- Holmqvist M, Courtney C, Meili R, Dick A. Studentrun clinics: Opportunities for interprofessional education and increasing social accountability.

- Journal of Research in Interprofessional Education. 2012:2:3.
- 23. Buckley K, Tsu Tsu L, Hormann S, Giang K, et al. A health sciences student—run smoking cessation clinic experience within a homeless population. Journal of the American Pharmaceutical Association, 2015;57(1):109-115.
- 24. Junio LS. DOH readies smoking cessation clinics. Philippine News Agency. 2017.
- Michaelsen LK, Parmelee DX, McMahan KK, Levine RE. Team-Based Learning for Health Professions Education. 1st ed. Sterling, VA: Stylus Publishing. 2008.
- 26. Howell D, Wittman P, Bundy MB. Interprofessional clinical education for occupational therapy and psychology students: A social skills training program for children with autism spectrum disorders. Journal of Interprofessional Care. 2012;26(1).
- Lando HA. Future research needs and capacity building. Presentation at the WHO meeting on Global Policy for Smoking Cessation hosted by the Ministry of Health of the Russian Federation, Moscow. 2002.
- 28. Lancaster T, Stead LF. Self-help interventions for smoking cessation. Cochrane Database Syst Rev. 2002;(3):CD001118.
- 29. Cupertino AP, et al. Long-term engagement in smoking cessation counseling among rural smokers. From: Journal of Health Care for the Poor and Underserved. 2007;39-51.
- 30. Cunningham P. Patient Engagement During Medical Visits and Smoking Cessation Counseling. JAMA Intern Med.2014;174(8):1291-1298. doi:10.1001/jamainternmed.2014.2170.
- 31. Group TGC. Tobacco use and cessation counselling: Global Health Professionals Survey Pilot Study, 10 countries, 2005. Tobacco Control, 15(Suppl 2), ii31–ii34. http://doi.org/10.1136/tc.2006.015701. 2006
- 32. Baskerville N, Azagba S, Norman C, McKeown K, K Stephen Brown. Nicotine & Tobacco Research, 2015;18(3):351–360.