

# Knowledge, Attitude and Practices on Smoking Cessation Among Physicians in Makati Medical Center

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## ABSTRACT

**BACKGROUND:** Despite major efforts through ordinances and government policies against tobacco use, cessation promotion remain to be a challenge and risk of relapse remain high. The World Health Organization (WHO) has recommended that tobacco-smoking surveys be conducted among health professionals to determine how their smoking knowledge and attitude affect their role as models and educators for patient smokers.

**OBJECTIVE:** To describe and correlate the knowledge, attitudes, and practices on smoking cessation of physicians at the Makati Medical Center

**Study Design:** Descriptive; cross-sectional study

**Methods:** A single center, hospital based, survey was conducted among randomly selected 339 physician in Makati Medical Center for the year 2014. All selected participants were sent a copy of a 47- item self-administered modified WHO Global Health Professional Survey (GHPS).

**Result:** There were 110 respondents out of 339 physicians, giving a response rate of 32.4%. There were more never smokers (70 of 110, 63.6%) than there were ever smokers (40 of 110, 36.4%). 13 out of 40 ever smokers reported to be current smokers while 24 were previous smokers. Less than half of the physician respondents have heard of, read, or are familiar with the smoking cessation guidelines. All physicians agreed that smoking is harmful to health. All physicians have positive attitude regarding smoking cessation. Ever smokers tend to be less active in providing smoking cessation practices compared to never smokers.

**Conclusion:** The physicians in Makati Medical Center were noted to have good knowledge and attitude regarding smoking cessation, regardless of smoking status; Smokers tend to educate less than nonsmokers. Never smokers tend to have a better practice regarding smoking cessation compared to ever smokers. Majority stated that lack of time and training are the common barriers they encounter in their practice. Majority expressed interest in updating their knowledge.

**Keywords:** Smoking Cessation Practices, Knowledge, Attitude, Practices, Physicians, tertiary hospital

## INTRODUCTION

Smoking has long been proven to be an important modifiable risk factor of numerous diseases such as cancers, vascular and lung diseases. Tobacco kills six million people each year. Of these, more than five million die due to direct tobacco use, while 600,000 die as a result of nonsmokers being exposed to second-hand smoke. Tobacco use is projected to cause approximately 450 million deaths in the next 50 years.<sup>1</sup> According to the estimation of the World Health Organization (WHO), there are about 1.3 billion smokers worldwide including one billion men (47% of the world's male population) and 250 million women (12% of the world's female population). In the US, 3.3% of physicians and 21% of the general population are smokers, while in China it is 23% and 34% respectively.<sup>2,3</sup> The death toll from tobacco consumption is now five million people a year. WHO also estimates that by 2030, if present consumption patterns continue, the number of deaths will nearly double, reaching close to 10 million annually with approximately 70% of the deaths occurring in developing countries.

Its global burden on health and environment led to policies by the WHO and member states. The WHO came up with the Tobacco Free Initiative, joined by 168 countries aiming to control tobacco use. The WHO – Western Pacific Regional Office (WHO-WPRO) and the Southeast Asia Tobacco Control Alliance (SEATCA) called to increase taxes on tobacco products thereby decreasing its demand. The Philippine College of Chest Physicians created the Advocacy Committee on Tobacco Control in 2008 to increase public health literacy on tobacco use as a medical condition and patient empowerment. Different guidelines in smoking cessation/intervention have been made in different countries- National Institute for health and Clinical Excellence Smoking Cessation Services in UK (NICE), The Royal Australian College of General Practitioners, the United states' CDC. In the local setting, the Philippine College of Chest Physicians (PCCP) Council on Tobacco or Health & Air Pollution also recently came up with a Brief Tobacco Intervention Program.

Despite major efforts through ordinances

and government policies against tobacco use, cessation promotion remain to be a challenge and risk of relapse remain high. Health professionals, especially physicians play a very important role in reducing this problem. Physicians are in a unique position to spot smokers and initiate smoking cessation counseling because they are able to integrate the various aspects of nicotine dependence and its bad effects. Even healthcare professionals who smoke find it difficult to quit. Nonsmoker physicians identified lack of willpower and interest as barriers to quitting while smoking physicians saw stress as a barrier. Smoking physicians are less likely to initiate cessation interventions.<sup>4</sup> Smoking is a significant threat to health and physicians have an important role to fulfill in its cessation.

Health professionals have a very significant role in helping smokers quit. Although a lot of smokers would quit on their own, some would benefit from physician's advice. Simple advice has small effect on cessation rates. According to a study (Cochrane Tobacco Addiction Group), assuming an unassisted quit rate of 2 to 3%, a brief advice intervention can increase quitting by a further 1 to 3%.

There have been numerous studies on smoking cessation, smoking interventions, as well as epidemiological data stating the harmful effects of smoking, yet it remains to be a tough problem to eradicate. There are similar studies in the region of Southeast Asia, but there is paucity of data in the Philippines regarding smoking cessation practices. The researcher found it relevant to conduct a baseline survey on the knowledge, attitude of physicians in Makati Medical Center. A KAP study measures the knowledge, attitude and practices of a community measuring the extent of smoking as a medical problem of both physicians and patients. This study will be of significant help in evaluating the effectiveness of the intervention and identifying the weakness and limitations encountered in the local setting of physicians regarding smoking cessation practices and why tobacco addiction remains to be a very difficult problem to eradicate. It is in analyzing the situation that we can come up with improvements in our smoking cessation program in the future.

## **Research Hypothesis**

Physicians in Makati Medical Center have good knowledge, attitude and practice on smoking cessation.

## **OBJECTIVES**

### **General Objective:**

To describe and correlate the knowledge, attitudes, and practices on smoking cessation of physicians at the Makati Medical Center

### **Specific objectives:**

1. To evaluate the knowledge and training of physicians on smoking cessation policies and treatment modalities based on WHO, CDC, and Philippine College of Chest Physicians guidelines
2. To measure the proportion of smokers among physicians and correlate the attitudes on smoking cessation practices between smokers and non-smokers
3. To describe the practices and barriers encountered by MMC physicians in providing smoking cessation counseling to patients

## **Methodology**

**Study design:** Descriptive; cross-sectional study

### **Study population:**

A single center, hospital based, cross-sectional survey was conducted among physician consultants, fellows, and residents working in Makati Medical Center for the year 2014.

### **Sample size estimation:**

Based on the Slovin's formula, the sample size for a population of 945 physicians is 282 respondents. The respondents were 189 consultants, 15 fellows, 78 residents. This sample size is set at a 5% margin of error at a 95% confidence interval. To account for a non-response rate of approximately 20%, 227

consultants, 18 fellows, and 94 residents (339 in total) were recruited to the study.

### **Plan of randomization and recruitment:**

An alphabetical list of consultants, fellows, and residents across the different departments was obtained, and numbered accordingly. Stratified random sampling was employed according to work status (consultant, fellow, resident). A random number generator was used to determine which doctors will be included in the survey.

Once the list of doctors was generated, questionnaires were distributed to doctors' clinics or personally given by the principal investigator to the selected subjects. Informed consent forms were attached to the survey forms. The principal investigator was responsible in obtaining the consent.

### **Questionnaire:**

A 47- item modified self administered questionnaire was used based on the World Health Organization Global Health Professional Survey (GHPS) modified by the Queen's University Family Medicine Development Program in the Balkans Region KAP questionnaire and Deluchi (S-KAP Instrument).<sup>6,7</sup> (See Appendix A)

All valid data from respondents with complete response to the surveys were included in the analysis. Missing values were not replaced or estimated during analysis.

These statistical tests were measured at a 0.05  $\alpha$ -level of significance under a 2-tailed test. Statistical Packages for Social Sciences or SPSS version 20.0 was used for analysis.

## **Results**

### **General characteristics of 110 physician respondents**

There were 110 respondents out of 339 who were given survey forms, giving a response rate of 32.4% after a waiting time of three weeks. The

respondents were compared and divided into 2 groups: Ever Smokers- include the current and occasional smokers as well as those who quit; Never smokers-include those who never smoked.

There were **more never smokers** (70 of 110, 63.6%) than there were ever smokers (40 of 110,

36.4%). Compared to never smokers, the ever smokers had a **higher proportion of females** ( $p = 0.002$ ) and reported to see more outpatients per week ( $p = 0.027$ ) compared to the never smokers (Table 1). Age, specialty, level of training were similar in the two groups.

**TABLE 1. General characteristics of the 110 physician respondents**

|                                          | Ever Smokers<br>N = 40       | Never Smokers<br>N = 70 | P-value      |
|------------------------------------------|------------------------------|-------------------------|--------------|
|                                          | Frequency (%), Mean $\pm$ SD |                         |              |
| Age                                      | 40.24 $\pm$ 12.20            | 38.23 $\pm$ 12.82       | 0.425        |
| Gender                                   |                              |                         |              |
| Male                                     | 16 (40)                      | 51 (72.9)               | <b>0.002</b> |
| Female                                   | 23 (60)                      | 19 (27.1)               |              |
| Specialty                                |                              |                         |              |
| Internal Medicine                        | 13 (32.5)                    | 34 (48.6)               | 0.089        |
| Pediatrics                               | 1 (2.5)                      | 4 (5.7)                 |              |
| Psychiatry                               | 0 (0)                        | 4 (5.7)                 |              |
| Surgery                                  | 5 (12.5)                     | 3 (4.3)                 |              |
| Others                                   | 20 (50.0)                    | 25 (35.7)               |              |
| Current level of training                |                              |                         |              |
| Consultant                               | 18 (45)                      | 29 (41.4)               | 0.588        |
| Fellow                                   | 3 (7.5)                      | 10 (14.3)               |              |
| Resident                                 | 18 (45)                      | 31 (44.3)               |              |
| Patients per outpatient basis every week |                              |                         |              |
| Less than 10 patients                    | 1 (2.5)                      | 15 (21)                 | <b>0.027</b> |
| 10-20 patients per week                  | 12 (30)                      | 19 (27.1)               |              |
| More than 20                             | 26 (65)                      | 36 (51.4)               |              |

### **Smoking characteristics of current and previous smokers**

Of the 40 ever-smoker physician respondents, **13 reported to be current smokers** while 24 were previous smokers. Three respondents did not specify whether they were currently or previously smoking. Among the physicians who were currently smoking, they started to smoke at a mean age of 19.46 years old, smokes an average of 5.77 cigarettes a day. Only 28.2% of the current smokers had managed to stop smoking for at least one week (Table 2).

When asked about their feelings of quitting, **8 out of 13 current smokers** (61%) are not ready to quit within the next 6 months; **3 out the 13 current smokers** (23%) think of quitting within the next 6 months; and **2 (15%)** are ready to quit during the time of survey.

**TABLE 2. Smoking profile of current smokers (n = 13)**

|                                           |              |
|-------------------------------------------|--------------|
| Age initiated smoking on a regular basis  | 19.46 ± 4.70 |
| Number of cigarettes smoked per day       | 5.77 ± 3.79  |
| Has stopped smoking for at least one week | 11 (84.6)    |

Previous smokers (n = 24) reported to have begun smoking at **18 years old**, and stopped at a mean age of **31 years old**. There were more respondents who smoked daily (62.5%) rather than occasionally (37.5%).

**TABLE 3. Smoking profile of previous smokers (n = 24)**

|                       | Frequency (%), Mean ± SD |
|-----------------------|--------------------------|
| Smoked daily          | 15 (62.5)                |
| Smoked occasionally   | 9 (37.5)                 |
| Age initiated smoking | 18.04 ± 4.32             |
| Age stopped smoking   | 31.17 ± 8.94             |

### Awareness on smoking cessation guidelines

Less than half of the physician respondents have heard of, read, or are familiar with the smoking cessation guidelines of the Philippine College of Chest Physicians, World Health Organization, or Center for Disease Control. A significantly greater proportion of ever smokers have read the guidelines compared to never smokers (27.5% vs 10% p = 0.017)

**TABLE 4. Awareness on smoking cessation guidelines**

|                                             | Ever smokers<br>N = 40 | Never smokers<br>N = 70 | P-value      |
|---------------------------------------------|------------------------|-------------------------|--------------|
|                                             | Frequency (%)          |                         |              |
| Heard of the guidelines                     | 11 (27.5)              | 33 (47.1)               | <b>0.047</b> |
| Read the guidelines                         | 11 (27.5)              | 7 (10)                  | <b>0.017</b> |
| Familiar with the content of the guidelines | 3 (7.5)                | 10 (14.3)               | 0.368        |

### Attitudes towards smoking and smoking cessation

**Both ever and never smokers** consistently *strongly* agreed that smoking is harmful to health, that hospitals should be smoke-free, and that smoking should be prohibited in enclosed public places.

**TABLE 5a. Attitudes towards smoking in general**

|                                                           | Ever smokers<br>N = 40 | Never smokers<br>N = 70 | P-value |
|-----------------------------------------------------------|------------------------|-------------------------|---------|
|                                                           | Median (Range)         |                         |         |
| Smoking is harmful to your health.                        | 1 (1-2)                | 1 (1-2)                 | 0.324   |
| Hospitals and health care centres should be "smoke-free". | 1 (1-4)                | 1 (1-4)                 | 0.181   |
| Smoking in enclosed public places should be prohibited.   | 1 (1-3)                | 1 (1-2)                 | 0.140   |

Scores range from 1 – Strongly agree to 5 – Strongly disagree

For questions on passive smoking, physicians generally agreed that maternal smoking during pregnancy increased the risk of SIDS. However, the smokers tended to answer *agree* to passive smoking to be associated to neonatal death or lower respiratory tract illnesses, while never smokers replied *strongly agree*.

**TABLE 5b. Attitudes towards passive smoking**

|                                                                                                                 | Ever smokers<br>N = 40 | Never smokers<br>N = 70 | P-value |
|-----------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|---------|
|                                                                                                                 | Median (Range)         |                         |         |
| Neonatal death is associated with passive smoking.                                                              | 2 (1-3)                | 1 (1-4)                 | 0.294   |
| Maternal smoking during pregnancy increases the risk of Sudden Infant Death Syndrome                            | 1 (1-4)                | 1 (1-4)                 | 0.184   |
| Paternal smoking increases the risk of lower respiratory tract illnesses such as pneumonia in exposed children. | 2 (1-4)                | 1 (1-3)                 | 0.380   |

Scores range from 1 – Strongly agree to 5 – Strongly disagree

Compared to never smokers, ever smokers agreed to a lesser degree that smoking health professionals are less likely to advise people to stop smoking, that they should serve as role models or set a good example by not smoking (Table 5c).

**TABLE 5c. Attitudes towards the role of health professionals in smoking cessation**

|                                                                                                          | Ever<br>smokers<br>= 40 | N | Never<br>smokers<br>N = 70 | P-value      |
|----------------------------------------------------------------------------------------------------------|-------------------------|---|----------------------------|--------------|
|                                                                                                          | Median (Range)          |   |                            |              |
| <b>Health professionals who smoke are less likely to advise people to stop smoking.</b>                  | 2.5 (1-5)               |   | 2 (1-5)                    | <b>0.018</b> |
| Health professionals should get specific training on cessation techniques.                               | 2 (1-4)                 |   | 2 (1-3)                    | 0.156        |
| Health professionals should speak to community groups about smoking.                                     | 2 (1-3)                 |   | 2 (1-4)                    | 0.180        |
| Health professionals should routinely advise patients who smoke to avoid smoking around children.        | 1 (1-3)                 |   | 1 (1-3)                    | 0.214        |
| <b>Health professionals serve as role models for their patients and the public.</b>                      | 1 (1-4)                 |   | 1 (1-3)                    | <b>0.021</b> |
| <b>Health professionals should set a good example by not smoking.</b>                                    | 1 (1-4)                 |   | 1 (1-3)                    | <b>0.033</b> |
| Health professionals should routinely ask about their patients smoking habits.                           | 1 (1-5)                 |   | 1 (1-2)                    | 0.119        |
| Health professionals should routinely advise their smoking patients to quit smoking.                     | 1 (1-3)                 |   | 1 (1-2)                    | 0.378        |
| Patient's chances of quitting smoking are increased if a health professional advises him or her to quit. | 2 (1-4)                 |   | 1 (1-4)                    | 0.054        |

*Scores range from 1 – Strongly agree to 5 – Strongly disagree*

Both ever and never smokers strongly agreed on the ban of cigarette smoking promotion, and to impose barriers to access, e.g. increase in prices.

**TABLE 5d. Attitudes towards the sales and promotion of tobacco use**

|                                                                        | Ever<br>smokers<br>N = 40 | Never<br>smokers<br>N = 70 | P-value |
|------------------------------------------------------------------------|---------------------------|----------------------------|---------|
|                                                                        | Median (Range)            |                            |         |
| Health warnings on cigarette packages should be in big print.          | 1 (1-4)                   | 1 (1-2)                    | 0.524   |
| Tobacco sales to children and adolescents should be banned.            | 1 (1-2)                   | 1 (1-2)                    | 0.633   |
| Sport sponsorships by tobacco industry should be banned.               | 1 (1-4)                   | 1 (1-4)                    | 0.461   |
| There should be a complete ban on the advertising of tobacco products. | 1 (1-5)                   | 1 (1-4)                    | 0.996   |
| The price of tobacco products should be increased sharply.             | 1 (1-5)                   | 1 (1-4)                    | 0.389   |

*Scores range from 1 – Strongly agree to 5 – Strongly disagree*

### Practices relating to smoking cessation of the 110 physician respondents

Most of the respondents practiced in urban settings, where smoke-free policies were implemented. However, about a quarter of the respondents did not know whether any such policy was in place.

Nearly half (44%) of the never smokers reported to provide self-help materials from their workplace for smoking cessation, which was significantly greater than the 30% of ever smokers who did the same. Similarly, 55% of the never smokers reported

to provide counseling, versus the 22.5% of ever smokers who reported to do so as well.

Another notable finding was that almost half of the ever smokers did not know of medications available in their work practice locations for smoking cessation (45.6% vs 18%,  $p = 0.008$ ).

Half of the respondents in both groups perceived themselves to be *somewhat* prepared to counsel patients on smoking cessation. Less than 20% of the respondents had any form of training for smoking cessation counseling.

**TABLE 6. Smoking cessation practices by the 110 physician respondents**

| PRACTICE                                              | Ever smokers  | Never smokers | P-value |
|-------------------------------------------------------|---------------|---------------|---------|
|                                                       | N = 40        | N = 70        |         |
|                                                       | Frequency (%) |               |         |
| Workplace/practice located                            |               |               |         |
| Urban                                                 | 38 (95)       | 67 (95.7)     | 0.917   |
| Rural                                                 | 1 (2.5)       | 2 (2.9)       |         |
| Both                                                  | 1 (2.5)       | 1 (1.4)       |         |
| A smoke-free policy is in place at workplace          |               |               |         |
| Yes                                                   | 29 (72.5)     | 48 (68.6)     | 0.861   |
| No                                                    | 2 (5)         | 3 (4.3)       |         |
| Don't know                                            | 9 (22.5)      | 19 (27.1)     |         |
| Interventions available to help patients stop smoking |               |               |         |
| Traditional remedies                                  |               |               |         |
| Yes                                                   | 9 (22.5)      | 20 (28.6)     | 0.094   |
| No                                                    | 12 (30)       | 31 (44.2)     |         |
| Don't know                                            | 19 (47.5)     | 19 (27.1)     |         |
| Self- help materials                                  |               |               |         |
| Yes                                                   | 12 (30)       | 31 (44.3)     | 0.002   |
| No                                                    | 11 (27.5)     | 30 (42.9)     |         |
| Don't know                                            | 17 (42.5)     | 9 (12.9)      |         |
| Counselling                                           |               |               |         |
| Yes                                                   | 9 (22.5)      | 39 (55.7)     | 0.001   |
| No                                                    | 12 (30)       | 19 (27.1)     |         |
| Don't know                                            | 19 (47.5)     | 12 (17.1)     |         |
| Medication                                            |               |               |         |
| Yes                                                   | 12 (30)       | 24 (34.3)     | 0.008   |
| No                                                    | 10 (25)       | 33 (47.1)     |         |
| Don't know                                            | 18 (45)       | 13 (18.6)     |         |

|                                                                                                  |           |            |       |
|--------------------------------------------------------------------------------------------------|-----------|------------|-------|
| Do you give patients advice regarding smoking cessation                                          |           |            |       |
| Always                                                                                           | 8 (20)    | 19 (27.1)  | 0.169 |
| Very often                                                                                       | 8 (20)    | 25 (35.7)  |       |
| Often                                                                                            | 11 (27.5) | 11 (15.7)  |       |
| Occasionally                                                                                     | 11 (27.5) | 14 (20)    |       |
| Interventions used to help patients stop smoking                                                 |           |            |       |
| Traditional remedies                                                                             |           |            | 0.580 |
| Yes                                                                                              | 17 (42.5) | 26 (387.1) |       |
| No                                                                                               | 23 (57.5) | 44 (62.9)  |       |
| Don't know                                                                                       | 0 (0)     | 0 (0)      | 0.291 |
| Self- help materials                                                                             | 10 (25.5) | 25 (35.7)  |       |
| Counselling                                                                                      |           |            |       |
| Yes                                                                                              | 26 (65)   | 57 (81.4)  | 0.054 |
| No                                                                                               | 14 (35)   | 13 (18.6)  |       |
| Don't know                                                                                       | 0 (0)     | 0 (0)      |       |
| Medication                                                                                       | 8 (20)    | 14 (20)    | 0.805 |
| How well prepared do you feel you are when counselling patients on how to stop cigarette smoking |           |            |       |
| Very well prepared                                                                               | 10 (25)   | 12 (17.2)  | 0.598 |
| Somewhat prepared                                                                                | 20 (50)   | 40 (57.1)  |       |
| Not at all prepared                                                                              | 10 (25)   | 18 (25.7)  |       |
| Received any formal training in smoking cessation approaches to use with patients                |           |            |       |
| Formal training during medical or nursing school                                                 | 3 (7.5)   | 9 (12.9)   | 0.530 |
| Formal training during specialization programs                                                   | 2 (5)     | 8 (11.4)   | 0.322 |
| Special conferences, symposia or workshops                                                       | 8 (20)    | 13 (18.6)  | 1.000 |

Ever and never smokers report to spend approximately two to three minutes on counseling patients on smoking cessation. However, **more never smokers** report to be interested in updating smoking cessation skills compared to ever smokers. **Eighty-five (77%)** of the respondents stated that they are interested to update their smoking cessation counseling skills.

|                                                            | <b>Ever<br/>Smokers<br/>N = 40</b> | <b>Never<br/>Smokers<br/>N = 70</b> | <b>P-<br/>value</b> |
|------------------------------------------------------------|------------------------------------|-------------------------------------|---------------------|
| Minutes spent on smoking cessation counseling              | 2 (1-3)                            | 3 (1-4)                             | 0.095               |
| Interested in updating smoking cessation counseling skills | 25 (62.5)                          | 60 (85.7)                           | <b>0.009</b>        |

For the open-response item on barriers to offering smoking cessation counseling to patients, there were nine common replies (Table 7).

**Table 7. Most commonly cited barriers to offer smoking cessation counseling**

|                                                          | <b>Frequency (%)</b> |
|----------------------------------------------------------|----------------------|
| Lack of time                                             | 23 (20.9)            |
| Education/training of physician                          | 17 (15.5)            |
| Patient's compliance                                     | 15 (13.6)            |
| Competency to counsel                                    | 13 (11.8)            |
| Lack of counselling materials/resources                  | 11 (10)              |
| Perceive that it is an invasion of the patient's privacy | 4 (3.6)              |
| Doctors' compliance                                      | 3 (2.7)              |
| Lack of support (i.e. hospital, community, society)      | 3 (2.7)              |
| Nicotine dependence                                      | 2 (1.8)              |

## **Discussion and Conclusion:**

Overall, **28.3%** (17.3 million) of the Philippine population aged 15 years old and over in the Philippines currently smoke tobacco; 47.7 % ( 14.6 million) are men, and 9.0% (2.8 million) are women. In this study, the prevalence of current smokers among our physician respondents (**18%**) is lower than the general population but notably with predominance of females.<sup>16</sup> This study is similar to a local survey among cardiologists and pulmonologists at a local government hospital stating that prevalence of smoking in physicians are less compared to the general population, hence physicians are less likely to smoke.<sup>17</sup>

The physicians in Makati Medical Center undeniably have good knowledge, favorable attitude regarding smoking cessation. Of the 110 physician respondents, all agreed regarding the harmful effects of passive and active smoking. Majority have positive attitude on smoking cessation practices. Some Ever Smokers seem to be defensive and agree at a lesser degree that health professionals who smoke are less likely to initiate advise to stop smoking. More never smokers reported that they initiate counseling compared to ever smokers; therefore, physician smokers seem to educate less compare to nonsmokers.

Half of the respondents feel that they are only somewhat prepared to offer smoking cessation counseling. In fact, only less than 20% claims to have any formal training aside from medical school.

### **Barriers Encountered**

The most common reason that limit intervention encountered by the respondents was lack of time, formal training and materials.

Thirteen percent of physician respondents feel that they lack competency to initiate counseling. For the patient part, 13% believe that patient compliance is a factor. Others mentioned nicotine dependence and lack of support from the community regarding smoking. In a local study done in a government hospital, they have identified principal reasons for difficulty quitting in the general population are social and environmental goads, particularly in the workplace, and associative processes. <sup>18</sup>

Only half of all smokers seeing a primary care physician report being asked about their smoking (Robinson et al, 1995), and only minority of smokers are being advised to quit (CDC, 1993).

In the US, the National Cancer Institute projects that if physicians assisted even 10% of their patient smokers, tobacco users in the US would drop by an additional 2 million people annually (Fiore et al, 1990). Physicians do make a difference in the battle against smoking.

Smoking cessation involves multiple specialties and includes a behavioral approach. Structured counseling is effective in smoking cessation rates according to a local study. The effectiveness of counseling may be influenced by the subject's intention to quit and the number of sticks consumed per day at baseline.<sup>19</sup>

In conclusion, physicians in Makati Medical Center have good knowledge and attitude regarding smoking cessation; however, there is problem translating these into practice due to the mentioned barriers and smoking status of physicians.

### **Limitation of the Study and Recommendations**

The study is limited by the poor response rate; therefore, it may not represent accurately the population being studied. More than half of survey forms distributed was not returned. Ten consultants declined to participate, the others were either on leave or busy at the time the survey was conducted. A higher response rate would give more accurate results. A personal interview would probably yield a more favorable result compared to self-administered survey; however, this will need more time, investigators and manpower. On the other hand, a longer survey period and more careful form retrieval should be done for future studies. New surveys are also being followed in other institutions-to compare different populations of physicians.

This study identifies the need for additional training of doctors. The Philippine College of Chest Physicians have come up with the Brief Tobacco Intervention Skills Certification Program to train health professionals, educators and lay community members interested in offering basic services to help tobacco user quit.<sup>18</sup>

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20. Stead LF, Physician advice for smoking cessation (Review). The Cochrane Collaboration. 2008

**APPENDIX A**

Modified WHO Global Health Professional Survey  
(Questions from Queen's University Family Medicine Development Program in the Balkans Region KAP questionnaire and Deluchi's S-KAP Instrument)

Date: \_\_\_\_\_  
Form number: \_\_\_\_\_

Hospital: \_\_\_\_\_  
1. Private 2. Government

|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                         |                   |          |           |             |                      |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|-----------|-------------|----------------------|
| <b>Section 1: Demographics (Please encircle your answer)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                         |                   |          |           |             |                      |
| 1                                                            | What is your gender? 1. Female 2. Male                                                                                                                                                                                                                                                                                                                                                                                  |                   |          |           |             |                      |
| 2                                                            | What is your age? Age _____                                                                                                                                                                                                                                                                                                                                                                                             |                   |          |           |             |                      |
| 3                                                            | What is your specialty? 1. Internal Medicine<br>2. Pediatrics<br>3. Psychiatry<br>4. Others (pls. specify) _____                                                                                                                                                                                                                                                                                                        |                   |          |           |             |                      |
| 4                                                            | What is your current level of training? 1. Consultant 2. Fellow 3. Resident                                                                                                                                                                                                                                                                                                                                             |                   |          |           |             |                      |
| 5                                                            | How many patients do you see per outpatient basis every week?<br>1. Less than 10 patients 2. 10-20 patients per week 3. More than 20                                                                                                                                                                                                                                                                                    |                   |          |           |             |                      |
| <b>Section 2: Cigarette use</b>                              |                                                                                                                                                                                                                                                                                                                                                                                                                         |                   |          |           |             |                      |
| 6                                                            | Which of the following best describes your smoking behaviour? ( Please circle your answer)<br>1. I have never smoked cigarettes Go to question 14<br>2. I have quit smoking Go to question 11<br>3. I currently smoke occasionally (Some days) Go to question 7<br>4. I currently smoke every day Go to question 7                                                                                                      |                   |          |           |             |                      |
| <b>If you CURRENTLY smoke</b>                                |                                                                                                                                                                                                                                                                                                                                                                                                                         |                   |          |           |             |                      |
| 7                                                            | How old were you when you first started to smoke on a <u>regular basis</u> ? Age _____                                                                                                                                                                                                                                                                                                                                  |                   |          |           |             |                      |
| 8                                                            | <u>On the days that you smoke</u> , how many cigarettes do you smoke per day? (Give average number) # _____                                                                                                                                                                                                                                                                                                             |                   |          |           |             |                      |
| 9                                                            | Have you ever stopped smoking for <u>at least one week</u> ? 1. Yes 2. No                                                                                                                                                                                                                                                                                                                                               |                   |          |           |             |                      |
| 10                                                           | Which of the following best describes how you feel about your smoking?<br>1. Not ready to quit within the next 6 months Go to 14<br>2. Thinking about quitting within 6 months Go to 14<br>3. Ready to quit NOW Go to 14                                                                                                                                                                                                |                   |          |           |             |                      |
| <b>If you smoked in the PAST</b>                             |                                                                                                                                                                                                                                                                                                                                                                                                                         |                   |          |           |             |                      |
| 11                                                           | When you smoked in the past, how often did you smoke?<br>1. Daily (Every day) 2. Occasionally (Some days)                                                                                                                                                                                                                                                                                                               |                   |          |           |             |                      |
| 12                                                           | How old were you when you first started to smoke on a <u>regular basis</u> ? Age _____                                                                                                                                                                                                                                                                                                                                  |                   |          |           |             |                      |
| 13                                                           | How old were you when you stopped smoking completely? Age _____                                                                                                                                                                                                                                                                                                                                                         |                   |          |           |             |                      |
| <b>Section 3: Knowledge and attitudes</b>                    |                                                                                                                                                                                                                                                                                                                                                                                                                         |                   |          |           |             |                      |
| 14                                                           | Different Centers, both international and local, such as the <b>CDC, WHO, Philippine College of Chest Physicians</b> have issued guidelines for healthcare professionals for treating nicotine dependence.<br><br>a) Have you <u>heard</u> of these guidelines? 1. Yes 2. No<br>b) Have you <u>read</u> these guidelines? 1. Yes 2. No<br>c) Are you <u>familiar</u> with the content of these guidelines? 1. Yes 2. No |                   |          |           |             |                      |
|                                                              | Check appropriate box                                                                                                                                                                                                                                                                                                                                                                                                   | 1. Strongly agree | 2. Agree | 3. Unsure | 4. Disagree | 5. Strongly Disagree |
| 15                                                           | Smoking is harmful to your health.                                                                                                                                                                                                                                                                                                                                                                                      |                   |          |           |             |                      |
| 16                                                           | Neonatal death is associated with passive smoking.                                                                                                                                                                                                                                                                                                                                                                      |                   |          |           |             |                      |
| 17                                                           | Maternal smoking during pregnancy increases the risk of Sudden Infant Death Syndrome.                                                                                                                                                                                                                                                                                                                                   |                   |          |           |             |                      |
| 18                                                           | Passive smoking increases the risk of <u>lung disease</u> in non-smoking adults.                                                                                                                                                                                                                                                                                                                                        |                   |          |           |             |                      |
| 19                                                           | Passive smoking increases the risk of <u>heart disease</u> in non-smoking adults.                                                                                                                                                                                                                                                                                                                                       |                   |          |           |             |                      |
| 20                                                           | Paternal smoking increases the risk of lower respiratory tract illnesses such as pneumonia in exposed children.                                                                                                                                                                                                                                                                                                         |                   |          |           |             |                      |
| 21                                                           | Health professionals who smoke are less likely to advise people to stop smoking.                                                                                                                                                                                                                                                                                                                                        |                   |          |           |             |                      |

|    | Check appropriate box                                                                                                                                                                                                                                                                                                                              | 1. Strongly agree | 2. Agree | 3. Unsure | 4. Disagree | 5. Strongly Disagree |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|-----------|-------------|----------------------|
| 22 | Health professionals should get specific training on cessation techniques.                                                                                                                                                                                                                                                                         |                   |          |           |             |                      |
| 23 | Health professionals should speak to community groups about smoking.                                                                                                                                                                                                                                                                               |                   |          |           |             |                      |
| 24 | Health professionals should routinely advise patients who smoke to avoid smoking around children.                                                                                                                                                                                                                                                  |                   |          |           |             |                      |
| 25 | Health warnings on cigarette packages should be in big print.                                                                                                                                                                                                                                                                                      |                   |          |           |             |                      |
| 26 | Tobacco sales to children and adolescents should be banned.                                                                                                                                                                                                                                                                                        |                   |          |           |             |                      |
| 27 | Sport sponsorships by tobacco industry should be banned.                                                                                                                                                                                                                                                                                           |                   |          |           |             |                      |
| 28 | There should be a <u>complete</u> ban on the advertising of tobacco products.                                                                                                                                                                                                                                                                      |                   |          |           |             |                      |
| 29 | Hospitals and health care centres should be "smoke-free".                                                                                                                                                                                                                                                                                          |                   |          |           |             |                      |
| 30 | The price of tobacco products should be increased sharply.                                                                                                                                                                                                                                                                                         |                   |          |           |             |                      |
| 31 | Health professionals serve as role models for their patients and the public.                                                                                                                                                                                                                                                                       |                   |          |           |             |                      |
| 32 | Health professionals should set a good example by not smoking.                                                                                                                                                                                                                                                                                     |                   |          |           |             |                      |
| 33 | Patient's chances of quitting smoking are increased if a health professional advises him or her to quit.                                                                                                                                                                                                                                           |                   |          |           |             |                      |
| 34 | Health professionals should routinely ask about their patients smoking habits.                                                                                                                                                                                                                                                                     |                   |          |           |             |                      |
| 35 | Health professionals should routinely advise their smoking patients to quit smoking.                                                                                                                                                                                                                                                               |                   |          |           |             |                      |
| 36 | Smoking in enclosed public places should be prohibited.                                                                                                                                                                                                                                                                                            |                   |          |           |             |                      |
|    | <b>Section 4: Worksite practice</b>                                                                                                                                                                                                                                                                                                                |                   |          |           |             |                      |
| 37 | Where is your workplace/practice located? 1. Urban 2. Rural<br>3. Both                                                                                                                                                                                                                                                                             |                   |          |           |             |                      |
| 38 | What sort of smoke-free policy is in place at your workplace?<br>1. No smoking policy in place GO TO 39<br>2. Smoking rooms available GO TO 39<br>3. No smoking allowed at all on the premises GO TO 38                                                                                                                                            |                   |          |           |             |                      |
| 39 | Is the smoke-free policy enforced? 1. Yes: always 2. Yes: sometimes 3. No 4. Don't Know                                                                                                                                                                                                                                                            |                   |          |           |             |                      |
| 40 | Are the following interventions AVAILABLE to YOU to help your patients stop smoking?<br>a Traditional remedies? 1. Yes 2. No 3. Don't know<br>b Self- help materials 1. Yes 2. No 3. Don't know<br>c Counselling 1. Yes 2. No 3. Don't know<br>d Medication (Nicotine gum, patch, bupropion) 1. Yes 2. No 3. Don't know<br>e Other (specify) _____ |                   |          |           |             |                      |
| 41 | Do you give patients advice regarding smoking cessation?<br>1. Always 2. Very often 3. Often 4. Occasionally 5. Never (Why not? Eg. Lack of time) _____                                                                                                                                                                                            |                   |          |           |             |                      |
| 42 | Which of the following interventions do you USE to help your patients stop smoking?<br>a Traditional remedies? (cold turkey) 1. Yes 2. No<br>b Self- help materials 1. Yes 2. No<br>c Counselling 1. Yes 2. No<br>d Medication (Nicotine gum, patch, bupropion) 1. Yes 2. No<br>e Other (specify) _____                                            |                   |          |           |             |                      |
| 43 | How well prepared do you feel you are when counselling patients on how to stop cigarette smoking?<br>1. Very well prepared. 2. Somewhat prepared 3. Not at all prepared.                                                                                                                                                                           |                   |          |           |             |                      |
| 44 | Have you ever received any formal training in smoking cessation approaches to use with your patients ?<br>a Formal training during medical or nursing school 1. Yes 2. No<br>b Formal training during specialization programs 1. Yes 2. No<br>c Special conferences, symposia or workshops 1. Yes 2. No<br>d Other explain _____                   |                   |          |           |             |                      |
| 45 | What do you think is the most common reason/barrier that limit capacity to offer smoking counselling?<br>_____                                                                                                                                                                                                                                     |                   |          |           |             |                      |
| 46 | How many minutes do you spend discussing tobacco use, with patients who smoke, during a typical patient visit?<br>1. no time 2. 3 to 10 minutes 3. 1 - 3 minutes 4. more than 10 minutes                                                                                                                                                           |                   |          |           |             |                      |
| 47 | Would you be interested in updating your smoking cessation counseling skills? 1. Yes 2. No                                                                                                                                                                                                                                                         |                   |          |           |             |                      |