

The Awareness on Passive Smoking among Smokers in Mukim Sg Pelek, Sepang, Selangor, Malaysia

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Abstract- Tobacco smoking is one of the biggest public health threats to the world, not only harmful for the smokers but also for the second-hand smokers. This study aims to assess the awareness on passive smoking among smokers' villagers in Sg Pelek, Sepang, Selangor. A cross sectional study was done by using simple random sampling. Respondents that fulfill the inclusion & exclusion criteria were interviewed with validated questionnaires and data were analyze using SPSS. The prevalence of smoking was 13.9%. The awareness on passive smoking among smokers was 42.4% and 57.1% of them still smoke in front of others despite of having the awareness. In order to make the public places in Malaysia as smoke free zones, an integrated effort needs to be initiated by various authorities. The perception of secondhand smoke health effects among Malaysians should also be instilled.

Index Terms- Smoking, Passive smoking, Awareness, Villagers, Selangor.

I. INTRODUCTION

The tobacco epidemic is one of the biggest public health threats to the world which kills six million smokers and 890 000 non-smokers [1]. In a study done in a rural area in Negeri Sembilan, the prevalence of current smokers was 34.2% [2]. However, the National Morbidity and Health Survey done in 2015, shows approximately 22.8% of Malaysian population aged 15 years and above were smokers [3].

Tobacco use is harmful not only for the smokers but also for the second-hand smokers, also known as passive smokers as it

II. RESEARCH METHODOLOGY

A cross-sectional study was conducted in a village area in Mukim Sg Pelek, Sepang, Selangor. The area which majority is Chinese population has 2000 residents with 450 houses. Simple random sampling was done to select the number of houses and respondents with the estimation of 262 sample size. All Malaysian who were above 18 years old, not mentally retarded, deaf and mute were selected as respondents.

Data was collected through assisted interview using a questionnaire from National Health Morbidity Survey 2015 [11].

can cause disease, disability, and death [4]. The process of non-smokers who breathe the same toxic chemicals in tobacco as the smokers do is called involuntary smoking or passive smoking [5]. Out of six million deaths due to smoking, 10% is attributed to the exposure of second-hand cigarette smoke [6]. Second-hand smoke also causes numerous health problems in infants and adults including asthma attacks, respiratory infections, ear infections, sudden infant death syndrome, coronary heart disease, stroke and lung cancer [7].

A study done in a district of India reports that 51% of the respondents have an above average awareness on the dangers of passive smoking [8], while 56.1% of respondents in Southern Nigeria had high knowledge on the negative impact of smoking on health and well-being [9]. In a study among working Malaysian adults' states 99.5% felt that people should not smoke in front of children [10].

Thus, this study was designed to determine the awareness on passive smoking among smokers in Mukim Sungai Pelek, Sepang, Selangor. Therefore, findings can then be used to increase the awareness on passive smokers among the smokers specifically and residents generally, by implementing health communication to change their attitudes towards passive smokers.

The data has been analyzed using descriptive statistics to get the frequency and relative frequency (percentage) for smoking and awareness. The association was determined by Pearson chi-square test. The level of significance was set at $p < 0.05$ and confidence level at 95%.

III. RESEARCH FINDINGS

A total of 238 participants participated in this study, giving an overall response rate of 91%.

Table 1. Prevalence of smoking status among respondents

| Smoking status | Frequency | Percentage |
|----------------|------------|--------------|
| Yes | 33 | 13.9 |
| No | 205 | 86.1 |
| Total | 238 | 100.0 |

The prevalence of smoking is 13.9% (Table 1).

Table 2: Smoking status by socio-demographic (N= 238)

| Sociodemographic Factors | Smoking status | | | TOTAL n (%) | P-Value |
|----------------------------|----------------|------------|------------------|-------------|---------|
| | Yes n (%) | No n (%) | | | |
| Age | | | | | |
| 18 - 29 | 4 (12.9) | 27 (87.1) | 31 (100) | | |
| 30 - 39 | 5 (18.5) | 22 (81.5) | 27 (100) | | |
| 40 - 49 | 7 (18.9) | 30 (81.1) | 37 (100) | | |
| 50 - 59 | 7 (13.7) | 44 (86.3) | 51 (100) | | |
| ≥ 60 | 10 (10.9) | 82 (89.1) | 92(100) | | |
| Gender | | | | | |
| Male | 27 (27.6) | 71 (72.4) | 98 (100) | 0.00 | |
| Female | 6 (4.3) | 134 (95.7) | 140 (100) | | |
| Education level | | | | | |
| No formal education | 2 (5.6) | 34 (94.4) | 36 (100) | 0.23 | |
| Primary education | 14 (20.6) | 54 (79.4) | 68 (100) | | |
| Secondary education | 14 (15.1) | 79 (84.9) | 93 (100) | | |
| Tertiary education | 3 (7.3) | 38 (92.7) | 41 (100) | | |
| Marital status | | | | | |
| Single | 2 (4.4) | 43 (95.6) | 45 (100) | 0.01 | |
| Married | 27(15.5) | 147 (84.5) | 174 (100) | | |
| Divorcee/Widow | 4 (21.1) | 15 (78.9) | 19 (100) | | |
| Occupational status | | | | | |
| Unemployed | 5 (6.7) | 70(93.3) | 75 (100) | 0.00 | |
| Govt. / Semi-govt. | 0 | 10 (100) | 10 (100) | | |
| Private employee | 7 (17.1) | 34 (82.9) | 41 (100) | | |
| Self-employed | 13 (28.3) | 33 (71.7) | 46 (100) | | |
| Housewife | 4 (9.3) | 39 (90.7) | 43 (100) | | |
| Student | 0 | 2 (100) | 2 (100) | | |
| Retiree | 4 (19.0) | 17(81.0) | 21 (100) | | |
| Household income | | | | | |
| Less than RM1000 | 10 (14.3) | 60 (85.7) | 70 (100) | | |
| RM1000 - RM4999 | 20 (13.8) | 126 (86.3) | 146 (100) | | |
| RM5000 - RM9999 | 3 (20.0) | 12 (80.0) | 15 (100) | | |
| Above RM10000 | 0 | 7 (100) | 7 (100) | | |

The higher prevalence is among age 40-49 years (18.9%), male (27.6%), with primary education (20.6%), divorcee / widow (21.1%), self-employed (28.3%) and those who have household monthly income RM 5000 – 9999 (20%) (Table 2).

Table 3: Smoking trend among smokers

| Smoking trend | n | % |
|---------------------------|-----------|------------|
| Age start smoking | | |
| < 18 | 13 | 39.4 |
| 18 - 25 | 17 | 51.5 |
| 26 - 33 | 2 | 6.1 |
| 34 - 41 | 1 | 3.0 |
| Duration of | | |
| < 5 years | 1 | 3.0 |
| 5-10 years | 1 | 3.0 |
| 10-15 years | 6 | 18.2 |
| > 15 years | 25 | 75.8 |
| Money spent (RM) | | |
| < 100 | 17 | 51.5 |
| 100 - 199 | 3 | 9.1 |
| 200 - 299 | 4 | 12.1 |
| >300 | 9 | 27.3 |
| Intention to quit | | |
| Yes | 19 | 57.6 |
| No | 14 | 42.4 |
| Cessation barriers | | |
| Addicted | 16 | 48.5 |
| No intention | 11 | 33.3 |
| Withdrawal | 3 | 9.2 |
| Peer pressure | 1 | 3.0 |
| Coping with stress | 1 | 3.0 |
| Habitual | 1 | 3.0 |
| Total | 33 | 100 |

Majority of the smokers start smoking at the age of 18 – 25 years old (51.5%), smoke more than 15 years (75.8%), spend less than RM 100 for cigarettes in a month (51.5%) and have intention to quit smoking (57.6%) (Table 3).

However, among the barriers towards smoking cessation are addicted (48.5%), no intention to quit (33.3%) and withdrawal symptoms (9.2%).

Table 4. Awareness on passive smoking among smokers

| Awareness status | Frequency | Percentage |
|------------------|-----------|--------------|
| Yes | 14 | 42.4 |
| No | 19 | 57.6 |
| Total | 33 | 100.0 |

Among the smokers, 57.6% are not aware regarding passive smoking (Table 4).

Table 5. Association between awareness on passive smoking and smoking in front of others

| Awareness status | Smoking in front of others | | Total n (%) | P value |
|------------------|----------------------------|----------|-------------|---------|
| | Yes n (%) | No n (%) | | |
| Yes | 8 (57.1) | 6 (42.9) | 14 (100) | 0.966 |
| No | 11 (57.9) | 8 (42.1) | 19 (100) | |

Among smokers who have awareness on passive smoking, 57.1% still smoke in front of others. However, statistically, there is no significance association between smokers who have awareness on passive smoking and smoke in front of others ($P>0.05$) (Table 5).

IV. DISCUSSIONS

The prevalence of smokers in our study was lower than the prevalence of smokers which conducted by NHMS 2015 (20.9%) [12]. The difference is likely due to the populations included in the national survey were both from urban and rural populations while our study was conducted in a rural area. A study done in China showed that the smoking prevalence among rural-urban migrants increased (28.4%) after they moved to the city, due to life stress (19.5%) and high work stress (21.6%) [13,14]. However, our result was quite similar with a study done in Sepang, Selangor in 2018 with the prevalence of 13.3% [15].

Studies done by Gallus and Nurulfarahin report that the prevalence of smokers are higher among males (59.8% and 37.9%, respectively) [16,17], which are consistent with our finding. This might be due to a social norm in Malaysia to have male smokers (40%) and they are less motivated to quit smoking (59.4%) as compared to females (66.9%) [18,19]. Our finding also showed that 33.3% of the smokers have no intention to quit smoking. Majority of them have started smoking at early age and have been smoking more than 15 years. These caused the addiction to nicotine that reduces the likelihood among males to cease smoking [20], which was the highest barrier towards smoking cessation in our study.

The perception that not much benefit will be gained from smoking cessation might also contribute to the prevalence of no intention to quit smoking, as smokers who are ambivalent of benefit in quitting had 2.1 times higher odds of planning to quit compared to smokers who saw little benefit in quitting [20, 21]. However, studies show many smokers use smoking as coping for stress with prevalence of 3.3% and 20.5% [22, 23].

This might also explain the higher prevalence of smoking among our divorcee/widow respondents (21.1%) which was similar to a study conducted by Lim and Gaafar [20, 24]. Both report the prevalence are 36% and 31.3%, respectively. Whereas, a study on smoking that has been conducted in Korea states that

the smoking rate for the unmarried is higher than for the married in both genders, with the highest rate observed in men (78.2%) [25].

The education generally has the strongest influence, where high school dropouts have odds of smoking 3.7 times larger than for college graduates and respondents without formal education are 2.09 more likely to smoke than those with tertiary education [20]. Other studies conducted in Malaysia among adult and elderly, both show a higher prevalence of smokers among those who only had primary educational level with 25% and 17%, respectively [12, 27].

Not more than half of the residents were aware of passive smoking (45.8%) but the prevalence was compared to a study done in an urban area in Bangladesh (22%) [28]. These might be due to having the thought of smoking would affect the smokers only instead of harming passive smokers as shown by a study on smoking-related knowledge and education level in China in which there is a significant difference between thinking smoking will harm themselves ($p = 0.0002$) and considering smoking will harm others ($p = 0.0001$) [29].

In a study done on tobacco smoke exposure towards children, 31.4% of respondents claimed that there are family members who smoke in the house and majority (89.8%) of them have good knowledge on tobacco smoke exposure especially towards children [15]. This is consistent with other studies on second hand smokes (SHS) with more than 90% of respondents are aware on passive smoking [30, 31]. However, our respondents have much lower percentage in awareness on passive smoking, which might be due to lack of knowledge about the health effects on passive smokers, as the higher the education, the more the awareness regarding health hazards of SHS, where 53.7% illiterate respondents considered SHS to be harmful, the number increased significantly to 82.4% in respondents having education up to intermediate or above [32].

Another study done among higher institution community, reports that 68.7% of respondents preferred to move away from the smoking area due to high level knowledge regarding negative effects of smoking to the surrounding people [33]. Knowledge was also a significant predictor of respondents' attitude, as it was positively correlated with attitude ($p<0.001$) which mean the higher the knowledge, the more negative the attitude towards smoking [34]. Although statistically there was no association between smokers who have awareness on passive smoking and smoke in front of others, but 57.1% of them still smoke in front of others.

V. CONCLUSION AND RECOMMENDATION

The prevalence of smokers is significantly low. However, more than half of the smokers were not aware about passive smoking.

Thus, an integrated effort need to be initiated by various authorities to make the public places in Malaysia as smoke-free

zones and to critically instill the perception of secondhand smoke health effects among Malaysians.

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