

Smoking Behavior among Undergraduate Female Students in Universitas Padjadjaran Bandung

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Abstract

Background: Smoking is an addictive habit of affecting human behavior. Global data has shown that 47.5% of men and 10.3% of women are active smokers. Based on *Survei Sosial Ekonomi Nasional* in 2007, the prevalence of women smokers in Indonesia is increased from 1.3% to 5.2%. This study was conducted to describe the smoking behavior among undergraduate female students in Universitas Padjadjaran, Bandung.

Methods: This was a descriptive cross-sectional study, including female students from 9 faculties in Universitas Padjadjaran, using a snowball sampling technique. A self-administered questionnaire was distributed, consisting of questions about when students smoked for the first time, level of addiction, smoking intensity, smoking location, and the affecting mood.

Result: Of 99 female students, 40.40% have started smoking in high school, 31.32% in the university, and 25.25% in junior high school. The smoking intensity was moderate (45.45%), but some were high (29.30%). The location preference for smoking was both in private and public places (88.89%), driven by both positive and negative moods (88.89%). Interestingly, the most addiction level was situational (34.34%) or intensive (34.34%).

Conclusions: Since most of the female students have started smoking before enrolling in the university, smoking education and cessation in junior high school need to be strengthened.

Keywords: Addiction, behavior, cessation, smoking

Introduction

Smoking is an addictive habit, contributed as one of the risk factors in the human lifestyle affecting health in the past four centuries.¹ There are more than one billion smokers around the world, and smoking behavior has increased significantly especially in women. Estimated, 47.5% of men and 10.3% of women world population is active smokers. Interestingly, three out of ten students (30.9%) have been found to smoke for the first time before they reach the age of 10 years. Among students who smoke, 3.2% have addictions with the desired indicator first thing in the morning is a cigarette.²

Girls start smoking when they reach puberty. They start smoking as a response to peer pressure and misperception that consider smoking as something 'cool' to increase their

popularity. Some teenage girls start smoking or continue smoking because they believe that smoking can help them lose weight, especially, those who are living in a culture whose concept of ideal body proportions is not realistic. Cigarette company directly promotes cigarettes to women and makes the relationship between smoking behavior and gender equality.³

Indonesian society considers smoking behavior in women as a deviant behavior, however, evidence show that smoking habit among teenage girls continues to increase especially in urban society.⁴ Based on *Survei Sosial Ekonomi Nasional* (Susenas), the prevalence of adult smoking women is increased four times from 1.3% into 5.2% in 2007.⁵ This study was conducted to describe the smoking behavior among undergraduate female students in Universitas Padjadjaran, Bandung.

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Methods

This cross-sectional study was conducted in Universitas Padjadjaran from 2013 to 2014. Respondents of this study were undergraduate female students in Universitas Padjadjaran who had smoked for at least one month.

Respondents were voluntarily involved in this study after submitted informed consent. The respondents were chosen using snowball sampling. In brief, the first respondent selected through inclusion and exclusion criteria was chosen to be a 'seed' or 'source' for the next respondent sampling. The following

Table 1 The Distribution of the First Time Smoking and Smoking Intensity among Female Students from Universitas Padjadjaran

Variable	Number of Respondent n=99	Percentage (%)
Age (years old) (n=58)*		
17	2	3.45
18	1	1.72
19	7	12.07
20	18	31.03
21	12	20.70
22	10	17.24
23	3	5.17
24	4	6.90
25	1	1.72
Faculty (n=49)*		
Medicine	2	4.08
Cultural Study	13	26.53
Dentistry	2	4.08
Communication Science	14	28.57
Nursing	2	4.08
Psychology	2	4.08
Social & Political Science	12	24.49
Mathematics & Natural Science	1	2.04
Law	1	2.04
First Time Smoking(n=99)		
Elementary School	3	3.03
Junior High School	25	25.25
High School	40	40.40
University	31	31.32
Smoking Intensity(n=99)		
Low	25	25.25
Moderate	45	45.45
High	29	29.30

Note: The smoking intensity was designated as low (1-4 cigarettes), moderate (5-14 cigarettes), and high (>15 cigarettes). *the number of respondents was not the same as total numbers since not all respondents acknowledge their age and faculty.

Table 2 The Distribution of Location of Preference for Smoking among Female Students (n=99) from Universitas Padjadjaran

Variable	Number of Respondent	Percentage (%)
Private Place		
Private vehicle	73	73.74
Private room	74	74.75
Restroom	65	65.66
Public Place		
Campus	69	69.70
Smoking area	76	76.77
Public transport	14	14.14
Restaurant/Canteen	79	79.80
Wherever I want	32	32.32

respondents were asked to bring back two other respondents that had similar criteria and so on. This study had been approved by the Health Research Ethics Committee no. 468/UN6.C2.1.2/KEPK/2013.

After consent, a validated self-administered questionnaire was distributed, which consisted of 32 questions exploring the respondent smoking behavior characteristics. The questions included the first time when the respondent had started smoking (elementary school, junior high school, high school) and smoking intensity (low, 1-4 cigarettes; moderate, 5-14 cigarettes; and high, >15 cigarettes), that had been asked in 1 question each; followed by 16 questions in Likert-scale type statements to assess respondent addiction (experimental, recreational, situational, intensive, compulsive). Furthermore, there were 8 questions about the preference of place or location for smoking (private place, public

place, both places), and 6 questions about mood aspect that affected them to smoke (positive, negative, both moods). Data was organized and presented using Microsoft Excel 2013.

Results

Ninety-nine female students from 9 faculties had participated in this study. The number of respondents who acknowledge their age and faculty was not the same as the total numbers, however, the average age of the respondents was 20 years old and most of the respondents studied at Faculty of Communication Science (28.57%). The female students started smoking in high school (40.40%) and smoked in moderate-intensity (45.45%) as shown in Table 1.

Most of respondents' favorable place to smoke was in a restaurant or canteen (79.80%)

Table 3 The Mood Affecting among Female Students (n=99) from Universitas Padjadjaran.

Variable	Number of Respondent	Percentage (%)
Positive		
Pleasure	61	61.62
After meal	80	80.81
Complementary cigarette	62	62.63
Negative		
While working/Studying	63	63.64
Anger	62	62.63
Anxious	71	71.72

Table 4 The Level Addiction among Female Students from Universitas Padjadjaran.

Variable	Number of Respondent (n=99)		
	Strongly Agree/ Agree*	Neutral	Disagree/ Strongly Disagree**
Experimental			
For the past week I only try smoke for the experience	10	10	79
Recreational			
I only smoke while hangout with my close friend	42	11	46
I only smoke while hangout with my smoking friend	45	15	39
Situational			
I smoke when feeling cold	56	19	24
I smoke when having exams	42	20	37
I smoke when having problems with family, friends, or girlfriend	64	13	22
I smoke if have a bad grade or bad review	47	17	35
Intensive			
I smoke whenever I want	71	15	13
I smoke everyday	68	13	18
I keep smoking even when I'm with my parents	11	8	80
I keep smoking even when I'm with my siblings or other relatives	29	16	54
Compulsive			
I can quit smoking whenever I want to	54	25	20
I will feel unease if I'm not smoking for a week	46	27	26
I will feel physically uncomfortable if I'm not smoking for a week	38	23	38
I will feel mentally uncomfortable if I'm not smoking for a week	38	28	33
Every day I am more and more frequent smoking	30	24	45

Note: The following answers were grouped into one category; *strongly agree and agree, and **disagree and strongly disagree

as shown in Table 2. Furthermore, our results showed that a small proportion of respondents preferred to smoke only in private places (10.10%) and only in public places (1.01%), and most of them in both places (88.89%). Most of the respondents smoked after a meal (80.81%) or when they felt anxious (71.72%) as shown in Table 3. Moreover, 8.08% of respondents affected only by positive moods, 3.03% only by negative moods, and 88.89% by both moods. The respondents admitted

to smoke as experimental (10.10%), as recreational (16.17%), situational (34.34%), intensive (34.34%), and compulsive (5.05%).

Discussion

Respondents of this study have started smoking since high school, similar to a various studies in USA,⁶ and New Zealand,⁷ that also shows that there is a low level of initiation

on older age.⁷ The fact that the majority of smokers start smoking in high school, it might be due to the teenager rebellious phase that starts in the period of high school. In the case of smoking intensity, our respondents are moderate-intensity smokers (45.45%). In a similar study conducted in Medan⁸, 89.43% are of low-intensity smokers.⁸ It seems that female students from Bandung smoke more often and have a higher cigarette/day ratio compared to students from Medan. Compared to study in the US, our respondent also have a similar distribution of high-intensity smokers, which is around 25%.⁹

Female students in our study tend to smoke in their private place (house, room, and vehicle) and also in public place (campus, restaurant). However, data show that public place as the less favorable place to smoke. Again in comparison to a similar study in Medan⁸ that shows 33.33% prefer to smoke in their house (private place) and 48.78% prefer to smoke in public place, in Bandung the respondents are braver in expressing their smoking behavior in both places (88.89%).

Female students start smoking not only because positive feelings they have, but also when they have a negative feeling. A similar study in Arizona-US¹⁰ shows that 49% of respondents smoke because of stress, while 47% because of relaxing feeling when smoking. It shows that not only negative feelings (stress, anger, anxiety) that affect people to smoke but also positive feeling (relaxation, successes).

The respondents' addictions to cigarettes are situational, intensive stage but it is still controllable. It is because they only smoke in certain situations. The parenting control affects their smoking behavior because the presence of parents or other siblings might prevent most of them to smoke. Furthermore, the respondent could quit smoking whenever they want, and they still do not feel any disturbance physically and mentally when they do not smoke.

This study has encountered several limitations. Inequality happens because there are some questions which are incomplete or incorrectly filled, and most of the respondent only keeps their smoking habit and behavior to themselves. Even though this study has used snowball sampling, it is hard to find respondents since each of the respondents usually does not know other women who smoke except their close friend.

In conclusion, most female students in our study have started smoking from high school

with moderate intensity. They are intensive and situational smokers with no location preference, thus, both in private and public places. They are affected by both positive and negative moods to smoke. Since most of the female students have started smoking before enrolling in the university, smoking education and cessation in junior high school need to be strengthened.

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