## THE EFFECTIVENESS OF CANCER PREVENTION PROGRAM FROM NATIONAL CANCER INSTITUTE, MALAYSIA

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## SUPERVISOR DECLARATION

"I/We hereby declare that I/We had read through this thesis and in my/our opinion that this thesis is adequate in terms of scope and quality which fulfill the requirements for the award of Bachelor Degree of Technology Management (Technology Innovation)"

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## DECLARATION

"I hereby declare that the work of this exercise is mine except for the quotations and summarize that have been duly acknowledge"

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#### **DEDICATION**

### This thesis is dedicated:

To my parents, W Mohamad Fadr Bin Ghazali and Fazidah Binti Fauzi whom has always been there supporting me through my ups and downs and giving me the extra boost that I always needed to finish up my thesis. My siblings, Wan Adila Binti W Mohamad Fadri who always has been such a supportive person for me to finish what I have started and that has been giving me the moral support that I need. Next, Prof. Madya Dr Chew Boon Cheong, my supervisor that has guided me and giving me the motivation to finish my thesis. Thank you for the guidance and motivation for helping going through this research. Lastly, to my beloved friends that has been behind me and supporting me in my up and downs while helping me throughout the project towards accomplishing my thesis.

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#### ABSTRACT

Cigarette smoking is the largest preventable risk factor for morbidity and mortality in developing countries. Daily smokers smoke cigarettes to maintain nicotine levels in the brain, primarily to avoid the negative effects of nicotine withdrawal, but also to modulate mood. Regular smokers exhibit higher and lower levels of stress and arousal, respectively, than nonsmokers, as well as higher impulsivity and neuroticism trait values. The research intended to find out the causes of smoking among the teenagers in University Technical Malaysia, Malacca (UTeM). The population of the research was comprised of all male and female students studying at (UTeM). The results show that there are various factors that cause students to smoking. Social, environmental, economic and emotional factors become the most important factor that leads students to start smoking. When they are unable to finding an appropriate way out for themselves, smoking becomes a main choice, even they know that smoking can cause a cancer.

Keywords: Teenager, Smoking habit, Causes of Smoking, Awareness of Cancer.

#### ABSTRAK

Rokok adalah faktor risiko terbesar yang dapat dicegah untuk morbiditi dan kematian di negara-negara membangun. Perokok setiap hari merokok rokok untuk mengekalkan tahap nikotin di dalam otak, terutamanya untuk mengelakkan kesan negatif penarikan nikotin, tetapi juga untuk memodulasi suasana hati. Perokok kerap menunjukkan tahap tekanan dan rangsangan yang lebih tinggi dan rendah, masing-masing, daripada bukan perokok, serta nilai sifat impulsif dan neuroticism yang lebih tinggi. Penyelidikan ini bertujuan untuk mengetahui sebab-sebab merokok di kalangan remaja di Universiti Teknikal Malaysia, Melaka (UTeM). Populasi penyelidikan terdiri daripada semua pelajar lelaki dan perempuan yang belajar di (UTeM). Keputusan menunjukkan bahawa terdapat pelbagai faktor yang menyebabkan pelajar merokok. Faktor sosial, alam sekitar, ekonomi dan emosi menjadi faktor terpenting yang mendorong para pelajar untuk mula merokok. Apabila mereka tidak dapat mencari cara yang sesuai untuk diri mereka sendiri, merokok menjadi pilihan utama, walaupun mereka tahu bahawa merokok boleh menyebabkan kanser.

Kata kunci: Remaja,Kesedaran Tentang Merokok,Punca Merokok, Kesedaran Tentang Kanser

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## LIST OF ABBREVIATIONS

UTeM	=	University Technical Malaysia Malacca
IKN	=	National Cancer Institute
SPSS	=	Statistical Package for Social Sciences

## LIST OF SYMBOLS

%	=	Percent
<	=	Greater-than
>	=	Less-than
=	=	Equals
β	=	Beta
$R^2$	=	R Square

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#### **CHAPTER 1**

#### INTRODUCTION

#### **1.1 BACKGROUND OF STUDY**

In this chapter, the purpose of the project will be described generally. Start with a brief explanation of the background project. Then, the problem statement that leads to the idea for this project and the objectives that aimed to be achieved are established in order to overcome the problem statement. This chapter also explains the scope that will be discussed in the project significantly.

Smoking is the single most avoidable cause of disease, disability, and death affecting the world's population today. The World Health Organization (WHO) reports that 15 billion cigarettes are sold daily and that approximately a third of the global male adult population smokes (World Health Organization [WHO], 2002). Globally, one in ten adults dies from smoking-related diseases every day and the WHO states that if this current trend continues, by the year 2030, smoking will kill approximately one in six people (WHO, 2002).

Smoking can make many chemicals enter the body through the lung. According to UPMC Life Changing Medicine (2011), report that burning tobacco can produce more than 4000 chemicals, nicotine, carbon monoxide and tars are some of these substances. Smoking greatly can affect lungs and airways. According to National Health & Morbidity Survey (2015), Smoking Prevalence In 2015, approximately 22.8% (4,991,458) of Malaysian population aged 15 years and above were smokers, 43.0 % (4.85 million) of men and 1.4% (143,566) of women smoked manufactured cigarettes, hand-rolled and smokeless cigarettes. Out of the current smokers, 20.5% were daily smokers; 38.8% of men and 1.1% of women). About one-tenth of the Malaysian population aged 15 years and above used smokeless cigarette (20.8% of men and 0.8% of women).

In a study among the staff of the Health Department of Melaka, the prevalence of smokers was 45.5%, while 14.1% were ex-smokers. Smoking was found to affect work performance, with an association between smoking status and respondent age, ethnicity, educational status, years of service and income (Masran et al., 2006). Smokers can get a variety of problems that related to breathing. Problems range from an annoying cough to grave illness like cancer. Cancers are caused by combining genetic and non-genetic changed induced by the environmental factor that triggers inappropriate activation or inactivation of specific genes leading to abnormal cell growth (Kaplan, 2004).

Cancer is a common condition and a serious health problem. More than one in three people will develop some form of cancer during their lifetime (Whiteman, 2015). However, there are many people that still unaware of the negative effect that can be caused by smoking although many awareness campaigns have been made. This research is all about the efficacy of the cancer prevention program that has been done on Malaysian smokers by National Cancer Institute Malaysia (IKN).

#### **1.2 PROBLEM STATEMENT**

The purpose of this study is to identify the relationship between smokers consisting of University Technical Malaysia Melaka (UTeM) youth groups and their awareness of the cancer-related illness. Students smoking are a dangerous habit that can perpetuate throughout a person's lifetime and cause serious negative health effects. Focusing intervention strategies on teens who smoke can help to cut off these health risks early on in life.

Besides the commonly known risks associated with smoking, adolescent bodies are still developing internally, which can be harmed by this habit (Wiencke and Kelsey, 2002). The heightened growth of lung volume occurs between puberty and young adulthood. Therefore, there are unique negative effects on the health of one's lungs and their ultimate growth when adolescents smoke cigarettes (Wiencke and Kelsey, 2002). During the second half of the twentieth century, the focus of smoking behaviors in teenagers was always on prevention instead of cessation. However, it is just as important to educate teens that have already decided to smoke the risks of this dangerous behavior and proper cessation techniques (Mermelstein, 2003).

In addition, if students were extensively educated on the negative implications associated with cigarette smoking, as well as its extremely addictive properties of the nicotine in cigarettes, they might be less likely to start smoking in the first place or quit this behavior before too much permanent damage is done to their bodies.

#### **1.3 RESEARCH QUESTION**

This study will try to answer the following research questions which are:

- a) What is the reason smoker student in University Technical Malaysia, Malacca continues smoking?
- b) What's the effective strategy that the National Cancer Institute Malaysia conducts to prevent smoking?
- c) What is the innovative suggestion to overcome the smoking issue?

## **1.4 RESEARCH OBJECTIVE**

To successfully implement the effective cancer prevention to refuse smoker to quit smoking, an effective program needs to implement. The main goal of the research is to achieve several objectives which are:

- a) To investigate the reason smokers still continue smoking.
- b) To examine what is the most effective strategy that International Cancer Institute does to prevent smoking.
- c) To propose an innovative suggestion in order to overcome the smoking issues.

#### **1.5 SCOPE, LIMITATION AND KEY ASSUMPTIONS OF THE STUDY**

This research will consist of creating an effect of the cancer program from National Cancer Institute Malaysia. The scope focuses smoking students in University Technical Malaysia Malacca. The number of students that study at University Technical Malaysia, Malacca almost reaches 12000 students. This data is based on the statistic students from 2015 until 2016. The statistic shows that the number of diploma students is 1119, the number of undergraduates and postgraduate students both within and outside the country is 9432 and 826 students and the total number of Ph.D. students is 383 (Portal UTeM, 2017). This research was conducted by different faculty and only on those with the diploma and bachelor degree only. The limitations and key assumptions of this study are to assume that respondents are honest, while answering the questionnaire and the respondent has the same level of knowledge.

## **1.6 IMPORTANCE OF THE STUDY**

The conventional wisdom "prevention is better than cure" is common knowledge, but may not necessarily be observed in an individual's or a community's everyday life. Smoking is the cause of cancer. The purpose of this study is important to establish healthy lifestyle practices in Malaysia in eradicating cancer and reducing the number of hardcore smokers in Malaysia. This research is important to investigate the effective ways to make these smokers to quit smoking. In addition, smoking is the leading cause of death and smoking initiation rarely occurs after adolescence. Thus, the research on adolescent smoking is crucial. A consistent definition of smoking is important because inconsistent definitions make comparisons across studies an arduous task (Park and June, 2006).

## **1.7 SUMMARY**

The conclusion of this chapter is to describe the introduction or background of the study. From the top, this research mostly explains about the general of the project. The background of the study, it's explained a little information about smoking students in University Technical Malaysia, Malacca and the National Cancer Institute Malaysia. After that, the researcher provides the research questions and also the research objective to fulfill this research. Mostly, this study will be concentrated on how an effective prevention program that the National Cancer Institute can make to prevent smokers to quit smoking.

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#### **CHAPTER 2**

#### LITERATURE REVIEW

#### **2.1 INTRODUCTION**

The literature review is a text of a scholarly paper, which includes the current knowledge as well as the theoretical framework and methodological contribution to a particular topic (Smith, 2013). According to Fida and Abdelmoneim (2013), despite its decline in developed countries, high rate of smoking is still found in developing countries. Mostly, developing countries have adopted preventive campaigns to combat smoking with varying rates of success. According to International Tobacco Control Malaysia (2012), an estimated of 1000 deaths in Malaysia were associated with the smoking-related illness annually. In addition, Global Adult Tobacco Survey Malaysia (GATS) identified that out of 4250 participants, 32.5% of them were students aged from 15 to 24 years and 54.9% of adult aged from 25 to 44 years were smokers in Malaysia (Center for Disease Control and Prevention, 2012).

According to Veda and Abdelmoneim (2013), people that are starting smoking before age 18 is a factor for the long life smoking and for smokers, quitting smoking will be more difficult. On the other hand, during the development period of adolescents, the behavior is influenced by rapid changes affecting certain functions such as emotions, environment, economic and social.

Promoting healthy lifestyle behaviors have become increasingly salient (Naik, et al., 2016). Smoking is an established risk factor for cardiorespiratory disease and a number of cancers (Secretan, et al., 2009), including leukemia (Danaila, et al., 2002), and cancers of the urogenital system (Park, et al., 2009). Continued smoking in cancer patients has been associated with negative outcomes, including increased chances of a second malignancy (Tucker, et al., 1997), reduced quality of life (Rowland, et al., 2012), poor treatment response (Wong, et al., 1993), and increased mortality (Stampfer, et al., 2011).

National Cancer Institute is a specialized cancer medical institution that specializes in the treatment and medical treatment of cancer patients in Malaysia. The establishment of the National Cancer Institute is aimed at addressing all the growing needs related to cancer issues in the country. According to Official Portal of National Cancer Institute (2017), the objective of establishing this institution is to become the National Cancer reference center that provides comprehensive and best cancer care for cancer patients as well as to provide conducive research and training requirements to enhance cancer treatment management. According to Naik, et al., (2016), greater physical activity in cancer survivors has been linked to improved survival and quality of life and to less fatigue, it has also been described as both safe and beneficial during and after cancer treatment.