

## **A study to assess the perception and level of awareness on Pap (Papanicolaou) smear screening among young adult women aged 19-40 years at a maternal and child health clinic, Malaysia.**

Mini Rani Mary Beth<sup>1</sup>, Nurul Adibah Bte Mansor<sup>2</sup>, Siew Keng Lim<sup>3</sup>.

<sup>1, 2, 3</sup>Division of Nursing, International Medical University, Malaysia.

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**Abstract:** The purpose of this study is to identify the perception and awareness of Pap smear among young adult women. A cross sectional design was used and subjects were chosen using convenience sampling method. Data was collected from 100 subjects who fulfilled the inclusion criteria. The results showed that 96% of the participants understood that Pap smear screening is very important to detect pre-cancerous cells in cervix and 99% of them agreed that Pap smear screening is important for any woman who has had sexual intercourse. The reasons for participants not going for the screening was the fear of outcome (21%), embarrassment (20%) and the combination of fear of outcome and embarrassment was 18%. One quarter (25%) of the participants want female health care personnel to carry out the screening. The findings also reveal that participants were not clear about the guidelines for the screening as 39% of the participants are not aware of the frequency of the Pap smear screening test. Nurses should provide accurate information to women regarding Pap smear screening to reduce their fear and conduct health education on Pap smear screening to promote awareness and increase the Pap smear screening coverage.

**Keywords:** Assess, Awareness, Pap smear screening, Perception, Young adult women.

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### **I. Introduction**

Cervical cancer is usually a slow-growing cancer that may not have symptoms but can be found with regular Pap smear test (Papanicolaou). According to WHO, cancer of the cervix is the second most common cancer in women worldwide, with about 500, 000 new cases and 250, 000 deaths each year. Cervical cancer contributed about 275, 000 deaths in 2008. Moreover, there was an estimation of 12,170 new cases and 4,220 deaths from cervical cancer in the United States in 2012 [1]. Malaysia is a fast-developing South-East Asian country with a significant burden of cervical cancer. With the incidence rate of over 16 per 100,000 and the mortality rate of over 8 per 100,000, cervical cancer is the second most common cancers among females. Malaysia Cancer Registry Report (2007) stated that the percentage of the cervical cancer detected at stage 1 is 21%, stage 2 is 34%, stage 3 is 26% and stage 4 is 19%. These statistics show that the Pap test coverage in Malaysia is low therefore most of the women are being detected at stage 2 and 3 instead of stage 1. Understanding the factors associated with underutilization of cervical cancer screening is important in order to enable women to respond positively to cervical cancer screening [2].

One of the qualitative study conducted by Wong et al (2008) on cervical cancer screening attitudes and beliefs among Malaysian women who have never had a Pap smear reported that many believed that the Pap smear was a diagnostic test for cervical cancer, and since they had no symptoms, they did not go for Pap smear screening. Other main reasons for not doing the screening include lack of awareness of Pap smear indications and benefits, perceived low susceptibility to cervical cancer, and embarrassment. Other reasons for not being screened were related to fear of pain, misconceptions about cervical cancer, fatalistic attitude, and undervaluation of own health needs versus those of the family [2].

The purpose of this study is to identify the perception and awareness of Pap smear among young adulthood to promote optimum health and prevent cervical cancer. This study will benefit young adult women who are at high risk for cervical cancer by introducing them to the concept of Pap smear screening, increasing their awareness on the importance of Pap smear screening and alter their perception positively on Pap smear screening if needed. This study also will encourage the participants to obtain more information regarding the health care services available for Pap smear screening.

### **II. Methods And Materials**

A cross sectional design was used in this study. Subjects were chosen using non-probability convenience sampling method. Data collection was done using face to face interview method after getting informed consent on 100 subjects who fulfilled the inclusion criteria. The sample size was calculated by using the formula of power analysis based on alpha 0.5, power of 0.9 and an effect size of 0.5. The instrument is a structured questionnaire, which comprised of part A: Demographic data, part B: Questionnaire on

‘Perception on Pap smear screening’ and part C: Questionnaire on ‘Awareness of Pap smear screening’. Research was conducted after the approval from the International Medical University Joint- Committee on Research and Ethics. Reliability was done using internal consistency method with the Cronbach alpha of 0.7 and the validity was done by content experts. Data analysis was done using Predictive Analytics Soft Ware (version 18). The results of the study are presented in tables and pie diagrams.

**2.1 Inclusion criteria:**

- Malaysian
- Women aged between 19 to 40 years
- Single or married who has had sexual intercourse
- No known history or current diagnosis of cervical cancer
- No Pap smear test done before
- Able to speak, read and understand English or Malay
- Alert, conscious and orientated
- Willing to participate in the study

**2.2 Exclusion criteria:**

- Foreigner
- Women aged less than 19 years and more than 40 years
- Has had a history of or diagnosed with cervical cancer
- Pap smear done earlier
- Unable to speak, read and understand English or Malay
- Not alert, unconscious and disorientated
- Unwilling to participate in the study

The theoretical framework used is Imogene King’s Goal attainment model[3]. The overall aim according to Imogene King is to promote health for individuals, families, communities and the world. King has defined perception as ‘each person’s representation of reality’. It is an awareness of persons, objects and events’. The major assumption of this model is based on an overall assumption that the focus of nursing is human beings interacting with their environment, leading to a state of health for individuals, which is an ability to function in social roles. Imogene King defines health as ‘dynamic life experiences of a human being, which implies continuous adjustment to stressors in the internal and external environment through optimum use of one’s resources to achieve maximum potential for daily living’ [4]. The application of this model relates to the main focus of this study which is to comprehend the perception and level of awareness of the Pap smear screening among the young adult women to promote health and prevent cervical cancer.

**III. Results And Discussion**

The demographic variable results of age, marital status, ethnicity, level of education, employment status and religion are presented in percentage (%) for 100 participants in Table 1.

**Table 1. Distribution of Demographic Characteristics**

Demographic variables	Percentage (%) n = 100
<b>Age group (in years)</b>	
19-25	18
26-30	50
31-35	26
36-40	6
<b>Total</b>	<b>100</b>
<b>Marital status</b>	
Single	4
Married	96
Others	0
<b>Total</b>	<b>100</b>
<b>Ethnicity</b>	
Malay	88
Chinese	7
Indian	4
Others	1
<b>Total</b>	<b>100</b>
<b>Level of education</b>	
Primary	0
Secondary	29

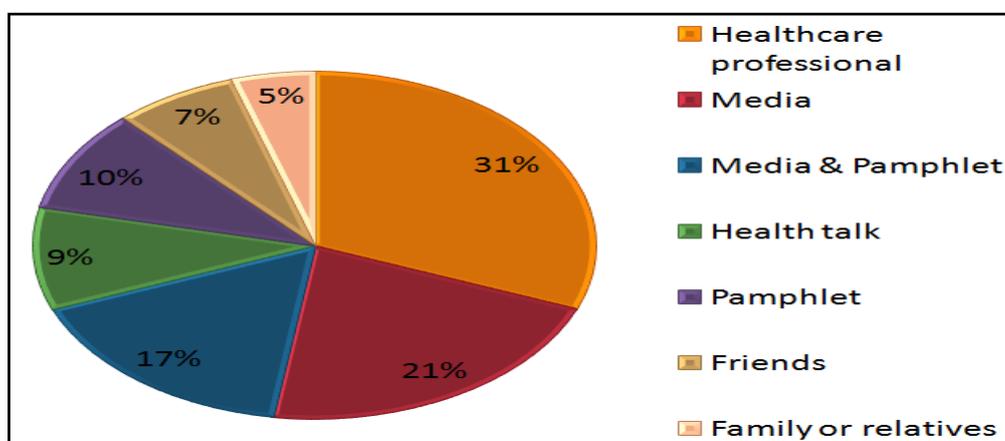
Tertiary	71
Illiterate	0
<b>Total</b>	<b>100</b>
<b>Employment status (Occupation)</b>	
Office staff	62
Hospital staff	4
House wife	18
School staff	5
Student	4
Others	7
<b>Total</b>	<b>100</b>
<b>Religion</b>	
Islam	89
Christian	5
Buddhist	3
Hindu	3
<b>Total</b>	<b>100</b>

### 3.1 Demographic data

The results on demographic data showed that 96% (n=96) subjects were married and there were only 4% (n=4) with single status. Among the 100 respondents in this research, 50% (n=50) belonged to the age group between 26-30 years. With regard to the ethnicity, most of the participants were Malay 88% (n=88), 7% (n=7) were Chinese and 4% (n=4) were Indians and only 1% (n=1) known to be from other ethnic groups. Most of the participants were well-educated, as 71% (n=71) completed their tertiary education and 29% (n=29) had completed their secondary education. In terms of occupation, as many as 62% (n=62) of the participants are working as office staff, 5% (n=5) work at school as teachers, 4% (n=4) work in the hospital as nurses, and 7% (n=7) belonged to other group of occupations such as business and engineering.

### 3.2 Perception on Pap smear screening

The results for 'Perception on Pap Smear Screening' show that all the participants understood that Pap smear screening is very important to detect pre-cancerous cell in cervix. Out of 100 participants, 94% (n= 94) of them claimed that it is necessary for to have the Pap smear screening whereas 6% (n=6) claimed that it is not necessary for them to have the Pap smear screening. There were 99% (n=99) of participants who agreed that Pap smear screening is needed for woman who has had sexual intercourse and 88% (n=88) of them understood that it is essential to have the Pap smear screening even if they had no family history of cervical cancer. On the other hand, 12% (n=12) of participants thought that it is not essential to have the Pap smear screening if they had no family history of cervical cancer. Pap smear test was accessible for 83% (n=83) of the participants, whereas 17 % (n=17) of participants did not have the access to Pap test facility. The reasons for participants refusing for the screening werethe fear of outcome 21 % ( n=21), embarrassment20 % ( n=20) and the combination of fear of outcome and embarrassment was 18 % ( n=18).About 58 % ( n=58) of them understood that Pap smear screening is for women who are 20 years old and above and who have had sexual intercourse, whereas 21 % ( n=21) of participants are not sure on the age when Pap smear test should be done. There were 20% (n=20)of participants who believed that Pap smear screening is only for women who delivered more than one time and one of the participant stated that this screening is for a woman who has not delivered a baby.



**Figure 1:** Awareness of Pap smear screening (Response to the question: 'From where have you heard about Pap smear screening?')

Fig 1 shows that highest number of subjects have heard about Pap smear from healthcare professionals 31%(n=31), from media 21%(n=21), from the media and pamphlet 17%(n=17), health talk 9%(n=9), pamphlet only 10%(n=10), friends 7%(n=7) and Family and relatives 5%(n=5).

### **3.3 Awareness of Pap smear screening**

The results for ' Awareness of Pap smear screening' reveals that participants were not clear about the guidelines for the screening as 39%(n=39) of the participants are not aware of the frequency of the Pap smear screening test. The knowledge on the benefits of Pap smear screening shows that 45 % ( n=45) of them agreed that Pap smear helps in early prevention from cervical cancer. All the participants agreed that doctors and nurses are the ideal members for them to obtain information regarding Pap smear screening.

One quarter 25 % ( n=25) of the participants expect female health care personnel to carry out the screening. Wong et al. (2008) reports that several respondents insisted that they would only accept a vaginal examination conducted by a female doctor. Muslim women, in particular, felt most comfortable with female health care providers. Many of them did not participate in screening due to perceived unavailability of female doctors. Furthermore, research has shown that easy access to female doctors contributed to the increased likelihood of receiving a Pap smear test. There were 25% (n=25) of the respondents who expressed their willingness to have a Pap smear test if they were advised by their health care providers. Therefore, healthcare providers play a very important role in promoting Pap smear screening. The result of the study have significantly shown that participants are unclear about the correct frequency for them to have Pap smear screening as 39% (n=39) of participants have responded that they are not sure.

## **IV. Conclusion**

Women's health is considered as specialty in the healthcare system whereby the women will have the opportunities to undergo gynaecologic examinations as part of routine health examinations. Based on the literature review, cervical cancer is a preventable disease only if the women begin their first step towards positive perceptions and openly to create awareness on Pap smear testing. The literature has identified that the Pap smear coverage is low specifically in Malaysia, as well as in other countries worldwide. Besides this, there are few factors which hinder the women from performing Pap smear testing including insufficient or poor knowledge on Pap smear testing, low level of awareness, fear and anxiety, and feeling of embarrassment.

A study done in 2010 among factory workers in Malaysia, shows that among the majority of whom had secondary education, only 25% ever had a Pap smear test done. Among predominantly highly educated women working at the university, 28% had a smear taken within the previous 3 years. About 63% of women with cervical cancer were familiar with the concept of a Pap smear; however the majority did not act on that knowledge. Malaysian women still experienced poor acquisition of knowledge [5].

The findings of this study on the assessment of perception and awareness on Pap smear screening have shown that there is a need to increase the level of awareness and remediating the misconception on Pap smear screening in the community. In order to familiarise Pap smear screening programmes in the country, healthcare providers should play an important role in promoting and advocating the women for enhancement towards a better health. Furthermore, comprehensive approaches are essential in facilitating access for screening services and providing accurate and culturally adapted information on Pap smear screening related to cervical cancer prevention.

Nurses play an important role in promoting Pap smear screening and prevent cervical cancer. Nurses and other healthcare providers must try their best to alleviate those discouraging factors like fear and embarrassment and should provide accurate information to women regarding Pap smear screening to reduce their fear and conduct health education on Pap smear screening to bring up the awareness and increase the Pap smear screening coverage.

## **Acknowledgements**

The authors would like to thank the Director of the clinic for giving permission to conduct this study. The authors express their appreciation and gratitude to International Medical University (IMU) for the provision of financial support and approval for this research project.

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