RESEARCH COMMUNICATION

Perception and Opinion of Medical Students about Pap Smear Test: A Qualitative Study

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Abstract

Objective: the objective of this study is to explore the perceptions of medical students regarding the Pap smear test. Methodology: Focus group discussion was held with twenty three medical students. The students were divided into three focus groups; two groups of female participants consisting of 9 and 8 students; respectively. The third group consistedof 6 male students. Questions regarding Pap smear testing included barriers that prevented women from taking the test, gender preference for the physician to conduct the cervical screening test, willingness to suggest Pap smear test to the family or friends. The data obtained were classified into various categories and analyzed manually. Results: Most of the study participants mentioned that the main barriers for women to not perform Pap smear test is lack of awareness 16 (70%), followed by shyness 12 (52%) and the cost of the test 12 (52%). Most agreed that the gender of the physician will affect the women decision to do Pap smear test. All mentioned that the advantage of a regular Pap smear test is to detect the abnormality at the early stage of cervical cancer. Some of the participants 9 (39%) mentioned that the disadvantages are expense, possible injury in the vagina due to the test procedures 8 (35%), associated infection 7(30.4%) and pain 7(30.4%) . The majority, 20 (87%) mentioned that the most effective prevention methods for cervical cancer are having sex only after getting married with the spouse only, HPV vaccination 15 (65%) and Pap smear14 (61%). Conclusion: The main barriers for women to not perform Pap smear test is lack of awareness, shyness and the cost of the test. Gender of the physician will affect the women decision to do Pap smear test.

Keywords: Perception - medical students - Pap smear test

Asian Pacific J Cancer Prev, **11**, 435-440

Introduction

Cervical cancer (CC) is the second most common cancer among women; affecting one million women worldwide. It is also the second leading cause of cancer deaths, accounting for more than 250,000 deaths in the year 2005 (Behtash & Mehrdad 2006; WHO, 2007). As a consequence of cervical cancer, 80% of cervical cancer deaths occur in developing countries (Gamarra et al., 2005). Infection with human Papillomavirus (HPV), early age of first sexual intercourse, multiple sexual partners and smoking are the risk for developing cervical cancer (Parkin et al., 2001). Papanicolaou (Pap) smear is one of the most essential screening tools for the early diagnosis of cervical cancer and the most effective preventive measures (WHO, 2007). The goal of routine screening is to detect early cytological changes such as dysplasia and to treat the patient before cervical cancer develops. Pap smear test plays an important role in reducing the incidence and mortality rate of invasive cancer (Brink et al., 2005). It has been observed that the decrease in incidence rates is more obvious in countries with organized screening programs (Gustafsson et al., 1997). Cervical cancer can be prevented by identifying pre-cancerous lesions early using repeated Pap smear screening and treating these lesions before they progress to cancer. Prevention, early diagnosis and treatment have been shown to reduce mortality rate due to cervical cancer. The value of the cervical cancer screening in reducing the risk of cervical cancer and mortality has been established, and it is estimated that regular screening reduces the risk of cancer up to 80% (Stewart and Kleihues 2002; Özgül, 2007).

Many countries have significant reduction in cervical cancer morbidity and mortality through cervical cancer screening and early treatment. The success of developed countries is largely due to the widespread and systematic use of Pap smear (Cronje, 2005). In the United States, despite the introduction of the Pap smear has been responsible for a 90% decrease in deaths from cervical cancer (Eddy, 1990); half of the United States women diagnosed with invasive cervical cancer have never had a Pap smear and 10% have not had Pap smears in the last five years (National Institutes of Health, 2007). In Australia, deaths from cervical cancer have decreased at about 2.8% a year, since the introduction of the National Cervical Cancer Screening Program in 1991 (Free et al.,

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1991). In Australia, 85% of the women who die of cervical cancer have not had regular Pap smears and about 50% of them have never had a Pap smear at all.

The World Health Organization recommendations on target ages and frequency of cervical cancer screening state that screening should start on women aged 30 years or more, a 3-year interval can be considered in the age group 25-49 years, and screening is not necessary for women over 65 years (WHO, 2002). Other studies recommend annual Pap testing, because this practice might have contributed to the declining incidence of invasive cervical cancer during the past 40 years (Mettlin & Dodd, 1991; American Cancer Society, 1992; Committee on Gynecologic Practice, 1995; US Preventive Services Task Force, 1996). However some other recognized bodies suggest that low-risk women need Pap smears only every 3 years after 3 consecutive normal Pap smear results (Canadian Task Force, 1988). These recommendations are based upon data from 8 cervical cancer screening programs with more than 1.8 million women which showed that the cumulative incidence of invasive cervical cancer was reduced 64.1% when the interval between Pap tests was 10 years, 83.6% at 5 years, 90.8% at 3 years, 92.5% at 2 years, and 93.5% at 1 year (IARC, 1986).

There are many obstacles and barriers discourage women from cervical cancer screening. Social and cultural factors and religious norms regarding Pap smear screening is undeniable and in need of attention among Asian women (Yi, 1994; Holroyd et al., 2004; Islam et al., 2006). Reasons for low rates of Pap testing include low education, low acculturation, lower cognitive scores, and other demographic, social and psychological factors (Wu et al., 2001; Wolff et al., 2003; Coronado et al., 2004). In United Kingdom the main reasons for noncompliance cited by the women themselves were fear and dislike of the test itself (Neilson & Jones, 1998). Other studies suggest that lack of knowledge about cervical screening fear, embarrassment, fatalism, inaccessibility of screening services and lack of time are also reported as barrier to screening (McAvoy, 1988; Doyle, 1991; Naish et al., 1994; Rudat, 1994; Kernohan, 1996).

Malaysia is like the rest of the world which cervical cancer is also the second most common cancer among women (MOH, 1999). The Second Report of the National Cancer Registry of Cancer Incidence in Malaysia showed that cervical cancer constituted 12.9% of total female cancers (Lim & Halimah, 2004). According to the 2002 report of Malaysia's National Cancer Registry, there was an average of 2,000-3,000 hospital admissions of cervical cancer per year in Malaysia, with the majority of cases presenting at late stages of the disease. Developed countries have been successful in controlling the incidence of cervical cancer, whereas developing countries such as Malaysia have unsuccessful dismally in this respect. The success of developed countries is largely attributed to the widespread and systematic use of the Pap smear (Cronje, 2005). There is a dramatic increase of death rate among Malaysian women due to cervical cancer from 1996, 2000 and 2002 ranged from 0.29%, 0.41% and 10.5%, respectively (Lim, 2002; Department of Statistics Malaysia, 2005).

Despite the cervical cancer screening program was established in 1969 in Malaysia among the target group of women aged 20-65 years, no reduction in the prevalence of cervical cancer has been noted to date.

National Health and Morbidity Survey reported that Pap smear coverage in the country was poor which 26% is in 1996 (National Health and Morbidity Survey II, 1997). Pap smear coverage in the country was a dismal figure of less than 2% in 1992, 3.5% in 1995, and 6.2% in 1996 (Ministry of Health Malaysia, 1998). Many Pap smears are done only on women who come for post-natal check-up (Nor Hayati & Ayob, 1997). Little is known about the perceptions of medical students, who will become the future doctors, regarding Pap smear. We therefore explored perceptions of medical students regarding cervical cancer screening.

Methodology

Focus group discussion was held with twenty three medical students from International Medical School, Management and Science University, Shah Alam, Malaysia. This study explored student's perceptions and opinion towards Pap smear test and their views on barriers to screening. Universal sampling used to conduct this study. The participants were on sixth semester of their study and of different age groups and both sexes were included. The study was conducted in February of the academic year 2010. The interview was conducted in English Language. This study was approved by the ethics committee of the International Medical School, Management and Science University. Consent was obtained from all participants. The students were di¬vided into three focus groups; two groups of female participants consisting of 9 and 8 students; respectively.

The third group consists of 6 male students. The author was the facilitator for group discussion. The facilitator asked probe questions and directed the group discussion in which all students participat¬ed and were given equal time for discussion. The conversations during the dis¬cussion wrote down in order to analyze the main theme of the study. The focus group discussion started with the ice breaking, which included every participant introduce him/her self, age and race to the rest of the group. Then questions regarding Pap smear testing which included questions on barriers that prevented women from taking the test, gender preference for the physician to conduct the cervical screening test, willingness to suggest Pap smear test to the family or friends, the advantages and disadvantages of Pap smear test and finally the prevention measures of cervical cancer were asked. The data obtained were classified into various categories. The data was analyzed manually.

Results

A total of twenty three students participated in this study. Respondents comprised 17 Malays, four Indians and two Chinese. The age of the participants ranged from 22 to 26 years. The majority were female 17 (74%) and Malay 17 (74%).

Barriers

Most of the study participants mentioned that the main barriers for women to not perform Pap smear test is lack of awareness 16 (%), followed by shyness 12 (%), cost of the test 12 (%), Not comfortable with the procedure of the test 2(%), women nowadays do not have time for screening because they are working 1 (%), the procedure may be painful 1(%),culture and back ground is one of the barriers 1 (%), no history of cervical cancer in the family is one of the barriers 1(%). Regarding the lack of awareness some of the participants said: "Most of the women don't have knowledge regarding Pap smear test." (Female, Indian, 23 years old)

"Unaware of the importance of the Pap smear test is the main barrier of not being screened." (Male, Malay, 24 years old)

Regarding the cost of the Pap smear test, some of them said: "Not all people afford for the cost of the Pap smear test." (Female, Malay, 22 years old)

"Pap smear test is costly and only available in developed town." (Female, Malay, 23 years old)

Regarding the culture and back ground is one of the barriers, some of them said:"Culture and different background is the main barrier for conducting Pap smear test." (Female, Indian, 23 year old)

Regarding the pain associated with the Pap smear test procedures, some of them said: "Women afraid that of getting hurt if they do the Pap smear test." (Female, Malay, 24 years old)

Recommend Pap smear test to female family members and friends

All the study participants mentioned that they will recommend the Pap smear test to female family members and female friends. The reason for recommending the Pap smear test to the female family members and relative is to detect the cervical cancer at early stage.

Some of them said: "I will suggest the Pap smear test to the family members or friends because it can be used to detect cervical cancer in early stage." (Male, Malay, 24 years old)

"I will suggest Pap smear test to my family and friends because Pap smear test can help in identification of abnormal cells, so the treatment can be done early." (Male Malay, 25 years old)

"Yes, I will because Pap smear test may be prevent the family and friends from getting cervical cancer." (Female, Malay, 23 years old)

"I will suggest Pap smear test especially for those who have family history of cervical cancer." (Female, Malay, 22 years old)

Gender of the physician will affect the patient decision to do Pap smear test

Most of the participants agreed that the gender of the physician will affect the women decision to do Pap smear test. Except one participant female mentioned that the physician gender does not affect the patient decision regarding Pap smear test. She said: "Not necessarily, because it's the mind that should overcome the matter. It's depends on the individual mind and perception. If the rise of "shy" arises, female should aware that the test is done for their own good." (Female, Malay, 23 years old)

However others said: "Yes, the gender of physician absolutely will affect the women decision because female not prefer if the physician from opposite sex to observe or examine their sexual parts." (Male, Malay, 25 years old)

"Yes, because in Malaysian culture the women feel shy to be examined her private parts by male physician." (Male, Malay, 23 years old)

"Yes, the Malaysian patients from different background and different races will feel ashamed to allow physician from opposite gender to examine them." (Female, Indian, 23 years old)

"Most ladies prefer lady doctor to do Pap smear test as they can be more open and discuss such issue together, if male doctor, ladies feel shy and uncomfortable." (Female, Indian, 23 years old)

"Yes, because different people has different culture. If in western countries, the female do not mind if the physician male examine her for Pap smear test, however in east countries, female concern about the gender of the physician." (Female, Malay, 22 years old)

"It's embarrassing that the woman exposure her private parts to the male physician." (Female, Malay, 23 years old)

"Gender of the physician who perform the test is one of the barriers of women to do Pap smear test" (Female, Malay, 23 years old)

Who prefer to perform Pap smear test for you?

A total of 16 female participants prefer female physician to perform the Pap smear test for them except one. She said "any qualified/certified person who is knowledgeable and fit enough for the test regardless the gender." (Female, Malay, 23 years old)

Others said: "Personally I prefer a female doctor who is expert in doing Pap smear test." (Female, Malay, 22 year old)

Advantages of Pap smear

All the study participants mentioned that the advantage of a regular Pap smear test is to detect the abnormality at the early stage of cervical cancer. One of them said "The advantage of Pap smear test it may help to detect precancerous stage of cervical cancer." (Male, Malay, 24 years old)

Disadvantages

Most of the participants 9 (%) mentioned that the disadvantages of the Pap smear test is expensive.

One of the participants said: "The disadvantages of the Pap smear test are its expensive, a bit pain and can cause bleeding in rare cases." (Female, Malay, 22 years old)

Significant number of the study participants 8(%) mentioned that one of the disadvantages of the Pap smear test is injuries in the vagina due to the test procedures. Some of the participants 7(%) mentioned that infection due to the test procedure is one of the disadvantages of Pap smear test. Some of the study participants 7(%) mentioned that pain due to the procedure of the test is disadvantage. Three of the participants mentioned that trauma is one

of the disadvantages of the Pap smear test. Two of the study participants mentioned that bleeding due to the Pap smear test procedure is a disadvantage. One of the participants mentioned that availability of the test is one of the disadvantages because this test is not available all over the country. One of them said: "Usually Pap smear test is done in central hospital which usually located in the main town, for low-income people and those who did not have transportation particularly in rural area may find it difficult to do the regular screening." (Female, Malay, 23 years old)

Prevention methods

The majority of the participants 20 (%) mentioned that the most effective prevention methods of cervical cancer is having sex only after get married with the spouse only. Most of the participants 15 mentioned that HPV vaccination is one of the preventive measures of cervical cancer. Most of the participants 14 mentioned that Pap smear test is one of the preventive measures of cervical cancer. Not smoking is one of the preventive measures mentioned by the study participants 11. Some of the study participants 8 mentioned that education regarding cervical cancer is one of the preventive measures of cervical cancer. One of them said: "The best way of the prevention is educate female on the prevention measures of cervical cancer." (Male, Chinese, 24 years old)

Using condom 7 is one of the preventive measures mentioned by the study participants. Three of this study participants mentioned that reduce number of giving birth is one of the cervical cancer preventive measures. Two of the study participants mentioned that personal hygiene and healthy lifestyle is one of the preventive measures.

Discussion

In terms of barriers to seek cervical cancer screening, most of this study participants mentioned that the main barriers for women to not perform Pap smear test is the lack of awareness. Similar finding was reported by other studies that lack of knowledge is a major issue regarding Pap smear test (Box, 1998; Chiu et al., 1999; Breitkopf et al., 2005). Dignan et al. (1996) reported that the more knowledgeable women about Pap testing, the more likely they are to make a screening visit. Several studies (Schofield et al., 1994; Stewart et al., 1994; Yabroff et al., 2000; Abercrombie, 2001) reported that knowledgeable women adhere to recommended follow-up for an abnormal result. Some studies in developed countries agreed with this study finding that the rates of Pap test receipt remain low due to lack of awareness (Sutton et al., 2001; Gupta et al., 2002). Lack of awareness of the importance of screening is one of the barriers of cervical cancer screening (Mamon et al., 1990; Paskett et al., 1990; Lantz et al., 1995).

The greatest barrier to effective cervical screening is the inadequate knowledge about the test. Utilization of the Pap test for cervical cancer screening will not increase unless knowledge is improved and barriers are eliminated. The findings of our study suggest that it is important to provide information about the value of cervical smear test and to contradict barriers. Providing information through leaflets and giving clear explanation about the test procedure can help in reducing anticipated distress and embarrassment (Al Sairafi & Mohamed, 2009). It concurred with other studies that women's knowledge influenced their screening behavior (Jirojwong et al., 1994; Maaita & Barakat, 2002; Holroyd et al., 2004; Markovic et al., 2005; McMullin et al., 2005; Breitkopf et al., 2005).

In this study, the majority of the participants agreed that the gender of the physician will affect the women decision to do Pap smear test. This is consistent with other research with Asian women, as many studies reported that they preferred female doctors to perform physical examination on intimate body parts and were highly embarrassed with male health providers (Nguyen et al., 2000; Holroyd et al., 2004). Similar finding was reported by other research (Naish et al., 1994; Nichols, 1987; Sutton & Rutherford, 2005) that the anxiety of potentially being faced with a male sample taker was a significant problem. Another study from Hong Kong reported that many Hong Kong women prefer not to have their genital areas examined by a male doctor (Dickinson & Chan, 2001). Another study from Mexico showed that a notable percentage of women agreed that being examined by a male physician would discourage them from getting a Pap test (Leyva et al., 2006). Another study from Kuwait reported that about 79% of the respondents would prefer a female doctor to conduct the Pap smear test (Al Sairafi & Mohamed, 2009). Barriers that have Lazcano-Ponce et al. (1999) reported that being examined by male is one of the barriers of Pap smear test screening among women. Research has shown that easy access to female doctors contributed to the increased likelihood of receiving a Pap smear test (Holroyd et al., 2004). The majority of this study participants mentioned that there is a high levels of embarrassment and anxiety about having vaginal or pelvic examination by male doctors. The possible explanation may be due to religious affiliation and cultural beliefs, 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.

Some of this study participants mentioned that pain and possible contamination during the procedure were the disadvantages of the Pap smear test. Similar studies reported that fear of pain and lacks of hygiene prevent women from attending Pap smear test screening (Doyle, 1991; Murray & McMillan, 1993). Pain and embarrassment were reported by Lazcano-Ponce et al. (1999) as a barrier. Wong et al. (2008) reported that an expectation of pain and discomfort during the procedure was another barrier to screening among these women. Misconception about the test being painful have also been reported in other studies (Bener et al., 2001; Maaita & Brakat , 2002; Gamarra et al., 2005). Fear of infection was reported by others (Bener et al., 2001; Maaita & Brakat, 2002; Gamarra et al., 2005).

Other important reasons mentioned by these study participants are cost; similar findings was reported by Fernandez-Esquer et al. (2003), access to health care; similar finding was reported by (Mamon et al., 1990;

Paskett et al., 1990; Lantz et al., 1995), having to take time off work for screening; similar findings was reported by (Mamon et al., 1990; Paskett et al., 1990; Lantz et al., 1995). The limitation of this study is inherent in qualitative study designs, its purpose was not to generalize the present findings to the larger population. Instead, this qualitative method provided an in-depth meaning of the perceptions of medical students towards Pap smear screening.

The main barriers for women to not perform Pap smear test is lack of awareness, shyness and the cost of the test. Gender of the physician will affect the women decision to do Pap smear test. The majority of the participants mentioned that the most effective prevention methods of cervical cancer are having sex only after get married with the spouse only, HPV vaccination and Pap smear test.

Improving the knowledge of the university students regarding cervical cancer screening is one of the most important steps in enhancing the Pap test coverage among Malaysian women.

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