

RESEARCH COMMUNICATION

Knowledge, Attitudes and Practices about the Pap Smear among Medical Workers in Naresuan University Hospital

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Abstract

Background: Cervical cancer, very common in females of the developing world, has a long premalignant period. Primary and secondary prevention can reduce the incidence. The Pap smear is the main screening modality in Thailand but the coverage is rather poor. **Objective:** This study was performed to evaluate the knowledge, attitudes and practices of medical workers in Naresuan university hospital who met the WHO guidelines for screening. **Methods:** A questionnaire covering general characteristics, knowledge, attitudes and practices about cervical cancer screening was administered and the data obtained were analyzed with SPSS version 16. **Results:** The majority of the 78 included participants were nurses with an education mostly more than diploma level. Knowledge about the importance of the Pap smear, early detection and the treatment of early stage cervical cancer was adequate (90.9 % and 81.6%, respectively) but awareness of cervical cancer risk factors was quite low. The most frequent reasons for avoiding Pap smear screening were fear of vaginal examination (27.6%), embarrassment (26.3%), lack of any symptoms (22.4%) and being busy (17%). **Conclusion:** The Pap smear is appropriate for detection of premalignant lesions of cervical cancer in Thailand but the coverage is still low. Although this study was performed with medical workers, their compliance with screening recommendations was still low. If we can improve the knowledge and attitudes about Pap smear cervical cancer screening in such experts, they should be able to readily provide appropriate and accurate information to the population to motivate the general population to join screening programs.

Keywords: Pap smear - knowledge attitudes and practices - cervical cancer screening - secondary prevention

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Introduction

Cervical cancer is generally the second most common cancer in females, causing high morbidity and mortality worldwide (Armstrong et al., 1992; Parkin et al., 2001; Sriamporn et al., 2006). Cervical cancer kills 274,000 women each year. At least 80% of cervical cancer death occurs in developing countries such as Thailand (Parkin et al., 2001; Sriprung et al., 2004; Sriamporn et al., 2006). In Thailand we found 6,243 new cases of cervical cancer and 2,620 patients died from cervical cancer each year with an estimated age standardized incidence rate 19.5/100,000 (IARC, 2002; Parkin et al., 2005; Wilailak, 2009).

Fortunately cervical cancer has a long premalignant period that provide the opportunity for screen and treat before it turns to be invasive cervical cancer (WHO press, 2002; Sawaya et al., 2001). Human Papilloma Virus (HPV) is the major cause of cervical cancer and precancerous cervical lesion (Gustafsson et al., 1997; Walboomer et al., 1999; Brink et al., 2005). HPV is the most common sexually transmitted diseases and the risk factors of

cervical cancer usually associated with sexual behavior and host defense mechanism (Thomas et al., 2001).

Cervical cancer is a preventable disease. The prevention was classified to primary, secondary and tertiary prevention. The primary prevention is reduced risk factors. Risk factors of cervical cancer are young age at first sexual intercourse, number of sexual partners and multiparity. Prevention from HPV infection by HPV vaccine which can prevent HPV type 16 and 18 is the primary prevention too (Chicharoen et al., 1998; Thomas et al., 2001).

Secondary prevention considered the detection and treatment of premalignant lesion before it turns to be invasive cancer (Janerich et al., 1995; Gustafsson et al., 1997; Crum et al., 2003). Nowadays, there is so many methods to detect premalignant lesion such as conventional Pap smear, liquid based cytology, VIA and HPV DNA detection. The conventional Pap smear is the main secondary prevention in Thailand because of its cost effectiveness, convenience, simple instrument and easily to train (Chicharoen et al., 1998; Thomas et al., 2001;

Crum et al., 2003; Kritpetcharat et al., 2003; Sriamporn et al., 2004; Parkin et al., 2005). Risk of invasive cancer decreased with increasing frequency of having a Pap smear (Nieminen et al., 1995; Gustafsson et al., 1997; Thomas et al., 2001; Kritpetcharat et al., 2003). Both primary and secondary prevention can reduce the incidence of cervical cancer by reduced risk factors and treatment before progress to invasive cancer but the tertiary prevention which is the early detection and treatment of cervical cancer cannot decrease the incidence of the cancer but can reduce the morbidity and mortality from disease (Hristova et al., 1997).

The obstacles for primary, secondary prevention and some tertiary prevention in Thailand are the hesitation to visit the physician, patient's embarrassment and lack of knowledge about the risk factors and screening methods. A survey study conducted in the year 2000 found that 33% of women had never been screened for cervical cancer during their life time (Chicharoen et al., 1998; Sriamporn et al., 2004). The ways to decrease cervical cancer incidence are provide knowledge, appropriated attitude and provide the convenience for screening. The main source of health knowledge is the health care provider such as doctor, nurse and even nurse aid who can give the information to people for the improvement of knowledge and attitude to motivate them to have cervical cancer screening.

This study was performed to evaluate the knowledge, attitude and the practice of the medical worker for the baseline for standardize and use the information to be the guideline for improvement knowledge and attitude of the hospital health care provider to the high level enough for provide the accurate information and good attitude for cervical cancer screening to the people and patients.

Materials and Methods

After the ethical committee approved this study protocol, the study was performed as a cross sectional survey. The subjects for this study were included from the female medical worker in Naresuan university hospital who met the screening criteria by WHO guideline (WHO Press, 2002; ACOG Practical Bulletin, 2003). All subjects were invited to participate the study voluntarily by answer the questionnaire in private place.

The questionnaire was performed and already tested for validity and reliability. The questionnaire contained both coded and open ended questions. The questionnaire composed with general characteristic of the subject included age, occupation, income, number of sexual partner, gravida, parity and contraceptive methods. The knowledge aspects were about the risk of cervical cancer, screening interval according to WHO guideline and necessary of Pap smear for cancer detection. The attitude aspect included the reason that they delayed or avoid to do Pap smear, the knowledge resource that they seek and what can make them more comfortably to do the Pap smear. In the practice aspect, the questionnaire asks about did they ever Pap smear, frequency and the interval of last Pap smear.

We included 78 participants women health care worker in Naresuan university hospital to fulfill the questionnaire.

After the questionnaire was collected completely, the statistic analysis was performed with SPSS version 16. General characteristics were evaluated with mean, mode, median, SD and percent. The knowledge and attitude and practice aspects were also evaluated.

Results

We included 78 participants who met the WHO guideline for screening Pap smear. The general characteristics are shown in Table 1. Majority of the participant was nurses (31.8%) which most of them income was lower than 30,000 Baht per month (93.4%), the education equal or more than diploma 76.0% and the marital status were married 75.4%. Most of them have single partner but some of them ever have abnormal vaginal discharge or vulva lesion (54.5%) which may represented the sexual transmitted disease risk.

The knowledge aspect, most participants know that Pap smear could detect early stage cervical cancer (90.9%) and the early stage cervical cancer can be cured (81.6%). The major source of knowledge of the patients came from doctors (48.1%), information handbill (48.1%) and mass media such as television or radio (36.4%). The knowledge about cervical cancer risk factor is quite low. They knew that multiple sexual partners is a risk factor 82.2% and young age at first sexual intercourse 76.7% but another risk factor such as smoking, multiparity, low socioeconomic and oral contraceptive pills use were not recognized.

The attitude aspect, the main reasons that they delayed or avoid screening Pap smear were fear of vaginal examination (27.6%), embarrassment (26.3%), no symptoms (22.4%) and busy (17.1%). Most of them feel more comfortable when Pap smear was performed by female doctors (80.5%).

In practice aspect, surprisingly 20.5% of the participants

Table 1. General Characteristics

Mean age (yr)	32.5
Mean age at 1 st sexual intercourse (yr)	22.4
Occupation	
Nurse	31.8%
Nurse aid	43.9%
Other	24.2%
Education	
Secondary school	21.3%
Diploma	50.7%
More than diploma	25.3%
Income (Baht)	
5,000-10,000	48.7%
10,001-30,000	44.7%
30,001-50,000	6.6%
Marital status	
Marry	75.4%
Single	14.5%
Widow	5.8%
Divorce	4.3%
Contraception	
No contraception	31.6%
Condom	21.1%
Oral contraceptive pills	18.4%
Injection/Implantation	11.8%
Sterility	14.5%

who work in the hospital and met the WHO criteria never screen Pap smear. The result of last Pap smear was all normal but despite of the mean age 32.5 year the most of them have previous Pap was only 1-2 times in their lifetime which is quite low.

Discussion

Cervical cancer is the second most common gynecologic cancer in Thai women and worldwide (Armstrong et al., 1992; Parkin et al., 2001; IARC, 2002; Parkin et al., 2005; Wilailak., 2009). Pap smear is the appropriate screening test for detection premalignant lesion of cervical cancer in Thailand but the coverage of the Pap smear is quite low in Thai population (Chicharoen et al., 1998; Thomas et al., 2001; Crum et al., 2003; Sriamporn et al., 2004; Sriamporn et al., 2006; Wilailak, 2009). From the literature review, the most common reasons in patient who avoid Pap smear are fear of vaginal examination, embarrassment and not concern the risk (Chicharoen et al., 1998; Kritpetcharat et al., 2003; Sriamporn et al., 2004; Gamarra et al., 2005; Moriera et al., 2006; Twaha et al., 2006; Mona et al., 2009). The reason avoiding Pap smear in our study was shown in the same way which may represent Thai culture of the embarrassment of female patients.

This study was performed to evaluate the knowledge, attitude and practice of the medical worker in the hospital according to Pap smear. The results showed us some surprise aspects such as even they are the medical worker who work in the hospital but the knowledge about risk factor of cervical cancer is quite low and furthermore the Pap smear coverage is 79.5%. Even the number of coverage seems to be high when compared to the previous study in general population (Walboomers et al., 1999; WHO press, 2002) but they performed only 1 or 2 times of Pap smear in their lifetime which is too low.

As we know that the medical worker is one of the most important health knowledge provider and promoter. So if the medical workers have unsatisfactory knowledge, inappropriate attitude and practice, they would not be distribute the knowledge to the community and can't be persuade the patients to performed Pap smear. From this study, we could improve the medical worker knowledge, attitude and practice based on the defect we saw in the questionnaire.

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