Knowledge, Attitude and Practice of the Pap Smear as a Screening Procedure Among Nurses in a Tertiary Hospital in North Eastern India

Chamaraja Thippeveranna1*, Surekha Sadhana Mohan1, Laiphrakpam Ranjit Singh2, Naorem Nabakishore Singh2

Abstract

Background: Cancer of the uterine cervix is one of the most common cancers among women worldwide. Industrialized countries have dramatically reduced the incidence of mortality from cervical carcinoma in the last 50 years through aggressive screening programs utilizing pelvic examinations and Papanicolaou (Pap) smears but it still remains a major problem in the developing world. Objectives: This study was performed to determine knowledge, attitude and practice of Pap smear as a screening procedure among nurses in a tertiary hospital in north eastern India. Material and Methods: This cross sectional study was carried out with a questionnaire survey covering the socio demographic factors, knowledge, attitude and practices about Pap smear screening among 224 nurses in Regional Institute of Medical Sciences, Imphal, Manipur, India during December 2011. Results: Two hundred and twenty one participants (98.6%) had heard about cervical carcinoma but 18.3% lacked adequate knowledge regarding risk factors. Knowledge about the Pap smear was adequate in 88.8% of the respondents. Out of these, only 11.6% had Pap smear at least once previously. The most common reasons for non-participation in screening were lack of any symptoms (58.4%), lack of counselling (42.8%), physician does not request (29.9%) and fear of vaginal examination (20.5%). Conclusion: Although knowledge of Pap smear as a screening procedure for cervical cancer is high, practice is still low. The nurses who should be responsible for opportunistic screening of women they care for are not keen on getting screened themselves. If we can improve the practice of Pap smear screening in such experts, they should be able to readily provide appropriate and accurate information and motivate the general population to join screening programs.

Keywords: Cervical cancer - pap smear - knowledge - attitude - practice

Introduction

Cancer of the cervix is a major burden on women’s health worldwide. Cervical cancer is the second most common cancer in women worldwide (12%) following cancer of the breast; in developing countries however it is the most common cancer among women (WHO, 2006). In India this is the commonest cancer among women and this country has the largest burden of cervical cancer patients in the world. India accounts for one-fifth of the world burden of cervical cancer (Desai, 2004). In many of the developed countries the annual incidence and mortality from this cancer has gone down by 50-70% since the introduction of population based screening (Adeleke et al., 2007).

Apart from the fact that incidence of cervical carcinoma is low in developed countries compared to what obtains in developing countries, the clinical features also show contrasting features. In developed countries 75% of patients present in early while in developing countries 75% of patients present in advanced stage where cure is not to be expected (Sankaranarayanan et al., 1998). According to the WHO, 80% of the 288,000 deaths out of 471,000 new cases globally were from developing countries in 2000 (WHO, 2002).

More than 35 types of the HPV are known to infect the genital tract out of which approximately 20 are associated with cervical cancer, with the most common types 16 and 18 and types 6 and 11 are more commonly associated with genital warts (Bosch et al., 1995; Arends et al., 1998). Early sexual debut, multiple sexual partners, HPV infection, smoking, genetic predisposition and compromised immunity are associated with development of cervical cancer (Munoz et al., 2003; McFarlane-Anderson et al., 2008). Recent studies have shown a link between HIV-1 and invasive cervical cancer (Kahesa et al., 2008). Fortunately cervical cancer has a long premalignant period that provides an opportunity for screening and treating before it turns to be invasive cervical cancer.
Cervical cancer to promote informed decisions about cervical cancer screening. Moreover, it has been shown that recommendation of cervical cancer screening to individuals by medical professionals, including nurses, effectively improves screening coverage among the general population (Yoshino et al., 2012). Therefore, nurses should have current and accurate knowledge about Pap smear and Cervical cancer to promote informed decisions about cervical cancer screening.

Materials and Methods

This cross sectional study was carried out with a questionnaire survey covering the socio demographic factors, knowledge, attitude and practices about Pap smear screening among 224 nurses in Regional Institute of Medical Sciences, Imphal, Manipur, India during December 2011.

No personal identifying information was collected in the anonymous questionnaire. All participants were given a full explanation of the methodology and purpose of the project and an assurance of confidentiality. Participants were also assured that their participation in the study was voluntary and that they could refuse to participate at any time during the interview. The questionnaire was designed based on the literature review and consisted of four sections: Socio-demographic characteristics (eleven questions): knowledge about cervical cancer (four questions); knowledge, attitude and practice of Pap smear test (ten questions); and finally barriers to undergoing Pap smear screening (ten questions).

Knowledge, attitude and practice regarding the Papanicolaou examination were evaluated as follows: Adequate knowledge - when the woman reported having heard about the examination, knew it was to detect cancer in general, or specifically of the cervix, and was able to cite at least two precautions necessary before performing the examination.

Inadequate knowledge, when the woman reported never having heard about the examination or had heard about it but did not know that it was to detect cancer; or was unable to cite at least two precautions that should be performed before the examination.

Adequate attitude, when the woman presented prevention of cervical cancer as a reason for performing the Papanicolaou examination. When she reported as a reason the fact that it is a routine examination or a desire to know that she was in good health, an adequate attitude was only considered if she also had adequate knowledge about the examination.

Inadequate attitude, when the woman presented reasons for the examination other than the prevention of Cervical Cancer.

Adequate practice, when the woman had performed her last preventive examination within the previous three years; returned to receive the result of the last examination performed and sought a consultation to show the result of the examination.

Inadequate practice, when the woman had performed her last preventive examination more than three years before or had never taken an examination, even after having commenced sexual activity more than a year before; or when she had not returned to receive the last result; or had not sought a consultation to show the examination results.

The association between adequacy of knowledge, of attitude and of practice of the examination and some socio-demographic characteristics, such as age, education, marital status, commencement of sexual intercourse, work outside the home, proximity of the residence to the health unit was analysed statistically by computing proportions and percentages.

Results

The socio-demographic characteristics of the study sample are displayed in Table 1. A total of 224 nurses were included in this study. Nurses aged between 30-39 years constituted the majority (54.4%). 92.4% were married. Maximum numbers of the participants were from the low socioeconomic status (39.2%). Majority of them were non-smokers (91.6%) and did not chew tobacco (54.4%).

Knowledge of study participants on Risk Factors for Cervical Cancer.

Knowledge of study participants on Risk Factors for Cervical Cancer.

Table 1. Socio-demographic Characteristics of Participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years</td>
<td></td>
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</tr>
<tr>
<td>20-29</td>
<td>34</td>
<td>15.10</td>
</tr>
<tr>
<td>30-39</td>
<td>122</td>
<td>54.40</td>
</tr>
<tr>
<td>40-49</td>
<td>56</td>
<td>25.00</td>
</tr>
<tr>
<td>50-59</td>
<td>12</td>
<td>5.30</td>
</tr>
<tr>
<td>&gt;60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
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<td></td>
</tr>
<tr>
<td>Single</td>
<td>16</td>
<td>7.10</td>
</tr>
<tr>
<td>Married</td>
<td>207</td>
<td>92.40</td>
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<tr>
<td>Divorced</td>
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<tr>
<td>Socioeconomic status</td>
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<td>Low</td>
<td>88</td>
<td>39.20</td>
</tr>
<tr>
<td>Middle</td>
<td>58</td>
<td>25.80</td>
</tr>
<tr>
<td>High</td>
<td>78</td>
<td>34.80</td>
</tr>
<tr>
<td>Smoking</td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>18</td>
<td>8.00</td>
</tr>
<tr>
<td>No</td>
<td>206</td>
<td>91.60</td>
</tr>
<tr>
<td>Tobacco chewing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>102</td>
<td>45.50</td>
</tr>
<tr>
<td>No</td>
<td>122</td>
<td>54.40</td>
</tr>
<tr>
<td>Family history of cancer</td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>122</td>
<td>54.40</td>
</tr>
<tr>
<td>No</td>
<td>206</td>
<td>91.60</td>
</tr>
</tbody>
</table>
Knowledge on risk factors

(a) Early age of coitus 41 18.30
(b) Multiple sexual partners 45 20.00
(c) Early age of first pregnancy 76 33.90
(d) Too many / too frequent births 34 15.10
(e) Low socio-economic status 25 11.10
(f) Poor personal hygiene 19 8.40
(g) High risk male partner 26 11.60
(h) Sexually transmitted diseases 47 20.90
(i) Genital infection – HPV, HIV, Chlamydia 88 39.20
(j) Lack of counselling 96 42.80

Knowledge on risk factors for cervical cancer are smoking (17.4%), genital infection – HPV, HIV, Chlamydia (39.2%), and having a high-risk male partner (11.6%).

Knowledge on Pap smear test

(a) Early age of coitus 41 18.30
(b) Multiple sexual partners 45 20.00
(c) Early age of first pregnancy 76 33.90
(d) Too many / too frequent births 34 15.10
(e) Low socio-economic status 25 11.10
(f) Poor personal hygiene 19 8.40
(g) High risk male partner 26 11.60
(h) Sexually transmitted diseases 47 20.90
(i) Genital infection – HPV, HIV, Chlamydia 88 39.20
(j) Lack of counselling 96 42.80

Knowledge about Pap smear test was adequate in 88.8% of the participants and 91.5% showed adequate attitude towards performing Pap smear.

Discussion

Cervical cancer despite being the commonest genital cancer of women in India, there are no properly organized or high-level opportunistic screening programs for cervical cancer in any of the provincial states of India. Data from population-based cancer registries indicate a slow, but steady, decline in the incidence of cervical cancer. However, the rates are still too high, particularly in the rural areas, and the absolute number of cases is on an increase due to population growth.

Reasons for not doing Pap smear test

(a) Fear of vaginal examinations 46 20.50
(b) Embarrassment 29 12.90
(c) Lack of any symptoms 131 58.40
(d) Being busy 11 4.90
(e) Carelessness 31 13.80
(f) No encouragement from the partner 11 4.90
(g) Physician does not request 67 29.90
(h) Long distance from the hospital 3 1.30
(i) Doctors are not cooperative 8 3.60
(j) Lack of counselling 96 42.80

In conclusion, in India like in most developing countries nurses are the majority of health personnel. It is important that they are well educated regarding cervical cancer, due its public health importance in India and the world, as they have a large role to play in informing the general public and promoting preventive practices given their influence in society. Although knowledge of Pap smear as a screening procedure for cervical cancer is high, practice is still low. The nurses who should be responsible for opportunistic screening of women they care for are not keen on getting screened themselves. If we can improve
the practice of Pap smear screening in such experts, they should be able to readily provide appropriate and accurate information and motivate the general population to join screening programs.

References


