Original Article

Knowledge and Attitudes towards Cervical Cancer among Women in Bandar Abbas City, South of Iran

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Abstract

Background: Cervical cancer is one of the most widespread and major causes of women's death in developing countries. The aim of this study was to the assessment of the knowledge and attitudes towards cervical cancer among women in the south of Iran. **Materials and Methods**: This cross-sectional study was conducted on 200 women who referred to Shariati Hospital. Data collection was done by using a questionnaire consisted of three sections (demographic information, knowledge, and attitude). Total score of knowledge score was classified as low=less than 50%, moderate=50-75%, and good=75-100%. Also, attitude total score of less than 50% indicated negative, 50-70%=neutral, and 75-100%=positive. Data were analyzed using SPSS version 16 with the required central criteria, Pearson correlation coefficient, and analysis of variance. **Result**: Our findings showed that the mean age of the subjects was 34.49±8.9 years. Also, it suggested that 43 subjects (21.5%) had low, 133 (66.5%) moderate and 24 (12%) good level of knowledge. Knowledge of cervical cancer was significantly associated with education level (P-value= 0.014). Also, one subject) 0.5% (had negative, 93 (46.5%) neutral, and 106 (53%) had a positive attitude toward cervical cancer. A significant difference showed that between attitude and education level (P-value=0.001). **Conclusion:** According to the results, the programs that could raise knowledge and change attitudes about cervical cancer prevention is recommended.

Keywords: Knowledge, Attitudes, Cervical Cancer, Iran

Introduction

Cervical cancer is one of the most common major causes of female mortality in developing countries (1, 2). According to the World Health Organization report, 85% of cases of cervical cancer are related to developing countries (3). Given that the pre-cancerous stage is prolonged and that the survival rate of the patient in the stage of pre-cancerous lesions that received treatment is approximately 100%; screening is important in the early diagnosis of the disease (4). The mean age of patients is 52 years at the time of diagnosis. Cervical cancer has two age peaks; 39-35 and 64-60 years old (5). Regarding the large spread of cervical cancer and late detection of high mortality, the implementation of the Pap smear test is of particular importance as a screening of the early stages (6). The screening program in Iran was implemented by the Ministry of Health and Medical Education since 1989, according to which all women aged 20-65 years. After their first marriage entered the screening program, and women who had been negated for three consecutive years should screen every three years (7). Pap smear test is the most effective and cost-benefit method for screening and reducing the deaths from cervical cancer (8). Pap smear as a simple, inexpensive, and uncomplicated method is still the preferred test for screening cervical cancer (9). Cervical cancer is diagnosed with Pap smear in the early stages. Pap smear is the most successful public health intervention program in cancer prevention and control (10). Performing Pap smears in an optimal way in health care centers can in fact reflect the fair distribution of health resources (11). Evidence suggests that women are confronted with nu-

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merous cultural, emotional, and practical problems for performing Pap smear tests (12). The most important risk factors for cervical cancer include early sexual intercourse, multiple sexual partners, cigarette smoking, immune system deficiency, and history of human papillomavirus infection. However, the association of this disease with contraceptive pills is still under discussion (13-15). Given the importance of this cancer in women's mortality in developing countries; treatment and regular follow-up of these patients is important (16). In Iran, 45% of cervical cancer is diagnosed via clinical symptoms, of them, 65% treated (17). Therefore, this study was aimed to the assessment of the knowledge and attitudes towards cervical cancer among women in Bandar Abbas city, south of Iran.

Materials and Methods

Study design
This cross-sectional study was conducted on 200 married women who referred to the Shariati Hospital at Bandar Abbas city. Sampling was done randomly among women. The women who completed the questionnaire entered the study, and unwilling to participate to the study, and incomplete questioners were excluded.

Data Collection
The data collection instrument was a questionnaire consisted of three sections. The first section includes demographic information (7 questions) such as age, education level, mode of delivery (normal vaginal delivery/ caesarian section), parity, obstetric history, and abortion. The second section consisted of 17 questions for assessment of knowledge with answers correct, incorrect, and don't know. Knowledge scores for these questions were coded as '1' for a correct response ("Yes") and '0' for an incorrect ("No") or 'don't know' response. A total score was calculated for each of the 17 questions. Participants who achieved a total score equal or fewer to 8 (=50%) was considered as low, 9 to 13 (50-74%) moderate, and 14 to 17 (75-100%) good level of knowledge. The third section addressed attitude and consisted of 10 items. The attitude items were rated on a 5-Likert scale (totally agree, agree, no idea, disagree, and totally disagree). Each item was to score between 1 and 5. The total score was calculated for each respondent. The minimum and maximum scores are 10 and 50. Acquiring less than 50% of the score showed negative, (50-74%) neutral, and (75-100%) positive attitude. This section assessed women's perception of risk, the severity of cervical cancer, perceived self-efficacy, and the importance of cervical cancer screening. The validity of the questionnaire was determined with an expert panel. Also, reliability was assessed using Cronbach's alpha that was more than 78%.

Data Analysis
Data analysis was done by the software SPSS version 16, via the central indices, Pearson correlation coefficient, analysis of variance tests. The significance level was set at P-value<0.05.

Result

In this research, 200 women participated. The mean age of the participant was 34.49±8.192 years (ranged 18-55). In terms of educational level, 9 (4.5%) women were illiterates, 20 (10%) had an elementary school degree, 109 (54.5%) middle and high school, and 62 (31%) had an academic degree. Regarding parity history, 19 (9.5%) were nullipara, 46 (23%) women had one, 65 (32.5%) had two, 27 (%13/5) had three, 26 (13%) had four pregnancies, 9 (4.5%) had five, 5 (2.5%) had six, and 3 (1.5%) had seven pregnancies. The findings showed that 43 (21.5%) women had low, 133 (66.5%) women had moderate, and 24 (12%) women had good knowledge toward cervical cancer (Table-1). A significant difference was observed between knowledge scores and education level (P-value=0.014). Our findings showed that 1 (0.5%) women had negative, 93 (46.5%) women had neutral, and 106 women (53%) had a positive attitude toward cervical cancer. A significant difference was seen between attitude and education level (P-value=0.001).

Discussion

The aim of this study was to the assessment of the knowledge and attitudes towards cervical cancer among women in Bandar Abbas city, south of Iran. Cervical cancer is the second common cancer of women worldwide (18). The results showed that 43 (21.5%) of women had a low level of knowledge toward cervical cancer. The low level of knowledge among studied women is consistent with that of both previous national and international studies (19-22). In contrast to our findings, a study by Khojasteh et al. shows that 10% of women had a low level of knowledge about cervical cancer (23). This difference can be explained by the age of participant and year of research in two studies. In the present study, the majority of the participants (66.5%) had moderate knowledge about risk factors of cervical cancer. This finding was consistent with the study of Ramezani Tehrani et al. (2). Also, a similar finding was reported among Malaysian female university students (24). Gatum et al. showed that women with higher levels of education had a better knowledge of the risk factors of cervical cancer (21). But this finding is in contrast with the results of the study by Keshavarzian et al. (25). This difference may be due to the difference in the education level of participants in the two studies. Higher literacy levels may be explained to the better levels of knowledge of cervical cancer

Table 1. Knowledge of cervical cancer risk factors among participants

Knowledge items	Correct N (%)	Incorrect N (%)
1. Is cervical cancer one of the most important cancers?	124 (62%)	76 (38%)
2. Does old-age marriage increase the risk of uterine cancer?	45 (22.5%)	155 (77.5%)
3. Does genital infection reduce the risk of uterine cancer?	161 (80.5%)	39 (19%)
4. Is cervical cancer higher in nulliparous women?	131 (65.5%)	69 (34.5%)
5. Is there an ulser in the cervix of the barrier to performing a Pap smear test?	78 (39%)	122 (61%)
6. Is cervical cancer one of the most common cancers?	129 (64.5%)	71 (35.5%)
7. Should a woman with abnormal uterine bleeding do a pap smear test?	128 (64%)	72 (36%)
8. Does cervical cancer cause bleeding and pain after intercourse?	66 (33%)	134 (67%)
9. Can a pregnant woman do pap smear?	130 (65%)	69 (34.5%)
10. Does cervical cancer in the early stages could be asymptomatic?	162 (81%)	38 (19%)
11. Pain in the pelvic floor is an early symptom of cervical cancer?	30 (15%)	170 (85%)
12. Is cervical cancer not recognizable at an early stage?	45 (22.5%)	155 (77.5%)
13. Have you ever seen Pap smear with symptoms such as infection and bleeding?	79 (39.5%)	121 (60.5%)
14. Do all women have to perform Pap smear once a year?	179 (89.5%)	21 (10.5%)
15. Should Pap smear test be performed only at a young age?	49 (24.5%)	151 (75.5%)
16. Is it better to do a Pap smear while bleeding?	118 (59%)	82 (41%)
17. Do you have performed testing on 15-18 years old?	137 (86.5%)	27 (13.5%)

among women in the present study. A significant difference showed that between knowledge and education level. There are several studies with similar results (19, 23, 26). It establishes an essential step for educational awareness in the community against cancer. More importantly, the outcomes underscore the need for health education to help the community to appreciate the risk factors and also prevent cervical cancer. According to the results, the majority of the participants (53%) had a positive attitude about the prevention of cervical cancer. This finding was consistent with previous (27, 28). Also, a similar finding was reported among referring female to health centers in Mashhad (29). Also, results showed a significant difference between attitude and education level. This finding was consistent with other similar research (23, 30). Also, Hadi et al. found that women with more education level had more correct attitude toward cervical cancer (26).

Conclusion

The present findings showed that the majority of participants had neutral attitude and moderate knowledge about cervical cancer. Low levels of knowledge have been associated with late diagnosis and poor prognosis of cervical cancer. Thus, the plans that raise knowledge and change attitudes about cervical cancer prevention are recommended. Our sample was married women who referred to the Shariati Hospital in Bandar Abbas city and may not be generalizable to other populations. The self-report nature, although facilitated, might have caused bias and over-or under-estimation of certain

variables.

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