ORIGINAL ARTICLE

Exploring Women's Challenge to Pap Smear Attendance and Colposcopy Referral: A Qualitative Study

Suhailah Mohammed Ali[1], Hewa Sattar Salih[2], Naji Yasser Saadoon[3]

[1] Department of Maternal and Neonate Health Nursing, College of Nursing, University of Kirkuk, 36013 Iraq
[2] Department of Community Heath Nursing, College of Nursing, University of Kirkuk, 36013 Iraq
[3] Department of Community Heath Nursing, College of Nursing, University of Babylon, 51002 Iraq

ABSTRACT

Introduction: The greatest protection against cervical cancer can be achieved through the combination of cervical screening via repeated Pap tests and HPV vaccination before first sexual intercourse. This study aimed to explore women's perceptions and experiences of Pap test and colposcopy examination to avoid advance stage of cervical cancer. **Methods:** An exploratory qualitative approach was carried out using face-to face semi-structured interviews with 22 women attending for their Pap test appointment or colposcopy examination in the main hospital in Kirkuk, Iraq. The study took place between October 2019 and March 2020. The collected data were analysed using inductive content analysis. **Results:** The findings revealed gap in knowledge regarding Pap test and colposcopy investigation among participants. Overall, three main categories emerged during data analyses namely, women's awareness of Pap test; challenges to access cervical screening and colposcopy services; women's views and suggestions to improve their access to cervical screening cervices. **Conclusion:** Currently, women living in Iraq have no access to regular cervical screening due to unavailability of the cervical screening programme in Iraq. This study provides evidence to develop strategies to enhance the existing cervical cancer prevention services. Health policy makers should consider the establishment of regular population based cervical screening. Health promotion efforts and interventions should focus on challenges and barriers influence the screening behavior among women living in Iraq.
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Corresponding Author:
Suhailah M. Ali, PhD
Email: suhailahali@uokirkuk.edu.iq
Tel : +9647701303476

INTRODUCTION

Cervical cancer can be life-threatening if not detected early (1). Primary prevention is the best strategy to reduce the burden of any disease, and in the case of cervical cancer the main prevention is the early detection of abnormal cell changes with cytology screening or regular examination of the cervix (2). Further, HPV vaccination before first sexual intercourse enhances a greatest protection against cervical cancer (3). In Iraq, cervical cancer ranks as the 12th most frequent cancer among women overall and the 10th most frequent cancer among women between 15-44 years of age, with about 291 new cervical cancer cases diagnosed annually (4). It is argued that this is because preventative cancer care is less accessible in many Asian countries. Internationally, cervical cancer has been considered as the third most common form of cancer after breast and colorectal cancer (5, 6).

Persistent infection with *Human papillomavirus* (HPV) is currently affirmed as the main cause of cervical cancer, but data on the HPV burden in the general population of Iraq are not yet available. However, 2.3% of women in the general population of Western Asia, the region in which Iraq is situated, are estimated to have a cervical HPV 16-18 infection (4). "In 2008, 86% of all cervical cancers and 88% of all deaths caused by cervical cancer occurred in developing countries" (7 p. 2678).

"More than 90% of cervical cancers develop within a small area of the cervix known as transformation zone and disease progression from dysplasia to invasive cancer is usually slow, providing the opportunity to detect and treat pre-cancerous changes early" (8 p.2). The risk of cervical cancer is essentially a potential HPV infection and lack of effective screening (9). Poor access to cervical cancer services, in addition to non-compliance with screening visits, were most frequently observed as social risk factors related to lower socioeconomic status and lower educational levels.

"There is evidence of risk from a small number of studies focusing on cervical cancer screening in countries

with large population of Muslim women" (10 p.2013). Previous studies have reported the underlying beliefs and perceptions of health among Arab Muslims to be greatly influenced by their culture, while socio-cultural stigma relating to the disease is relevant. "Muslim women are a population with unique cultural and religious traditions; some of these traditions and beliefs influence their use of the health care system" (10 p. 2012). "Researchers have found that Muslim women may not seek medical care unless they are experiencing specific health problems, women do not have any exposure to preventive or regular women's health until after their marriage" (10 p. 2013). Health services in Kirkuk are delivered through three hospitals: two main hospitals located in the city centre and one outside. At the time of this study, cervical cancer screening activities in Kirkuk were carried out through a small unit established by the Ministry of Health, for the purpose of early detection of cervical cancer in one main hospital. Women attending this unit are usually referred by other gynaecologists if they suspected any abnormality in the cervix. Cervical cytology takes place mostly as a part of a consultation for another illness. In the absence of a national population-based cervical cancer screening programme, most cervical screening is opportunistic. Women living in Iraq are at risk for cervical cancer, although they do not perceive themselves to be at risk. Hence, this study aimed to explore women's perceptions and experiences related to Pap smear and colposcopy as a preventive measure to avoid advance stage of cervical cancer.

MATERIALS AND METHODS

Study design

A qualitative exploratory approach was adopted among a purposive sample of 22 women who were attending to the unit of early detection of cervical cancer in the main hospitals in Kirkuk, Iraq.

Ethical approval

This study was granted ethical approval from Kirkuk Health directorate [Ref.n 34031]. The verbal informed consent was obtained from all participants before being interviewed.

Data collection

Data were collected using in-depth semi-structured interviews with a purposive sample of 22 women. The study took place between October 2019 and March 2020. A semi-structured interview based on an open ended questionnaire guide was adopted (12). The interview questions were developed based on previous integrative review by the primary researcher (13). The guide for the semi-structure interviews was pre-tested through the preliminary phase among 10 participants to examine the clarity of the question. Participants were recruited from different locations across Kirkuk, Iraq. The process of recruitments and data analysis were continued until saturation was reached and no new categories were emerging. Fifteen participants were recruited from the Unit of Early Detection of Cervical Cancer, Azadi hospital, seven from the primary health care centres. Initially, we tried to develop trust with the participants; all participants had been given a full explanation of the methodology and purpose of the project. Additionally, participants were reassured that the purpose of the interview was not to evaluate their knowledge but it was an opportunity to share their opinions, experiences and their perspectives with the researchers. Women were eligible if they were married\ unmarried, aged 25-45 years and diagnosed as symptomatic or asymptomatic cervical cancer. However, I realised that unmarried women were not seeking any gynaecological services due to the socio-cultural norms in Iraq.

The researcher conducted interviews in the language of participants' choice; two local city languages (Arabic, Kurdish) afterwards transcribed and translated into English. Language is a means through which cultural norms and values are communicated (14). Each interview lasted for approximately 20-30 minutes. Informed consent was obtained verbally from all participants before conducting the interview and all the interviews were digitally recorded. Interview questionnaire involved 10 questions; the first six questions related to cervical cancer, smear test, colposcopy and the interval for regular cervical cancer screening, while four related to factors influencing the women's access to the smear test. The final question related to women's recommendations to improve Pap test uptake among healthy women. All interviews were conducted by the primary researcher to ensure that all questions were administered in a standardised way.

Data Analysis

Data were analysed utilizing thematic content analysis approach. This approach has been particularly useful for developing more dynamic and accurate interpretations of the phenomenon (15). Thematic analysis can provide rich understanding of complicated phenomena that can be applied across extent theoretical and epistemological approaches and expands the existing theory (15, 16). Data were analysed by creating verbatim transcriptions of the digital recordings. The transcripts were read and re-read to allow full viewing of the data, following this process the transcripts were compared with the digital recordings and data were displayed. In this stage, open coded was conducted by breaking down the data through line by line coding, identifying initial codes from the raw data (17). A constant comparative process of analysis was used in order to drive and label the ideas or themes that emerged. Focusing on the participants' responses to each question, we examined relationships among codes; the common key themes were identified and data were displayed to enable organized examination of similarities among various responses. Patterns of themes identified were grouped into categories. The codes and emerging categories derived by primary researcher were

compared with those of the co-authors to ensure the trustworthiness of the findings.

RESULTS

Characteristics of the participants

Ten participants did not attended school and were unable to read and write, one participant had a Diploma degree and one university graduated. All the participants were married (n=22) and 20 of them were housewife (Table I) .

Themes/Categories emerging from interview analysis

Three main overarching themes emerged during data analyses: women's awareness of Pap test; challenges to access cervical screening and colposcopy cervices; women's views and suggestions to improve their access to cervical screening cervices (Table II).

Table I: Demographic data of participants

Variables	Frequency	Percentage
Age group		
25-30	17	77%
31-35	3	13%
36-40	1	5%
41-45	1	5%
Total	22	100%
Level of education		
Did not attended school	10	45%
Primary school graduated	5	23%
Intermediate school graduate	3	13%
Secondary school graduated	2	9%
Obtained diploma	1	5%
University graduated	1	5%
Total	22	100%
Occupation		
Housewife	20	91%
Employed	2	9%
Total	22	100%

Table II: Categories emerged from interview analysis

Categories	Descriptions
Women's awareness of Pap test	Women's understanding of the Pap test
	Women's information on cervical screening
	Women's knowledge of the purpose of Pap test
Barriers to access cervical screening services	Reasons for not attending for screening
	Women's source of information
	Challenges and difficulties women's face to access cervical prevention services
Participant's views and suggestions	Women's suggestions to improver cervical screening uptake
	Facilitators to access cervical screening services

Women's knowledge and perceptions of Pap test

When patients were asked if they know what Pap test is, the majority denied hearing about it or seeking any screening. Lack of knowledge was the main factor preventing them from seeking a screening test:
'I have no idea about this test; they told me that this is a swab taken from the vagina' (W3)

Two participants blamed doctors for not giving her information about the test:
''Doctors never told us about this test '(W7)'

Lack of information about colposcopy was indicated by most patients.
'Have no idea about this test, and if I had for sure I would have done it, for instance my sister told me about breast screen so I have done it'(W20)
''I don't know what this test means, they told me usually doctors send patients to do this test if women has mass or bleeding from the uterus and I heard some women have had their uterus removed'(W17)

When participants who were attending for a smear test were asked about their understanding of the test, they indicated that their doctors had given them a range of reasons for the smear test
'To check if there is any inflammation in the uterus, as the doctor told me' (W1)

Another participant believed that smear test was used to detect infection or check for pregnancy.
''Tests always done for every woman to check for any infection, for example, urine test or blood test to know if the woman is pregnant or not.'(W14)

Several women been told smear tests recommended just for unhealthy women.
'I think just unhealthy women or woman with breast cancer should do this test' (W5)

All interviewed women believed that it was not possible to have a Pap test screening, because they were unaware of the availability of the test in the city hospitals.
'Always I go to the doctors but no one suggested it' (W12)

Also, the findings indicate that most participants have no knowledge of the risk factors for cervical cancer including those who had presented for a smear test. When women were asked if they had ever heard of the factors that increase the risks of cervical cancer, many women believed that recurrent infection might lead to cervical cancer.
'Some woman get this disease because of frequently and recurrent inflammation because they ignore [it]' (W18)

Two participants mentioned childbirth as risk factors
'I think multiple childbirths may lead to this disease because my mother had this disease and had nine childbirths' (W15)

One of the participants mentioned hard work as a risk factor:
'Don't know, but I know my relative got this disease because she worked very hard in her life, she was raised in a village and worked as a farmer so this might be the cause of her disease' (W4)

Another patient indicated other reason for her attendance for a Pap test.
'I have an ulcer and inflammation in the uterus since three years ago and my doctor told me to do this test' (W20)

Challenges to access cervical screening services
The finding shows women were not aware of the availability of cervical prevention services and argued that it was the health care provider's responsibility to inform them about the test. In most cases patients also stated that they did not know about the use of Pap test as a tool for early cervical cancer detection.
'*Nobody suggested this test and women have no information about the availability of the test to prevent advanced symptoms of cervical cancer (W16)*

Few women referred to illiteracy as a reason for not attending for screening:
'Don't know because I can't read' (W22)
'Have no idea about this test because I can't read and if I was aware of this, for sure I would have done it' (W11)

Two women referred to the unavailability of the Pap test in the primary Health care centers as a challenge:
'You know I went to the closed primary health care center at my place of residence, but they referred me to the hospital because this test is only available at the main teaching hospital, and this is difficult for me because my house is far away from the main teaching hospital'(W10)
'Oh, they told me you have to go to the main hospital where the test is available, but the hospital is very far from my house and I can't leave my five kids to go there' (W19)

Participant's views and suggestions
Most patients emphasised the doctors' role in informing women how to access the screening services:
'Doctors must inform every woman and must emphasis that this is an important issue so doctors should tell every woman' (W3)

In the meantime, most women suggested doctors talk about the screening on television.
Doctors should suggest it or talking about it on the TV. I haven't seen any doctor talk about this disease seriously' (W21)

Most participants suggested establishment of the Pap test in the primary health care centers
'I prefer doing this test at primary health care center rather than going to the hospital' (W6)
'I have been to the primary health care center and the doctor has referred me to the main hospital because this test is not available at the GPs, but you know it is difficult to go to the hospital because it is faraway and always busy'(W2)

Overall, all participants wanted to know more about Pap test, colposcopy and cervical cancer screening. The main recommendation was doctors should talk about cervical cancer prevention services in the media.

DISCUSSION

The main purpose of this study was to explore women's perceptions and experiences related to Pap smear and colposcopy as a preventive measure to avoid advance stage of cervical cancer. In general women were very poorly aware of cervical cancer and they were unaware of early detection of cervical cancer unless their doctors recommended it. Previous Study by Ali et al., (13) has also highlighted insufficient awareness of Pap test among women in a different region in Iraq. So far the findings of this study provide evidence that, even though it might be expected that those patients who had been referred for a Pap test would have been aware of the purpose of the test, in fact most of them were not.

There were many misconceptions about the purpose of the test. The overall poor knowledge on cervical cancer and cervical cancer prevention in this study may be related to the participants' level of education, as 45% participants had not attended school and a further 23% had only able to read and write. The finding of this study is similar to a study by Saadoon et al., (18), who reported women were more likely to be aware of cervical cancer and cervical prevention services if they had higher than secondary school education. This means illiterate women are less likely to know about cervical screening. To attend the cervical screening programme, women need to be aware of the disease and techniques of early detection and prevention. There are several studies indicating that knowledge on cervical cancer and Pap test influences the uptake of cervical cancer prevention/ screening services (19, 20). Studies have indicated that high level of education in women considers as a crucial factor that contribute to high cervical screening rates.

These findings confirm the importance of the interaction of the health care professionals with the women to raise their awareness on the need for early detection of cervical cancer, especially as women in this study stated that they would be more likely to go for screening if their doctor recommended it. This suggests that doctors have a strong part to play in encouraging women to undergo regular Pap test and women may rely more on their health professional's advice when they have little access to information, either due to lack of availability or lack of literacy. Previous integrative review by the primary has reported that the recommendation of doctors is the most influential (13). Women's discomfort was linked to a lack of awareness of the smear test and colposcopy. It has been indicated doctors need to offer clear explanations and identify the importance of the early detection of cervical cancer in a way that is

understandable by all women. This study discovered that, similar to the findings of Ali et al., 2021, the national health care delivery system in Iraq mainly focuses on treating symptoms rather than preventive health care, which may have a negative impact on women's health practices (20). "In Iraq most women visit doctor's private clinic when they or their family members are ill" (20 p.8). Thus, the physician-initiated discussion on cervical cancer is essential and it might be the only opportunity for those women to be educated about early detection of cervical cancer (21).

"According to the World Health Organization, the health care system in Iraq has been on a centralised, curative and hospital-oriented paradigm; this system has lacked the capacity to deliver the services that addresses the major health problems faced by the majority of the population in a sustainable and equitable pattern " (20 p.8-9).

Strengthening the plan of offering cancer screening through a universal health care system may help to increase cervical screening behaviour to optimal levels among all eligible women living in Kirkuk. Community outreach strategies are a common method of health promotion. This includes the use of appropriate language material, involvement of health workers and presentations at the workplace settings (22).

The biggest challenge experienced during the research was inability of the women to engage with the research topic due to their health literacy regarding cervical cancer and cervical cancer screening. Additionally, limitations centred on the quality of the data as most of the participants were not familiar with cervical cancer and cervical screening and most of them stated that this was the first time they attended the Unit of Early Detection for Cervical Cancer to undertake smear test. However, even discovering that women knew very little was a finding in itself.

CONCLUSION

Women's health literacy and their perception of Pap test, colposcopy and cervical cancer may have further impact on cervical screening programme in Iraq. Health promotion efforts and interventions should consider the cultural barriers that influence the screening behavior among women living in Kirkuk and Iraq. This study provides evidence of the importance of further strategies to promote women's awareness regarding Pap test and cervical cancer prevention services. Future research should address promotion of strategies to expand the access of Arab Muslim women to cervical cancer screening.

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