International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Chaurasia A et al. Int J Reprod Contracept Obstet Gynecol. 2022 Jun;11(6):1757-1761
www.ijrcog.org
pISSN 2320-1770 | eISSN 2320-1789

DOI: https://dx.doi.org/10.18203/2320-1770.ijrcog20221453

Original Research Article

Knowledge, attitude and practices regarding cervical and breast cancer: a comparative study in a tertiary care centre

Amrita Chaurasia, Anupma Upadhyay*, Archana Kumari

Department of Obstetrics and Gynecology, MLN Medical College, Prayagraj, Uttar Pradesh., India

Received: 25 April 2022
Accepted: 13 May 2022

***Correspondence:**
Dr. Anupma Upadhyay,
E-mail: dr.anu.ald@gmail.com

ABSTRACT

Background: Cervical and breast cancer are commonest cancer among Indian females. Timely screening through simple methods can prevent advanced stage of disease, thereby preventing mortality. Updated knowledge about available standard preventive methods have a huge impact in improving the acceptance and thus increasing the percentage of screened, vaccinated and treated population. Objective were to evaluate and compare knowledge, attitude and practices about cervical and breast cancer among paramedics and hospital visitors at tertiary care teaching institute.
Methods: 100 participants; 50 each of paramedics and hospital visitors of Swaroop Rani hospital Prayagraj were assessed for knowledge, attitude and practices regarding cervical and breast cancer using predesigned questionnaire.
Results: The 100% of paramedics had heard about cervical and breast cancer while among hospital visitors only 66% had heard about cervical cancer and 78% about breast cancer. Regarding in depth knowledge of symptomatology paramedics had higher percentage for both cervical and breast cancer. The knowledge of cervical and breast cancer screening methods was significantly higher among paramedics as compared to hospital visitors. Positive attitude regarding cervical and breast cancer was 60% and 74% among paramedics while 26% and 16% among hospital visitors. Both groups showed poor practice (34%,42% among paramedics while 12% and 6% in hospital visitors).
Conclusions: Despite various focused programs on cancer awareness and preventive strategies being run already significant differences were observed in knowledge, attitude and practice of paramedics and hospital visitors. Although the knowledge was good among paramedic's gap was seen in attitude and practice that warrants the need of focusing on awareness generation through different platforms.

Keywords: Knowledge, Attitude, Practice, Screening, HPV

INTRODUCTION

Cervical cancer and breast cancer are the two most common cancers among women in India and are potentially preventable (>90%) with appropriate screening and prophylactic strategies. However, lack of knowledge and awareness amongst healthcare providers and general population are limiting factors in adequate utilization of the preventive strategies.[1] Over past several decades, the incidence of cervical cancer has decreased in developed countries by 70-90%, attributed to markedly increased awareness, more effective preventive and screening strategies.[3-5] Huge population burden and varied demographic distribution in India requires efficient and dedicated well versed paramedic staff to overcome the barrier of deficient health care providers in comparison to the population. So, we assessed the knowledge, attitudes, and practices of cervical cancer breast cancer screening amongst female paramedic healthcare professionals at our institute and compared them with the status of knowledge, attitude and practice of general women of comparable age group and demographic profile in department of obstetrics and gynecology, Swaroop Rani hospital Prayagraj.

Objectives

Objectives were to evaluate and compare knowledge, attitude and practices about cervical and Breast cancer

amongst female paramedics and hospital visitors at tertiary care teaching institute

METHODS

Place of study

The study conducted at Swaroop Rani hospital Prayagraj.

Type of study

The study was of a hospital based cross-sectional study.

Duration of study

The study period was from August 2021 to February 2022.

Number of subjects

The 100 participants (50- paramedical staff, 50- hospital visitors) were included in the study.

Methodology

Institutional ethics committee approval was taken before conducting study. After taking informed verbal consent and maintaining strict privacy and confidentiality, each participant were interviewed separately. The participants were interviewed using predesigned questionnaire, that included questions related to their knowledge about demographic factors, risk factors, signs and symptoms, prevention, and ways of screening for cervical and breast cancers. Attitude was assessed by questions based on their beliefs towards usefulness of prevention strategies. To assess their practice, they were questioned regarding adoption of preventive strategies for them Selvers and for their family members. questions were based on their use of prevention strategies.

Statistical analysis

Data was entered and analyzed using Microsoft excel. For descriptive analysis frequency and percentages were calculated while for testing associations Fisher's exact test and Chi square test were used using online Graph Pad calculator. P<0.05 was considered as significant.

RESULTS

The age, marital status, area of residence was comparable among the two study groups (Table 1).

The knowledge of cervical and breast cancer was significantly higher among paramedics as compared to hospital visitors. All the paramedics had heard about cervical and breast cancer whereas only 66%, 78% hospital visitors had heard about cervical and breast cancer respectively knowledge of each symptom of cervical cancer and breast cancer was significantly higher among paramedics than the hospital visitors. Thus, discharge per vaginum and breast lump were maximally known symptom of carcinoma cervix and carcinoma breast respectively (Table 2).

Table 1: Distribution of study population according to demographic factors.

Variables	Paramedics, (n=50)	Hospital visitors, (n=50)	P value
Age (Years)			
<30	09 (40.9)	13 (59.1)	0.47
>30	41 (52.6)	37 (47.4)	
Marital status			
Married	30 (46.2)	35 (53.8)	0.40
Unmarried	20 (57.1)	15 (42.9)	
Area of residence			
Urban	40 (54.1)	34 (45.9)	0.25
Rural	10 (38.5)	16 (61.5)	

Table 2: Knowledge about symptoms of cervical cancer and breast cancer.

Knowledge	Paramedics, (n=50)	Hospital visitors, (n=50)	P value
Cervical cancer			
Heard about cervical cancer	50 (100)	33 (66)	0.0001
Discharge per vaginum	39 (78)	20 (40)	0.0002
Post coital bleeding	31 (62)	19 (38)	0.027
Post-menopausal bleeding	37 (74)	21 (42)	0.002
Breast cancer			
Heard about breast cancer	50 (100)	39 (78)	0.0005
Breast lump	49 (98)	39 (78)	0.004
Nipple discharge	48 (96)	32 (64)	0.0001
Breast skin color change	44 (88)	23 (46)	0.0001

The knowledge of cervical and breast cancer screening methods was significantly higher among paramedics as compared to hospital visitors except for HPV test in cervical cancer. None of the participant in hospital visitor group knew about HPV test and mammography as a screening modality for carcinoma cervix and carcinoma breast respectively (Table 3).

The 48% of paramedics underwent cervical screening whereas only 12% of hospital visitors underwent cervical screening once. No significant difference was seen in cervical screening between paramedics and hospital

visitors. None of the paramedics as well as hospital visitors were vaccinated with HPV vaccine (Table 4).

The attitude as well as practice regarding cervical cancer and breast cancer was significantly different between paramedics and hospital visitors. In spite of good attitude, poor practice (34%, 42%) regarding spreading awareness of cervical cancer and breast cancer respectively was observed in paramedics whereas it was 12%, 6% in hospital visitors which was statistically significant.

Table 3: Knowledge about screening methods of cervical and breast cancer.

Knowledge	Paramedics, (n=50)	Hospital visitors, (n=50)	P value
Cervical cancer			
PAP smear	31 (62)	4 (8)	0.0001
Colposcopy	33 (66)	1 (2)	0.0001
HPV test	3 (6)	0 (0)	0.24
Breast cancer			
USG	38 (76)	18 (36)	0.0001
Mammography	23 (46)	0 (0)	0.0001
Self-breast examination	22 (44)	10 (20)	0.02
Clinical breast examination	18 (36)	4 (8)	0.001

Table 4: Distribution of study population according to self-cervical cancer screening, HPV vaccination and breast cancer screening by breast self-examination.

Variables	Paramedics, (n=50)	Hospital visitors, (n=50)	P value
Cervical cancer screening			
Once	22 (44)	6 (12)	0.76
Twice	2 (4)	0 (0)	
As per schedule	0 (0)	0 (0)	
HPV vaccination	0 (0)	0 (0)	-
Self-breast examination	5 (10)	2 (4)	

Table 5: Attitude and practice regarding cervical cancer and breast cancer among study participants.

Knowledge	Paramedics, (n=50)	Hospital visitors, (n=50)	P value
Cervical cancer			
Attitude	30 (60)	13 (26)	0.001
Practice	17 (34)	6 (12)	0.02
Breast cancer			
Attitude	37 (74)	8 (16)	0.0001
Practice	21 (42)	3 (6)	0.0001

DISCUSSION

An appropriate and adequate knowledge about the preventive strategies and symptomatology about cancers amongst general population is essential for adequate utilization of available preventive strategies for these cancers. Studies conducted to assess the knowledge, attitude and practice about any morbid condition helps the educators to plan out the awareness programs. Present study, demonstrated comparatively better knowledge about the breast cancer than the cancer cervix in our study population. In a hospital based cross sectional survey of south India conducted by Narayana et al 64.2% had knowledge about symptoms of cervical cancer which corresponds to our study whereas in the study conducted by Siddharthar et al in a tertiary care hospital in Puducherry India this value was very low, only 44.5%.[7,8] Knowledge of breast lump as a symptom of breast cancer in our study population was high similar to cross sectional survey by Shankar et al in Maharashtra among college teachers and among community level woman by Dey et al in Delhi.[13,14] Thus lesser known symptoms like postcoital bleeding and nipple discharge should be emphasized in health education programs. Though significantly more percentage of paramedics were having better knowledge than the general women of the comparable demographic profile, the level of knowledge was still unsatisfactory, because being paramedic warrants 100% knowledge status about breast and cervix cancer. Awareness programs on these cancers have been being conducted since many years, and it has gained fastest pace in recent years owing to inclusion of both these cancers in WHO'S priority noncommunicable illnesses list as well as many nongovernmental and semigovernmental gynaeoncological organizations have come in with a proactive attitude towards preventive oncology.

On analysing the knowledge of preventive strategies, approximately only half to two third paramedics were knowing about PAP smear and Colposcopy for screening of cancer cervix, but very few of them were knowing about HPV test. Our result corresponds to the study conducted by Jassim et al and Zutshi et al in North India.[6,10] On the contrary Shashank et al at AIIMS Jodhpur and Narayana et al showed 77% and 74.9% knowledge of pap smear which was; more than our study while Siddharthar et al and Varughese et al showed 25% and4.3% which was quite less as compared to our study.[6,8,9] Similarly about breast cancer, up to two third were aware about ultrasonography as a modality to screen breast cancer but knowledge about self-breast examination was significantly low. Rather self-breast examination is the cheapest and most readily available method for cancer breast screening that might be quite sensitive also if done in a proper way. The level of knowledge about screening methodologies of breast cancer were more or less comparable to the cross-sectional survey in 2017 by Pauniker et al in urban health care centre Maharashtra and by Kavitha et al among female health care workers in Karnatka.[15,16] Thus adequate sensitization regarding various screening methods, their

availability and utility in modern times is required for their effective implementation.

In our study, knowledge about HPV vaccination in paramedics and hospital visitors was more than the study conducted by Jassim et al in primary health care centre in Bahrain (3.7%), Siddharthar et al (Puducherry India) (2.8%) and Varughese et al (Punjab India) (6.6%).[6,8,9] Vaccination against cervical cancer and breast self-examination needs to be communicated to the public at large including health care workers.

An individual's perception towards health determines the positive and healthy attitude. More than half of our paramedics had Positive attitude about cervical cancer which corresponds to the study conducted by Narayana et al (62.5%) but it was lower in the study by Jassim et al (44.3%).[7] In our study less than half of paramedics and about 12% of hospital visitors were self-screened once for cervical cancer which corresponds to the study conducted by Jassim et al (40.7%), while it was very low in the study conducted by Narayana et al (13.4%) and in the study by Zutshi et al (3%).[6,7,10] More than two thirds of our paramedics had Positive attitude about breast cancer which corresponds to the study conducted in Koppal, Karnataka by Smitha (>50%)among undergraduate female students but only 5.28% of them admitted to have done SBE in that study.[11] These studies indicate that despite adequate knowledge, its usage in their personal life was extremely low. The reason might be anything from ignorance to misbelief or non-belief, but the outcome is non conversion of their knowledge in to their practice. Thus, awareness regarding acceptance of usefulness and efficacy of screening strategies will make people to subject themselves to screening. As of now our study indicates poor percentage for self-screening practices; also potentiated by other similar studies Jassim et al and needs to be addressed strongly.[6]

CONCLUSION

According to NHFS 2021 only 2.2% urban and 1.7% rural women in the age group 30-49 years received cervical cancer screening in life time. Despite various cancer awareness campaigns, our study population showed average knowledge of screening methods of breast and cervical cancer. Though majority of people among paramedics and hospital visitors were aware about cancer cervix and breast cancer but in-depth knowledge about symptomatology and prevention strategies was lacking; even the positive attitude and practice of preventive strategies were also suboptimal. Our study highlights the need for repeated formal educational programs for the healthcare workers at Swaroop Rani hospital, Prayagraj, specifically to improve their knowledge regarding the risk factors and early sign and symptoms of cervical cancer and breast cancer.

Healthcare providers should be proactive in promoting women's health and preventing disease. Therefore, making sure healthcare professionals are informed about the benefits of routine cervical and breast cancer screening and preventive methods will go a long way. A step forward in ensuring support to FOGSI cervical cancer elimination initiative. Strong commitment from government and participation by non-government organisations is required to develop comprehensive awareness and screening policies for breast and cervical cancer in India. We also strongly recommend incorporation of HPV vaccination in government national immunization program.

ACKNOWLEDGEMENTS

Author would like to thanks to Dr. Amrita Chaurasia (Professor and HOD, department of obs. and gynae, MLN medical college, Prayagraj) for her untiring efforts in guiding me throughout my study. Also, thankful to my colleagues, juniors, patients, health care workers for their continuous help and support

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Das BC, Hussain S, Nasare V, Bharadwaj M. Prospects and prejudices of human papillomavirus vaccines in India. Vaccine. 2008;26:2669-79.
2. Adegoke O, Kulasingam S, Virnig B. Cervical cancer trends in the United States: a 35-year population-based analysis. J Womsen's Health. 2012;21(10):1031-7.
3. Bray F, Loos AH, McCarron P. Trends in cervical squamous cell carcinoma incidence in 13 European countries: changing risk and the effects of screening. Cancer Epidemiol Biomarkers Prevention. 2005;14(3):677-86.
4. Torre LA, Bray F, Siegel RL, Ferlay J, Lortet-Tieulent J, Jemal A. Global cancer statistics, 2012. A Cancer J Clin. 2015;65(2):87-108.
5. Torre LA, Islami F, Siegel RL, Ward EM, Jemal A. Global cancer in women: burden and trends. Cancer Epidemiol Biomarkers Prevention. 2017;26(4):444-57.
6. Jassim G, Obeid A, Al Nasheet HA. Knowledge, attitudes, and practices regarding cervical cancer and screening among women visiting primary health care Centres in Bahrain. BMC Public Health. 2018;18(1):128.
7. Narayana G, Suchitra MJ, Sunanda G, Ramaiah JD, Kumar BP, Veerabhadrappa KV. Knowledge, attitude, and practice toward cervical cancer among women attending Obstetrics and Gynecology Department: A cross- sectional, hospital- based survey in South India. Indian J Cancer. 2017;54:481.
8. Siddharthar J, Rajkumar B, Deivasigamani K. Knowledge, awareness and prevention of cervical cancer among women attending a tertiary care

hospital in Puducherry India. J Clin Diagn Res. 2014;8:OC01.
9. Varughese NR, Samuel CJ, Dabas P. Knowledge and practices of cervical cancer screening among married women in a semi urban population of Ludhiana, Punjab. CHRISMED J Health Res. 2016;3:51.
10. Zutshi V, Dankher S, Malik A. Cervical cancer screening and prevention: An analysis of beliefs and predictors of knowledge, attitude and practice in Northern India. Indian J Gynecol Oncol. 2017;15:71.
11. Nimbannavar SM. Breast cancer: knowledge, attitude and practices among undergraduate female students at a government college in Koppal, Karnataka. Int J Community med Public Health. 2019;6(7)2944-9.
12. Shekhar S, Sharma C, Thakur S, Raina N. Cervical Cancer Screening: Knowledge, Attitude and Practices among Nursing Staff in a Tertiary Level Teaching Institution of Rural India. Asian Pac J Cancer Prev. 2013;14(6):3641-5.
13. Shankar A, Rath G, Roy S, Malik A. Level of awareness of cervical and breast cancer risk factors among college teachers of different states in India. Asian Pac J Cancer Prev. 2015;16;927-32.
14. Dey S, Mishra A, Govil J. Breast cancer awareness at the community level among women in Delhi, India. Asian Pac J Cancer Prev. 2015;165243-51.
15. Pauniker AP, Khadilkar HA. Knowledge, attitude and practices of women towards breast cancer in urban health centre Aurangabad. Int J Community Ned Public Health. 20174;3659.
16. Kavitha M, Jadhav J, Vishwanath E. Knowledge, attitude and practice towards breast self-examination among female health care workers in Nelamangala Taluk. National J Public Health. 2016;4:1-5.

Cite this article as: Chaurasia A, Upadhyay A, Kumari A. Knowledge, attitude and practices regarding cervical and breast cancer: a comparative study in a tertiary care centre. Int J Reprod Contracept Obstet Gynecol 2022;11:1757-61.