

Knowledge of Cancer Screening among Nurses in AL-Ahasa, Saudi Arabia

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Abstract:

Cancer is one of the top ten leading causes of death across the world. Nurse practitioners serve a great responsibility as the first line of contact with the patients. Appropriately trained nurses can produce as high quality care as primary care doctors and achieve as good health outcomes for patients. Research say that empowering nurses with information about early detection methods and their related benefits could help in advancing their skills in performing breast self-examination and expanding their role as client educators. The present study was undertaken to assess the knowledge of nurses in Al-Ahsa province of Saudi Arabia about cancer screening. A Cross Sectional study was conducted among 143 nurses working at various hospitals, Al-Ahsa, Kingdom Of Saudi Arabia. A self- administered questionnaire was given to all the participants and they were requested to fill up the questionnaire. The data was entered and analyzed using the SPSS statistics version 17, ANOVA and Tukey test. Only 13 (9.1%) participants had good knowledge about cancer screening with sample mean of 77.38 and standard error of 0.61. Present study revealed inadequacies in knowledge of nurses about cancer screening methods.

Keywords: *Cancer, Knowledge, Nurse , Saudi Arabia, Screening*

INTRODUCTION

Cancer is one of the top ten leading causes of death across the world. It is estimated that 7.4 million people died of cancer in 2004 and, if current trends continue, 83.2 million more will have died by 2015.[1] Breast cancer is the commonest cause of cancer mortality in females, accounting for 16% of cancer deaths in adult women .[1] As per Saudi Arabia National Cancer Registry (NCR), the total number of new cancer cases for Saudis in 2004 was 6969, with an almost equal number for men and women. In the same year, 49% of male patients and 33% of female patients older than 59 years of age were diagnosed with cancer, while that age group accounts for only 3.5% of the total Saudi population.[2] Colorectal cancer has been the most common cancer among men and the third commonest among women since 2002 in Saudi Arabia. [3] Breast cancer was the ninth leading cause of death for females in the Kingdom of Saudi Arabia (KSA) in 2010. [4]

Health education particularly early detection of cancer has significant role in raising awareness levels among community people which helps to reduce morbidity and mortality related to cancer. Nurse

practitioners serve a great responsibility as the first line of contact with the patients. Appropriately trained nurses can produce as high quality care as primary care doctors and achieve as good health outcomes for patients. [5]. Research say that empowering nurses with information about early detection methods and their related benefits could help in advancing their skills in performing breast self-examination and expanding their role as client educators. [6]

Therefore there is strong need to train nurse practitioners about various aspects of cancer management especially regarding early detection of cancer. The present study was undertaken to assess the knowledge of nurses in Al-Aahsa province of Saudi Arabia about cancer screening.

MATERIAL AND METHODS

A Cross Sectional study was conducted among 143 nurses working at various hospitals in Al-Ahssa, Kingdom Of Saudi Arabia. All study participants were selected by simple random sampling method. Written permission was obtained from study participants after explaining the purpose of study. A self-administered, structured and modified questionnaire was given to all the participants and they were requested to fill up the questionnaire under strict supervision. A questionnaire consisted of close ended questions on different types of screening methods for Breast, Colorectal, Prostate and Cervical cancer. . In present study, three groups of study participants were made namely A, B and C with 95% CI and P value of <0.05 significant. The data was entered and analyzed using the SPSS statistics version 17, ANOVA and Tukey test.

RESULTS

In present study, out of 143 study participants, 56 (39.16%) were males and 87 (60.83%) were females. The response rate was 100%. Table 1 shows that only 13 (9.1%) participants had good knowledge about cancer screening with sample mean of 77.38 and standard error of 0.61. A total of 89 (62.2%) participants had moderate knowledge and 41(28.7%) participants were having poor knowledge about cancer screening.

Table 1: Knowledge of participants about cancer screening (n = 143)

	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
greater than 75%	13	77.3756	2.20902	.61267	76.47	82.35
between 50 % and 75 %	89	60.8724	6.02116	.63824	52.94	70.59
less than 50%	41	41.0330	7.14262	1.11549	17.65	47.06
Total	143	56.6845	12.57650	1.05170	17.65	82.35

N- Number of participants

There is a statistically significant difference between the mean score of the three groups of nurses (greater than 75 %, between 50% and 75%, and more than 75% of knowledge). (p<0.001)

Table 2 indicates that there is a significance difference between group (A) and group (B) In the direction of group (A). There is a significance difference between group (A) and group (C) In the direction of group (A). There is a significance difference between group (B) and group (C) In the direction of group (B).

Table 2: Comparison of knowledge of participants about cancer screening (n=143)

(I) factor	(J) factor	Mean Difference (I-J)	Std. Error	Sig.
greater than 75%	between 50 % and 75 %	16.50313*	1.82508	P<0.001
	less than 50%	36.34257*	1.95651	P<0.001
between 50 % and 75 %	greater than 75%	-16.50313-*	1.82508	P<0.001
	less than 50%	19.83944*	1.16020	P<0.001
less than 50%	greater than 75%	-36.34257-*	1.95651	P<0.001
	between 50 % and 75 %	-19.83944-*	1.16020	P<0.001

DISCUSSION

Present study reported that only 13 (9.1%) participants had good knowledge about cancer screening methods. These study finding is comparable with study finding of Semarya Berhe Lemlem et al. [7] where nearly half, 114 (42.2%), of the nurses working at the university hospital were not knowledgeable about breast cancer and its screening methods. Low level of knowledge (45.5%) about breast cancer screening was also found among female health workers in the two major government health institutions in Benin City, Edo State capital in Nigeria. [8]

A cross-sectional study, conducted in Pamukkale University Hospital in Denizli revealed good level of knowledge of participants about breast cancer screening as 113 (90.4%) participants were aware of importance of breast cancer screening methods. [9]

Present study showed poor knowledge of participants about Pap smear as only 11 (7.69%) participants were knowing about Pap smear as a cervical cancer screening method. M Urasa and E Darj conducted study among nurses at a regional hospital in Tanzania to assess their knowledge of cervical cancer and screening practices. They reported that majority of nurses had poor knowledge about Pap smear examination. [10] Studies which had been conducted in Uganda, Turkey and Nigeria revealed inadequate knowledge of cervical cancer screening procedures among nurses [11, 12].

Poor knowledge about colorectal cancer and its screening procedures was observed among majority of participants in present study. Maria Ramos et al. [13] in her study reported good level of knowledge of participants where 83.7 of nurses knew about screening methods and also they were aware that the purpose of a population screening programme is to reduce the mortality rate due to colorectal cancer.

Considering the inadequacies in knowledge of nurses about cancer screening methods, present study reiterated strong need to train them about various aspects cancer including screening procedures. Similar recommendation was given by M Urasa and E Darj [10] where they said that nurses should be well educated regarding cancer especially cervical cancer and its screening methods as it is one of the important public health problems across the world and nurses have key role to play in informing the general public and promoting preventive practices about it in society. Semarya Berhe Lemlem et al. [7] also emphasized on the need of workplace training of nurses to bridge knowledge gaps regarding cancer and its screening methods.

CONCLUSION AND RECOMMENDATIONS

Present study revealed inadequacies in knowledge of nurses about cancer screening methods. It reiterates the need of frequent structured and systematic training of nurses regarding important aspects of cancer including screening methods. Cancer and its screening methods should be included as major part of nursing curriculum in order to give comprehensive information about cancer to nurses.

REFERENCES

- [1] World Health Statistics, 2008, http://www.who.int/whosis/whostat/EN_WHS08_Full.pdf. Accessed on 24th August 2016.
- [2] Ezzeldin Ibrahim, Bakr M. Bin Sadiq, Laila Banjar, Saeed Awadalla, Mohammed S. Abomelha. Current and future cancer burden in Saudi Arabia: meeting the challenge. *Hematology/Oncology and Stem Cell Therapy*, 1(4), 2008, 210–215.
- [3] Alsanea N, Abduljabbar AS, Alhomoud S, Ashari LH, Hibbert D, Bazarbashi S. Colorectal cancer in Saudi Arabia: incidence, survival, demographics and implications for national policies. *Ann Saudi Med.*, 35(3), 2015, 196-202.
- [4] Mokdad AH, Jaber S, Aziz MIA, Al Buhairan F, Al Ghaithi A, Al Hamad NM et al. The state of health in the Arab world, 1990–2010: an analysis of the burden of diseases, injuries, and risk factors. *Lancet*, 38(3), 2014, 309–320.
- [5] Laurant M, Reeves D, Hermens R, Braspenning J, Grol R, Sibbald B. Substitution of doctors by nurses in primary care. *Cochrane Database Syst Rev.*, 2005, 18(2), 1-4.
- [6] I. M. Alkhasawneh, L. M. Akhu-Zaheya, and S. M. Suleiman. Jordanian nurses' knowledge and practice of breast self-examination. *Journal of Advanced Nursing*, 2009, 65(2), 412-416.
- [7] Semarya Berhe Lemlem, Worknesh Sinishaw, Mignote Hailu, Mesfin Abebe, and Alemseged Aregay. Assessment of Knowledge of Breast Cancer and Screening Methods among Nurses in University Hospitals in Addis Ababa, Ethiopia 2011, *International Scholarly Research Notices*, 2013, 1-8.
- [8] A. O. Akhigbe and V. O. Omuemu. Knowledge, attitudes and practice of breast cancer screening among female health workers in a Nigerian urban city. *BMC Cancer*, 9 (203), 2009, 1-4.
- [9] A. Yaren, G. Ozkilinc, A. Guler, and I. Oztop. Awareness of breast and cervical cancer risk factors and screening behaviors among nurses in rural region of Turkey. *European Journal of Cancer Care*, 17 (3), 2008, 278–284
- [10] M Urasa and E Darj. Knowledge of cervical cancer and screening practices of nurses at a regional hospital in Tanzania, *Afr Health Sci.*, 11(1), 2011, 48–57.
- [11] Mutyaba T, Mmiro FA, Weidpass E. Knowledge, attitudes and practices on cervical cancer screening among the medical workers of Mulago Hospital, Uganda. *BMC Med Educ.*, 6, 2006; 6-13.
- [12] Ayinde OA, Omigbodun AO. Knowledge, attitude and practices related to prevention of cancer of the cervix among female health workers in Ibadan. *J Obstet Gynaecol.*, 23(1), 2003, 59–62.
- [13] Maria Ramos, Magdalena Esteve, Jesús Almeda, Elena Cabeza, Diana Puente, Rosa Saladich et al. Knowledge and attitudes of primary health care physicians and nurses with regard to population screening for colorectal cancer in Balearic Islands and Barcelona, *BMC Cancer*, 10(1), 2010, 1-9.