Original Article

Indian Journal of Preventive Medicine
Volume 4 Number 1, January - June 2016
DOI : https://dx.doi.org/10.2108/ijpm.2321.5917.4116.2

When to Ring the Bell??!!: Perception on Warning Signals of Cancer in a Rural Community, Mysuru

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Abstract

Background: Cancer is the third leading cause of mortality in developing countries. Awareness of public about warning signs of cancer in relation to early detection and prevention has been surveyed in a few countries only, and results showed poor knowledge among them.The present study was aimed at investigating the awareness level about warning signs of cancer and its determinants in rural population of Mysuru District. *Materials and Methods*: This cross-sectional survey was conducted in two selected villages which come under rural field practice area of JSS Medical College, Mysore in the month of July-September 2014. 200 people aged 18 years and above were included in the study. *Results*: The study showed that, out of 200 people interviewed, the awareness regarding persistent Change in bowel and bladder habits was 77(38.5%), Non healing Wound 70(35%), Bleeding from natural orifices 75(37.5%), Lump in breast 92(46.0%), Difficulty in swallowing 69(34.5%), Difficulty in opening mouth 70(35.0%), Change in Size or shape of wart 62(31.0%), Hoarseness of voice 76(38.0%), Unexplained Weight loss 86(43.0%). It showed that, 06(3%) were having persistent change in Bowel and bladder habits, 02(1%) were having Non Healing wound, 3(1.5%) were having Bleeding from natural orifices, 02(1.0%)were having lump in breast, 5(2.5%) were having unexplained weight loss *Conclusion*: The awareness related to warning signals of cancer was very low among study participants. Therefore, educational and intervention programmes, with special attention placed on particular at-risk populations, to increase awareness about the disease leading to its early diagnosis is needed.

Keywords: Awareness; Cancer; Warning Signs; Mysore.

Introduction

Cancer is the third leading cause of death in developing countries.India is experiencing a rapid health transition with a rising burden of Non Communicable Diseases (NCDs) [1]. Overall, NCDs are emerging as the leading cause of deaths in India accounting for over 42% of all deaths (Registrar General of India) [2]. The incidence of cancer in the next decade will rise due to an increase in the number of the elderly people of the country [3].

The importance of cultural influences on recognition of symptoms and help-seeking behaviours was highlighted in a review of ethnic and cultural differences in models of and attitudes

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towards cancer across ethnic groups (Dein, 2004).

Based on the cancer registry data, it is estimated that there will be about 800,000 new cancers cases in India every year [4]. At any given point there is likely to be thrice this load, i.e. about 24,00,000 cases.

According to the National Commission on Macroeconomics & Health (NCMH) Report (2005), the Crude Incidence Rate (CIR) for Cervix cancer, Breast cancer and Oral cancer is 21.3, 17.1 and 11.8 (among both men and women) per 100,000 population respectively [5].

Awareness of public about warning signals of cancer in relation to early detection and prevention has been surveyed in a few countries only, and results showed poor knowledge among them.Stimulated by the neglect of research in assessing awareness regarding cancer, attitudes towards it and help seeking for cancer symptoms in ethnic minorities, the present study was carried out.

Materials and Methodology

This cross-sectional survey was conducted in two selected villages which come under rural field practice area of JSS Medical College, Mysore in the month of July-September 2014. 200 people aged 18 years and above were included in the study.

Two Villages were selected by simple random sampling in rural Mysore. Complete enumeration of all the individuals aged above 18 years was done. Those who were available for interview for awareness of cancer at home at the time of visit and consenting to participate in the study were included. Data was collected by House to House survey using Pretested Semi structured questionnaire to assess the awareness regarding cancer and presence of signs of cancer by interview technique. This was followed by health education session using flipcharts. Study participants having signs of cancer were referred to JSS Hospital, Mysore.

Statistical Analysis

The data was entered in excel sheet and analysis using SPSS ver 16.0 software. Descriptive statistics like mean, median, frequencies were calculated. Each sign was assigned score 1 and the overall scores were calculated for each individual. And the overall scores were divided into three grades i.e., low (0-3, medium 3.1-6, High >6).

Results

Among 200 adults included in the study, mean age of the study participants was 35 $\pm$0.8 years. 52% of them were males and 48% were females.

Among the study participants, 77(38.5%) were aware of persistent change in bowel and bladder habits, non-healing wound 70(35%), bleeding from natural orifices 75(37.5%), lump in breast 92(46.0%), difficulty in swallowing 69(34.5%), difficulty in opening mouth 70(35.0%), change in Size or shape of wart 62(31.0%), hoarseness of voice 76(38.0%), unexplained weight loss 86(43.0%) Table 1.

The study showed that, 6(3.0%) were having persistent change in bowel and bladder habits, 2(1%) were having non healing wound, 3(1.5%)were having bleeding from natural orifices, 2(1.0%)were having lump in breast, 5(2.5%)were having unexplained weight loss at the time of the survey Table 2.

It was observed that, the awareness regarding cancer awareness signs was low among 74% high among 28% of the study participants.Table 3.

Table 1: Showing distribution of study participants according to awareness of cancer signals

Warning signal	Frequency(%)
Bowel and bladder habits	77(38.5)
Non healing Wound	70(35)
Bleeding from natural orifices	75(37.5)
Lump breast	92(46.0)
Difficulty swallowing	69(34.5)
Difficulty in opening mouth	70(35.0)
Size or shape of wart	62(31.0)
Hoarseness of voice	76(38.0)
Weight loss	86(43.0)

Table 2: Showing distribution of study participants according to presence of cancer warning signals

Warning signal	Frequency(%)
Bowel and bladder habits	6(3)

Wound	2(1)
Bleeding	3(1.5)
Lump breast	2(1.0)
Difficulty swallowing	0
Opening mouth	0
Size or shape of wart	1(0.5)
Hoarseness of voice	3(1.5)
Weight loss	5(2.5)

Table 3: Distribution of study participants according to awareness scores.

Awareness Levels	Frequency(Percentage)
low	128(64.0)
medium	15(7.5)
high	57(28.5)
Total	200

Discussion

The study has identified low levels of awareness of cancer warning signs.The results revealed that, in general, the level of knowledge about warning signs of cancer among the studied subjects was low.

Our findings are consistent with those of a few studies in developing countries [7,8]. However, the level of awareness in a developed country is slightly higher [9,10].

Such a difference, in general, can be attributed to the social inequalities and absence of community based / patient education between developed and developing countries.

Mehta S, Rajaram S, in their cross sectional study on Awareness about Human Papilloma Virus and its vaccine among medical students [11] clearly states awareness and attitude of medical college students towards HPV and its vaccine. The medical students did not know the incidence of cervical cancer in India, but they could relate its association with cervical cancer. The lack of knowledge among medical students is only tip of the iceberg. The misconceptions in the lay public would be even more and this could prove detrimental to the health of the society.

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Breast cancer is the most common diagnosed malignancy in women worldwide (22%) and in India (18.5%) it ranks second to cervical cancer. The burden of breast cancer is increasing in both developed and developing countries [12]. Present study estimates awareness of presence of lump is a warning sign is present in 46% of the participants . Considering breast cancer as one of the leading cause of death in India, awareness towards the same should be created.

Conclusion

This study may be considered as a maiden attempt in the development of an educational intervention program. Such educational and intervention programmes should be culture-sensitive and accessible to all individuals, with special attention placed on reaching the populations of the highest risk to increase awareness about the disease leading to its earliest diagnosis.

As a National Cancer Prevention strategy, public education combined with the use of cancer-screening technology, focused on high-risk populations, can be a cost-effective approach.

References

1. World Health Organization. Cancer control: knowledge into action: WHO guide for effective programmes. Module 2. Geneva: World Health Organization,2007:iii. (www.who.int/cancer/modules/Prevention%20 Module.pdf, 2007, accessed on July 2010).
2. Park K. Epidemiology of chronic non communicable diseases and conditions. 21st edition, M/s Banarsidas Bhanot publishers.
3. Sadjadi A, Nouraie M, Mohagheghi MA, Mousavi-Jarrahi A, Malekezadeh R, Parkin DM. Cancer occurrence in Iran in 2002: an international perspective. Asian Pac J Cancer Prev. 2005; 6: 359-63.
4. Breslow RA, Sorkin JD, Frey CM, Kessler LG. Americans' knowledge of cancer risk and survival. *Prev Med.* 1997; 26: 170-7.
5. Operational guidelines for national programme for prevention and control of cancer, diabetes, cardiovascular diseases & stroke (NPCDCS), Directorate General of Health Services, Ministry of Health & Family welfare, Government Of India. Available from http://health.bih.nic.in/Docs/Guidelines-NPCDCS.pdf.

6. Boffetta P, Brennan P, Saracci P. Neoplasms. Oxford Textbook of Public Health. 4th Edition, Oxford University Press.
7. Ali NS, Khalil HZ. Cancer prevention and early detec- tion among Egyptians. Cancer Nurs. 1996; 19: 104-11.
8. SanTurgay A, Sari D, Turkistanli EC. Knowledge, attitudes, risk factors, and early detection of cancer rele- vant to the schoolteachers in Izmir, Turkey. Prev Med. 2005; 40: 636-41.
9. Bostick RM, Sprafka JM, Virnig BA, Potter JD. Knowledge, attitudes and personal practices regarding prevention and early detection of cancer. Prev Med 1993; 22: 65-85.
10. Brunswick N, Wardle J, Jarvis MJ. Public awareness of warning signs for cancer in Britain. Cancer Causes Control. 2001; 12: 33-7.
11. Mehta S, Rajaram S, Goel G, Goel N. Awareness about Human Papilloma Virus and its vaccine among medical students. Indian J Community Med. 2013; 38: 92-4.
12. Kamath R, Mahajan KS, Ashok L, Sanal T S. A study on risk factors of breast cancer among patients attending the tertiary care hospital, in Udupi district. Indian J Community Med. 2013; 38: 95-9.