

BREAST CANCER KNOWLEDGE AND BREAST SELF-EXAMINATION PRACTICE AMONG RURAL AND URBAN WOMEN IN ZAMBIA

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ABSTRACT

Objectives: The purpose of this study was to compare breast cancer knowledge and the use of breast self-examination as a breast cancer screening tool among rural and urban women in the reproductive age group (15–49 years) in the rural and urban areas of Zambia.

Methods: The study sites were located in the Solwezi rural district and Lusaka urban districts in Zambia. A total of 238 women participated in the study.

Results: The findings revealed that 82 percent of the respondents in the rural area and 58 percent of women in the urban area had no knowledge of breast cancer. It was also found that 95 percent of the respondents in the rural and 95 percent of respondents in the urban areas did not practise breast self-examination. The most common reasons given by women for not practising breast self-examination were lack of knowledge on how to do it (65 percent of rural and 55 percent of urban women), the perception that it was not important to do breast self-examination (30 percent of urban and 27.5 percent of rural women) and that they did not perceive themselves as being at risk of getting breast cancer (15 percent of urban and 8 percent of rural women). These findings show that there is a need for nurses to design an educational programme to sensitise women on the dangers of breast cancer and the importance of early diagnosis through the use of breast self-examination.

Keywords: Breast cancer, breast self-examination practice, breast cancer knowledge, rural women, urban women, Zambia.

INTRODUCTION

Breast cancer is one of the leading causes of death among middle-aged women and it

is becoming a major public health problem in developing countries, including Zambia. Breast cancer is the second most common cancer among women in Zambia. The incidence rate of breast cancer has increased by 27 percent in black women and 10 percent in white women over the past 30 years (Price, 1992). It usually develops in women over 50 years of age but recent studies have identified that younger women are also being affected.

The case detection and prevalence of breast cancer have continued to rise in Zambia. The incidence of breast cancer at the University Teaching Hospital (UTH) increased from 35 in 2001 to 93 in 2003 (UTH Cancer Registry, 2003). Data also show that breast cancer was common in women aged 50 and above but more recently it has also been recorded in women under 30. In 2002, three girls younger than 14 were diagnosed with breast cancer and the incidence among those aged between 15 and 34 has risen from 13 in 2001 to 19 in 2003 (UTH Cancer Registry, 2003). It should be noted that the above information represents only a minimal number of breast cancer cases, as poor record keeping in health institutions is a problem in the country.

It has also been reported that most women only seek medical help in the late stage of the disease (UTH Cancer Registry 2003). This could be attributed to inadequate knowledge on the condition and non-utilisation of breast self-examination as a screening tool.

The World Health Organisation (WHO) recommends breast self-examination as an alternative cost-effective screening method for breast cancer to all women over the age of 20 years. This is because mammography, though effective in screening for breast cancer, is not available to many women in developing countries (WHO, 2002). Dorsay (2001) defines breast self-examination as a method whereby a woman examines her breasts regularly and at specific intervals. According to Berkow (1997) the woman herself examines her breasts monthly one to two days after menstruation when the breasts are not tender or swollen. Available evidence shows that the sensitivity of breast self-examination ranges from 60-65 percent (Bailey, 2000; Humphrey, 2002). Breast self-examination is a cost-effective self-care action which, when performed correctly, can detect tumours of 2 cm or less and does not require specialised personnel or equipment as it can be performed at home by the individual in about 10 minutes (Bell, 1997).

REVIEW OF RELEVANT LITERATURE

Studies from around the world have shown that the incidence of breast cancer is rising both in developed and developing nations and that it is common in menopausal women but this trend has changed in recent years (Bird, 1992; Persson, 1995). This change could result from changes in lifestyles, especially in those of African women (Amir, 1998). In the past women had started child bearing early, they bore many children and breastfed children for longer periods. In countries south of the Sahara, breast cancer is the second most common malignancy in women. In Uganda the incidence is 16.4 per-

cent (Akhtar, 1993) and in Tanzania breast cancer represented 8.1 percent of all female cancers, with a peak prevalence in the group 35-44 years (Nzarubara, 1999). Identified risk factors for breast cancer include early menarche, nulliparity, late menopause, poor diet and lack of physical exercise (Amir, 1994).

In addition, studies have shown that alcohol intake is associated with breast cancer and the risk increases slightly in women who consume even one alcoholic drink daily (Amir, 1998; Dorsay, 2001). Smeltzer (2002) has also suggested that smoking increases the risk of breast cancer and that the earlier women begin to smoke, the higher the risk.

OBJECTIVES OF THE STUDY

The objectives of the study were to:

- assess breast cancer knowledge levels and breast self-examination practices among women
- compare knowledge of breast cancer and breast self-examination practices among rural and urban women.

RESEARCH METHODOLOGY

A qualitative study was conducted in two districts, namely Solwezi and Lusaka in Zambia. In Solwezi the study was conducted in the Kapijimpanga residential area while in Lusaka it was conducted in the Kabulonga residential area. The study design was exploratory and comparative in nature. Permission to conduct the study was obtained from the research ethics committee of the University of Zambia and the district authorities in the two districts. Informed consent was obtained from the individual women who participated in the study. The study units were women aged 15–49 years who lived in the two study districts of Solwezi and Lusaka. A total of 238 women participated in the study: 128 from the urban area and 110 from the rural area. The study adopted the systematic random sampling technique, using a sampling frame of households. Kapijimpanga has 2 939 households and Kabulonga has 7 784 households.

The data-collecting instrument was a 28-item semistructured interview schedule developed by the researchers. The researchers conducted face-to-face interviews. Each respondent was interviewed independently.

The research instrument comprised three sections. Section A elicited information on the sociodemographic characteristics of the respondents. Section B was designed to obtain information on women's breast cancer knowledge. Section C elicited information on respondents' breast self-examination practices. The instrument was pretested to assess validity and precision. After data collection, raw data were edited for completeness and consistency, then categorised and coded. The EPI Info statistical package was used to analyse data. Chi-square analysis was utilised to determine the association between variables.

RESEARCH RESULTS

The results are presented in tables and figures.

Table 1: Demographic data of the respondents

Variables	Urban (n= 122)	Rural (n=116)
Age distribution		
15–21	48.4%	37%
26–35	30.3%	39.7%
36–45	18.9%	19%
46+	2.4%	4.3%
Marital status		
Single	48%	28%
Married	38%	62%
Divorced	–	8%
Widowed	–	2%
Separated	6%	–
Cohabiting	10%	–
Educational level		
Primary school	24.2%	28.2%
Junior secondary school	16%	12%
Senior secondary school	30.3%	33.6%
Tertiary	29.5%	36.2%
Occupation		
School girl	25%	18%
Self-employed	18%	4%
Formally employed	45%	18%
Full time housewife	12%	60%

Fifty-one percent of the respondents were urban women and 49 percent were rural women. The median age for rural women was 29 years and for urban women it was 27. Sixty-two percent of the rural and 38 percent of the urban women were married, and those who were single constituted 28 percent of rural and 48 percent of urban women. As reflected in table 1, the majority of the rural women (60 percent) were full-time housewives, 18 percent were in formal employment and another 18 percent were school girls, whereas the majority of urban women (45 percent) were in formal employment, 18 percent were self-employed, 12 percent were full-time housewives and 25 percent were school girls. Thirty-six percent of the rural women and 30 percent of the urban re-

spondents had post-secondary education and 34 percent of rural and 30 percent of urban respondents had secondary education.

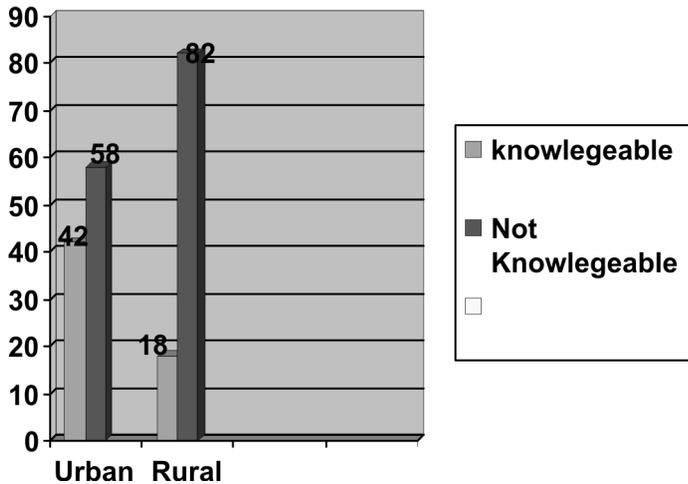


Figure 1: Breast cancer knowledge among urban and rural women

With regard to knowledge about breast cancer, 58 percent of respondents in the urban area had no knowledge compared to 82 percent of the rural women. Significant differences in knowledge were observed between the two groups of women ($P < 0.000$). Women in urban area were more knowledgeable about breast cancer than rural women.

Figure 2 shows poor breast self-examination. Ninety-five percent of urban women as well as 95 percent of rural women did not practise breast self-examination. No significant differences were observed in breast self-examination practice between urban and rural women ($P < 0.928$).

The reasons given by both rural and urban women for not practising breast self-examination were as follows: Sixty-five percent of rural and 55 percent of urban women lacked knowledge on how to do the examination, 15 percent of urban and 8 percent of rural women did not think it was important to do breast self-examination and 30 percent of urban and 27 percent of rural women did not perceive themselves to be at risk of getting breast cancer.

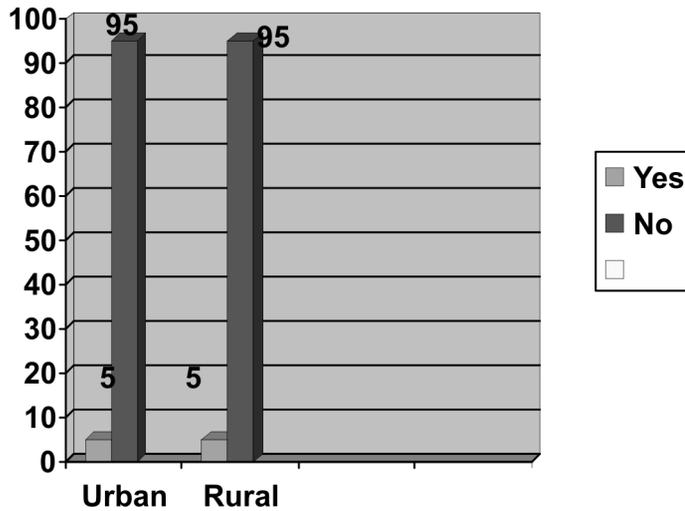


Figure 2: Breast self-examination practices among urban and rural women

Table 2: Reasons why urban and rural women do not practise breast self-examination

Reason	Urban (n=122)	Rural (n=116)
Lack of knowledge	55%	65%
Did not think it was important	15%	8%
Did not perceive themselves to be at risk	30%	27%

DISCUSSION OF RESEARCH FINDINGS

In this study, the aspects of knowledge that were assessed included the definition, predisposing factors, signs and symptoms, treatment and prevention of breast cancer. The study revealed that both the rural and urban women's knowledge levels of breast cancer were generally low. This could be attributed to a lack of educational programmes on

breast cancer presented by nurses and other concerned stakeholders. Inadequate knowledge on breast cancer could have resulted in women not practising breast self-examination (Leslie, 2003; Macdonald, 1991; Nzarusara, 1999; Price, 1992; Sadler, 2001). A similar result was obtained in an American study where women's knowledge levels about breast cancer were low (Leslie, 2003).

Mothers need to know the dangers of breast cancer. This information could be communicated to women during antenatal and postnatal clinic visits and through electronic and print media. Education on breast cancer would teach women the benefits of breast self-examination and can promote early diagnosis of the condition.

The results showed significant differences in breast cancer knowledge between rural and urban women ($P < 0.000$). Urban women had higher levels of knowledge than rural women. The differences in knowledge levels could be because urban women have easier access to information than their rural counterparts.

Many women (95 percent) in both rural and urban areas did not practise breast self-examination. This could be attributed to lack of specific information about breast self-examination as a screening tool. According to Steinberger (1994) and Ko (2000) knowledge of breast cancer and provision of screening guidelines are related to high screening rates. The major reasons cited by women for not practising breast self-examination included lack of knowledge on how to perform breast self-examination. Some women did not think it was important to examine themselves while others did not perceive themselves to be at risk of getting breast cancer. Barton (1999) and Budden (1995) also found that many women in America gave similar reasons for not practising breast self-examination.

CONCLUSION

The findings showed that a larger percentage of rural than urban women had no knowledge about breast cancer. A significant difference in knowledge levels on breast cancer was observed between the rural and urban areas. However, breast self-examination practice was poor in both rural and urban areas.

RECOMMENDATIONS

Based on the research results the following recommendations were made. First, the government should develop a policy on breast screening. Breast self-examination should be recommended as the best method of screening for breast cancer in Zambia. At the same time, the Ministry of Health should conduct programmes on breast cancer and breast self-examination in the electronic and print media by in local languages to reach out to the rural women.

The Ministry of Health and other concerned stakeholders should develop teaching manuals and other teaching aids for use by health care providers so that there is consistency and uniformity in the information given to women. Breast cancer and breast self-examination should be incorporated in the Zambian school curricula so that girls in schools are sensitised at an early age.

Nurses and peer educators should receive training on the dangers of breast cancer and the benefit of breast self-examination so that they are equipped to educate communities on the dangers of breast cancer. Finally, a more rigorous study should be conducted on the topic in order to shed more light on the subject matter.

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