

RESEARCH COMMUNICATION

Perceptions and Opinions about Male Breast Cancer and Male Breast Self-Examination: A Qualitative Study

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Abstract

Objective: While the relatively common nature of female breast cancer has resulted in a high level of general awareness, male breast cancer is still comparatively unknown to the general public and to healthcare professionals. The objective of this study is to explore the perceptions and opinions about male breast cancer and male breast self-examination among male university students. **Methodology:** In-depth interviews were conducted among 36 male university students from the Management and Science University, Malaysia, selected by simple random sampling. The themes of the interview were: knowledge of male breast cancer and male breast self-examination, sources of knowledge and attitudes towards male BSE. The data obtained were classified into various categories and analyzed manually. **Results:** The majority of participants mentioned that there is a low possibility for males to get breast cancer. They also believed that the cause of breast cancer among men is due to the carcinogens from cigarettes. The majority of participants mentioned that they know about breast self-examination from the mass media and that the presence of a lump in the breast is the main symptom of breast cancer in men. The majority of participants mentioned that they encourage their family members to practice breast self-examination but considered that BSE is not important for men because they have a low probability of getting breast cancer. **Conclusions:** Misconceptions regarding male breast cancer and breast self-examination among men still exist among male university students. Therefore especial attention should be given to educate men about male breast cancer and male BSE.

Keywords: Perceptions - opinions - male breast self - examination - qualitative

Asian Pacific J Cancer Prev, 13, 243-246

Introduction

Breast cancer in men is uncommon, accounting for less than 1% of all breast cancers and less than 1% of all carcinomas in men (Giordano et al., 2004). Unfortunately the incidence of male breast cancer is increasing. For instance; Giordano and colleagues reported that between 1973 and 1998, the incidence of male breast cancer increased by 26%, while the incidence of female breast cancer rose by 52% (Giordano et al., 2004). Another recent epidemiological study indicated that male breast cancer incidence is rising (Stang et al., 2008). Similar findings reported that a substantially high proportion of male breast cancer cases have been reported in Africa (Giordano et al., 2002). Although scarce, data from this continent have shown an annual male breast cancer incidence rate ranging from 5 to 15% (Bhagwandin, 1972; Ojara, 1978; Sasco et al., 1993). In contrast, the annual incidence of male breast cancers in Japan is significantly lower (5 per 1,000,000) than the average incidence, comparable to the lower than average incidence of female breast cancer in that country (IARC, 1976).

The most common symptom of breast cancer among

men is the presence of a painless lump (Peate, 2001). Clinically, there is a similarity to female breast cancer with hormonal, environmental and genetic factors contributing to the development of breast cancer (Vetto et al., 1999). Risk factors can include age, benign breast conditions, testicular disease, Jewish ancestry, and chromosomal abnormalities such as Klinefelter's syndrome (D'Avanzo & La Vecchia, 1995; Goss et al., 1999). It has also been suggested that other predisposing risk factors include radiation exposure, oestrogen administration and diseases associated with hyper-oestrogenism such as cirrhosis of the liver. Obesity also can increase the risk of breast cancer in men, possibly due to hormonal mechanisms (Hsing et al., 1998). While there are no standard guidelines for breast cancer screening in men, the American Cancer Society (ACS) states that mammography might be useful for screening men with a strong family history of breast cancer and/or with BRCA mutations (American Cancer Society, 2010).

Men diagnosed with breast cancer are likely to experience major psychological issues including delay in diagnosis, shock, stigma, altered body image, lack of emotional support, provision of inappropriate information,

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misperceptions of causal factors, masculinity, and feelings of isolation with an uncommon malignancy or difficulties with physical changes after treatment (Bunkley et al., 2000; France et al., 2000; Nicholas, 2000;).

While the relatively common nature of female breast cancer has resulted in a high level of general awareness about the condition, male breast cancer is still a comparatively unknown entity, both by the general public and by healthcare and social care professionals. Unfortunately, male breast cancer has received relatively little attention in both the primary health care community and the general population. Both groups lack an awareness of the disease and are often ill-informed about its potential physical and psychological implications (Robinson et al., 2008). Breast cancer in men is an under-researched area in comparison to a range of other cancers and breast cancer in women. Previous research on female breast cancer has been conducted (Al-Naggar et al., 2009a; 2009b). There is a lack of awareness among the public, as well as health professionals, that breast cancer can affect men, and treatment and management strategies are currently based on those used for women. Therefore, the aim of this study is to explore the perceptions and opinions about male breast cancer and BSE among Malaysian men.

Materials and Methods

In-depth interview was conducted among 36 male university students in the academic year 2010 from the Management and Science University, Malaysia. Simple random sampling was used in this study. The participants were recruited from all the faculties namely: the International Medical School (IMS), Faculty of Health and Life Sciences (FHLS), Faculty of Business Management and Professional studies (FBMP) and Center for Foundation Studies (CFS). The inclusion criteria were male students older than 18 years, able to communicate in English language and are Malaysian citizens. The exclusion criteria were female students, unable to communicate in the English language and were non-citizens. Those who fulfill the inclusion criteria were invited to a convenient place such as the university library or the university café for the interview. The protocol of this study was approved by the Ethics and Research Committee of the Management and Science University (MSU). Consent was obtained from all participants before the in-depth interview began. The themes of the in-depth interview were: knowledge of participants on male breast cancer and male breast self-examination, sources of knowledge and attitudes towards BSE. The data obtained were classified into various categories and analyzed manually.

Results

The majority of subjects were 21-25 years old, Malay, single and from the International Medical School (IMS). The majority of participants mentioned that there is a low possibility for males to get breast cancer. One said: "The possibility for males to get breast cancer is low as compared to woman." (Malay, 20 years old, IMS)

Table 1. Socio-Demographic of Male University Students (n=36)

Variable	Categories	Frequency	Percentage (%)
Age	≤ 20	8	22.2
	21-25	26	72.2
	26-30	2	5.6
Race	Malay	24	66.7
	Indian	7	19.4
	Chinese	5	13.9
Marital status	Single	33	91.6
	Engage	2	5.6
	Married	1	2.8
*Faculty	IMS	26	72.2
	FHLS	6	16.6
	FBMP	2	5.6
	CFS	2	5.6

*IMS, International Medical School; FHLS, Faculty of Health and Life Sciences; FBMP, Faculty of Business Management and Professional studies; CF, Center for Foundation Studies.

Causes of breast cancer among men

The majority of participants mentioned that the cause of breast cancer among men is the carcinogenic agents from cigarettes. Few of them mentioned that exposure to radiation is a cause of breast cancer among men. One of them said: "Smokers are at high risk of breast cancer because they have high risk of lung cancer and it is related to breast." (Indian, 24 years old, IMS)

Symptoms

The majority of participants mentioned that the presence of a lump in the breast is the main symptom of breast cancer in men.

Is breast self-examination (BSE) among males important?

The majority of participants mentioned that it is not important because men have a lesser possibility to get breast cancer (as compared to women). The majority of participants mentioned that breast self-examination in males is similar to breast self-examination in females. (Attached is a brochure on male breast examination) One of them said; "It is similar to the self-examination among females." (Indian, 25 years old, IMS). Some of participations mentioned that they do not have any idea about it.

Sources of information

The majority of participants mentioned that they knew about breast self-examination from the mass media. A few of them mentioned that they knew it from their family.

Encourage family members to practice BSE

The majority of participants mentioned that they would encourage their family members to practice breast self-examination. A few of them did not. One of them said: "I do encourage females but for males not yet." (Malay, 24 years old, IMS)

Need more information about male breast cancer

The majority of participants mentioned that they need more information about male breast cancer.

Discussion

Regarding knowledge about male breast cancer, the result of this study agreed with several studies before that there is poor knowledge about male breast cancer among men. This may be due to that the literature they received covered topics that were specific to women's breast cancer. For instance, most leaflets that discussed issues such as breast self-examination, breast cancer and breast reconstruction were all about women's breast cancer. A similar study reported that the majority of men were not aware that men could develop breast cancer (Thomas 2010).

The majority of participants mentioned that they knew about breast self-examination from the mass media. In Turkey, similar findings reported that TV and radio programs were identified as the main sources for information about breast cancer among women (Dundar et al. 2006). This finding emphasizes the role of the media to educate through the most popular media used by the population.

The majority of participants mentioned that the causes of breast cancer among males were due to the carcinogenic agents from cigarettes. A few of them mentioned that exposure to radiation is one the causes of breast cancer among males. It is clear that there is a lack of knowledge among men about the male breast cancer. The literature mentioned that the etiology of male breast cancer is unclear, but hormonal levels may play a role in the development of male breast cancer. Testicular abnormalities such as undescended testes, congenital inguinal hernia, orchiectomy, orchitis and infertility have been consistently associated with an increase in breast cancer risk (Thomas et al., 1992; Sasco et al., 1993). Benign breast conditions, including a history of breast trauma and nipple discharge have also been reported to increase the risk. Risk factors for male breast cancer

include a positive family history, Klinefelter's syndrome and radiation therapy. BRCA2 mutations are found in approximately 4% of all cases and in 15% of cases with a first-degree relative who have breast cancer (Liede et al., 2004).

Whether gynecomastia is a risk factor for male breast cancer is unclear. Gynecomastia has been reported in association with breast cancer in men (Goss et al. 1999; Yildirim & Berberoglu 1998), but is also very common in healthy men (Braunstein 1993). Klinefelter's syndrome, in which patients carry XXY chromosomes, may be present in 3 - 7% of males with breast cancer, giving males with Klinefelter's syndrome a 50-fold greater risk over the general male population (Harnden et al., 1971; Casagrande et al., 1988; Hultborn et al., 1997). Men with a family history of breast cancer in a female relative have 2.5 times the odds of developing breast cancer (Rosenblatt et al., 1991). As in women, exposure to chest wall radiation, such as in patients previously treated with mantle radiation for Hodgkin's disease, increases the risk of subsequent breast cancer (Sasco et al., 1993). Alcohol use, liver disease, obesity, electromagnetic field radiation and diet have all been proposed as risk factors, but findings have been inconsistent (Hsing et al., 1998; Sorensen et al., 1998; Rosenblatt et al., 1999; Erren, 2001; Ewertz et al., 2001; Pollan et al., 2001; Weiderpass, 2001; Johnson, 2002).

Regarding the symptoms of male breast cancer, the majority of participants mentioned that the presence of a lump in the breast is the main symptom of breast cancer among men. The most common presenting symptoms in male breast cancer patients are a painless subareolar lump, nipple retraction, and bleeding from the nipple (Stierer et al. 1995; Goss et al., 1999; Giordano et al., 2002). As in women, there is a slight preponderance of left-sided versus right-sided disease (Scott-Conner et al., 1999). Usually the primary consideration in the differential diagnosis is gynecomastia, which affects approximately 30% of healthy men (Williams, 1963). Mammography can be helpful in differential diagnosis.

The limitations of this study include the small numbers of participants and the possible self-selection of those who participated in the in-depth interview. The next step will be to collect survey data from a larger and representative sample of men across Malaysia about their knowledge, practice and information sources in relation to male breast cancer. Other limitations are that these groups were exclusively university students which may not adequately reflect the views of men about breast cancer in males.

In conclusion, misconceptions and lack of knowledge regarding male breast cancer and male breast self-examination exist among male students. Therefore especial attention should be given to educate men about breast cancer and BSE because they are the decision makers in their homes and correct knowledge is important to make a right decision.

In recommendation, to raise the awareness among men about male breast cancer, the authors of this study designed a leaflet on male breast self-examination in both Malay and English languages (Figure 1). This study also emphasized the need for public service campaigns indicating that breast cancer is a man's problem too.



Figure 1. Leaflet on Male BSE in English

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