RESEARCH COMMUNICATION

Perceptions of Breast Health Practices in Pakistani Muslim Women

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Abstract

Objective: Even though breast cancer is the most common form of cancer in females in Pakistan, there is a paucity of evidence on the views of Pakistani Muslim women in relation to breast cancer. This study aimed to investigate the perceptions of Pakistani Muslim women in relation to the aetiology of breast cancer and impressions of breast health. The study took place in Lahore, Pakistan. Methods: This survey used a questionnaire and focus group interviews to investigate women's perspectives on breast health. Data was collected over a period of six months, quantitative data was analysed using descriptive statistics and qualitative data was analysed using thematic analysis. Results: 105 women participated in the questionnaire and 48 women contributed to 6 focus group interviews. Women generally were aware of the term breast cancer but were unsure of its aetiology. The questionnaire data revealed that women were aware of both mammography (55%) and breast self examination (BSE) (77%). Fifty five percent of women had been taught the BSE technique. In comparison, the majority of women attending the focus group interviews had limited exposure to BSE or mammography. Although women had heard of mammograms and BSE they were unaware of BSE technique or breast cancer screening procedures. Conclusions: Even though there is a desire amongst women to engage in BSE by being taught the necessary technique and specific pathological changes to look for, there is a strong cultural opinion that breasts are private organs that should not be discussed publically. In view of this and the frequency of breast cancer in Pakistani Muslim women, it is essential that breast awareness campaigns are implemented by health care professionals such as breast cancer nurses, midwives and medical practitioners to explore the concept of BSE and breast cancer. Selective health education can educate women and lead to changes in health behavior.

Key words; Breast cancer - women's health - focus groups - mammography

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Introduction

Breast cancer is not a single disease but a group of tumour subtypes that account for the most common form of cancer in females. It is a disease that knows no boundaries and affects women and men irrespective of age, social class, race, ethnicity or religion. Universally, breast cancer is the most important cause of cancer in women and accounts for cancer-related mortality in women (Parkin et al., 2005). Global estimates indicate that there were up to 1.1 million new cases of breast cancer in women which accounts for 10% of all new cancer cases (Ferlay et al., 2004). In developed countries women have a 1 in 9 chance of developing breast cancer at some time in their lives (Cancer Research UK, 2009). In developing countries, there has been a substantial rise in the number of reported cases of breast cancer with incidence figures of 53.1 to 69.1 per 100,000 in 2004 (Bhurgi, 2004; Chuwa et al., 2009). These figures are comparable to European and North American rates (Bhurgi, 2004).

However breast cancer mortality rates differ. In developed countries there has been a decline in breast

cancer mortality in the 50-64 years of age group (Brewster, 2009; Kumle, 2009) but a rise in Asian countries (Boyle, 2003; Kim & Kim, 2008). Shaukat Khanum Memorial Cancer Hospital & Research Center (SKMCH & RC) based in Lahore, Pakistan maintains a database of all malignancies registered with them. The top three malignancies amongst adult females were breast cancer followed by ovary & uterine adnexa, and thirdly cancer of the lip & oral cavity. From 1994 until 2002, there were 3.889 reported cases of breast cancer in Lahore. Pakistan (Badar et al., 2005). Even with this considerable number of cases, it is unknown whether Pakistani Muslim women are knowledgeable about breast cancer and breast health practices, both of these can influence how women receive a diagnosis of breast cancer and whether the disease is recognized when it is in its advanced stage. The interplay between Muslim cultural influences and cancer screening practices is relatively unknown.

Many developed countries offer national breast cancer screening programmes in contrast developing countries may offer opportunistic programmes which are accessed by individuals who can afford to pay for the costs of

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screening (Miles et al., 2004, Porter, 2008) such as Pakistan.

In developed countries the most prevalent age of onset of breast cancer differs between countries. In England the optimum age to develop breast cancer ranges from 50-64 years (Cancer Research, UK, 2009), in the US it is 60 years and older (NCI). In contrast, in Asian countries, the most prevalent age range varies from 20- to 70 years in Pakistan (Rashid et al., 2006) and 22 to 78 years for BRCA negative women with a mean age of 44.2 years in Malaysia (Thirthagiri et al., 2008).

In many Asian countries cultural barriers exist which are thought to have a strong impact on breast self examination (BSE) and breast screening behaviour. Many Asian women do not practice BSE due to the taboo about touching oneself (Sadler et al., 2001) and the associated embarrassment about discussing intimate parts of the body or being examined by a male physician (Bottoroff et al., 1998). Even though many Asian women may have heard about breast screening, they may possess insufficient knowledge about the benefits of screening or how to perform a BSE (Bhakta, 1995; Rashidi & Rajaram, 2000). It is unknown whether these findings are also consistent for Muslim women of Pakistan. This study proposes to add to the evolving body of evidence on the impact of breast cancer in ethnic minority women. The aim of this study was therefore to investigate the perceptions of Pakistani Muslim women in relation to the aetiology of breast cancer and impressions of breast health.

Materials and Methods

This survey uses mixed quantitative and qualitative procedures to collect and analyze data in two stages: first, through questionnaires and second through focus group interviews with women. This research design is sequential and cumulative: the preliminary results from analyzing the questionnaire data were fed into the focus group interviews to allow for the elaboration of perspectives and opinions. This design encourages validation by representative participants.

Data collection and instruments

A questionnaire was developed from the available literature to investigate women's perceptions of the aetiology of breast cancer, breast health practices which include breast cancer screening and BSE. The brevity of the questionnaire was intentional to increase response rate. The questionnaire comprised questions that focused on demographic data such as age, educational achievement with seven specific questions related to awareness of breast self examination, whether women had been taught BSE technique, how often should BSE be undertaken, awareness of mammogram, age range to participate in mammograms, frequency of mammographic screening and cancer aetiology.

In phase 2, focus group interviews were held in SKMCH & RC. Focus group interview questions were developed from relevant breast health literature and also from responses generated from the questionnaire. It is important that the design of the interview questions

specifically addressed the cultural sensitivity of the women involved. To achieve this, the questions were developed jointly with members of the research team who is also of Pakistani Muslim origin. This ensued that participants would be familiar with the phraseology used and could engage with the questions employed. The suitability of the interview questions were tested using three pilot samples and necessary changes to the schedule questions were made prior to undertaking the main study. All focus group interviews were conducted in English. All those involved in the study are researchers, experienced in interviewing techniques. During focus group interviews, the same interviewer undertook the interviews to enhance the validity and reliability of the data collected (Wengraf, 2004).

All researchers were involved in data analysis to ensure the consistency of interpretations and the internal validity of the data. Methodological triangulation was used to achieve validity (Patton, 1990, Kevern & Webb, 2001).

Sampling procedure

A purposive sample of women employed in banks, financial institutions and SKCM & RC were encouraged to participate in the questionnaire phase of the study. Women eligible to participate in the study were as follows: aged 20-50 years, no history of breast cancer, of Muslim belief and Pakistani origin. One hundred questionnaires were distributed to banks, and financial institutions and 70 questionnaires were made available to female employees and visitors to SKMC &RC and female patients. This sample size was selected to allow for an ample response rate (Table 1).

The focus group interviews were advertised in SKMCH & RC and in local Government offices with details of the research and contact details of the research team. Women interested in participating in the interviews were encouraged to contact a member of the research team. Purposive sampling was used to recruit an independent sample of women from a variety of professional and educational backgrounds to participate in focus group interviews; school teachers, health care, government, independent sector workers and housewives.

Table 1. Characteristics of the Study Sample

Characteristic	0	Survey (N=105) %	Focus group (N= 48) %
Age	20-35		68
-	31-40	59	
	41-50	46	
	36-50		32
Highest	Graduate	86	44
Qualification			
	Diploma	12	33
	No qualifications	7	23
Employment	Bank	31	
	LG	39	
	SKMC & RC	30	84
	Housewife	36	16

Guide: Bank = bank employee,

LG = local government, SKMCH & RC

The basis for this selection was to provide a representative sample of women who were employed in a broad range of professional fields and to reflect the local population of women. The sample criteria included women over the age of 20 to 50 years of age, with no history of breast cancer, and of Pakistani origin and Muslim belief.

Procedures

The questionnaire was piloted to a group of eight women employed as clerical staff at SKMCH & RC in Lahore Pakistan to assess the validity of the tool and comprehension of the questions. Necessary adjustments were made to the questionnaire before commencing the main study. The study was advertised in local banks, financial institutions and hospitals. Following this, the questionnaire was distributed by mail to local banks, financial institutions and made available in a central location within SKMCH & RC for relatives, female staff, visitors and female patients. Interested parties were invited to complete the anonymous questionnaire and to submit completed questionnaires in the collection boxes provided. Questionnaires were collected after 14 days. A total of 105 complete questionnaires were received and included in the analysis.

Six focus group interviews were held in SKCMH &RC. Focus group interviews were held at a convenient time at weekends to encourage participation. Each focus group comprised of up to eight women, giving a total of 48 women. This sample selection and size permitted an exploration of the diversity of views from women in relation to perceptions of breast health, breast cancer screening and BSE practices but also allowed comparisons to be made as well as the exploration of perceptions, identification of categories, repeating patterns and emerging themes.

The focus groups interviews consisted of broad, non cued questions which addressed issues such as meaning and causation of breast cancer, and breast health practices such as breast cancer screening and BSE and cultural views on breast cancer. This approach allowed participants to openly discuss their opinion and allowed the emergence of issues that were of importance to the group.

Examples of focus group questions included the following: Have you heard of the term breast cancer? What do you associate with breast cancer? Do you undertake breast self examination? Are there any cultural issues that would prevent you from undertaking breast self examination?

Focus group discussions were adapted to meet established practices (Kitzinger 1994) and took up to 60 minutes to complete. Interviews were digitally tape recorded and transcribed verbatim.

Data analysis

The questionnaire data was analyzed using descriptive statistics via SPSS to reveal percentage responses for itemized questions.

The information generated from the focus group interviews was analyzed using thematic analysis (Miles & Huberman, 1994). This is a tried and tested approach that utilized matrix formation to help visualize data and

allows the development of core categories, concepts, repeating patterns and clusters that influence the development of emerging themes. Findings were verified by crosschecking across the research team, testing explanations for coherence (Miles & Huberman, 1994), inter-coder cross checking of interpretations and its assessment in relation to the terms of reference (Denzin & Lincoln, 2000). Reliability was also enhanced by reviewing the research decision trail and by the exploration of alternative views (Flick, 2003). In order to evaluate the trustworthiness of reported generalizations it is important that the researcher's constructions are grounded in the data and that there is transparency of its adequacy in representing these data (Mishler, 1986).

Following analysis, a participatory dissemination seminar was undertaken, in which participants, practitioners and researchers questioned, challenged and added to the research findings.

Ethics of participation

Each participant was provided with an information sheet written in English. The information outlined the following details: the ethics of participation, the study purpose; a statement about the confidentiality and anonymity of the information given; what is required of them and that participation is voluntary; the number of participants we are seeking to recruit and that the study has been approved by relevant ethics committees. The contact details of the researcher were provided on the information sheet. Individuals interested in participating in interviews were asked to contact the researcher to arrange the time and location of the focus group interviews.

Consent to participate in the study was undertaken prior to the focus group interview. All participants were assured that their contributions in the study would remain anonymous and strictly confidential in all publications and reports generated from the study. Assurances were also given that identities will not be revealed in any publications. Participants were reminded that they could withdraw from the study at any time. The Research Governance Framework regulations and procedures were adhered to (DH, 2000). Ethical approval will be sought from the appropriate office for Research Ethics Committees (DH, 2004).

Results

Questionnaire data

In total 105 questionnaires were received which reflected a 62% response rate. Table 1 outlines the sociodemographic details of the participants who completed the questionnaire and focus group interviews.

The results from questionnaire indicate that an equal number of women held educational qualifications and were employed in either banks or were housewives. Women were aware of BSE and the relevant frequency of examination. Fifty five percent of women had been taught the technique used in BSE and 47% were aware of the need for monthly checks. Similarly, 54% of women were aware of the mammogram, 24% acknowledged the need for screening in women over the age of 40 years and 30% of women knew that screening should be undertaken on a yearly basis. Women were also able to distinguish some of the perceived causes of cancer (Table 2).

Focus group data results

Three themes emerged from the focus group data; perceptions of breast cancer risk and breast cancer aetiology, knowledge of breast cancer screening and information needs, and impact of culture on breast health practices.

Perceptions of breast cancer risk and breast cancer aetiology

Data from focus groups indicate that up to 50% of Pakistani women had heard of breast cancer. Sources of knowledge included the media, magazines, newspapers, from reading about celebrities such as Kylie Minogue in magazines, searching the internet, or from individual experience of female family members. Several participants were employed at SKCMH &RC and had direct contact with medical professions and access to hospital literature on mammography. It was recognised by some participants that breast cancer is a common form of cancer in females in Pakistan and that the disease appeared in stages but there was generally a negative perception of breast cancer in the Pakistani community.

Women identified several independent factors that may be related to breast cancer, these included; the environment; genetic mutations, chemicals and smoking. These points are illustrated as follows: One member stated: "in Pakistan, in Asia breast cancer is the most common cancer disease in females and the sad part of

Table 2. Summary of Key Questionnaire Findings

Screening practice Item			(N)
BSE	Had awareness	77	(81/105)
	No awareness	23	(24/105)
BSE	Taught BSE technique	55	(58/105)
	Not taught BSE	45	(47/105)
BSE Duration	Weekly	15	(16/105)
	Monthly	47	(49/105)
	Yearly	10	(11/105)
	Don't know	13	(14/105)
	No response	15	(16/105)
Mammogram	Aware	54	(57/105)
	Not aware	46	(48/105)
Required age	>30	29	(31/105)
range	>40	24	(25/105)
	>50	5	(5/105)
	Don't know	13	(14/105)
	No response	29	(30/105)
Frequency of	3 years	20	(21/105)
mammograms	Yearly	30	(32/105)
	Monthly	5	(5/105)
	Don't know	45	(47/105)
Cancer	Smoking	46	(48/105)
aetiology	Genetics	44	(46/105)
	Radiation	48	(50/105)
	Chemicals	45	(47/105)
	All of the above	27	(27/105)
	Don't know	4	(4/105)

that is remains untreatable because most of the women are not aware and they don't go for the treatment and all these things for breast cancer and at this stage it becomes ... when it starts spreading in the whole body,at that time it appears that they are suffering from cancer. In the initial stage, it remains undetectable due to lack of awareness or either the diagnostic facilities are not available to the women or under developing countries so could be a reason".

One member stated: "the fact is that in Pakistan due to the lack of knowledge the women's are not pretty much aware of that disease. You can say that they hide the disease from their relatives, their parents, from their spouses because they think that their disease is not curable and how we can discuss this disease with our doctors or with our relatives".

There was disagreement between group members in relation to the aetiology of breast cancer. One participant worked in a hospital radiology unit and her response was as follows: "from my radiological knowledge, it is a hereditary problem it runs in families. There are certain genes that are mutated, if they are mutated that person will have breast cancer at any stage of her life. So it is a hereditary problem".

In contrast another group member stated: "I think that this disease can be to anybody, it is not hereditary..... it is due to our environment".

In response a participant responded: "that person has to have the mutated gene, a lot of other factors will add to the disease, if nobody else has that disease in the family, it does not mean that you cannot have a mutated gene because cancer is a disease it progresses in the body when the mutated gene is in your body".

One pathologist also explained: Inheritance, our environment, improper diet mimic like chemicals which can cause genetic mutations. Other reasons attributed to breast cancer aetiology included not breast feeding your children, and maintaining an unbalanced diet.

Knowledge of breast cancer screening and information needs

Women generally had a variable knowledge of breast cancer screening practices. Some women had been exposed to mammograms, either individually due to fibrocystic disease, or via their relatives. Some women had heard of mammography but had not been screened. One participant explained that she has heard of mammography: "I have heard that mammogram is very painful, uncomfortable, after that the women are uncomfortable and feeling pain".

One member stated: "I believe that specialist doctors are specialists in this kind of thing. I have no idea".

With respect to undertaking BSE, women in the focus groups had generally had limited experience of the technique involved, its importance or the physical changes that can occur in the breasts and their association with breast cancer. Some women had downloaded information from the internet or had consulted with medical professionals. Women were keen to learn about the BSE technique. This is demonstrated in the following extracts: "Women really don't know how to examine themselves. It is a proper way how to examine or how to go to the doctor for a proper examination, it may be helpful for them".

Impact of culture on breast cancer and breast health practices

Women identified that culture may have an impact on breast cancer awareness. In Pakistani culture breasts are generally not openly discussed. One participant explained this situation as follows: "I think that women in our society are told from their childhood that this organ is to be kept very secret so they don't talk about it very openly with their parents or to their relatives unless they talk about it to their friends only. Friends... they are not very much aware of the mortality of the disease so everyone tries to keep it hidden. That's why they are diagnosed at fourth stage when there is no option but surgery".

In addition to this there is also the issue of secrecy that circumvents the illness for women with a diagnosis of breast cancer or the discovery of a breast lump. This is explained in the following exemplar: "they hide the disease from their relatives, their parents, from their spouses because they think that their disease is not curable and how we can discuss this disease with our doctors or with our relatives".

One member stated: "In our society, there are women who are not literate, so if they have a sickness, they just hide the girl and remove the girl from the scene....they just make her stay at home or move her to her Uncle's house. They feel that if she has a sickness how will we get her married?".

As a consequence of need to hide the disease many women are discouraged from seeking treatment. These sentiments are reflected in the following excerpts:

: Our society we do not take it very positively.... they never encourage ... with the parents if they go for intensive treatment chemotherapy and all these things they never encourage the patient.... give them hope to fight the cancer, and all these things. They always think that if the patient is suffering from cancer ultimately they think you are going to die and that is it. So it's socially acceptable, of course there are exceptional cases who do not react in this way, but mostly people think like that.

:Mostly in low areas, people say hide that disease or you can go to SK (SKCMH & RC). SK is known in South Asia and Pakistan and the reasons are that people hide for the 1st stage and for the last stage they go to the doctors, they think it is a normal routine that comes to the disease but over the last stage they go to the doctor for a solution.

Women realize that attitudes are engrained in their culture and what society expects. However when asked whether there are significant cultural issues that would prevent women from performing BSE, overall the response was positive. Women had a strong desire to comprehend the technique that underpins BSE and to teach other women and relatives, and close friends the practicalities of BSE. One participant claimed: "Self examination can be very helpful in the early detection of breast cancer and we should work on awareness of self examination. I think this is a first step that we can guide people as they should adopt this practice to do self examination on a regular basis".

One member stated "I have read about breast self examination but I don't know the techniques involved. I would really like help to know these techniques".

One member stated: "I don't think anyone would say don't go for that and our religion even I haven't heard in our religion that stops us from doing self examination. It is not that bad, so I don't think we should not go for it".

Overall women were very keen to increase awareness of breast cancer and reinforced the need to increase breast awareness to the wider communities through the implementation of breast awareness campaigns to hard to reach groups such as illiterate women, teaching women and their families about the need of undertake BSE and that breast cancer is a curable illness through mass media campaigns, advertising on the radio, television to target illiterate women and their families but also through local newspapers.

Discussion

In this study the views of Pakistani Muslim women were investigated in relation to knowledge of breast cancer, breast cancer screening practices and cultural views on breast cancer. The questionnaire data revealed that 77% of women were aware of BSE and 55% knew the practicalities of BSE, 54% of women were also knowledgeable about mammograms and their related frequency of use, in addition to identifying possible carcinogens. These results were also supported by findings from the focus group interviews. In total three themes emerged from the data. The first of these is breast cancer

Women in this study identified several independent factors that may be related to breast cancer, these included; the environment; genetic mutations, chemicals, breast feeding and smoking. Some of these factors have been identified previously, for example it has been shown that many African American women associated breast cancer with the environment through exposure to chemicals. However there is also a genetic element of breast cancer including family history (Lowe et al., 1997). It is fairly well established that genetic mutations involving BRCA1, BRCA2, and HER2 genes can predispose women to varying forms of breast cancer and that mutations can vary in their severity; early stage breast cancer to advanced stage (Hortobagyi, 2005). For the women in this study, the role of genetic predisposition in the development of breast cancer appears to be tentative and ambiguous. Several women felt that breast cancer risk only occurred in women with a family history, for others genetic mutations can occur if the predisposing factors are apparent. This division in opinion was confusing for women as many felt that their risk was minimal, and that other issues such as the duration of breast feeding was more important, following breast feeding advice provided by medical practitioners. These perceptions of risk and health priorities have implications for future health education programmes that are needed in Pakistan.

Culture is of extreme importance to individuals and communities. A key finding from this study is the issue of the secrecy of breast cancer and the impressions of breast generally. In this culture, breasts are viewed as an organ that should be hidden and not discussed openly, not just because breast cancer involves women, but also Pakistani women do not like to discuss or examine their breasts. They feel shy, uncomfortable and modest when talking about them; an impression that is ingrained in women from childhood when they are taught not to touch their bodies unnecessarily. Privacy and modesty are innate characteristics that are also be portrayed by women in other Asian cultures biut also with Asian Canadians (Bottoroff et al., 1998, Im & Park, 2002). These characteristics prohibit many Korean women from seeking medical help when they suspect they may have breast cancer because they may have been examined by a male physician (Im & Park, 2002).

Bottoroff et al., (1998) founds that Asian Canadians have a tendency to assign breast cancer as a low health priority and to not disclose a diagnosis to individuals outside the close knit family, especially as it may impact on their children's future marriage plans. This concurs with the issue of secrecy and the social discrimination that accompanies breast cancer in Pakistan.

In Pakistan, breast cancer is often viewed as a socially unacceptable disease that may result in a negative response from family members. As a consequence, women may be discouraged from seeking active medical treatment for the disease or they may attempt to hide the diagnosis as the disease will affect the whole family and may cause unnecessary financial problems. Instead women often seek help from peers (religious scholars) when they develop a lump in their breast rather than being examined by a medical practitioner. Peers provide them with spiritual guidance. This finding concurs with evidence from interviews with Pakistani Muslim patients being treated for breast cancer (Banning et al., 2009).

The social unacceptability of breast cancer and innate social discrimination is not unique to Pakistan. In Korea, breast cancer is associated with perceptions of bad luck for the family members (Im & Park, 2002). Impressions such as these may be tackled through health education with emphasis on raising the priority of breast health awareness. In this study only five women had heard of mammography, compared to 54% of women who responded to the questionnaire. Given the ambiguity surrounding the genetic influence of breast cancer, women wanted to be informed about the aetiology of breast cancer, and the BSE technique. It is known that the information needs of women from ethnic minority backgrounds are essentially equivalent to that of the indigenous population of women but cultural differences do exist (Manning & Quigley, 2002). Breast cancer information should use language that focuses on cultural beliefs, values, and practices of that specific culture (Ashing-Giwa & Ganz, 1997). It is of paramount importance that information is culturally sensitive in order to avoid embarrassment for women whose culture embodies the concept of modesty and privacy and respect their views (Watts et al., 2004).

Women consistently expressed the need for explicit health education and instruction on the aetiology of breast cancer, its associated risk factors, precise instruction on how to undertake BSE along with the duration and frequency, also information on mammography. The quality of information needed to be concise, clear and accurate with instructions that can be passed on to wider members

of the extended family system but also culturally selective in order to meet the cultural values, beliefs in language that is both supportive and acceptable (Farmer & Smith, 2002).

The importance of community based health educational programmers was supported by all women with emphasis on educating men as well as women. Men often held primitive views established by stories and wives tales rather than fact about breast cancer and could offer resistance to women seeking appropriate medical advice. This could result in greater openness of society towards discussing breast health and help to sanction breast awareness practices (Bottoroff et al., 1998). To achieve this, educators need to be of both genders (Sadler, et al, 1998). This is reflected in a statement by one member who stated: "This disease is also found in males but to a lesser degree. Our spouses should understand the situation that we are in".

In order to make breast cancer a health priority, culturally relevant health education and interventions are needed in Pakistan. Health beliefs and perception of risk can influence cancer screening behaviour (Bailey, Erwin & Berlin, 2000), so it is important for health professionals to be able to acknowledge the common perceptions held by Pakistani Muslim women and men in order to have any impact on health behaviour and to offer appropriate health education. ":Ignorance is one of the reasons and communication gap, this is one of the reasons. I must say that daughters they are not telling their mother and mothers are not paying attention, real attention to whatever the problems are and then there should be as educated women we should be attending seminars and reading pamphlets and we should be made aware though media to be more aware of the problem that we are facing in Pakistan. The information is there on the net, if we pay more attention and open the net and we can have the information and spread it to the younger ones also". "Educate illiterate women with no access to the net etc. Educate men to improve men's spouses knowledge., Openly discuss in personal meetings as we are succeed to discuss it. On the radio, newspapers, TV, radio is useful in rural areas to educate".

Intervention strategies need to focus on BSE, and the association between breast screening services and breast cancer. Demonstrations of how to perform BSE may be useful especially for women who have not previously received this type of instruction (Sadler et al., 2001). This can be achieved using culturally sensitive videotapes (Bottoroff et al., 1998), leaflets, instruction programmes, education support initiatives and seminars offered by breast cancer and oncology nurses but also by health visitors and midwives providing breast feeding support to women and also by offering health care information in Urdu and local dialects that target women and men attending local hospitals. The use of interpreters is especially useful to cater for Pakistanis with dialects other than Urdu.

In conclusion, breast cancer and breast health are important global issues which affect the lives of all women. In Pakistan, the breast is an organ that is not discussed openly, so women who develop breast lump or breast cancer are prone to secrecy about their illness. Breast self examination is not openly practiced as many Pakistani women are unaware of the technique involved mostly due to cultural reasons. Even so Pakistani women acknowledge their cultural background but remain inquisitive to learn about breast cancer and breast health awareness. Health care professionals have a key role to play in educating women and their families about the importance of breast health awareness.

References

- Ashing-Giwa K, Ganz P (1997). Understanding the breast cancer experience of African American women. J. Psychosocial Oncol, 2, 19-35.
- Banning M, Hafeez H, Faisal S, Hassan M, Zafar, A (2009). The impact of culture and sociological issues on Muslim patients with breast cancer in Pakistan. Cancer Nursing, 32, 317-24.
- Badar F, Moid I, Waheed F, et al (2005). Variables associated with recurrence in breast cancer patients - the Shaukat Khanum Memorial Experience. Asian Pac J Cancer Prev, 6, 54-7.
- Bailey EJ, Erwin DO, Berlin P (2000). Using cultural beliefs and patterns to improve mammography utilization among African American women: The witness project. J Natl Med Assoc, 92, 136-42.
- Bhakta P (1995). Asian women's attitudes to breast selfexamination. Nurs Times, 9, 44-7.
- Bradley PK (2005). The delay and worry experience of African American women with breast cancer. Oncol Nursing Forum,
- Bhurgri Y (2004). Karachi Cancer Registry data implications for the national cancer control program of Pakistan. Asia Pac J Cancer Prev, 5, 77-82.
- Bottoroff JL, Johnson JL, Bhagat R, et al (1998). Beliefs related to breast health practices: the perceptions of South Asian women living in Canada. Soc Sci Med, 47, 2075-85.
- Boyle P (2003). Mammographic breast cancer screening after the dust has settled. Breast J, 12, 351-6.
- Brewster DH, Sharpe KH, Clark DI, et al (2009). Declining breast cancer incidence and decreased HRT use. Lancet, 373, 459-740
- Cancer Research UK (2009) available at: http:// info.cancerresearchuk.org/ cancerstats /types /breast/ incidence. Accessed August 2009.
- Chuwa EWL, Yeo AWY, Heng HW, et al (2009). Early detection of breast cancer through population-based mammographic screening in Asian women: A comparison study between screen-based detected and symptomatic cancers. Breast J, **15,** 338-43.
- Denzin NK, Lincoln YS (2000). Handbook of Qualitative Research. 2nd Edition. London: Sage Publications.
- Department of Health (2000). The Research Governance Framework for Health and Social Care. Department of Health.. Available at: http://www.doh.gov.uk/ research.
- Department of Health National Research Ethics Committee. (2004). Department of Health. Available at: http:// www.nres.org.uk.
- Farmer BJ, Smith ED (2002). Breast cancer survivorship: Are African American women considered? A concept analysis. Oncol Nursing Forum, 29, 779-87.
- Ferlay J, Bray FM, Pisani P, Parkin DM (2004). Cancer incidence mortality and prevalence worldwide IARC Cancerbase no. 5. Version 2. Lyon France. IARC Press.. http://www.-

- dep.iarc.fr. Accessed 5.08.09. Flick U (2003). An Introduction to Qualitative Research, 2nd Edition. London: Sage Publications.
- Hortobaygi GN (2005). Trastzumab in the treatment of breast cancer. N England J Med, 353, 1734-6.
- Im EO, Park YS (2002). Korean women's breast cancer experience. West J Nursing Res, 24, 751-71.
- Kevern J, Webb C (2001). Focus groups as a tool for critical social research in nurse education. Nurse Education Today,
- Kitzinger J (1994). The methodology of focus groups: the importance of methods between research participants. Sociology of Health and Illness, 16: 105-9.
- Kumle M (2009). Declining breast cancer incidence and decreased HRT use. Lancet, 372, 608-10.
- Kim JH, Kim O (2008). Predictors of perceived barriers to mammography in Korean women. Asian Nursing Res, 2, 74-81.
- Lowe J, Borg F, Norman S, McCorckle R. (1997). An urban inter-generational programme for cancer control education. J Cancer Educ, 12, 233-9.
- Manning DL, Quigley P (2002). Understanding the needs of people using a cancer information service in Northern Ireland. Eur J Cancer Care, 11, 139-42.
- Miles A, Cockburn J, Smith RA, et al (2004). Promoting cancer screening: learning from experience. Cancer, 101 (Suppl **5**), 1107-17.
- Miles M. & Huberman AM.(1994). Qualitative Data Analysis: An extended source book. London: Sage Publications.
- Mishler E. (1986). Research Interviewing. Thousand Oakes: Sage Publications.
- Parkin, DM., Bray, F., Ferlay, J.& Pisini, P. (2002) Global cancer statistics. Cancer J Clin, 2005, 55, 74-108.
- Porter, P. (2008). Westernising women's risks? Breast cancer in lower income countries. N Eng J Med, 358, 213-6.
- Patton M (1990). Qualitative Evaluation and Research. 2nd edition London: Sage Publications.
- Rashid MU, Zaidi A, Torres D, et al (2006). Prevalence of BRCA1 and BRCA2 mutations in Pakistani breast and ovarian cancer patients. Int J Cancer, 119, 2832-9.
- Raishidi A, Rajaram SS (2000). Middle Eastern Islamic women and breast self-examination. Cancer Nursing, 23, 64-9.
- Sadler GR, Dhanjal SK, Shah NB, et al (2001). Asian Indian Women: knowledge, attitudes and behaviours toward breast cancer early detection. *Public Health Nursing*, **18**, 357-63.
- Sapsford R, Jupp V (1998). Quantitative Data Analysis. London: Sage Publications.
- Smith ED, Phillips JM, Price MM (2001). Screening and early detection among racial and ethnic minority women. Sem Oncol Nursing, 17,159-70.
- Thirthagiri E, Lee SY, Kang P (2008). Evaluation of BRCA1 and BRCA2 mutations ands risk prediction models in a typical Asian country (Malaysia) with a relatively low incidence of breast cancer. Breast Cancer Res, 10, 59-74.
- Watts T, Merrell J, Murphy F, Williams A (2004). Breast health information needs of women from minority ethnic groups. J Adv Nursing, 47, 526-35.
- Wengraf, T. (2004). Qualitative Research Interviewing. London: Sage Publications.

Maggi Banning and Haroon Hafeez