BREAST CANCER MANAGEMENT DELAY - TIME FOR IMPROVEMENT: A REFLECTION FROM THE EASTERN PROVINCE OF SAUDI ARABIA

MAHA S.A. ABDELHADI, FRCSI, MSc

Department of Surgery, College of Medicine, King Faisal University, Dammam, Saudi Arabia

مقدمة: سرطان الثدى من أكثر السرطانات انتشاراً عند النساء، كما أنه يتصف بصغر سن المصابات في مجتمعاتنا مقارنه بالعالم الغربي.

ر... يعتمد نجاح العلاج لهذا المرض على الأكتشاف المبكر للورم في مراحله الأولية، وذلك لأن التأخير في مبادره العلاج يتسم بنتائج سلبيه مما يؤدي الى إجهاد الكوادر والخدمات الطبية معنويا وماديا.

طريقة الدراسة: هذه الدراسة أجريت في مستشفى الملك فهد الجامعي بالخبر حيث رصدت خطوات المريضات اللاتي تم تشخيصهن باحتمال المرض الخبيث عن طريق معاينه الملفات وإحصاء عدد الزيارات لكل مريضة أثناء فترة التشخيص.

النتائج: تبين أن المدة التي تقضيها المريضة قبل بداية العلاج تتراوح بين 6-15 أسبوعاً مما يؤدى إلى إحباط شديد من قبل المريضة وذويها ودفعها إلى البحث عن وسائل علاجية أخرى.

الخلاصة: هذا النوع من التأخير يمكن إذا تجمعت الجهود من جميع التخصصات المعنية بعلاج هذا المرض في عيادات مشتركة والتعجيل بالعلاج.

الكلمات المرجعية: سرطان الثدي، العلاج.

Objective: Breast cancer is the commonest international malignancy among women. Its increased prevalence over recent years in our part of the world has prompted women to randomly seek medical advice. Many patients are delayed for weeks to months prior to receiving medical treatment. This review explores the causes of delay and proposes possible solutions.

Materials and Methods: This review was undertaken at King Fahd Hospital of the University, a tertiary care center with the capacity of 420 beds. It accommodates a large number of referrals from the Eastern Province, other regions of the Kingdom, in addition to many walk-in patients. Most of the patients referred with breast cancer are directed to the breast clinic for treatment. There was random re-tracing of patients' steps from the discovery of the suspicious breast mass to the delivery of care.

Results: The total number of diagnosed breast cancer cases at this center between 1997-2007 was 303, with a total number of 975 registered visits. Random retracing of these patients' records identified three points of delay: community related, primary heath care and tertiary care. It was found that the patients spent 6-15 weeks and around 32-38 hand offs before receiving the final care.

Conclusion: This unnecessary delay creates anxiety and mistrust of the operating health system leading patients to seek alternative medicine or treatment abroad.

A multidisciplinary one-stop breast oncology clinic may be the solution to the above problem. It may allow the fast tracking of breast cancer patients through a highly specialized and well-trained multidisciplinary team that offers the highest quality of care, thereby optimizing the chances of cure with the least delay and possible morbidity.

Key Words: Breast cancer, management, delay.

J Fam Community Med 2008;15(3):117-122.

Correspondence to:

Dr. Maha S.A. Abdelhadi, Professor and Consultant Surgeon, Department of Surgery, King Fahd Hospital of the University, P.O. Box 40293, Al-Khobar 31952, Saudi Arabia

E-mail: abdelhadi_m@hotmail.com

INTRODUCTION

Global breast health promotion encourages and enables women to improve their breast health within an increasingly global context. Breast cancer is the commonest malignancy among women internationally. 1 Its increased prevalence over recent years has alerted women to seek random medical advice. Recent data obtained from the Saudi cancer registry have indicated the progressive and steady increase in the incidence of breast cancer over the last two decades, with a reported incidence of 20.6% of all female cancers.² Estimated annual number of cases diagnosed globally with breast cancer exceeds one million, and this number is expected to increase to 1.5 million by the end of the decade because of the major increase in the number of cases in countries with limited resources.³

In this part of the world, women depend mostly on males for any tasks which involve transportation to health care facilities. women tend to be impatient when there are delays, long waiting lists or repeated visits with unnecessary contact time. Based on many inherited misconceptions, they may turn to more accessible alternative means within their communities, such as traditional medicines, seek treatment abroad, or even wait and hope that the spontaneously resolve. Delayed presentations certainly burden the health services with the cost of long hospital stay, and treatment with poor outcomes.

MATERIALS AND METHODS

This review was undertaken at King Fahd Hospital of the University (KFHU), Al Khobar, Eastern Province of Saudi Arabia in a decade (1997-2007). This is a tertiary care center with the capacity of 420 beds accommodating large numbers of referrals from all over the Eastern Region, a few from other regions and in addition to a number of walk-ins. Medical record charts of patients diagnosed with breast cancer were reviewed and steps retraced from the discovery of breast mass to the process of management.

RESULTS

The total number of patients diagnosed with breast cancer were 303 patients with a total of 975 registered visits excluding radiology, laboratory and visits to outpatient clinics on appointment. Three points of delay were identified, the community, primary physician and tertiary care.

Community related delay

From the patients' history, most patients indicated that they did not seek medical advice because of inherited misconceptions which tend to override knowledge. Breast cancer is still considered a stigma and people do not name it for fear of catching the disease or it affecting a member of one's family. The current situation is grave. It is unfortunate that in this 21st century, patients continue to present with average tumors size of 4-6 cms sometimes with ulceration and distal metastasis.

Unfortunately, wide scale structured programs are still scarce or non-existent in this area and are very limited in scope even when available. Breast cancer awareness programs (BCAP) should be designed to assist in prevention and early detection in order to improve the outcome and decrease the morbidity of late presentations. This lack of knowledge and cultural beliefs impact negatively on the awareness programs (Figures 1 and 2).



Figure 1: 29-year- old female presented with progressive left breast cancer of one and half year's duration 2005.



Figure 2: 34-year-old female diagnosed as Right breast mass, refused excision, became pregnant twice, 2004



Figure 3: 29-year-old lactating female. She and her physician watched her right breast disappear with cancer. Was reassured for nine months before referral - 2004.



Figure 4: 41-year-old female presented with right breast mass. Only referred when skin changes developed – 2005.

Primary Physician

Unfortunately, many primary physicians lack the training and knowledge of breast cancer. Their clinical information and their attitudes towards the gravity of the disease are below expectation. Many patients presenting with suspicious breast masses are therefore delayed (Figures 2 to 4).

Tertiary Care

The delay continues even when the patient reaches the hospital. In a busy public hospital, a breast cancer patient can rarely circumvent the long appointment waiting lists. Most hospitals do not have sub-specialized facilities for breast diseases. The referred patients go through the long process of referrals and many handoffs before they are actually seen by the specialist. The waiting time for our patients ranges approximately between 6-15 weeks. Value time is 2 weeks and the number of handoffs is 38, causing a great deal of anxiety and inconvenience for both

the patient and family. The value time is defined as the actual time during which the patient actually undergoes a procedure or is in contact with a physician or receiving treatment (Figure 5 – Process Mapping I).

Occasionally, the surgeon or the oncologist tries to fast track patients by admitting them directly from the outpatients department once the diagnosis is made. The entire process will then be completed in approximately 2-3weeks as compared to the 6-15 weeks on an outpatient basis. This may partially solve the problem of the waiting time for the patient. However, it adds to the financial burden of a busy hospital when a patient occupies a hospital bed for investigations and thus deprives another of its use. Contrary to the globally agreed plan for breast cancer management, some surgeons still admit patients to the surgical unit, perform the surgery regardless of the extent of the disease, before referring them to the oncologist in other centers to evaluate and investigate in retrospect.

Proposed Solution

The breast surgical specialty clinic at KFHU, founded in the year 2000 was the first in the Eastern Province of Saudi Arabia. The estimated number of patients attending this clinic are 30-60 per week with variable breasts complaints. The surgeon is the main treating physician running service, with other supporting departments as necessary. This clinic has provided direct access to a breast specialty, yet the process of management is fragmented giving less than optimal outcomes.

The plan is to establish a one-stop multidisciplinary clinic where the patient completes all requested investigations in one setting, thus utilizing value time, eliminating the long waiting time and minimizing the unnecessary hand-offs. Each member of the core team must have special training in breast pathology and avail themselves of continuing professional education on a regular basis. The core team must consist of all those who play a part in the management of breast cancer, namely, health educators, nurse coordinators, primary care physicians, surgeons, radiologists, radiographers, pathologists, oncologists, psychologists, physiotherapists and data managers.

This multidisciplinary team must have a well-connected Clinical Director of Breast Services. His/her main task would be facilitate the administrative part of the set up, monitor the

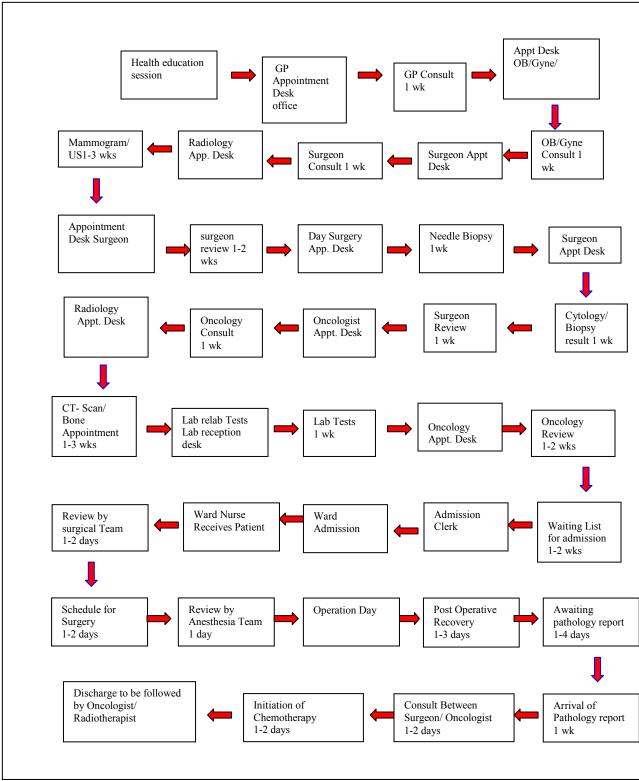


Figure 5: Process Mapping 1 - Current patients steps

services and the audit in addition to being directly involved with patient care. No additional funds would be required since all members of staff needed would be employees of KFHU. Though all services are available and function fully, they are fragmented and unorganized resulting in an

inefficient use of the available assets and human resources of the hospital.

This multidisciplinary service can offer comprehensive breast lesions management performed in a one-stop clinic where decisions are made collectively by the group. The anticipated

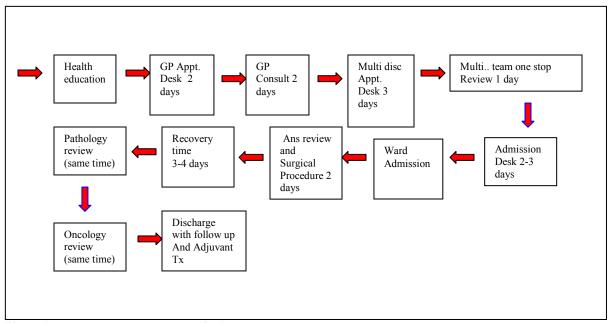


Figure 6: Process Mapping II - Proposed solution

patient process mapping is much shorter than the current one.

The estimated total waiting time is 1-2 weeks compared to 6-15 weeks, and the number of hand-offs reduced to 8-10 instead of the 36-38 in the current system (Figure 6 – Process Mapping II).

DISCUSSION

Breast cancer in our communities is characterized by young age and delayed presentation as well as the reluctance to seek medical advice early because of the fear of discovering cancer.^{4,5} Delayed presentations certainly burden the health services with the cost of long hospital stays and treatment with poor outcomes. Currently, there are no established large scale structured screening programs for breast cancer, and most of the patients that present are symptomatic. The implementation of such programs is of the utmost importance. The provision of female staff as general practitioners, surgeons, radiology technicians and health educators will help to remove major obstacles and facilitate access in order to improve outcome. In addition, organizing bi-annual awareness events that target women's gatherings may help to improve knowledge and remind the target population of the means of early breast cancer detection.^{6,7}

Breast cancer education continues to pose a challenge to the health care system in developing countries and countries with limited resources. Community-based cancer education requires intervention on many levels to address the

fundamental causative contributing issues to the myriad health disparities.⁸

The nature of health education and information is significantly different in developing countries compared to those in more developed regions. Evaluation of public awareness, attitudes and misperception is of fundamental importance for the successful implementation of cancer control activities.⁹

The level of education plays a major role in the ease of delivering health education. However, misconceptions also impose obstacles. It has been shown that the highly educated section of the society had higher erroneous response rate regarding the outcome of breast cancer, the potential risk factors, and the importance of mammography than the general population. ^{10,11}

In one study in our community, contrary to expectation, the report of limited knowledge and misconceptions from the highly educated medical personnel was alarming. Seventeen point three percent believed in self-breast examination, 42.7% believed in mammographic screening. Even the high risk group among these professionals ignored the potential risk, and did not comply with the basic principles of early detection. The management in multidisciplinary specialized breast units is more often adequate; local and regional recurrence rates are lower, and survival is correspondingly better.

Multidisciplinary approach to breast cancer certainly shortens waiting time, minimizes hand offs, reduces patient anxiety and cuts down hospital costs. Despite the fact that there is no clear-cut evidence that a delay of up to 4 weeks has an adverse effect on survival, diagnostic and therapeutic procedures give patients a great deal of anxiety, which can be partially relieved if the treatment is offered 2-3 weeks after the confirmation of diagnosis.¹⁴

Regular audit is required to provide data on the number of patients treated and type of the treatment given. They should also be able to report on the long term outcome measures in treating women with breast cancer. These regular reviews will help to maintain high standards of patient care and improve outcomes.¹⁵ In order to improve the outcome and set high standards in the management of breast cancer, it is highly recommended that:^{16,17}

- 1. National health education programs be established.
- 2. Structured screening programs be set up and early detection methods promoted.
- 3. The knowledge of the primary health care physician be improved by providing training programs on early detection: and regular audit done to maintain standards.
- 4. Referral strategies be established for patients diagnosed with suspicious breast mass with clear lines of communications between the primary care team and the multidisciplinary team
- 5. Multidisciplinary one-stop breast oncology clinic be established where management protocols are set and patients directed to the specialized service without delay.
- 6. Psychological support be provided for women diagnosed with breast cancer.
- 7. An integrated network of cancer care using common clinical guidelines, management protocols, and strategies of care be developed.

CONCLUSION

The need for a multidisciplinary team for the diagnosis and treatment of breast cancer can not be over emphasized. A lengthy tedious process of diagnostic and therapeutic management gives

patients a lot of anxiety that impacts on both family and job performance. The management of such cases should be classified as urgent. The comprehensive opinion of a multidisciplinary core team as a working unit in charge of patients can make a strong prognostic impact on the process of diagnosis and management. It would provide the highest quality of care needed to optimize the chances of a cure and the least morbidity.

REFERENCES

- American Cancer Society 1997; (14) Cancer facts and figures. American cancer society, Atlanta.
- The National Cancer Registry of Saudi Arabia. www.kfshrc.edu.sa/NCR
- Love R, Love S, Laudico A. Breast cancer from a public health perspective. Breast J 2004; (10)2: 136-140.
- Maloney N, Koch M, Erb D, Shneider H, Goffman T, Laronga C. Impact of race on breast caner in lower socioeconomic status women. Breast J 2006; 12(1) 58-62.
- ElHarith A, AbdelHadi M, Doerk T, Bader A Schidtke J. The potential benefits in genetic testing in breast and ovarian cancer. SMJ 1999; 20(9) 663-670.
- AbdelHadi M. Breast Cancer awareness Campaign: Will it make a difference? J Family and Comm Med 2006;13(3):115-118.
- Blamey R, Wilson A, Patnick J. Screening for breast cancer. ABC of Breast Diseases 1997; BMJ Publishing Group:22-6.
- Hurd T, Muti P, Erwin D, Womack. An Evaluation of the integration of non-traditional learning tools into a community based breast and cervical cancer education program: the witness project of Buffalo. BNC Cancer 2003; 3(1):18
- Strothman A, Schneider HP. Hormone therapy: the European women's perspective. Climacteric 2003; 6(4) 337-346.
- Ibrahim E, Idressi I, Al Khadra A, Kurashi N, Al Jishi F, Said I. women knowledge and attitude towards breast cancer in developing country. J Cancer Educ 1991; 6(2):73-81.
- 11. Luther SL. Price JH, measuring common public misperception about cancer. J Cancer Ed 1987;2(3):177-87.
- AbdelHadi M. Breast Cancer Awareness among health professionals. Ann Saudi Med 2000;20(2)136-7.
- Kingsmore D, D Hole C Gillis. The role of surgical management in breast diseases. British Journal of Cancer 2004; 90:1920-1925
- Joint Council for clinical radiology. Reducing Delays in Cancer treatment: Some targets. London Royal College of Physicians and Royal College of Radiologists.1993
- Walsh T, O'Higgins N. Breast Cancer Management: Manual of Clinical Guidelines; 2000; Royal College of Surgeons in Ireland: Dublin. 1-22
- Management of breast cancer in women. A national clinical guideline. A national clinical guideline. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network 2005. Clin Onco (R Coll Radiol) 2007;19(8):588-90.
- 17. EUSOMA GUIDELINES AND PUBLICATIONS Breast Unit Guidelines ... www.eusoma.org/Engx/Guidlines/Guidline. aspx.