

Elective Report

David Mearkle

How does breast cancer affect the lives of women living in the UK? How is their experience likely to differ from that of women globally?

Breast cancer outcomes show vast worldwide geographical variation. Survival rates in developed countries such as the UK can be as high as 80% and above. However, in poorer developing nations they can fall below 40%. This difference is mainly due to the fact that there are fewer and less sophisticated early detection programmes in developing countries. This leads to more women presenting with late stage disease, which carries a poorer prognosis.¹

Survival rates alone do not illustrate the whole picture of the impact breast cancer can have on a woman's life. While patients' experience of the disease no doubt varies greatly across the globe depending on access to treatment and social support networks as well as culture and health beliefs, certain experiences are likely to be universal. The impact of being given a diagnosis of cancer is profound. The effect of having a parent with or losing a parent to cancer, changes the lives of many young people all around the world.

In the UK there are several charities and organisations such as Breast Cancer Care who provide a number of services for people affected by breast cancer. Their mission statement gives 4 main objectives. Firstly, 'to provide information and offer emotional and practical support'. Secondly, 'to bring together people affected by breast cancer'. Thirdly, 'to campaign for improvement in standards of support and care.' And finally, 'to promote the importance of early detection.' My experience is that organisations such as this can have a huge impact on the lives of not only the patients, but on their families as well.⁵

How is care delivered to women with breast cancer in the UK? How does this differ globally?

Breast cancer is the most prevalent female cancer in both developing and developed countries. As life expectancy increases and western lifestyles become more common in developing countries, the incidence of breast cancer is increasing. As with all cancers, late detection of the disease is a poor prognostic factor, therefore the World Health Organisation recommends early detection strategies as the most effective way to improve cancer outcomes.

In the UK breast cancer screening programmes are widespread and are aimed to be available to all women over 50. The NHS Breast Cancer Screening Programme invites women registered at a GP and aged over 50 to attend a mammogram at their local breast screening unit every 3 years, until they reach the age of 70. The programme costs approximately £96million per year.²

Due to the cost of screening programmes, different strategies need to be adopted in developing countries; early detection in these countries can be aided by educational programmes aimed at helping women recognise early signs and

symptoms of breast cancer. Wherever possible, clinical examination screening can be implemented at a lesser cost than use of imaging techniques.

In the UK, breast cancer care is most often delivered by the NHS. The range of treatments available to patients is broad and ranges from surgery and chemotherapy to emotional and financial support. Increasingly, oncoplastic surgery is being used. Traditionally, if a patient would like to have reconstructive surgery after a mastectomy, this would require 2 separate procedures. This is costly as it would require 2 separate hospital stays as well as relatively risky as it would require 2 surgical procedures and 2 general anaesthetics. It is now possible for oncoplastic surgeons to carry out a mastectomy and reconstructive surgery in one procedure. The surgeons who taught me about this, told me that this is the future of breast surgery. It offers patients better outcomes as decreasing the number of operations required decreases the risk of complications. It also improves the patient's experience as they only have to recover from one operation. Oncoplastic surgery is becoming more widespread in the UK, but it has not yet become the norm. It is a highly specialised and expensive surgery, so it not commonly available to women in developing countries.

Improve knowledge and understanding of staging and progression of cancer.

The most commonly used cancer staging system is the TNM system. This gives the clinician important information relating to 3 key elements of the disease. Each element is given a numerical value that relates to its severity.

T stands for Primary Tumour and in cases of breast cancer, is scored as follows:

- TX – primary tumour cannot be evaluated
- T0 – no primary tumour noted
- Tis – Ductal carcinoma in situ
- T1 – Tumour is less than or equal to 2cm in diameter
- T2 – Tumour is between 2 and 5cm in diameter
- T3 – Tumour is greater than 5cm across
- T4a – Tumour has spread to chest wall
- T4b – Tumour has spread to skin
- T4c – Tumour has spread to skin and chest wall
- T4d – Inflammatory carcinoma. (skin is erythematous and tender)³

The N values describe the extent of spread to regional lymph nodes and are scored as follows:

- NX – Unable to assess regional lymph nodes. For example if they have been removed.
- N0 – No regional lymph node spread
- N1 – Spread to ipsilateral axillary lymph nodes. Lymph nodes are still mobile.
- N2 – Spread to ipsilateral axillary lymph nodes. Nodes are attached to each other or local structures.

N3 – Spread to ipsilateral internal mammary lymph nodes.

M stands for metastases and is scored as follows:

M0 – no metastatic disease

M1 – distant metastatic spread. This includes ipsilateralsupraclavicular lymph nodes as well as more distant structures such as brain, lung, liver etc.⁴

References

- 1 - World Health Organisation website. Available at <http://www.who.int/cancer/detection/breastcancer/en/index.html> accessed on 4/6/13
- 2 - NHS Breast Cancer Screening website. Available at <http://www.cancerscreening.nhs.uk/breastscreen.html> accessed on 5/6/13
- 3 - National cancer institute website. Available at <http://www.cancer.gov/cancertopics/factsheet/detection/staging> Accessed on 5/6/13
- 4 - Cancer research UK website. Available at <http://www.cancerresearchuk.org/cancer-help/type/breast-cancer/treatment/tnm-breast-cancer-staging> Accessed on 5/6/13
- 5 - Breast Cancer Care website. Available at <http://www.breastcancercare.org.uk/> accessed on 5/6/13