



Factors contributing to low participation in mammography screening in Papua New Guinea



R. Pape^{a, c}, K.M. Spuur^{b, *}, P. Umo^a

^a Pacific International Hospital, PO Box 6103, Boroko, NCD, Papua New Guinea

^b School of Dentistry and Health Sciences, Faculty of Science, Charles Sturt University, Locked Bag 588, Wagga Wagga, NSW 2678, Australia

ARTICLE INFO

Article history:

Received 17 November 2015

Received in revised form

27 April 2016

Accepted 29 April 2016

Available online 20 May 2016

Keywords:

Breast cancer

Breast screening

Mammography

Barriers

Participation

Papua New Guinea

ABSTRACT

Aim: The aim of this paper is to describe the current state of mammography screening services in Papua New Guinea (PNG) and to document factors thought to contribute to low participation in the free mammography screening service at the Pacific International Hospital (PIH), Port Moresby.

Method: Women attending for mammography screening at PIH between August 2006 and July 2010 were invited to complete a survey investigating environmental, political, social, financial, cultural and health factors thought to be contributing to low participation in the mammography screening service. Ethics approval and permission to collect data was granted through the University of Papua New Guinea, School of Medicine and Health Sciences Research and Ethics Committee and by the Medical Director and Chief Operating Officer of PIH.

Results: The reasons for low participation were found to be multifactorial; difficult environmental factors 42.86%; financial dependency factors 40.54%; cultural factors related to exposing the body 50.03%, social factors (sexual harassment) 77.6%, political factors 4.29% and health factors including poor health 54.54%.

Conclusion: The study demonstrated that in this snapshot of PNG women, the low participation rate in the free mammography screening program at PIH was influenced by various interrelated factors inherent in both the PNG environment and culture, in particular lack of transport infrastructure, financial burden and sexual harassment. As low participation directly impacts upon the high breast cancer mortality in PNG women, a more comprehensive study of the women of PNG is required to validate this research.

© 2016 The College of Radiographers. Published by Elsevier Ltd. All rights reserved.

Introduction

Papua New Guinea (PNG) is located north of Australia in the south western Pacific Ocean and occupies the eastern half of the island of New Guinea and its many offshore islands. The absolute true size of the female population of PNG, is not accurately known.

The most recent Census was conducted in 2011 and reported a total of 3 396 404, females from a total population of 7 254 442, with 2 037 905 females aged over 18 years.¹ The life expectancy at birth for females is 64.8 years.² The majority of the population (43%), were documented to live in the Highlands; only 12.5% of the population reported residing in urban areas.²

There is very little written about breast cancer in PNG and the few available papers date between 1963 and 2004.^{3–9} Breast cancer is the most common cancer in women worldwide, with nearly 1.7 million new cases diagnosed in 2012.¹⁰ The incidence of breast cancer in PNG has continually risen in all four regions of PNG, throughout the 40 years prior to 1998 (since cancer in PNG was recorded) correlating with the Westernisation of the country.^{3,6,8} Other factors may also contribute to the increasing incidence of the disease, but these are not reported in the literature.

* Corresponding author. Tel.: +61 2 69 334550.

E-mail addresses: ruthpape@y7mail.com (R. Pape), kspuur@csu.edu.au (K.M. Spuur), puumonai@gmail.com (P. Umo).

^c University of Papua New Guinea, School of Medicine and Health Sciences, Discipline of Medical Imaging, UPNG Taurama Campus, PO Box 5623, Boroko, NCD, Papua New Guinea.

The age standardised breast cancer incidence in PNG remains lower than in Western countries including Australia at 6.9/100 000 PNG women, 116.4/100 000 Australian women and 155/100 000 women in the United Kingdom (UK).^{4,11,12} The incidence of breast cancer is greatest in women aged between 35 and 54; with 75% of breast cancers being evident in premenopausal women.⁴ Incidence rates in PNG are: 83.9% < 54 years, 55.7% < 45 years and 15.7% < 35 years.⁴ This is significantly different to incidence in Western countries such as Australia where the greatest incidence of breast cancer, 52.5% occurs in women aged 50–69 years and the UK, where 80% of breast cancers are diagnosed in women aged over 50 years.^{11,12}

In PNG, women typically present to health care facilities late, and with more advanced stage cancers; typically Stage III or Stage IV.^{4,5,9,13} Currently, there is no nationwide breast screening program similar to the ones in the UK (National Health Service Breast Cancer Screening Program [NHSBSP]) or Australia (BreastScreen Australia [BSA]).⁷ Essentially women, particularly in rural areas have limited options for breast imaging and typically only present to health practitioners when the disease is so advanced it impacts upon their physical condition.

The health delivery system in PNG is heavily decentralised and approximately 20% of health sector expenditure is funded by non-governmental organisations unlike the NHSBSP and BSA screening programs which are free for women in the target age groups.¹⁴ The two mammography screening services in PNG are both located in the capital Port Moresby. Women aged over 30 years may attend Port Moresby General Hospital (PMGH), where women accessing this government funded service are required to pay a fee of PGK\$ 5.00 (AUD\$2.00/EUR€1.31); or the Pacific International Hospital (PIH) which attracts no service fee. The free screening program at PIH is sponsored by the PNG Motor Vehicle Insurance Limited (MVIL). There are two additional mammography units located in two other Provinces; however, these do not provide a screening service.

The benefits of the early detection of breast cancer including decreased morbidity and mortality are well documented.^{15–17} In established population-based screening programs with participation rates of 85% or higher, mortality reduction has been reported at 40%.^{17,18} Despite the availability of the two screening services in PNG there is a lack of effective participation by women in mammography screening. Although the female population in PNG is more than three million, during the period of this study only a few (<0.1%) women had accessed the free service at PIH. In comparison, in Australia over the same period, 55% of women aged between 50 and 69 years had had a screening mammogram through BSA.¹⁹ In the NHSBSP 72.1% of women aged 50–70 had attended for screening in 2013–2014.²⁰

This paper adds to the very limited number of publications concerning breast cancer in PNG and provides an overview of the current state of mammography screening; reporting factors believed to be contributing to low participation in the free breast screening service at PIH.

Methods

With limited resources, a survey method was employed for this exploratory study as a simple cost effective way of collecting data.²¹ Surveys were made available to women at the time of their appointment. The survey examined various factors locally

attributed to the low participation of PNG women in mammography screening as reported by women who had undergone mammography screening at PIH between August 2006 and July 2010. The survey examined: environmental, political, social, financial, cultural and health factors. Other variables that were studied included: age, parity and the use of hormonal replacement therapy (HRT), which are not reported here. It is acknowledged that the survey is not a validated tool. It was constructed by one of the authors (RP) in collaboration with PIH radiology staff and is based on a lived experience as a woman of PNG, possessing sophisticated knowledge to evidence the focus of the survey. Participants also had the choice to answer each question or not.

A poster promoting the research was prominently displayed in the waiting room and women who had undergone screening were invited to participate in the survey at the conclusion of their appointment. As many of the participants had no formal education and limited literacy (the mean years of schooling for females is 3.2 years and literacy rate of females aged over 15 years was 57.27% in 2010),^{2,22} the intent and purpose of the survey was explained by the PIH radiographer (R.P.), with participants providing informed consent prior to completing the survey. Where disclosed, data collection from illiterate women was assisted by R.P. as part of an informal discussion centered on the survey. All other women completed the survey themselves. The survey involved selecting from predetermined answers with the option to add additional comments at the end of each question.

The large sample size was directly related to the number of mammograms sponsored by PNG MVIL during the survey period. PNG MVIL initially sponsored 3000 mammograms however as this was the first free program of its type there was great interest in the program and the number of women who elected to participate in the screening program during that period exceeded 3000, with the final number of surveys collected being 3500. Data was analysed using simple percentage analysis; and narrative thematic analysis as described by Nagy, Mills, Waters and Birks (2010)²³ was applied to written comments by the author R.P.

Ethics approval and permission to collect data was granted through the University of Papua New Guinea, School of Medicine and Health Sciences Research and Ethics Committee and by the Medical Director and Chief Operating Officer of PIH.

Results

In total, 3500 surveys were analysed for this study, with a response rate of 87.5%. An estimated 4000 PNG women were screened at PIH over the period of this study. Surveys that were incomplete (typically due to non-disclosed language barriers and literacy issues) were excluded. Some surveys were mistakenly taken away by patients.

The following tables report the qualitative analysis; patient quotes are included after some tables and key themes from the thematic analysis are reported within the discussion.

Demographics

48.3% of respondents reported residing in the metropolitan areas of PNG, 31.71% in shanty towns and settlement areas and 19.65% in regional and rural areas.

Download English Version:

<https://daneshyari.com/en/article/2735668>

Download Persian Version:

<https://daneshyari.com/article/2735668>

[Daneshyari.com](https://daneshyari.com)