

**Brief Report****Is Cancer Screening a Priority among Adult Females in Sri Lanka?**

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**Abstract**

Cancer is the second leading cause of death in the world. Proper utilization of available services is of utmost importance in preventing cancer in low and middle-income countries. We assessed the use of well women clinic (WWC) screening services for cervical and breast cancer prevention in a sample of females attending the largest religious festival in Sri Lanka. Of the 3,116 women studied, although 1,895 (60.8%) were aware of the WWC services, only 578 (18.5%) had ever used it. Awareness on breast and cervical carcinoma were 2,874 (92.2%) and 2,609 (83.7%) respectively. Of the 217 professionals or associate professionals in the study sample, 190 (87.6%) were aware of the WWCs compared to only 58.8% among the 2,899 women falling under the categories of other occupations and housewives. Clinic attendance was also significantly higher amongst professionals and associate professionals compared to women in other occupational categories and housewives (40.1% versus 16.9%). Use of well woman clinic services are low and new strategies are needed to improve awareness and participation in this program.

**Key words:** Cervical cancer, Breast cancer, Screening, Sri Lanka, Knowledge

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**Introduction**

The concept of the Well Woman Clinic (WWCs) was first introduced to Sri Lanka in 1996 to screen women for non-communicable diseases including reproductive system malignancies; breast and cervical cancers. This was done as part of a reproductive health programme promoted by international agencies at the International Conference on Population and Development in Cairo in 1994. At present, WWCs are operating throughout the country, at all Medical Officer of Health (MOH) areas, on fortnightly or monthly basis. At these clinics, women over 35 years of age get screened for cervical and breast cancers, hypertension and diabetes mellitus.

Breast and cervical cancers are the most common malignancies among women in the world as well as in Sri Lanka. According to the National Cancer Control Unit data, the estimated age adjusted annual incidence for breast and cervical malignancies in Sri Lanka was 23 and 8.4 per 100,000 respectively in 2010. The lifetime risk of having a

breast cancer among Sri Lankan women is 2.1%. Screening for breast cancer is considered effective in Low and Middle Income Countries (LMICs) where the size of the tumour is considerably large at presentation. Unlike other malignancies, the survival rates of cervical cancer patients are high when identified at early stages. While the WWC services are available for early detection, more than 30% of breast cancers diagnosed in Sri Lanka in 2007 were in the stage IIIA or later showing a late presentation. These women were either not using or not aware of cancer screening services. It has been more than 20 years since the WWC was first introduced to the Sri Lankan health sector. Yet, published data on awareness and utilization of the services of the WWC is scarce. The purpose of the present study was to determine the awareness and utilization of breast and cervical cancer and WWC services among women aged more than 35 years.

## Materials and Methods

This study was conducted on the 6th of June 2012 in the sacred city of Anuradhapura on the 'Poson Poya day', the largest Buddhist gathering in the country. Every year, an average of 800,000 Buddhists and non-Buddhists participate in religious activities in Anuradhapura on this day, coming from nearly every district in Sri Lanka. We conducted a rapid spot survey using a short questionnaire at the sacred city of Anuradhapura using a convenient sample, while the pilgrims were waiting to enter one of the sacred places. The survey was conducted as a part of a massive health promotion and awareness program on breast and cervical cancers initiated by the medical undergraduates of the Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka. The target group included women aged 35 years and above, similar to the target group of the WWC.

## Results

A total of 3,116 females from 22 districts were interviewed. Mean age of the study sample was 52.6 years (SD 10.3 years). All districts, except Jaffna, Kilinochchi and Mulativu districts, were represented in the study sample. Of the 3,116 women studied, 2,874 (92.2%) reported that they have at least heard the condition 'breast carcinoma' and 2,609 (83.7%) of 'cervical carcinoma'. Although a majority of women expressed awareness of these malignancies, only 1,150 women (36.9%) were aware that they belonged to the high-risk age group for breast cancer. For cervical cancer, this percentage was 32.4% (n=1,011). Of the women surveyed, 1,895 (60.8%) were aware of the WWC services, but only 578 (18.5%) had ever used it.

Of the 217 professionals or associate professionals in the study sample, 190 (87.6%) were aware of the WWC compared to only 58.8% among the 2,899 women falling under the categories of other occupations and housewives. Clinic attendance was also significantly higher among the professionals and associate professionals compared to women in other occupational categories and housewives (40.1% versus 16.9%). Women aged 50 years or younger (n=1349) had a significantly higher awareness of the WWC program (67.1%) while only 56.0% of women over 50 years of age (n=1767) reported awareness. In addition, a slightly higher percentage of younger women have attended the WWCs compared to the older women (20.2% versus 17.45%).

## Discussion

This study shows that less than 20% of women aged over 35 years have ever participated in screening for breast and cervical cancers through WWC. In addition, there was a

significant difference in awareness and usage of WWC by social class and age. Findings of this study show that even after 16 years of establishment, WWCs do not have the expected coverage. A previous study from Gampaha showed that only around 2.2% women had ever undergone clinical breast examination in 2007<sup>2</sup>. Even among healthcare workers in Sri Lanka, the use of cancer screening services was reported as less than 20%<sup>3</sup>. Service utilization and knowledge on these two malignancies vary widely in other developing countries in the region. Norlaili *et al* reported that even in rural Malaysia the use of clinical services for screening is around 56%<sup>4</sup>. In Turkey, the general public's<sup>5</sup>, university students'<sup>6</sup> and health workers'<sup>7,8</sup> knowledge, practice of self-breast examination and the use of clinical services was much higher than the values reported in our study. However, in Nepal<sup>9</sup>, where the socio-economic conditions are more similar to Sri Lanka, the knowledge and the use of screening services was reported to be much poor compared to the current study. As described by Vitharan *et al*, one reason for this underutilization would be the substandard services provided through these clinics, and the need for training of healthcare workers<sup>10</sup>. The finding of probable social disparity on awareness and use of WWC services in the current study is not a fact that was expected. Previous studies on the use of public health services in Sri Lanka shows that there was no social disparity on using public health services<sup>11</sup>. This finding may be due to the lack of knowledge on malignancies in the lower socio-economic group. Even though Sri Lankan women possess high health literacy and the participation in maternal and child health services is nearly hundred percent, non-communicable disease prevention is yet to develop as a priority among them. This should be a priority in the Sri Lankan settings, especially due to the epidemiological and demographic transitions the country is going through.

Even though these study findings cannot be generalized to the whole Sri Lankan population due to the use of non-probability sampling method, the large study sample representing 22 districts in the country provides credible information on the inadequate use of WWC services. It is evident that more awareness on reproductive malignancies is needed in order to motivate more women to seek out the services that are readily available to them.

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