A Review of Cancer Awareness in Malaysia – What’s Next?

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Abstract

Background: The burden of cancer is particularly greater in less developed countries where 82 percent of the world’s population resides. Greater efforts are needed for cancer awareness. This paper reviewed the campaigns conducted in the last five years in Malaysia, to identify gaps for informing the direction of future campaigns.

Method: A two steps review involving searching for published campaigns on the internet, using keywords – cancer campaigns, awareness, and it was limited to June 2012-2017. The follow up step was a searched into the cancer related websites.

Results: The search found at least 35 published cancer campaigns – which focus predominantly on breast cancer, mostly conducted as one day event, with no report on outcome measures of effectiveness, and primarily held in peninsular Malaysia. There is an increasing trend to focus on colorectal cancer in recent years.

Discussion: Cancer awareness campaigns are sporadic, generic, and dominated by breast cancer. Cancer awareness, cancer detection and cancer prevention campaigns have their roles and are equally needed. Future campaigns with measure of effectiveness should be targeted – i.e. on general awareness (focusing on a knowledge strategy on clear signs and symptoms) or specific cancer survivorship (focusing on prevention - via tobacco control, vaccination for liver and cervical cancers, physical activity, good dietary patterns, and weight-control). Clear, key detection strategy (targeted at general population) and clear preventive strategy (targeted at the rising cancer survivors), are needed and should be pursued relentlessly, to help reduce the rising burden of cancer.

Conclusion: Future campaigns should be designed as targeted campaigned – not just with the types of cancer, but with specific knowledge strategy - i.e. awareness of specific cancer, or detection of sign and symptoms, or knowledge of access to screening, or cancer prevention strategy. There must be accompanying outcome measurement on the effectiveness of the campaign conducted, so that future campaigns can be upgraded. Cancer awareness, cancer detection (with symptoms recognition), or cancer prevention should be targeted, and be designed accordingly. A one size fit all is not the way forward.

Keywords: Cancer Awareness; Cancer Campaigns; Measurement; Prevention; Control; Targeted
Background

The burden of cancer is particularly greater in less developed countries where 82 percent of the world's population resides [1]. Cancer incidence and its burden in Malaysia is rising with 1 in 7 Malaysians projected to develop cancer before the age of 75 years old [2]. Malaysians are expected to get cancer at the estimated risk of 1 in 4 in his/her lifetime [3]. Age-standardized incidence rates for all cancers were 137 and 156 per 100,000 in Malaysian males and females respectively [4]. The cancer-related mortality has also risen from 20,100 (in 2008) to 21,700 (in 2012) [2]. A mortality rate of 10.3 percent of all medically certified deaths has been estimated in 2002 [5]. An estimated one-third to one-half of deaths due to cancer is preventable through early presentation, early detection and early treatment. However, a big proportion of cancers in Malaysia presents at late stages, whereby, 52.2 percent of breast cancer patients, 77.1 percent of oral cancer patients, 85 percent of nasopharyngeal cancer, only consulted the doctor at late stages of cancer progression [4,6,7]. In addition, there are more studies on cancer treatment or intervention, or cancer research. Even the amount of cancer survivorship research has grown substantially during the past three decades. However, cancer awareness research is lacking, as most awareness campaigns are not conducted as a research. In addition, cancer detection research is also lacking as most screening are not done as research. Awareness of screening (cognition) is as important as detection of screening (motor/ behavioural sequelae). Awareness campaign must follow up with specific screening campaign as getting screening tests regularly may find breast, cervical, and colorectal (colon) cancers early, when treatment is likely to work best. It's thus important to examine the basic trend, types of cancer awareness, duration/time, and the organisers. The aim of this review article is to summarize what has already been conducted in the last five years in Malaysia, to identify gaps for future cancer awareness campaigns.

Methods

A search on the internet with the keywords (‘cancer awareness’, ‘campaign’, ‘Malaysia’, ‘all cancer’), limited to past five years was conducted. Then a second search for specific cancer was conducted using key words (breast, colorectal, lung, pancreatic, lymphoma, cervical, etc.) in the title. The specific cancer organisations websites like BCWA, MAKNA, EMPOWERED, KeepAble were visited, to identify cancer campaigns conducted. Exclusion criteria was year 2011 and earlier, and May 2017 onward. Articles and research projects focusing on cancer treatment, basic or clinical research, education and/or program funding, pilot projects, dissemination research and survivorship care plans, were excluded mainly due to the predetermined scope of this manuscript. The data on campaign projects that met the inclusion criteria were categorized according to the dates conducted. Data were further categorized into topic areas into the specific types of cancer, and were then re-organised according to dates. In order to gain a better understanding of how the past five years campaign are focusing on, the organiser, duration/time, types of cancer and the campaign themes were tabled.

Results

There were at least 33 cancer campaigns conducted in the last five years. Most campaigns are focus on breast cancer, although there are increasingly more focus on colorectal cancer. Majority of the campaign are held in peninsular Malaysia with three in east Malaysia. There is no reports on measures on its effectiveness, as most are conducted as campaigns, not as (cancer awareness) research. The total number of campaigns were 10 for breast, 11 for colorectal, four for lung, three for prostate, two for mixed cancer, and, three on all cancer. Table 1 presents these cancer awareness campaigns conducted in the last five years. In terms of cancer type, the highest number of campaigns were on breast cancer, although colorectal cancer campaigns is rising and, campaigns on other types of cancer are low. There were 10 breast cancer campaigns conducted in the last five years, three in west Malaysia (Sabah/Sarawak) and seven in peninsular east Malaysia. With colorectal, there were at least 11 campaigns but they mostly started recently in 2014. Empowered Malaysia is a non-governmental organisation that focuses on colorectal since 2011 and has an annual awareness event until today.
| Campaign | Organizer | Date         | Themes                                                                 | Type of Cancer | Location                  |
|----------|-----------|--------------|-----------------------------------------------------------------------|----------------|---------------------------|
| Breast Cancer | Estée Lauder Company | 31 Oct 2012 | Believe in a world without breast cancer. | Breast | Kuala Lumpur (KL) |
| Kiss Goodbye to Breast Cancer | AVON Malaysia & LPPKN⁵ | Oct 2013 | Educating Breast health | Breast | Kota Kinabalu |
| | | Oct 2014 | Educating Breast health | Breast | Sabah & Sarawak |
| Pink Day Out | BCWA⁴, National Cancer Council, NCSM³ | 14 Oct 2014 | We Stand by You | Breast | Tropicana Golf & Country Resort |
| Pink Day Out | MAKNA & Soflan | 15 Oct 2013 | We Stand by You | Breast | Kuala Lumpur |
| Be Breast Aware | Cancer Research Malaysia | Oct 2015 | Early Detection Saves Lives and Saves Breasts | Breast | National |
| #Grab-It/Beat-It | BCWA⁴ & grab car | Oct 2015 | Early Detection Is The Best Protection | Breast | National |
| Pink October | NCSM³ & Pfizer | August 2015 | Metastatic Breast cancer | Breast | National |
| Pink Ribbon Campaign | Fuji Film Malaysia | Oct 2016 | Breast Cancer Screening for your FUTURE | Breast | National |
| Kiss-Goodbye to Breast Cancer | AVON Malaysia | 30 May 2017 | The Best Protection Is Early Detection. | Breast | Sabah & Sarawak |

**COLORECTAL CANCER**

| Campaign | Organizer | Date         | Themes                                                                 | Type of Cancer | Location                  |
|----------|-----------|--------------|-----------------------------------------------------------------------|----------------|---------------------------|
| Colorectal Cancer | EMPOWERED ² | 5 April 2012 | Colon cancer screening | Colorectal | Subang |
| Colorectal Screening | EMPOWERED ² | 28 April 2013 | Colon cancer screening | Colorectal | Setapak |
| Colorectal Screening | EMPOWERED ² | Jan - July 2014 | Colon cancer screening | Colorectal | Cheras |
| Colorectal cancer awareness | KeepAble CC ¹ | Feb 2014 | The Blue wave | Colorectal | Petaling Jaya |
| Colorectal cancer awareness | KeepAble CC ¹ | June 2015 | The Greater Blue wave | Colorectal | Petaling Jaya |
| Colorectal Cancer Awareness Campaign | Yakult (M) Sdn Bhd | March 2015 | Colorectal Cancer is Preventable | Colorectal | Klinik Mutiara Damansara |
| Colorectal Cancer | EMPOWERED ² | 19 April 2015 | Saving Lives, Preventing Cancer in the Underprivileged | Colorectal | Ampang, KL |
| Community Colon screening | KeepAble CC ¹ | Oct 2016 - Mac 2017 | Cancer is Curable, If detected early | Colorectal | Petaling Jaya |
| Colorectal Cancer Screening Project | EMPOWERED ² | 3rd April 2016 | Love Your Butts, Check Your Guts | Colorectal | Desa Tun Razak, KL |
| | | 13-14th May 2017 | Love Y’r Butts, Check Y’r Guts | Colorectal | Paradigm Mall, KL |
| Colon screening | Cancer Hospital Duchess of Kent | 4th June 2016 | Early detection saves lives | Colorectal | Sandakan, Sabah |

**LUNG CANCER CAMPAIGNS**

| Campaign | Organizer | Date         | Themes                                                                 | Type of Cancer | Location                  |
|----------|-----------|--------------|-----------------------------------------------------------------------|----------------|---------------------------|
| Lung Cancer Carnival | Empowered ² | Oct 2014 | Say NO to Smoke, Say YES to Life | Lung | Bandar Sentul, Kuala Lumpur |
| Lung Cancer Project | Mount Miriam Cancer Hospital | 25 Nov 2014 | Save Your Lungs, Save Your Life | Lung | Penang |
| Quit-smoking Clinics | National Cancer Society Malaysia | Dec 2015 | Jom, Tak Nak (Come, Reject) | Lung | National |
| ‘Quit Like a Champ!’ Smoking Cessation | National Cancer Society Malaysia & Pfizer Malaysia | 5th Nov 2015 | Defeat Yourself, Quit Like a Champ! | Lung | Klang Valley |
A Predominant Focus on Breast Cancer, and Lacking in Many Other Cancers

There were several cancer awareness campaigns conducted in the last five years (Table 1). Breast cancer led the campaigns in terms of frequency and in terms of wider disseminations, with more campaign in the month of October – a month gazette for breast cancer and often known as "Pink October". The trend is similar to research projects conducted in USA, whereby, female breast cancer survivors represent 22 percent of cancer survivors in the United States, but 40 percent of their current research projects are focused on breast cancer survivors alone [11].

Colorectal cancer campaigns appear to be gaining ground, there were at least 11 campaigns in recent years - mostly started in 2014. One of the longer duration colorectal screening was conducted at KeepAble, i.e. a period of 6 months colorectal screening using faecal immunochemical tests (FIT) [12]. FIT do not need dietary restrictions prior to testing - unlike the guaiac-based faecal occult blood tests (gFOBT). In a sample of 162 participants at KeepAble campaign, 11.7 percent (n=19/162) were positive. In comparison, another study on 69 people with normal colonoscopic findings, were found with 4.3 percent were positive for FIT and 23 percent for

Discussion

The aim of this paper was to provide a review of published cancer awareness and prevention campaigns conducted in Malaysia, and reflect on its emerging themes of patterns of the campaigns. The steep rise in cancer incidences has brought attention to the importance of understanding and addressing the needs of cancer awareness campaigns, conducted in a concerted approach. This review has identified several important themes to inform future research.
gFOBT [13]. The sensitivity for detecting any neoplasia in a study of 103 subjects screened at an endoscopy unit, was 53 percent for FIT and 40 percent for gFOBT, and the specificity for excluding any neoplasia was 91.7 percent and 74 percent respectively [14]. Literature review suggests that FIT is the best, user-friendly screening tool in colon cancer campaign [12].

Other screening tests that have been shown to reduce cancer deaths used in funded campaigns are mammography (breast for women 40-74), breast MRI (those with BRCA1 or 2 genes), low dose helocal computed tomography (lung cancer for smokers 55-74yrs), Pap test and human papillomavirus (HPV) testing (cervical cancer for 21-65 years), Alpha-fetoprotein blood test along with ultrasound of the liver (liver cancer), CA125 test (ovarian cancer), Prostate-Specific Antigen (PSA) Test (prostate cancer), and transvaginal ultrasound imaging test (ovarian cancer or endometrial cancer) [15].

There is a gross neglect in most other types of cancer, whereby, many tumor sites are not receiving equal attention from the cancer campaigns community. Prostate, gynecological and hematologic cancers are some of the underrepresented cancer, and they are also underrepresented in the current cancer survivorship research [11]. Three sub themes emerged from this review on the pattern of campaigns in Malaysia.

I. Campaigns are sporadic and of short duration - Almost all campaigns were a 1-day program or less than a week program. The colorectal screening program at KeepAble [9,10] and Empowered [16] appeared to be the longest duration (6-months), but there is no report on measurement for effectiveness. Most campaign are held in big cities (mostly Kuala Lumpur and Petaling Jaya), i.e. mostly in peninsular Malaysia. Only three were held in east Malaysia.

II. Generic awareness, not targeted program - Most campaigns were raising awareness of cancer in general. There is a lack of concerted effort on clear, targeted cancer awareness. An often cited reason for late disease presentation is the lack of ability to recognize early signs of cancer [17]. Thus, campaigns to educate the public on the early signs of cancer so that more will present at an early stage, leading to improved survival is needed. Future campaigns should focus specifically on either - i) signs or symptoms (for early detection), or ii) prevention strategy (for reducing risks of recurrences or cancer control).

III. No outcome measure on effectiveness of the program. Overall, none of the campaigns reported any measure of effectiveness or reported any outcome measures used. Future campaign must include outcome measures to measure effectiveness of the campaigns.

Conclusion

The review showed a preoccupation on breast cancer awareness, with a current greater focus on colorectal cancer, but a gross neglect in most other types of cancer. Not all tumor sites have received equal attention from the cancer campaigns community. Prostate, gynecological and hematologic cancers are some of the underrepresented cancer, although colorectal cancer campaigns appear to be gaining ground. Awareness campaign must be supplemented with specific screening campaign, as getting screening tests regularly may find breast, cervical, and colorectal (colon) cancers early, when treatment is likely to work best. In addition, campaign for prevention of recurrences should also be targeted at specific strategies for preventing relapse. In conclusion, future campaigns should be redesign as targeted campaigns (specific to the specific objective i.e awareness or detection or prevention), longer duration (targeting evidence based optima duration), and all campaign must ideally have outcome measures of effectiveness. A one size fit all is not the way forward, for cancer campaigns to be cost effective.

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21. BCWA-Breast Cancer Welfare Association.

22. LPPKN-National population and family development Board.