

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 campaign – 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

Abbreviations: MAKNA: National Cancer Council Malaysia; NCSM: National Cancer Society Malaysia; BCWA: Breast Cancer Welfare Association; KeepABLE: Keepable Cancer Community; Empowered CASM: Cancer Advocacy Society of Malaysia

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 sequela). 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.

Cancer Awareness Campaigns in Malaysia (last 5 years)							
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 & LPPKN ⁵	Oct 2013	➤ Educating Breast health	Breast	Kota Kinabalu		
	AVON Malaysia, LPPKN ⁵	Oct 2014	➤ Educating Breast health	Breast	Sabah & Sarawak		
Pink Day Out	BCWA ⁴ , National Cancer Council, NCSM ³	14 Oct 2014	➤ We Stand by You	Breast	Tropicana Golf & Country Resort		
Pink Day Out	MAKNA & Soflan	15 Oct 2014	➤ 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	BCWA ⁴ & grab car	Oct 2015	➤ Early Detection Is The Best Protection	Breast	National		
Pink October	NCSM ³ & 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							
Colorectal Cancer	EMPOWERED ²	5 April 2012	➤ Colon cancer screening	Colorectal	Subang		
Colorectal Screening	EMPOWERED ²	28April 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 Butt, Check Your Guts	Colorectal	Desa Tun Razak, KL		
		13-14 th May 2017	➤ Love Y’r Butt, Check Y’r Guts		Paradigm Mall, KL		
Colon Cancer screening	Hospital Duchess of Kent	4 th June 2016	➤ Early detection saves lives	Colorectal	Sandakan, Sabah		
LUNG CANCER CAMPAIGNS							
Lung Cancer Carnival	Empowered ²	Oct 2014	➤ Say NO to Smoke, Say YES to Life	Lung	Bandar Baru 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, Lung Reject)	Lung	National		
‘Quit Like a Champ!’ Smoking Cessation	National Cancer Society Malaysia & Pfizer Malaysia	5 th Nov 2015	➤ Defeat Yourself, Quit Like a Champ!	Lung	Klang Valley		

PROSTRAT CANCER					
First Blue Cap relay run	Ministry of Health & Malaysia Urological Association	29 Nov 2015	➤ Run with your man	prostate	University malaya
2 nd Blue Cap Run	Malaysia Urological Association	2 Aug 2016	➤ Relay run for prostate	prostate	University malaya
3 rd Blue Cap run	Malaysian Urological association	23 sept 2017	➤ Run with yr man	prostate	University Malaya
ALL TYPES OF CANCER					
Going bald for cancer	National Cancer Council, Malaysia	Oct 2014	➤ 'Jom Botak'/'Be bald' for Cancer Patients	All	Kuala Lumpur
Lavender ribbon	KeepAble CC	Nov 2016	➤ Giving Back To Society	All	Kuala Lumpur
Cancer Walk	KeepAble CC	Mac 2017	➤ Keeping Survivors Able	All	Kuala Lumpur
World Cancer Day	Cancer Research Malaysia & Subang Jaya Medical Centre	4 Feb – 4 Mac 2016	➤ We Can I Can (Kick Butt), We Can I Can (Get Vaccinated)	Colorectal-cervical	National
Hereditary Breast & Ovarian Cancer Awareness	Empowered ²	Dec 2016	➤ Check Your Genes, Fight Cancer	Breast & ovarian	Paradigm mall, PJ

Table 1: Cancer Awareness Campaigns in Malaysia 2012-2017.

KeepAble Cancer Community. EMPOWERED - Cancer Advocacy Society of Malaysia; NCSM = National Cancer Society Malaysia ; BCWA- Breast Cancer Welfare Association; LPPKN = National Population & Family Development Board

Campaign held were mostly short duration, with the average being one day. Only two organization (KeepAble [8-10] and Empowered) run their colorectal; screenings over a longer period of 6-months duration. Most campaigns were on raising awareness of cancer in general. There were no reported specific campaigns that focus on – (i) signs or symptoms (for early detection), nor were they any for – (ii) prevention (to reduce the risks of recurrences and cancer control). The themes were wide ranging with Pink October being the most common, and where the month of October have been gazetted as a month for breast cancer. In general, none of the campaigns reported any measure of effectiveness or reported any outcome measures used.

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.

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 gazetted 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

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 helical 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 ie awareness or detection or prevention), longer duration (targeting evidence based optimal 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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