

The Importance of Screening - Screening Programs in Qatar

Hana Ansari Hayat

Specialist Family Medicine
General Medicine-Family Medicine Clinics

Correspondence:

Hana Ansari Hayat

Email: hhayat@phcc.gov.qa

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Screening is defined as a 'test to detect potential health disorders or diseases in people who do not have any symptoms of disease' (1). It is a method of detecting possible pathology in a pre-determined high-risk population to better inform decision making with regards to further investigations or management (2). It is not necessarily intended to be a means of diagnosis.

By offering screening to a population, often based on demographic factors including age or gender, the aim is to reduce the incidence of serious health problems at a late or symptomatic stage of disease. It is well documented that the introduction of screening programs has improved national mortality rates, globally. This is demonstrated well by the introduction of breast screening in various parts of the world. A study in Norway concluded that 'After 15 years of follow up, a 43% reduction in mortality was observed among women who attended the national mammographic screening program in Norway (3). Blanks R G et al commented on a 21.3% reduction in mortality for women aged 55-69 years in 1998, when 'compared to predicted mortality in the absence of screening or other effects' (4). In April 2010 – a study in Canada found that 'initiation of the screening program led to a significant reduction in breast cancer mortality within five years of its initiation' (5). More locally in the MENA region, it is well identified that 'mortality rates have declined with

late detection of the disease dropping from 64% in 2009 to 16% in 2013' (6). It goes on to champion screening services claiming 'As in other countries, one of the most effective ways of lowering mortality rates from cancer can be to engage the public in an education campaign around possible signs or symptoms. This also includes engaging public health bodies in organising campaigns and funding for mammograms.

Screening for disease successfully translates into benefits in terms of patient health outcomes, improved health economics and more cost-effective healthcare provision. The World Health Organisation (WHO) has categorized a 10-point screening criterion before accepting a test as appropriate for task (Figure 1).

These criteria are based on findings of the report entitled 'Principles and Practice of Screening for Disease', by James Mawell Glover Wilson, Principal Medical Officer at the Ministry of Health (London) and Gunner Jungner, Chief of Clinical Chemistry Department of Sahlgren's Hospital in Gothenburg (Sweden) in 1968. They were able to identify and recognise the importance of early disease detection. This report looked at current practice of the time and attempted to standardise efforts for the future, becoming the gold standard for screening considerations in public health.

Figure 1: Principles of Screening, Wilson and Jungner (8)

1	The condition sought should be an important health problem
2	There should be an accepted treatment for patients with recognized disease
3	Facilities for diagnosis and treatment should be available
4	There should be a recognisable latent or early symptomatic stage
5	There should be suitable test or examination
6	The test should be acceptable to the population
7	The natural history of the condition, including development from the latent to declared disease, should be adequately understood
8	There should be an agreed policy on whom to treat as patients
9	The cost of case-finding (including diagnosis and treatment of patients diagnosed) should be economically balanced in relation to possible expenditure on medical care as a whole
10	Case-finding should be a continuous process and not a 'once and for all' project

In reality, with advancements in modern-day medicine, these essential principles may be enhanced in context of emerging patient needs – with newer tools being developed to guide the synthesis of screening programs (7).

Based on these principles, Primary Health Care Corporation (PHCC) launched its own ‘Screen for Life’ bowel and breast screening program in December 2015 to ‘deliver Qatar’s new wellness model of healthcare as outlined in its National Health Strategy (NHS) 2011-2016. The implementation of the program is consistent with the National Cancer Strategy’s key recommendation....which states the need in Qatar for a population-based cancer screening program’ (9).

PHCC forms the front-line for community based primary care in Qatar, following its establishment through Emiri Decree No. 15 on 20 February 2012. The primary health centres provide a wide range of preventative, diagnostic and treatment healthcare services, including dental, antenatal care, immunization, pharmacy, ophthalmology, audiology, radiology and wellness services - across 26 centres in Qatar (10). They were ‘given the authority to spearhead the initiative under Qatar’s National Cancer Program, which was initiated by the Ministry of Public Health upon review of international best practices of excellent cancer care’ (9).

It offers breast screening for women aged 45-69 with no signs of breast cancer symptoms, advising three year follow up for normal screening results. It is also offering bowel screening for men and women aged 50-74, with no signs or symptoms, with yearly follow up if normal (11).

The ‘Screen for Life’ Program regularly initiates campaigns to improve uptake of screening and educate the population about the intended benefits. This is of course supported by ongoing efforts from family medicine physicians to convey health promotion messages to the target population.

There are regular national drives for public health awareness through campaigns in malls and health centres, access to lectures to better understand the conditions, with additional training for physicians as well. In addition to the three long-term health-centre based screening units, they have also commissioned routine availability of mobile units, most recently seen during the ‘Put Yourself First’ Campaign of October 2019 – as part of International Breast Cancer Awareness Month (12). There is easy access to all these units, with walk-in and appointment-based systems in place to encourage attendance at patient convenience. Educational efforts have been extended to secondary schools, including information for parents and teachers. This allows an opportunity for lectures about the benefits of timely screening and once again, offered access to mobile screening units (13).

Wilson and Jungner quoted ‘...screening for disease will grow in importance with time’ (9). As public health efforts continue in this endeavor and awareness of its importance increases, we can only hope this stands true for a healthier future, not only in Qatar, but internationally.

References

1. Screening Tests for Common Diseases, John Hopkins Medicine, Last updated 2020 available via <https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/screening-tests-for-common-diseases>
2. NHS Screening, NHS, Last updated 14 May 2018 available via <https://www.nhs.uk/conditions/nhs-screening/>
3. Breast cancer mortality in participants of the Norwegian Breast Cancer Screening Program, Hofvind S et al – Cancer. Sept 2013; 119(17): 3106-3112
4. Effect of NHS breast screening programme on mortality of breast cancer in England and Wales, 1990-8; comparison of observed with predicted mortality BMJ 2000; 321: 665
5. Breast Cancer Mortality Reduction After Initiation of a Screening Program: Consistency of Effect Estimates Obtained Using Different Approaches, Brisson J et al, Institut National de santé publique Québec
6. Out of the Shadows; breast cancer mortality in the middle east, Practical Patient Care, Last updated 04 2017 available via <http://www.practical-patient-care.com/news/newsout-of-the-shadows-6796032>
7. Revisiting Wilson and Jungner in the genomic age: a review of screening criteria over the past 40 years, Anderman A et al, Bulletin of the World Health Organization - Volume 86, Number 4, April 2008, 241-320
8. Wilson J, Jungner G: Principles and practice of screening for disease. In: Public Health paper No 34. edn. Geneva: World Health Organization; 1968
9. Primary Health Care Corporation Launches ‘Screen for Life’ Program, 2016, Screen for Life – News, Last updated 2016 available via <http://screenforlife.qa/news/primary-health-care-corporation-launches-screen-for-life-program>
10. Primary Health Care Corporation, Guide to Healthcare Services in Qatar – State of Qatar ; Ministry of Public Health, Last updated 2018 available via https://www.hamad.qa/EN/Guide/Elderly/Health_Care_Providers/PHCC/Pages/default.aspx
11. Primary Health Care Corporation Emphasizes the Importance of Timely Screening, Primary Health Care Corporation – Corporate News, Last Updated 13 June 2019 available via https://portal.phcc.gov.qa/intranet_new/index.php/en/media-center/corporate-news/2006-primary-health-care-corporation-emphasizes-the-importance-of-timely-screening
12. Screen For Life to Launch October Put Yourself First Campaign For International Breast Cancer Awareness Month, Primary Health Care Corporation - Corporate News, Last updated 30 September 2019 available via https://portal.phcc.gov.qa/intranet_new/index.php/en/media-center/corporate-news/2090-screen-for-life-to-launch-october-put-yourself-first-campaign-for-international-breast-cancer-awareness-month 30 September 2019
13. PHCC extends its Outreach Campaigns to Schools Through Screen for Life Campaign, Primary Health Care Corporation – Corporate News, Last updated 25 February 2019 available via https://portal.phcc.gov.qa/intranet_new/index.php/en/media-center/corporate-news/1942-phcc-extends-its-outreach-campaigns-to-schools-through-screen-for-life-program