1. **World Cancer Day 2019**

Cancer is one of the leading causes of morbidity and mortality worldwide. It is the second leading cause of death globally, and is responsible for an estimated 9.6 million deaths in 2018. Globally, about 1 in 6 deaths is due to cancer. Approximately 70% of cancer deaths occur in low- and middle-income countries (WHO Cancer Key Facts 2018).

One in 5 men and one in 6 women worldwide develop cancer during their lifetime, and one in 8 men and one in 11 women die from the disease. Worldwide, the total number of people who are alive within 5 years of a cancer diagnosis, called the 5-year prevalence, is estimated to be 43.8 million (Globocan 2018).

Every year, World Cancer Day is celebrated on the 4th February. Many activities related to cancer awareness are carried out around the world during this period. This year, the Union for International cancer Control (UICC) launched a new three-year World Cancer Day theme (2019-2021):

"I Am and I Will"
“Saya Akan dan Saya Boleh"

‘I Am and I Will’ is an empowering call-to-action urging for personal commitment and represents the power of individual action taken now to impact the future. Whoever you are, you have the power to reduce the impact of cancer for yourself, the people you love and for the world. It is time to make personal commitment.

It is very important for everyone to take part and play their role in fighting cancer and to get good impact in reducing the cancer burden in the country,

2. **Key Issues To Be Addressed**¹

There are a number of major issues that has to be addressed for this year World Cancer Day celebration. The major ones are described below in the following order:

(1) Awareness and correct understanding
(2) Screening for cancer
(3) Prevention and risk reduction
(4) Mental and emotional impact
(5) Saving lives saves money

2.1. **Awareness and correct understanding**

 Increased awareness and accurate information and knowledge can empower everyone to recognise early warning signs, make informed choices about one’s health and counter own fears and misconceptions about cancer. Recognising the signs and symptoms early save lives.

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¹ Source: UICC
Not all cancers show early signs and symptoms. However, many do show signs that something isn’t quite right such as for breast, cervical, colorectal and oral.

Survival rates and quality of life is better if cancer is diagnosed early. Each of us can be empowered with the right information to know what’s normal for our bodies and recognise unusual changes and seek medical help promptly.

**What can we do as an individual or health professionals?**

i. As an individual, we can teach ourselves, the people we love, including teachers, parents and caregivers and our communities about the common signs and symptoms of cancer.

ii. Health professionals need to understand the signs and symptoms to avoid misdiagnosis and understand and encourage the value of early detection in their patients.

**2.2. Screening for cancer**

Screening is meant to detect cancer or pre-cancerous lesions among those who appear healthy. Some cancers that can be effectively screened includes breast, cervical, colorectal and oral cancer.

The Ministry of Health Malaysia (MOH) provides screening services for the following four types of cancers (breast, cervical, colorectal and oral). These services are available at public health clinics throughout the country. Cancer screening for high risk groups for certain cancers such as liver, prostate and nasopharyngeal cancers are available in hospitals.

**Myths, misinformation and stigma**

Some common myths and misconceptions about cancer includes that there is no cure or there is nothing that can be done about cancer. These will understandably cause fear.

Misinformation, misconceptions and stigma around cancer creates a negative cycle and may prevent people from either seeking early detection, or to delay or avoid treatment and care altogether. Often, by receiving diagnosis at a late stage or not seeking treatment at all, this can result in worse outcomes, which in turn perpetuates the myths and misconception of cancer being incurable or untreatable.

**What can we do as an individual?**

i. Access accurate cancer information by being informed and counter the misconceptions and reduce fears around cancer. Through knowledge, awareness and understanding, we are empowered to challenge negative beliefs and attitudes and behaviours in others that perpetuate myths about cancer.
ii. Use your voice by talking and help to reduce fear and stigma and discrimination, shift perceptions and strengthen support for people with cancer.

iii. Understand different cultural beliefs and practices around cancer is essential in responding to it and changing attitudes and dispelling common myths.

iv. Governments, communities, employers and media have a role to play to challenge perceptions about cancer to create a culture and a population where people living with cancer do not face discrimination in the workplace, in the health system or in our society.

2.3. Prevention and risk reduction

At least one third (30-50%) of cancers are preventable, which means everyone can reduce one’s cancer risk. This gives us every reason to champion healthy choices and have the best chance to prevent and reduce our cancer risks.

**Smoking**

Tobacco use is the single largest preventable cause of cancer and stopping smoking is one of the best things we can do to reduce our risk of cancer. Use of tobacco has been found to cause around 15 different types of cancer including oral cancers, lung, liver, stomach, bowel and ovarian cancers, as well as some types of leukaemia (cancers of the blood).

Quitting at any age can make huge a difference, increasing your life expectancy and improving quality of life.

Malaysia is a signatory and has ratified the WHO Framework Convention on Tobacco Control (FCTC) and implementing all components under this framework. To protect the health of non-smokers, the MOH has already gazetted more than 20 non-smoking areas. Recently on 1 January 2019, MOH gazetted all eateries as a non-smoking area.

**Alcohol**

Alcohol is strongly linked with an increased risk of several cancers. By reducing and limiting how much you drink, you can reduce your risk of cancers of the mouth, pharynx, larynx, oesophagus, bowel and breast, and may also reduce the risk of liver and bowel cancers.

**Physical activity**

Maintaining a healthy weight and making physical activity part of your everyday life can help reduce your risk of ten cancers, which include bowel, breast, uterine, ovarian, pancreatic, oesophagus, kidney, liver, advanced prostate and gallbladder cancers.
**Vaccination**

Cancers such as liver, cervical and stomach cancers are associated with infections with hepatitis B virus (HBV), human papillomavirus (HPV) and bacterium Helicobacter Pylori virus (H. pylori) respectively. There are safe and effective vaccines against HBV and HPV which can help to protect against the infection-related cancers of liver and cervical cancers.

The Ministry of Health Malaysia provides free HBV vaccination for the newborn since 1989 and HPV vaccination for 13 years old girls (Form One) since 2010 respectively.

**What can we do?**

i. **As individuals** we can take responsibility for our health, including getting vaccinated and reminding others to get vaccinated, maintaining a healthy and active lifestyle, avoiding alcohol and tobacco.

ii. **Schools** can be champions of healthy behaviours among children, staff, parents, families and the wider community by cultivating an environment that supports good nutrition and physical activity, as well as providing information on other cancer risk factors.

iii. **Workplaces and employers** can implement measures in the workplace that will motivate and sustain healthy habits throughout a person’s everyday life and put in place policies to prevent occupational exposure to cancer-causing agents, such as asbestos and other workplace carcinogens, as well as fostering physical activity, healthy nutrition and creating smoke-free spaces.

2.4. **Mental and emotional impact**

The impact of cancer goes far beyond physical health, impacting the mental and emotional wellbeing of patients and their caregivers. Quality cancer care includes dignity, respect, support and love and considers not just the physical impact of cancer but respects the emotional, sexual and social wellbeing of each individual and their carer.

Patients and families should be empowered to participate actively in decisions about their care and treatment plan which respects their individual needs and preferences. This can go a long way in helping individuals to regain a sense of control and preserve their dignity throughout their cancer journey.

Physical changes that can occur during and after treatment such as the removal of a part of the body, hair loss, speech impairment or urinary incontinence can affect the way patients look and feel about themselves. Issues of body image and sexuality can have a significant impact on partner
relationships, with cancer patients and survivors facing issues around self-esteem and sexual intimacy.

Studies have found that cancer support groups can enhance self-esteem, reduce depression, decrease anxiety and improve relationships with family members and friends. For a person living with cancer, strong emotional support and loving relationships with partners, friends and families can make a big difference in their life.

Cancer carers or caregivers, most commonly partners, family members or friends often receive little preparation, information, or support to carry out their vital role. Often, carers also put their own needs and feelings aside to focus on the person with cancer which can lead social isolation and depression in some cases.

Many people living with cancer want to return to work. Sometimes the people at work make up another vital network of support. Talking about cancer with colleagues as well as keeping in touch during work absences can have a positive impact on recovery.

**What can we do?**

i. **As individuals**: find out more about cancer services around you and help in sharing accurate information about cancer to dispel myths and misconceptions, support those individuals who need around you.

ii. **As caregivers**: take advantage of support services around you to support yourself and your family member/friend with cancer, these services might be able to direct you to more resources.

iii. **As employers/colleagues**: explore how you can support colleagues or employees with cancer (or caregivers) through measures like flexible working hours or creating an open environment to talk (or not talk) about cancer.

All individual and support groups especially those of cancer survivors are strongly encouraged to participate in any organisations and lend a helping hand, for example, by giving correct information and positive motivation to cancer patients to stay strong and fight cancer.

2.5. **Saving lives saves money**

Individuals living with cancer and their carers often take a double-hit on their finances. Out-of-pocket expenditures for ongoing and expensive treatments like surgery or chemotherapy and lost income and benefits from taking time off work can combine to create a catastrophic financial burden. For many, this can lead to drained savings, borrowing money or selling assets. Those who struggle often give up on going to medical appointments because of the cost of transportation, cutting back on food, education and/or defaulting on bill payments.
3. **Cancer Scenario in Malaysia**

3.1. **Overview**

Like most developed and developing countries, Malaysia is experiencing an epidemiological transition where diseases related to lifestyle particularly cardiovascular diseases and cancers have progressively become more prevalent. The Malaysian National Cancer Registry Report 2007-2011 estimated that the lifetime risk in developing cancer for Malaysian male and Malaysian female are one in ten and one in nine respectively.

In 2016, death related to cancer was the fourth (12.6%) most common cause of death in Ministry of Health hospitals.

In cancer, early detection and prompt treatment improves the chances of cure. Unfortunately, delays in presentation are commonly found among our cancer patients. Almost 60% of cancers in Malaysia are detected late (stage III and IV). This is mainly because most of the patients did not come early for check-ups or screening. Detecting cancer at late stages lead to higher cost of treatment and reduce chances of cure.

Cancer treatment does take a big toll on patients and their families. The ASEAN Costs in Oncology (ACTION) study conducted by the George Institute for Global Health found 45% of cancer patients in Malaysia are actually facing financial catastrophe; i.e. the cost of treatment exceeds 30% of family income; after a year being diagnosed with cancer. They have spent their money and are no longer able to pay the costs.

3.2. **Most common cancers in Malaysia**

The ten most common cancers in general population, regardless of gender and ethnicity in Malaysia for the period of 2007-2011 are as shown in Figure 1 below. The most common cancer was breast (17.7%) followed by colorectal (13.2%) and lung (10.2%).

![Figure 1: Percentage of ten most common cancers, all residents, Malaysia, 2007-2011](image-url)
The three most common cancers among males in Malaysia were colorectal (16.4%), lung (15.8%) and nasopharynx (8.1%); whilst the three (3) most common cancers among females in Malaysia were breast (32.1%), colorectal (10.7%) and cervix (7.7%).

The ten most frequent cancers in general population, males and females in Malaysia for the period of 2007-2011 are as in Figure 2.

### Figure 2: Age-standardised rate for ten common cancers by sex, Malaysia 2007-2011

#### 3.3. Breast cancer

Breast cancer is the most common type of cancer affecting women in Malaysia and accounted for 32.1% from all cancers. The incidence of breast cancer was highest among Chinese, followed by Indian and Malays. Risk for Chinese female was 1:22, Indian female was 1:24 and Malay female was 1:35. The percentage of breast cancer detected at stage I and II was 56.9%. About one in 30 women in this country are at risk of developing this cancer.

#### Signs and symptoms

The signs and symptoms may vary from person to person. However, having any of the abnormal findings in the list below should lead to a suspicion of breast cancer:

- A lump which is hard, fixed or irregular. Sometimes it appears as a thickening mass in the breast or axilla
- Enlargement of lymph nodes in the axilla
- Nipple discharge or retracted
- Scaly skin around nipple
- Dimpling of the skin or skin become like orange
- Change in size and shape of breast

**Risk factors**

| Non-modifiable risk factors | • Gender  
| • Aging  
| • Genetic risk factors  
| • Family history of breast cancer  
| • Personal history of breast cancer  
| • Certain benign breast conditions  
| • Early menarche (before age 12 years) or and late menopause (after age 55 years)  
| • Nulliparous |
| Modifiable risk factors | • Alcohol intake  
| • Overweight or obese  
| • Tobacco smoke  
| • Physical inactivity  
| • Hormone replacement therapy (HRT)  
| • Not breastfeeding |

**Screening**

To identify asymptomatic individuals who may have the disease.

| Clinical Breast Examination | • Is done by health care providers (doctor or paramedic)  
| • To detect breast abnormality  
| • Age 20 to 39 years: every 3 years  
| • 40 years and above: every year  
| • High risk women, at any age: every year  
| • Patients are referred for mammogram if abnormality is detected |
| Mammogram | • Recommended for high risk women aged 40 years and above with certain criteria such as strong family history  
| • Mammography may be performed biennially in women from 50-74 years of age |
| Breast Self Examination | • Is not a screening modality  
| • Women are encouraged to do BSE monthly to detect any abnormalities at their breast |
Challenges for early detection

- Poor uptake of screening
- Poor public awareness in the availability of screening services
- Poor awareness in recognising the early signs and symptoms
- Ignorance: Fear of the disease and facing the reality leads to late screening
- Culture & social barriers: shy, myths and society perceptions, poor family support
- Limited resources in certain hospital settings
- Logistic limitations for people living in rural settings

3.4. Colorectal cancer

In Malaysia, colorectal cancer is the overall second most common cancer after breast. Amongst men, it is the most common cancer whereas it is second most common among women in Malaysia (MNCR 2007-2011). The incidence increases with age and is slightly higher in males compared to females. The standardised incidence rate (ASR) for male is 14.6 per 100,000 population and for female is 11.1 per 100,000 population. The incidence is highest among Chinese, as compared to Malay and Indian ethnicities.

Colorectal cancer can be detected early through screening. According to MNCR 2007-2011 report, 65% of colorectal cancer is diagnosed at stage III and IV.

Signs and symptoms

- A change in bowel habits, including persistent diarrhoea or constipation or a change in the consistency of stool
- Rectal bleeding or blood in stool
- Persistent abdominal discomfort, such as cramps, gas or pain
- Tenesmus
- Weakness or fatigue
- Unexplained weight loss

Risk factors

<table>
<thead>
<tr>
<th>Non-modifiable risk factors</th>
<th>A personal history of colorectal cancer or polyps</th>
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<tr>
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<td>Inflammatory intestinal conditions such as ulcerative colitis and Crohn's disease</td>
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<td></td>
<td>Family history of colon cancer</td>
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<td></td>
<td>Age</td>
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<tr>
<td>Modifiable risk factors</td>
<td>Low-fiber, high-fat diet</td>
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<td>Diets high in red meat and processed meat</td>
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• Alcohol
• Diabetes (people with diabetes and insulin resistance may have an increased risk of colon cancer)

**Screening**

- In Malaysia, colorectal cancer screening is offered to every asymptomatic male and female aged 50-75 years
- Test is done using Immunological Faecal Occult Blood Test (iFOBT)
- Those who have positive iFOBT are referred to hospital for confirmatory diagnosis using colonoscopy
- **Note:** Those who present with signs and symptoms or have higher risk (such as strong family history, history of colonic polyps and inflammatory bowel diseases) are to be assessed and referred for colonoscopy

**Challenges for early detection**

- Poor awareness on signs and symptoms for colorectal cancer
- Poor screening uptake among clients
- Current limited scope facilities in many MOH hospitals
- Logistic limitations: limited resources and infrastructure in rural areas

### 3.5. Cervical cancer

In Malaysia, cervical cancer is the third most common cancer among women, with an ASR of 7.6 per 100,000 population. Around 40% of the cases were detected at Stage III and IV.

Infection of the cervix by Human Papilloma Virus is the most common causes of cervical cancer. In woman, high-risk types of HPV such as type 16, 18, 31 and 45 cause abnormal changes in the cell of the cervix.

**Signs and symptoms**

There are rarely any symptoms in the early stages of cervical cancer. As cervical cancer progresses, symptoms begin to appear and these are:

- Abnormal vaginal bleeding or discharge
- Bleeding after menopause
- Lower back pain
- Pain during sexual intercourse
- Painful urination
- Foul smelling vaginal discharge
- Post coital bleeding
- Pelvic pain
**Risk factors**

- HPV infection
- Early sexual debut
- Multiple sexual partners
- Smoking

**Screening**

Screening detects any abnormalities in the cervix so that early treatment can be initiated. The current screening policy in Malaysia includes:

- Screening via pap smear
- For women aged 30-65 years old
- Every three years following two times annual normal screening
- Any woman who is sexually active or ever had sexual intercourse

**Primary prevention**

- Primary prevention is through HPV vaccination
- The MOH provides free HPV vaccination to 13 years old girls (Form One students) i.e. two doses at 0 and 6 months.
- Malaysia is the first country in the region with a national HPV vaccination programme, introduced in 2010 through the School Health Programme and is included under the Extended Programme for Immunisation EPI).

**Challenges in early detection**

The major challenge in early detection is the poor uptake in screening. Mostly it is due to:

- Fear
- Embarrassment
- Shame
- Inconvenience (no time)
- Negative experience (such as an unconducive screening environment in health facilities)
- Lack of awareness on the importance of screening
- **Note:** Poor knowledge in recognising the signs and symptoms leads to late in seeking help from health care providers.

### 3.6. Lung cancer

Lung cancer is the second most common cancer among males and third most common cancer in Malaysia. The incidence for male was 14.4 per 100,000 population and 6.0 per 100,000 for female respectively. The MNCR 2007-2011 showed that for male, the ASR among Chinese was higher (18.8 per 100,000) compared to Malays (12.6 per 100,000) and Indians (7.6 per 100,000).
The age of peak incidence of lung cancer in Malaysia is the seventh decade of life. Most lung cancer is detected late; whereby more than 60% of the cases were detected at stage IV.

**Signs and symptoms**

- Persistent cough
- Coughing up blood or rust-coloured sputum
- Pleuritic chest pain
- Hoarseness of voice
- Weight loss
- Loss of appetite
- Shortness of breath
- Feeling tired or weak

**Risk factors**

- Smoking
- Exposure to second hand smoke
- Exposure to occupational hazards such as asbestos and other carcinogens
- Family history of lung cancers

**Challenges in early detection**

- Lung cancer generally does not cause any signs and symptoms in its earlier stages. Symptoms occur only when the disease is advanced.
- The only recommended screening test for lung cancer is low-dose computed tomography for persons who are at high risk for lung cancer because of their age and cigarette smoking history. However, it is not cost effective and not applicable for population based screening.

### 3.7. Nasopharyngeal cancer

Nasopharyngeal cancer (NPC) is the fifth most frequent cancer in Malaysia regardless of gender and ethnic groups (MNCR 2007-2011). It is the fourth most frequent cancer amongst men with an ASR of 6.4 per 100,000 population. The incidence in men begins to increase at the age of 25 and peaks at the age of 65.

The incidence is higher among Chinese compared to the other major ethnic groups in the country. The incidence rate of this cancer in Malaysia is amongst the highest in the world, especially in certain ethnic groups in Malaysia (Bidayuh, Chinese, other indigenous people of Sabah and Sarawak and Malay) have increased risk of NPC compared to the average world population.
Signs and symptoms

The common signs and symptoms are:
• A painless lump at the neck area is the commonest sign
• Unilateral hearing loss
• Tinnitus (ringing in one ear)
• Fluid collection in one ear
• Blocked or stuffy nose – particularly if unilateral
• Numbness of the lower part of the face

The other symptoms may include:
• Frequent blood stained saliva or blood stained nasal discharge
• Frequent headaches
• Blurred or double vision
• Unexplained weight lost
• Fatigue
• Dysphagia (difficulty in swallowing)
• Changes in voice – such as hoarseness

Risk factors

• Family history
• Epstein-Barr virus (EBV) infection
• Diet high in salt- cured fish and meat
• Smoking
• Alcohol
• Chemicals such as formaldehyde

Challenges in early detection

• There is no specific screening program available
• Failure to recognise common presenting symptoms of NPC
• Patients presenting late to seek advice
• Lack of awareness about NPC among the public
• NPC screening using EBV DNA testing was reported to be able to downstage NPC. A Health Technology Assessment done by MOH in 2011 revealed that there is fair evidence to demonstrate acceptable diagnostic accuracy of the EBV serological test in a NPC screening programme; however, there is no evidence on cost-effectiveness.

For further information on World Cancer Day 2019 celebrations and events, please contact the Cancer Unit, Ministry of Health Malaysia:

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