

# KINGDOM OF CAMBODIA

Nation Religion King



Ministry of Planning



## Policy Brief

### Promote elimination of cervical cancer to save women's lives



June 2024

The Ministry of Women's Affairs, in collaboration with the Ministry of Health, the National Institute of Statistics of the Ministry of Planning, has established working groups to develop the Policy Briefs



Bloomberg Philanthropies



## Preface

Under the leadership of **Samdech Moha Borvor Thipadei Hun Manet**, Prime Minister of the Kingdom of Cambodia, the Royal Government of the 7<sup>th</sup> Legislature of the National Assembly has carried on promoting gender equality and preventing all forms of gender-based violence by increasing investment in gender and empowering women in all fields to enable conducive environments for women to exercise their leadership rights to alleviate gender-based violence, early marriage, and teenage pregnancy, as well as to enhance public health, such as malnutrition among women and children, aimed at mitigating maternal and child mortality.

As a secretariat to the Royal Government, the Ministry of Women's Affairs has played a key and active role in promoting gender equality and health, in collaboration with the Ministry of Health, the National Institute of Statistics of the Ministry of Planning, and developed recommendations for Policy Briefs related to gender and health.

The Inter-ministerial Working Group, which is composed of members from the Ministry of Women's Affairs, the Ministry of Health and the National Institute of Statistics of the Ministry of Planning, has decided to select 5 topics as follows:

1. Promote response services for women and children survivors affected by gender-based violence;
2. Promote eradication of cervical cancer to save women's lives;
3. Mitigate maternal and infant mortality by promoting women's health and nutrition, reproductive health, pregnant women, and postpartum women aged 15-49;
4. Mitigate the impact of early marriages and teen pregnancy; and
5. Promote women in leadership and governance roles in the health sector.

The aforementioned 5 recommendations of the Policy Briefs have responded to the Pentagonal Strategy – Phase I of the Royal Government of the 7<sup>th</sup> Legislature for Growth, Employment, Equity, Efficiency and Sustainability by continuing to embrace "People" as a priority, with Pentagon 1 focusing on "Development of human capital" that takes into consideration of promoting people's health and well-being people and strengthening social support system. Pentagon Side 4.1 on "Sustainable and Inclusive Development" focuses on promoting

gender equality. The Ministry of Women's Affairs' Neary Rattanak VI Five-Year Strategic Plan consists of 6 key strategies, the 3<sup>rd</sup> of which relates to promoting well-being of women and young girls, transforming gender in health sector. Hence, Data to Policy (D2P) is absolutely crucial as it serves as evidence for advocacy in taking public health response measures as part of Neary Rattanak VI Strategic Plan.

With the support of Vital Strategies, the Ministry of Women's Affairs has led and collaborated with the Ministry of Health and the National Institute of Statistics of the Ministry of Planning to organize several meetings and consultative workshops as well as reviewed and analyzed existing data and identified 5 key issues for the formulation of the recommendations of the Policy Briefs on gender and health to advocate with concerned ministries, institutions and partners.

In addition, strengthening the capacity of officials to develop D2P Policy Briefs recommendations on gender and health in line with the policies of the Royal Government of the 7<sup>th</sup> Legislature focuses on public administration reform, public financial management reform and other reforms at national and sub-national levels.

We firmly believe that these recommendations of the Policy Briefs serve as guiding aide-memoires for the Royal Government and line ministries and institutions to make informed decisions in the formulation of action plans to contribute to the reduction of identified issues and provide recommendations based on this Policy Briefs.

Last but not least, the Ministry of Women's Affairs, the Ministry of Health, and the National Institute of Statistics of the Ministry of Planning strongly believe that all stakeholders within the Royal Government, development partners, private sector, and civil society organizations will use these recommendations of the Policy Briefs as a compass for effective and efficient implementation to contribute to the promotion of gender equality and health in response to the Pentagonal Strategy - Phase I of the Royal Government of the 7<sup>th</sup> Legislature of the National Assembly, and Neary Rattanak VI Strategic Plan.

Phnom Penh, *December 24, 2024*....

*For - Minister*

SECRETARY OF STATE



CHAN SOREY

## Acknowledgement

The Policy Briefs Recommendation Development Working Group would like to express our most profound gratitude to **Her Excellency Dr. Ing Kantha Phavi**, Minister of Ministry of Women's Affairs, **His Excellency Professor Chheang Ra**, Minister of Ministry of Health, and **His Excellency Bin Trochhey**, Minister of Ministry of Planning, for their constant support to the successful completion of the Policy Briefs recommendations formulation.

In addition, the working group would like to thank the leaders of the 3 ministries, including **Her Excellency Chan Sory** and **Her Excellency Man Chenda**, Secretaries of State of the Ministry of Women's Affairs; **Her Excellency Pen Riksy**, Secretary of State of the Ministry of Health; **Her Excellency Pech Pitoratha** and **Her Excellency Thongphean Chhaymaly**, Under-secretaries of State, Ministry of Women's Affairs, and the technical working groups of the 3 ministries.

We would like to thank Vital Strategies for providing both financial and technical supports for the development of the recommendations of the Policy Briefs, in particular to **Mr. Luis Ocaranza**, Senior Technical Advisor; **Dr. Mean Reatanasambath**, Country Coordinator; **Ms. Emily Myers**, and **Mr. Ric Mateo**, Trainers, for having developed the capacity of the working group to formulate these recommendations of the Policy Briefs. In the meantime, we would also like to thank the experts from the relevant ministries, institutions and partners for their inputs on the formulation of these recommendations of the Policy Briefs.

## Composition of Technical Team

The Ministry of Women's Affairs will prepare a decision to establish an inter-ministerial core working group to prepare a plan and implement policy recommendations, consisting of the following:

No	Name	Position
<b>Core Team Leadership</b>		
1.	HE Chan Sorey	Secretaries of State of MoWA
2.	HE Man Chinda	Secretaries of State of MoWA
3.	HE Hou Samith	Secretaries of MoWA
4.	HE Pen Ricksy	Secretaries of State of MoH
5.	HE Hou Nirmita	Secretaries of State of MoWA
6.	HE Pich Pitou Ratha	Under Secretaries of State of MoWA
7.	HE Thong Pheanchhaymaly	Under Secretaries of State of MoWA
8.	HE Chan Sokha	Under Secretaries of State of MoH
<b>Composition of Coordination</b>		
1.	HE Nhean Sochetra	Director General of the General Department of Social Development, MoWA
2.	Ms. Nith Sreya	Deputy General Director Directorate of Administration of General Affairs
3.	Ms. Chhan Ratha	Deputy Director General of Social Development Directorate
4.	Ms. Te Vouchlim	Director of Planning and Statistics Department, MoWA
5.	Dr. Mean Reatanak Sambath	Country Coordinator, Vital Strategies
<b>Composition of Master Trainers</b>		
1.	Luis Ocaranza	Senior Technical Advisor Vital Strategies
2.	Emily Myers	Senior Technical Advisor, Vital Strategies
3.	Ricardo Mateo Jr	Vital Strategies
<b>Composition of Group 2</b>		
1.	Mr. Khiev Khemarin	Deputy Director General, National Institute of Statistics, MoP
2.	Ms. Leng Monypheap	Director of Department of Women and Health, MoWA
3.	Mr. Yoeung Sina	Staff of Education Department, MoWA
4.	Ms. Ly Huysornng	Staff of Department of Women and Health, MoWA
5.	Mr. Phluk Soriya	Deputy Director of Department of NIS, MoP

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## Acronyms / Abbreviations and Definitions

Acronym	Definitions in English
CCS	Cervical Cancer Screening
CDHS	Cambodia Demographic and Health Survey
CHAI	Clinton Health Access Initiative
HPV	Human papillomavirus
ICR	Incidence Rate
LMICs	Low-and Middle-Income Counties
PVR	Prevalence Rate
Pap Smear	Papanicolaou test
SSA	Sub-Saharan Africa
VIA	Visual Inspection with Acetic Acid

## Summary

### **The rate of cervical cancer mortality remains high due to limited cervical cancer screening and cervical cancer vaccination coverage**

Cervical cancer is a hidden killer which causes many women to become victims, suffer from pain and death, and it has become a public health problem around the world. The World Health Organization (WHO) revealed that in 2020, cervical cancer related deaths were estimated at 341,800, while the number of annual incidence was projected to rise from 570,000 to 700,000 between 2018 and 2030 with annual deaths from 311,000 to 400,000.

In 2022, WHO showed that about 660,000 people all over the world were diagnosed with cervical cancer, and about 94% of the 350,000 women died from cervical cancer which occurred in low- and middle-income countries (LMICs). Risk factors which lead to the rapid development of human papillomavirus (HPV) resulting in cancerous lesions are caused by HPV (70% is Type 16 and Type 18), smoking, multiple pregnancies (5 times or more), long-term use of contraceptive hormones, and weakening of the immune system.

In Cambodia, cervical cancer is the 2<sup>nd</sup> most common cancer after breast cancer and the 3<sup>rd</sup> leading cause of deaths by cancer among women of all ages. The GLOBOCAN 2022 report estimated that 1,274 women are diagnosed with cervical cancer each year and that about 670 women die each year.

WHO has launched a global strategic initiative to speed up the elimination of cervical cancer; that is the 90-70-90 Strategic Targets to eliminate 4 cases of cervical cancer per 100,000 women by 2030.

As a consequence, the Policy Brief Recommendations are designed to raise awareness and prevent cervical cancer and deaths in women aged between 15 and 49. The Policy Brief Recommendations aim to reinforce and make health services larger for cervical cancer screening and treatment which are part of Side 3 of Pentagon 1 of the Royal Government's Pentagonal Strategy - Phase 1 of the 7<sup>th</sup> Legislature of the National Assembly.

In addition, the Policy Brief Recommendations are also recommended for minimizing the mortality rate from cervical cancer, which has become a global concern, and they play an important role in promoting and complementing the prevention of the disease by strengthening the health system with the focus on expanding cervical cancer screening services at health facilities.



## 1 Introduction

Globally, non-communicable diseases kill about 41 million people, accounting for 71% of the world's annual deaths. The majority of premature deaths due to non-communicable diseases occur in low- and middle-income countries (LMICs). If we look at the western Pacific region, no country is immune to the rise in non-communicable diseases, which are currently the silent killers, resulting in about 90% of all deaths in the region. In that amount, cervical cancer is one of the non-communicable diseases and ranks 5<sup>th</sup> among all cancers and ranks 2<sup>nd</sup> in women's cancer <sup>(1)</sup>.

Evidence from LMICs, such as Cambodia, suggests that untimely and diagnosis and inappropriate treatment of the disease due to limited access to medical services and treatment of cervical abnormalities or allowing the disease to reach the invasive stage and having inadequate monitoring are the main causes of high mortality <sup>(2)</sup>.

Other major contributing factors include social stigma, negligence, improper referrals, lack of critical health infrastructure, and ineffective treatment. Lack of knowledge about cervical cancer screening, including demographic, socio-economic, cultural and structural barriers, is a major determinant of low cervical cancer screening rates in LMICs. Due to constrained resources, some countries have differently identified the minimum age for cervical cancer screening, such as in China at 18, Korea at 20, India and Indonesia at 30, and Thailand at 35 years old <sup>(2)</sup>.

The Cambodia National Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2022-2030 recognizes that in the short to medium term, the most cost-effective intervention for cancer in Cambodia is prevention and care <sup>(1)</sup>. The plan has identified cervical cancer as a top priority for the fight against cancer and that includes a range of interventions, including the provision of HPV vaccines to 9-year-old girls, cervical cancer screening (CCS) and treatment. CCS had to be provided to women between the ages of 30 and 49 at least for 1 time by 60% and over by 2020 as set out in the Health Strategic Plan – Phase 3 <sup>(3, 4)</sup>. As the Ministry of Health was updating the guidelines for cervical cancer screening which was approved in 2018, the cervical cancer screening rate remained low. It was deemed necessary to incorporate all comprehensive strategies that would include HPV vaccination programs among the population, as well as the expansion of cervical cancer screening programs and primary prevention measures <sup>(3)</sup>.

## 2 Problem Analysis

Cervical cancer is a preventable disease. It is estimated that, each year, more than half a million women globally develop cervical cancer and the majority of them take place in developing countries rather than developed ones. This gap is due to inequalities in access to cervical cancer screening and treatment programs in the early stages of cancer <sup>(3)</sup>.

The known genuine reason of cervical cancer is that more than 95% is caused by HPV infection. About 69% of cervical cancer is caused by HPV Type 16 and Type 18 <sup>(5)</sup>. In 2022, WHO demonstrated that cervical cancer was the 4<sup>th</sup> most common cancer among women, with an estimate of 660,000 new cases worldwide and an estimate of 350,000 deaths. Of those deaths, about 94% occurred in LMICs, and more than 80,000 (23%) of all deaths (350,000) occurred in the Sub-Saharan Africa (SSA). Both cervical cancer incidence and mortality rates are highest in LMICs, Central America, and Southeast Asia <sup>(4)</sup>.

This inequality results from the lack of a national HPV vaccination program, the lack of screening and treatment services, and other socio-economic factors, such as women living with HIV, gender bias, and poverty. Women living with HIV are 6 times more likely to develop cervical cancer than normal women <sup>(4)</sup>.

A person can be infected with HPV through a sexual contact with an infected person. As HPV is the leading cause of cervical cancer, it can be effectively prevented. There is nothing to be ashamed of when a woman comes in for an HPV screening test. When the development period of cervical cancer is slow, it is considered to be a positive part of cervical cancer. As cervical cells begin to mutate, it can take years for the abnormal cells to develop into metastatic cervical cancer, which is an advantage for us to detect and treat it as early as possible <sup>(22)</sup>.

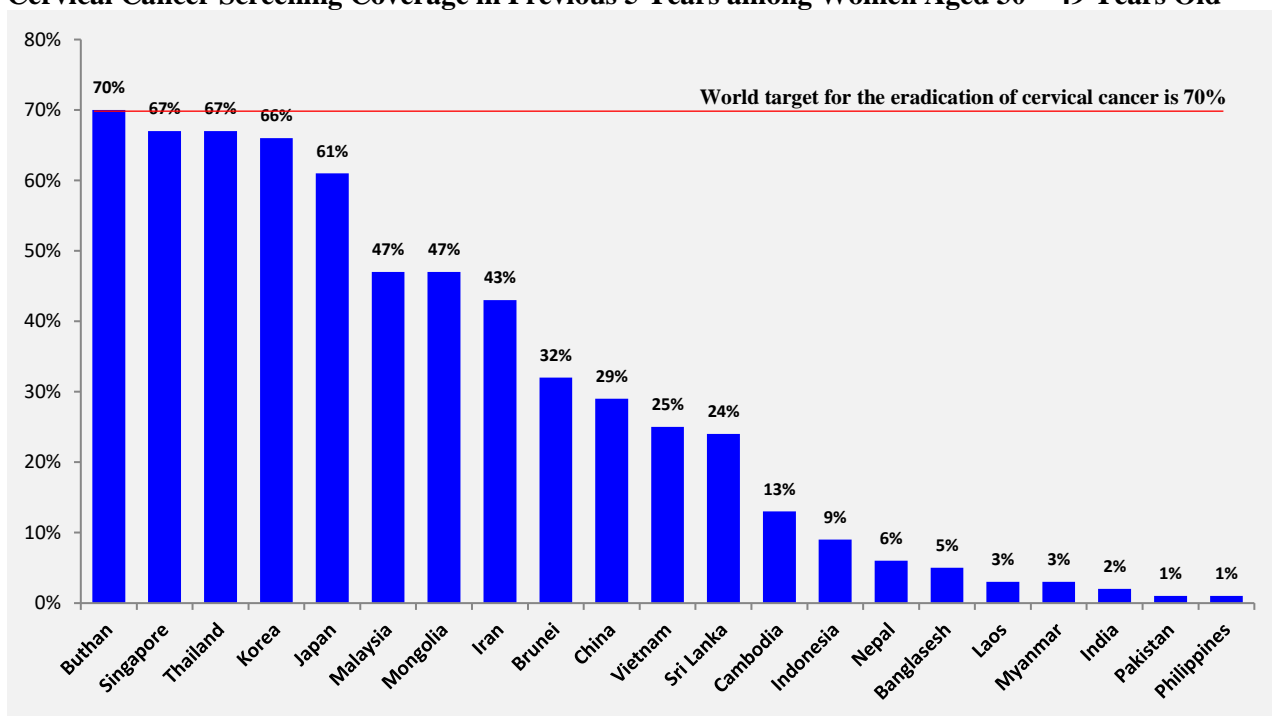
In Cambodia, cervical cancer is the 2<sup>nd</sup> most common cancer after breast cancer and the 3<sup>rd</sup> leading cause of mortality by cancer among women of all ages. Based on a UNICEF report in 2023, there were estimated 1,135 new cases and 643 deaths each year <sup>(5)</sup>. In addition to HPV, which is the main factor, there are a number of other factors which contribute to cervical cancer such as smoking, multiple pregnancies, long-term use of birth control pills, and HIV infection, which weakens the immune system <sup>(5)</sup>.

According to the GLOBOCAN 2022 report which was released in 2024, it estimated that for Cambodia there were about 1,274 cases of cervical cancer in women and about 670 deaths per year <sup>(6)</sup>. In Cambodia, cervical cancer mortality is rising every year,

becoming a major public health concern due to low education, poverty and high service costs, which are barriers for women to seek a screening test in the early stages of the disease, and thus resulting in the disease development to be severe.

As compared to some countries, the rate of cervical cancer screening in Cambodia 5 years ago was only at 13%, and it was higher than Indonesia, Nepal, Bangladesh, Laos, Myanmar, India, Pakistan and the Philippines, but 4 countries attained the coverage as equal to or close to the WHO target of 70%; they were Bhutan, Singapore, Thailand, Korea and Japan as shown in the graph below (7).

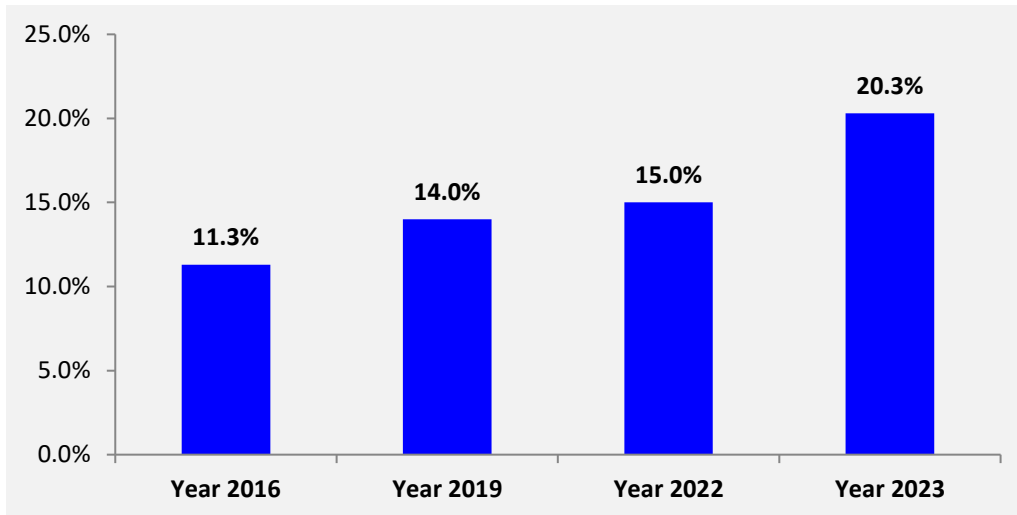
**Cervical Cancer Screening Coverage in Previous 5 Years among Women Aged 30 – 49 Years Old**



Source: Towards Elimination of Cervical Cancer-HPV vaccination and Cervical Cancer Screening in ANCCA Member Countries 2023

Data from the Cambodian Demographic and Health Survey 2021-2022 suggests that only 15% of women aged between 15 and 49 were screened for cervical cancer by medical doctors or by other service providers (8). The rate of the screening tests was increased at a very slow pace, i.e. at 11.3% in 2016 (8), 14% in 2019 (9), 15% in 2022 (10), and 20.3% in 2023 (13). It has been estimated that without effective interventions, 68,707 Cambodian women will die of cervical cancer by 2070 and 176,281 by 2120 (11).

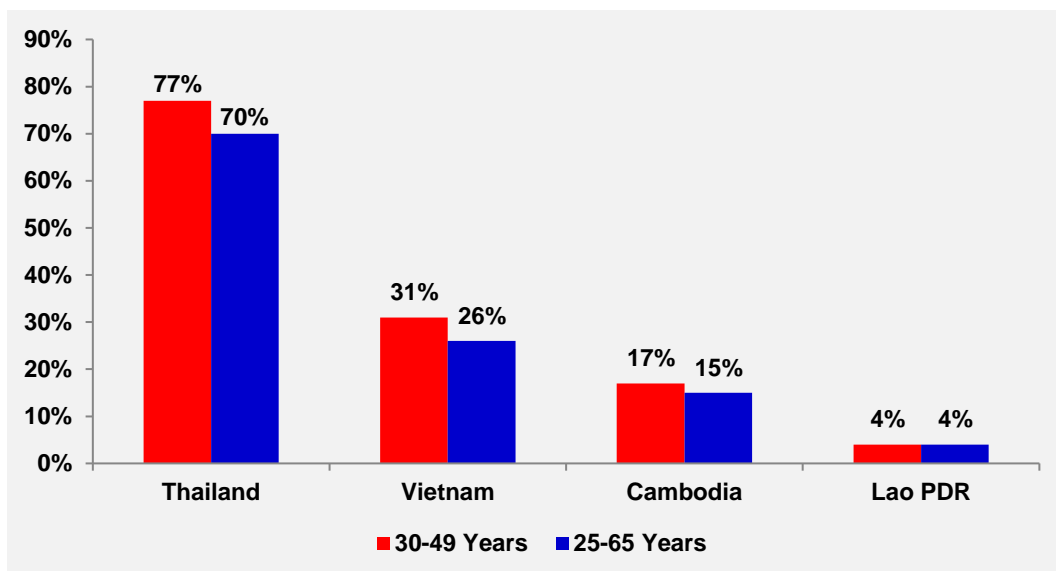
### Cervical Cancer Research Rate in Cambodia (%)



Source: References No. 8, 9, 10 and 13

Based on the 2024 Ministry of Health Convention Report, the number of staff and services for cervical cancer screening has not yet been deployed nationwide. The cervical cancer service coverage accounts for 62% of the total health centers, and 2,100 health employees and 9,081 health care supporters have received training in cervical cancer. Adding to that, the majority of health center employees are nurses and midwives, resulting in limited diagnosis and management of cervical cancer, including a lack of basic infrastructure, medical equipment, essential drugs, and cervical cancer screening equipment <sup>(12)</sup>. According to a comparative study of cervical cancer screening cases among 4 countries in Southeast Asia, Thailand had the highest rate and Laos had the lowest rate <sup>(14, 15, 16, 17)</sup>.

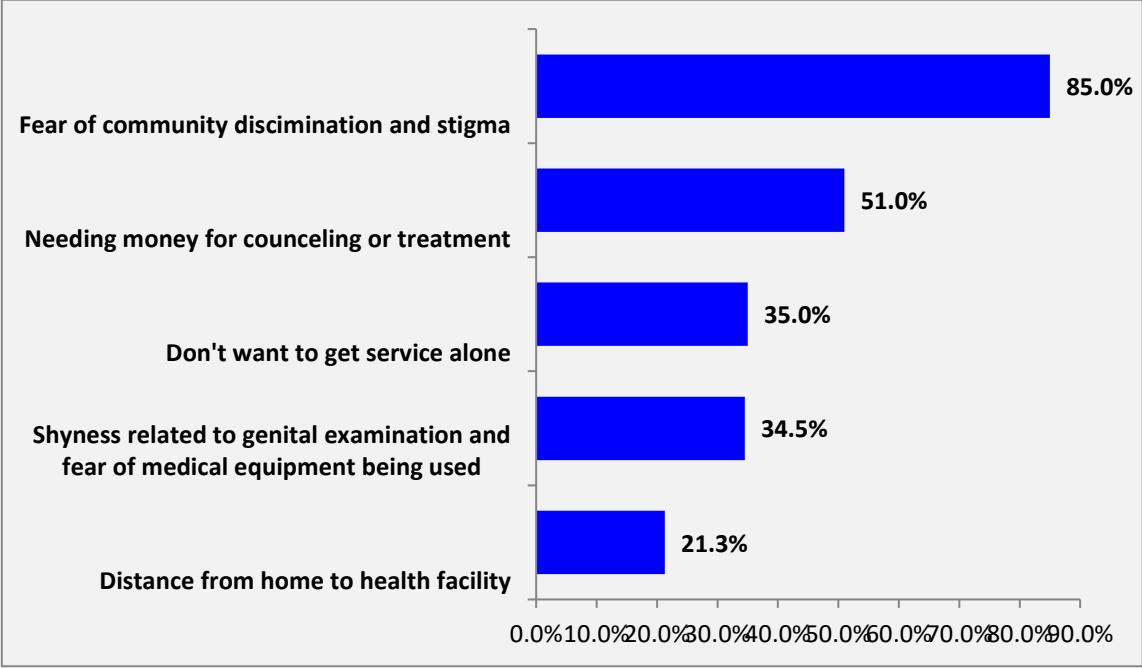
### Cervical Cancer Screening Report among the 4 Countries by Age Group



Source: HPV and Related Cancers, Fact Sheet 2023, Thailand, Vietnam, Cambodia, Lao PDR

On the other hand, attributing to a 2020 World Bank report, there were about 0.8 physician per 1,000 people in Cambodia, which indicated the challenges of providing health care services <sup>(12)</sup>. CDHS 2021-2022 suggested that the number of people having access to cervical cancer screening services was low due to the lack of understanding of cancer, and the most common problem in accessing health care was the money needed for counseling or treatment, which accounted for up to 51%, and the problem of not wanting to go to obtain the service alone accounted for 35%. In general, only 8% of women aged between 15 and 49 with low level of education and poverty received cervical cancer screening. Other factors such as shyness related to genital examination and fear of medical equipment being used during the examination accounted for 34.5%, concerns about high service costs with the inability to pay accounted for 51%, and fear of community and social discrimination and stigma about cancer accounted for 85%. Along with this, general surveys suggested that 21.3% of women did not go to health facilities due to long distances. These results are demonstrated in the figure below. Moreover, education and mainstreaming to raise awareness about cervical cancer were not widely carried out on social media platforms and through mobile health education working groups on educating people in the community <sup>(8, 12)</sup>.

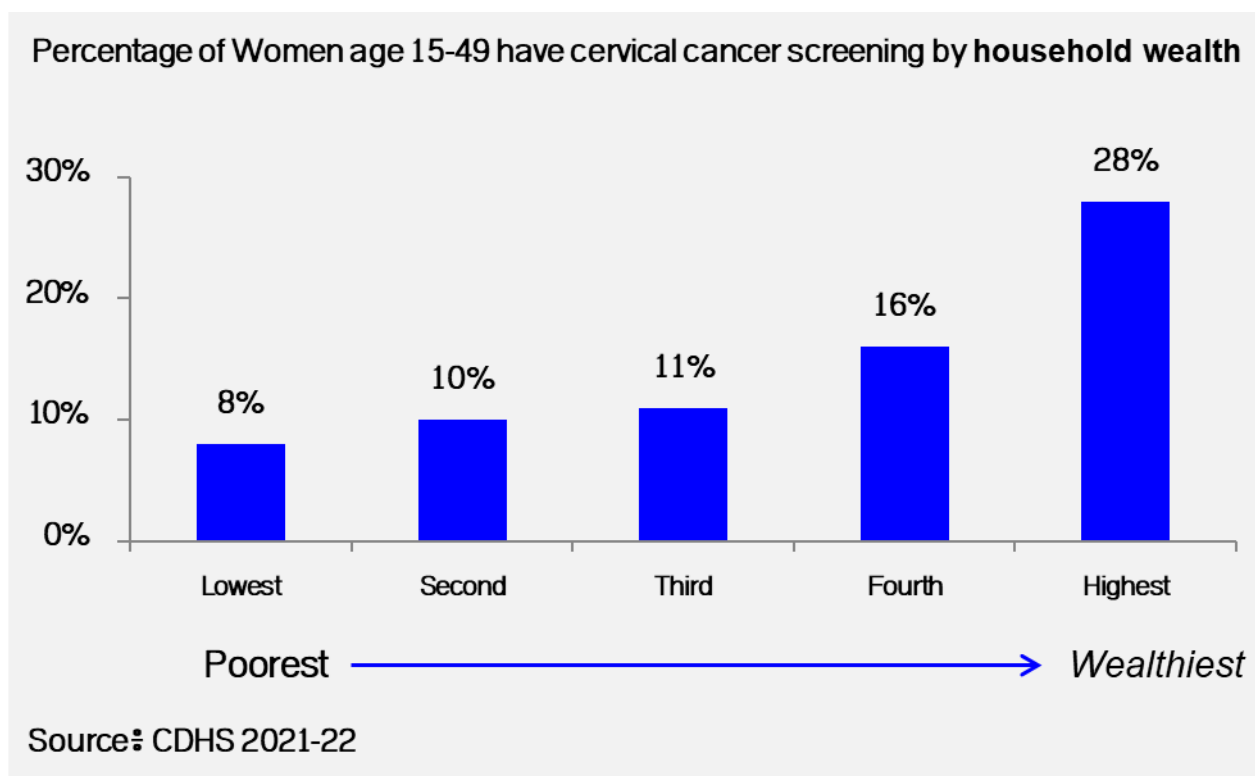
### Main Reasons of Low Rate of Cervical Cancer Screening Test



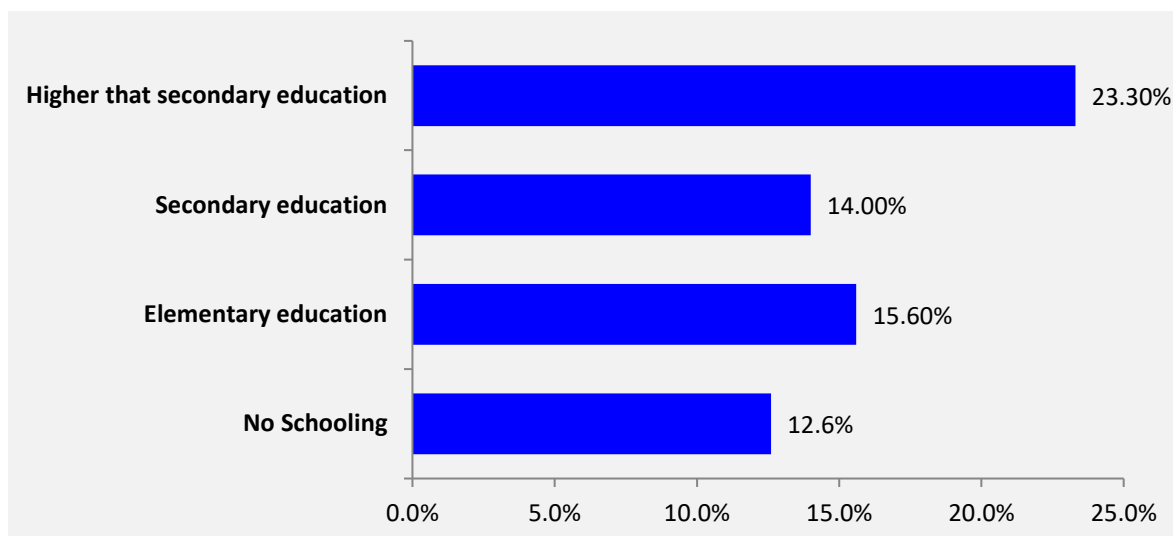
Source: Report on Health Achievement 2023, Work Direction 2024 and Continuing Years, MoH

According to a Knowledge, Attitude, and Practice (KAP) Survey on Cervical Cancer Prevention in Kampong Speu Province on 440 women, 74% of them were aware of cervical cancer, 34% of them were aware of cervical cancer Pap Smear tests, and only 7% of them had received these tests. 74% of the women who answered the survey questionnaire indicated a willingness to take the Pap Smear tests. Furthermore, 35% of the women were aware that cervical cancer could be prevented by the vaccine, and 62% of them wanted to get the HPV vaccine, yet only 1% of them was vaccinated. Therefore, it can be concluded that most women in Kampong Speu have been aware of cervical cancer, have little understanding about cervical cancer screening and rarely go for screening tests. Instead, they intend to get screening tests and vaccinated <sup>(18)</sup>.

This graph shows that women with low economic status also have low access to screening services. All in all, the level of this screening is proportional to the household economic standard of living. If a household standard of living is high, the rate for seeking voluntary cancer screening tests is also high <sup>(8)</sup>.



### The rate of women aged 15 - 49 who have been tested for cervical cancer by education level



Source: Cambodia Demographic and Health Survey 2021 - 2022

This graph shows that women with a higher education level have higher access to cervical cancer screening tests than women with a low education level or without education. However, cervical cancer screening was slightly different for women attending primary and secondary education, accounting for 15.6% at the primary level and 14% at the secondary level (8).

Cervical cancer screening is very significant since it will allow us to detect the presence of cancer cells which have just begun to mutate, while early and immediate treatment will prevent their development into full cancer. Cancer found at an early stage is very easy to treat so that it does not turn into metastatic cancer.

Policy Brief Recommendations are, therefore, designed to increase awareness and prevent cervical cancer and deaths in women aged between 15 and 49 and make health services larger for cervical cancer screening and treatment which are part of Side 3 of the Royal Government's Pentagonal Strategy - Phase 1 of the 7<sup>th</sup> Legislature of the National Assembly.

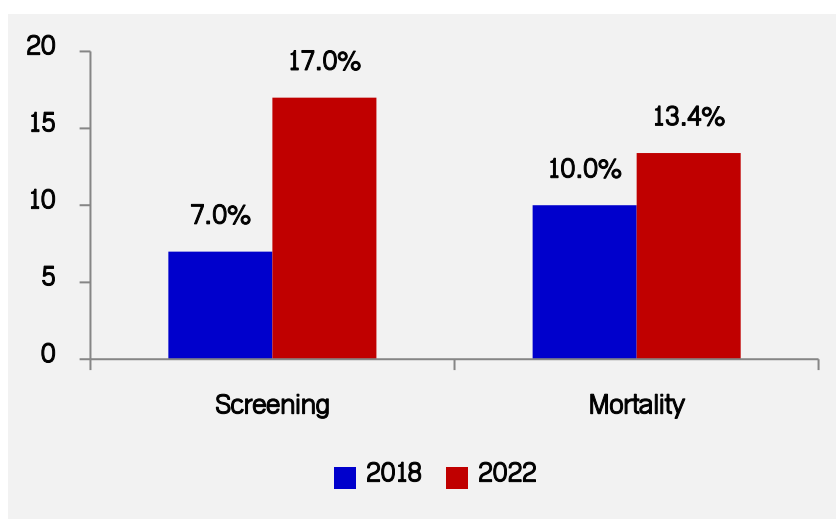
## 2.1 Findings

The mortality rate of cervical cancer in Cambodia is on the rise every year, ranging from 10% in 2018 to 13.4% in 2022, and it has become a major public health concern. The people most affected by cervical cancer are Cambodian women aged between 15 and 49 across the country. Owing to the Cambodia Demographic and Health Survey 2021 - 2022, cervical cancer screening among Cambodian women aged between 15 and 49 accounted



for only 15% (7). A 2022 UNICEF report suggested that cervical cancer screening services remained insufficient and incomprehensive, which resulted in delaying diagnosis and leading to an increase in cervical cancer mortality.

**Cervical Cancer Status in Cambodia**



Source: WHO 2018 and 2022

According to the Ministry of Health's 2023 Achievement Report, cervical cancer inpatients accounted for 11.2% <sup>(12)</sup>. Evidence from LMICs, such as Cambodia, suggests that incomplete treatment and insufficient monitoring were the main causes of the low proportion of cervical cancer screening and that late detection resulted in high mortality, together with other significant contributing factors such as lack of adequate vaccination, lack of understanding, negligence to take cervical cancer screening, inappropriate referral systems, lack of essential health infrastructure, and ineffective treatment. The average cost of a cervical cancer screening test is US\$5.4. In general, the total cost is estimated at about US\$4 million annually <sup>(19)</sup>.

The cervical cancer prevalence associated with a lack of understanding accounts for up to 70% of patients who seek treatment in the later stage of the disease. If women come and obtain timely treatment, the chance of being cured is effectively high as well. The study of the effect of organized cervical cancer screening on the mortality of cervical cancer patients in Europe estimated that the screening reduced the incidence of cervical cancer from 50% to 60% <sup>(20)</sup>.

## 2.2 Challenges

Cambodia is faced with critical public health problems by non-communicable diseases which kill almost 60,000 people every year, equivalent to 64% of all deaths in 2018, which is a threat to the progress for sustainable development goal of reducing premature deaths by one-third by 2030. Of these deaths, cancer accounted for 14%. There are 6.06 million women aged 15 and over who are at risk of developing cervical cancer <sup>(1, 3)</sup>.

Based on the latest WHO data released in 2022, cervical cancer related deaths in Cambodia were increased to 670 (670/13,799) <sup>(6)</sup> or 4.9% of the total cancer related deaths. Among the top 10 types of cancer between 2022 and 2023, cervical cancer patients ranked the 2<sup>nd</sup> in terms of accessing hospital treatment services, which accounted for 12% <sup>(21)</sup>. Cervical cancer can be cured if it is diagnosed at an early stage and treated on time. Countries around the world are now working to expedite the elimination of cervical cancer in the upcoming decades, as identified by 90-70-90 Targets <sup>(4)</sup> to be realized by 2030 as recommended by WHO.

As a result, the 3 biggest challenges were identified: 1. Lack of HPV vaccination program for girls under the age of 15, 2. Minimal rate of cervical cancer screening services, and 3. Cervical cancer screening is not yet covered across the country.

Cervical cancer is caused by Human Papillomavirus (HPV) infection. Women living with HIV are 6 times more likely to develop cervical cancer than women without HIV. HPV vaccination and pre-cancerous lesion screening and treatment are effective strategies for preventing cervical cancer and are highly effective. Cervical cancer can be cured as long as it is timely diagnosed and detected at an early stage. Cambodia's objective of eliminating cervical cancer reflects its commitment to abide by WHO recommendations to realize 90% coverage of HPV vaccination for girls <sup>(4)</sup>.

## 3. Selection of Policy Brief Recommendations

The Royal Government of Cambodia, in particular the Ministry of Health, is paying close attention to the fight against cervical cancer as part of a national strategy for combating and preventing non-communicable diseases, which are a growing challenge, in order to further solidify our health system. The good point is that cervical cancer can be prevented. There are two major interventions that the MoH has put in place to manage cervical cancer: first, cervical cancer screening and treatment, and second, the provision of vaccines. We already know that both interventions offer high and effective and life-saving

value. In order to promote the elimination of cervical cancer, the MoH must collaborate with line ministries and institutions to review, approve, and turn the following Policy Brief Recommendations into action:

### **3.1. Policy Brief Recommendation Option 1**

The Ministry of Health needs to strengthen and expand cervical cancer screening services by conducting HPV tests based on Visual Inspection with Acetic Acid (VIA) for a comprehensive screening and treatment strategy at public and private health facilities across the country.

While the new guidelines for cervical cancer screening (CCS), on which the MoH has not yet finalized, new WHO recommendations for cervical cancer screening and treatment should be temporarily carried out.

This action can surely be implemented with a huge success as it is an action that must be executed in the existing health facilities, and there are some significant principles as follows:

- According to WHO guidelines, this screening should start with women over the age of 30, even if they have or have not been vaccinated, and it should be carried out every 5 to 10 years. While women living with HIV, it should be carried out every 3 years and started with women at the age of 25;
- Another strong point is that the MoH has the National Multi-Sectoral Action Plan on the Prevention and Control of Non-communicable Diseases 2018-2027 and the National Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2022-2030, which are the main roadmap; and
- The MoH developed the National Action Plan for Cervical Cancer Prevention and Control 2019-2023, the Standard Operating Procedure (SOP) on Cervical Cancer Screening 2018 and the 2024 Update, and the National Development Council's Roadmap and Plan for the Participation of Stakeholders 2019-2030;

Benefits obtaining from cervical cancer screening can be as follows:

- It promptly allows us to detect the prevalence of cervical cancer in the early stage before the progression to invasive cervical cancer, to easily seek ways to prevent and treat the disease on time, and to effectively reduce the incidence and mortality from cervical cancer, in particular to significantly minimize costs, which will help boost the economy of the household and the nation;

- Based on the studies on the effects of CCS on cervical cancer mortality in Europe, they have shown that organized CCS cut down the incidence of this disease from 50% to 60% <sup>(20)</sup>; and
- It does not consume a lot of money for the purchase of screening equipment for primary cervical cancer screening at health centers.

### 3.2. Policy Brief Recommendation Option 2

Promote the promotion and expansion of cervical cancer HPV vaccination services in all public and private health facilities and in schools for girls between the ages of 9 and 14.

This Recommendation can surely bring about tremendous successes as the MoH has introduced the cervical cancer vaccines for 9-year-old girls across Cambodia in collaboration with the Ministry of Education, Youth and Sport and local administrations together with the support of GAVI, WHO, UNICEF and CHAI (Clinton Health Access Initiative) to provide free cervical cancer vaccines containing 1 dose of 2-valent HPV to 9-year-old girls across the country through regular service delivery to communities, schools, and health centers. There are several types of cervical cancer HPV vaccines:

- 1) 2-valent HPV (for protection against HPV 16/18) at health centers,
- 2) 4-valent HPV (for protection against HPV 6/11/16/18), and
- 3) 9-valent HPV (for protection against HPV 6/11/16/18/31/33/45/52/58)

HPV is divided into 2 types:

- 1) High-risk HPVs that can cause cancer: types 16, 18, 31, 33, 45, 52 and 58 and
- 2) Low-risk HPVs that can cause warts: types 6 and 11

Things to know about the cervical cancer vaccines:

- These vaccines can be given from the age of 9. The special feasibility is that this intervention will be carried out in existing public health facilities and private services which will be required to collaborate under the guidance of the MoH;
- Vaccines minimize the incidence of cervical cancer in all girls across Cambodia;
- Vaccines significantly reduce costs because cancer treatment is very costly;
- Vaccines provided will cut down household financial loss and national budget for cancer treatment and loss of productivity;

- They reduce the loss of human resources that are key partners in the family, in particular the loss of mothers; and
- They increase household income productivity.

### 3.3. Policy Brief Recommendation Option 3

Expand education and dissemination programs on the advantages of cervical cancer screening and vaccination, especially the integration of education programs into the MoH primary health care mechanism.

A number of line ministries and institutions have contributed to cervical cancer education programs by organizing exhibition events on cervical cancer with the participation of stakeholders, a network of oncologists, and health workers at the site. Disseminations with detailed activities can be carried out at health centers, hospitals, schools and public places, etc. The Ministry of Women's Affairs, MoH, Ministry of Education, Youth and Sport and line ministries and institutions must strengthen and expand cooperation to promote cervical cancer dissemination and prevention.

- Establish a cross-sectorial coordination mechanism at the sub-national level to expand and promote reproductive health education (at the ages of 15-49) through the MoH's primary health care implementation mechanism. Currently, the MoH has guidelines for improving primary health care throughout the country by transferring right and authority to lead and manage to the sub-national administration, which is a good opportunity for gender transformation and reproductive health education for target women;
- Throughout the 25 capital and provinces, working groups have been set up to manage the implementation framework on the promotion of primary health care at the capital/provincial and municipal/district/Khan levels. Hence, the MoH must work together with the sub-national administration to reinforce and expand reproductive health education activities and raise awareness of cervical cancer screening to the people. Through this mechanism, it contributes to mitigating the need for human resources and budget for the implementation, but in return it increases work effectiveness and high results.

This Policy Brief Recommendation can be applicable based on:

- National Standard for Implementation of Cervical Cancer Screening and Surveillance Methods of the Ministry of Health;

- Neary Rattanak VI's Strategic Plan (2024-2028), Ministry of Women's Affairs;
- National Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2022-2030;
- National Action Plan for Cervical Cancer Prevention and Control 2019-2023;
- Standard Operating Procedure (SOP) on Cervical Cancer Screening 2018; and
- National Development Council's Roadmap and Plan for the Participation of Stakeholders 2019-2030.

To make this Recommendation a success, education and dissemination by working closely with the community are needed in order:

- To raise women's awareness about cervical cancer, how to prevent it, and belief in the HPV vaccination program which ensures the vaccine effectiveness to prevent the disease;
- To be included in the education program that HPV can be transmitted through a sexual contact with a person living with the disease as similarly to HIV; and
- To reduce the expenses on cancer treatment, which are extremely expensive, if they get vaccinated and early cervical cancer screening on time.

### **3.4. Policy Brief Recommendation Option 4**

Promote the implementation of the cervical cancer screening mechanism through a self-sampling method for target women (Women aged from 30 and over).

The Policy Brief Recommendation Option 4 is that we can compare it to a Covid-19 rapid test. WHO has also approved the HPV cervical self-sampling method, an additional method of screening for cervical cancer. This method allows health officials to conduct tests for HPV-DNA cells, one of the most effective methods of detecting early-stage cervical cancer. The good point of this method is that women have to take it themselves, which is easy, private, comfortable, both physically and mentally, and painless. The question raised for this method is whether the samples taken by the women themselves are as officially accepted as those taken by the health workers <sup>(21)</sup>.

Furthermore, in areas where an HIV transmission rate is high, WHO recommends that women and young girls who are sexually active, regardless of their age, be tested for HPV as soon as we find out that they are HIV positive.

### 3.5 Analysis of Policy Brief Recommendations

In accordance with the Problem Analysis, Findings and Challenges, as described above, as well as those key points mentioned in each Policy Brief, it is clear that each of the points contains its own strengths and weaknesses in terms of knowledge, attitude and practice of health care, particularly all cancers in general and cervical cancer in particular. Owing to the MoH Strategy, adopting the guidelines on cervical cancer screening, referral and treatment of target women aged between 30 and 49, it will contribute to the elimination of cervical cancer in line with the National Strategic Plan on Prevention and Control of Non-communicable Diseases 2023-2030.

WHO has launched a global strategic initiative to speed up the elimination of cervical cancer, as mentioned in the 90-70-90 Strategic Targets to annually cut down up to 4 cases of cervical cancer incidence per 100,000 women by 2030. The strategic initiative is as follows:

- 90% of girls fully vaccinated with the HPV vaccine by the age of 15,
- 70% of women screened with a high-performance test by the age of 35 and again by the age of 45, and
- 90% of women diagnosed with cervical ulcers but not yet developed into cancer (pre-cancer) treated.

The prioritization of each policy depends on political decisions and service delivery capabilities which can be effectively executed and must also satisfy the different needs of clients.

- Policy Brief Recommendation Option 1, which sets out that MoH needs to strengthen and expand cervical cancer screening services by conducting HPV tests based on a comprehensive screening and treatment strategy at public and private health facilities across the country, can absolutely be attained as necessary resources are now readily available in health sector, and some health facilities have successfully carried out cervical cancer screening. However, more training for technical officers and the assurance that test kits are available and sufficient are needed.
- Policy Brief Recommendation Option 2, which sets out the promotion and expansion of cervical cancer HPV vaccination services in all public and private health facilities and in schools, can also be achieved as planned since the government, in particular the MoH, has been highly committed with particularly

large international organizations such as WHO, UNICEF, GAVI and CHAI, as well as the National Immunization Program, which has been highly successful for many years. Specifically, there is full support from the Ministry of Education, Youth and Sport because it is able to gather girls from the ages of 9 to 15 for educating, bringing awareness to and scheduling cervical cancer vaccination.

- Policy Brief Recommendation Option 3 sets out the expansion of education and dissemination programs on the advantages of cervical cancer screening and vaccination broadly because the lack of cervical cancer understanding will play a key role in disrupting the disease prevention efforts. This Recommendation can be quite successful if there are engagements from all aspects of the health system, such as communities, schools, and religious education facilities, including diverse means such as verbal education and/or presentations. The main barrier of Policy Brief Recommendation Option 3, however, is that it costs a lot of money and encounters cultural barriers which are sometimes difficult to explain to young girls.
- Policy Brief Recommendation Option 4, which sets out the promotion of women to conduct the cervical cancer screening mechanism through a self-sampling method, is possibly faced with many difficulties, in particular the effectiveness of sampling, which makes it hard to rely on the results obtained. There are a number of challenges in Recommendation Option 4 that are hard to attain huge successes.

### Prioritization of Policy Brief Recommendations

	Political possibilities	Practical Possibility
Policy Brief Recommendation Option 1		
Policy Brief Recommendation Option 2		
Policy Brief Recommendation Option 3		
Policy Brief Recommendation Option 4		

#### Possibility

High possibility



Some possibility



Impossibility





#### 4. Policy Brief Recommendations

Cervical cancer can be cured if it is diagnosed and treated at an early stage. Understanding the symptoms by the woman herself and seeking medical advice to address the concerns are the most important step. In order to realize the elimination targets of the disease, the national program must be well-organized for strengthening and expansion of HPV cervical cancer screening and treatment services.

In order to enjoy the accomplishment from implementing the Policy Brief Recommendations, the MoH and line ministries must:

1. Promote the adoption of National Standard for Implementation of Cervical Cancer Screening and Surveillance Methods,
2. Update the National Strategic Plan for Cervical Cancer Prevention and Control,
3. Promote and broaden the implementation of cervical cancer screening services across the country,
4. Expand cervical cancer education and dissemination programs,
5. Estimate the service cost of cervical cancer screening to compare with that of cervical cancer treatment,
6. Reinforce the monitoring and evaluation mechanism on the implementation of cervical cancer screening, and
7. Enhance the research for non-communicable disease risk factors to be carried out every 5 years.

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