Original Article

FINANCIAL AND MEDICAL BARRIERS AND MOTIVATIONS OF CERVICAL CANCER SCREENING AMONG ETHNIC MINORITY WOMEN IN VIETNAM

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DOI: 10.47750/pnr.2022.13.S07.765

Abstract

Cervical cancer is a dangerous disease, causing the second - highest number of deaths among all cancers that Vietnamese women have. Although it can be prevented, the participation of Vietnamese women in cervical cancer screening is still low, especially among ethnic minority women in the Northern midlands and mountainous areas. Especially when Vietnam is a country that does not have a national screening program. The objective of this study was to explore the perceptions of ethnic minority women in Vietnam about cervical cancer and identify the factors that inhibit and motivate their decision to perform screening. This study conducted interviews with a group of 155 ethnic minority women in the northern mountainous provinces of Vietnam. The results show that the awareness of cervical cancer among ethnic minority women in Vietnam is incomplete and inaccurate. The lack of financial capacity and weakness of the health system for ethnic minority communities are the main reasons preventing them from implementing screening. Motivating factors, such as increased awareness and the need to love and care for themselves, as well as interventions from family and community support may convince a woman to go for screening.

Keywords: cervical cancer screening, ethnic minority women, Vietnam.

Introduction

The majority of studies on women's cervical cancer screening have been conducted in industrialized nations like the US, UK, Australia, Canada, and Sweden (Eaker et al., 2001; Van Til et al., 2003). Women frequently have limited knowledge of cervical cancer and do not comprehend the need for cervical cancer screenings in healthy women (Markovic et al., 2005). Low socioeconomic status and no health insurance are likely to limit access to screening (Lindau et al., 2002; Hewitt et al., 2004).

Regular cervical cancer screening, according to studies, aids in early detection (Lee-Lin, 1969; Botha, 2009). Cervical cancer screening should start at age 21 (Saslow et al.; 2012). Therefore, regardless of age at first having sex or any associated risk factors, women as young as 21 should be screened for reproductive health problems. Additionally, cervical cancer screening in women between the ages of 30 and 49 at least once will lower cervical cancer fatalities, according to the World Health Organization (2014). In high-income countries during the past 50 years, cervical cancer screening has been successful in lowering morbidity and death compared to low-income countries, which have almost no successful cervical cancer screening programs (Franco and Harper, 2005).

Cervical cancer is a major global burden on women, families, economies, and underdeveloped health systems. In less developed areas, cervical cancer mortality predominate (WHO, 2018). With 311,365 fatalities in 2018, the WHO ranked cervical cancer as the fourth most frequent malignancy in women worldwide. 85% of these incidents took place in low- and middle-income nations. In affluent nations with efficient control mechanisms in place, cervical cancer is dropping. But in nations with insufficient or inadequate control strategies, cervical cancer rates are rising (Ferlay, 2018). Cervical cancer is one of the most prevalent malignancies in Vietnamese women despite being a preventable condition with early detection (Nguyen Trung Kien, 2021). With an age-standardized incidence estimate of 11.5/100,000 women, it is now predicted that 5,664 women are diagnosed with cervical cancer each year, and 2,472 die from the disease.

The "National Action Plan on Prevention and Control of Cervical Cancer for the Period 2016–2025" was adopted by the Ministry of Health in 2016 and is being implemented at two health levels, ranging from the central level to the provincial level to the provincial level, district and commune levels. Cervical cancer screening, however, is still mostly carried out at medical institutions, especially in communities of ethnic minorities. When seeking care, ethnic minority women in Vietnam's low-income northern midland and mountainous regions encounter a number of obstacles relating to education, geography, cost, accessibility to healthcare providers, and family acceptance that may not exist in high-income areas. Therefore, the study was carried out to take into account the financial and medical barriers as well as the motivations for cervical cancer screening of ethnic minority women in Vietnam.

Literature

The concept of cervical cancer

In the context of climate change and environmental pollution strongly affecting the living environment of people, dangerous diseases are also increasing accordingly. In which, cancer is becoming the "disease of the century" that all humanity has to face, according to IACR - the international agency for cancer research (under WHO), the proportion of the global population with cancer in 2021 is estimated at about 20 million people, an increase of 3 million people compared to 2018. The total number of deaths increased from 9.6 (2018) to nearly 10 million people (2021). The Covid 19 pandemic has also made cancer care and treatment more difficult.

For women, cervical cancer is one of the most common types of cancer, after breast cancer, accounting for 12% of all common cancers in women. According to the World Health Organization (WHO) statistics, in 2020, there will be about 604,000 new cases of cervical cancer and 342,000 deaths from this disease. 48-52 is the average age of cervical cancer in women. According to a study by Sung H et al (2020), more than 90% of cervical cancer deaths occur in developed, low- and middle-income countries. This result has a high agreement with previous studies on the prevalence and mortality from cervical cancer in the world (Randall and Ghebre, 2016; Chuang et al., 2016). Without a significant resolution, the global number of cervical cancer cases is expected to increase to nearly 700,000 cases and 400,000 deaths (2030), representing an increase of 21% and 27%, respectively 2018 (WHO; 2020). The first studies on cervical cancer were performed by a gynecologist Walter Schiller (1933). He observed the external lesions of the cervix over time and confirmed that pre-invasive lesions of the cervix were the true precursors of malignancies.

Regarding the concept of cervical cancer, after many review studies NCI (US National Cancer Institute) gave a general concept: Cervical cancer is a malignant disease that begins in the cells of the cervix bow includes squamous epithelial cells or cervical adenocarcinoma cells grow abnormally leading to the formation of tumors. The cervix is the narrow and lower end of the uterus (womb). The cervix connects the uterus to the vagina. Tumors in the uterus after appearing will multiply continuously, invade and affect surrounding organs. Meanwhile, the American Society of Clinical Oncology (ASCO) emphasizes the transformation of healthy cells on the surface of the cervix that grow out of control to form tumors. If these malignant cells spread deeper into the cervix or other tissues and organs, the disease is called cervical cancer. With domestic studies, Nguyen Thi Nhu Tu (2019) suggested that cervical cancer occurs when cells in the cervix begin to multiply and lose control, leading to loss

of function and malignant tumor formation. Over time, the tumor gradually invades and destroys other organs. Thus, the definitions of cervical cancer from major medical organizations in the world and in the country can be found to have similarities, thereby giving a general concept of cervical cancer as follows: Cervical cancer develops in a woman's cervix (the entrance to the uterus from the vagina) when normal cells grow rapidly and out of control, forming malignant tumors, and the ability to metastasize, destroy nearby functional organs.

Cervical cancer is named after the type of cell where the cancer started. Very rarely, cancer develops in other cells in the cervix. Those two categories include:

Squamous cell carcinoma: About 90% of cervical cancers are squamous cell carcinomas. The tumor begins in the cells on the outer surface of the cervix.

Adenocarcinoma: Cervical adenocarcinoma develops in the glandular cells of the cervical endometrium. This form of cancer is relatively rare.

Occasionally, cervical cancer has features of both squamous cell carcinoma and adenocarcinoma. This is called mixed carcinoma or squamous cell carcinoma.

The development of cervical cancer

Cervical cancer grows quite slowly, thus leading to subjectivity in examination and diagnosis. Most cases are discovered when the tumor has worsened, invaded and metastasized to other organs. According to statistics from the International Agency for Research on Cancer (IARC), the 5-year survival rate for all people with cervical cancer is 66%. This rate depends largely on the stage at which it is diagnosed. When detected at an early stage, the 5-year survival rate for those with cervical cancer is 92%. If cervical cancer has spread to surrounding tissues or organs or to lymph node areas, the 5-year survival rate is 58%. In cases where the cancer has spread to a distant part of the body, the 5-year survival rate is 18%. However, currently, the rate of cervical cancer diagnosed at an early stage is only 44%.

Evaluation of the developmental stages of cervical cancer is shown by the FIGO (International Federation of Gynecology and Obstetrics) Staging System, which consists of 4 stages, the earlier the stage, the more spread the cells cancer cells are limited.

- Phase I

In stage I, cervical cancer has formed and exists only in the uterus. This stage is divided into stages IA and IB, based on the size of the tumor and the point of deepest invasion of the tumor. Inside:

Stage IA is subdivided based on the deepest point of invasion of the tumor (from 3mm to 5mm).

Stage IB is subdivided based on the size of the tumor (less than 2 cm, 2 cm to less than 4 cm, and greater than 4 cm).

- Phase II

At this stage, cervical cancer has grown and spread to the upper two-thirds of the vagina or the tissues surrounding the uterus. Based on how far the cancer cells have spread, this stage is further divided.

- Phase III

From spreading within stage II, if cancer cells have spread to the lower third of the vagina, the pelvic wall, or affect the lymph nodes, then cervical cancer is at this stage paragraph III

- Stage IV

As the final stage of cervical cancer, this stage is also known as the metastatic stage. By this time, cervical cancer has spread beyond the pelvis or has reached the lining of the bladder or rectum and spread to other parts of the

body. When detected at this stage, the ability to treat and cure the disease is almost impossible because the cancer cells have metastasized to other organs in the body and destroy them from the inside.

Thus, clinical testing plays an important role in detecting and treating cervical cancer in a timely manner. The earlier the disease is detected, the more likely it is to cure and prevent recurrence.

Risk of cervical cancer

Cancer is generally considered as one of the dangerous diseases and there is no method of prevention as well as a complete cure for this disease. Cancer is becoming more and more common and its subjects are also getting younger. Anyone can get cancer from many different causes. Cancer cells in the body, once formed and begin to create tumors, will not stop multiplying exponentially, proceeding to invade organs next to the disease site and destroy them, their function of these organs are accordingly destroyed. Thereby creating ulcers, which cannot heal the patient and lead to death. As for cervical cancer - the type of cancer associated with women, its consequences go far beyond the physical harms. The health risks that cervical cancer leads to include: physical health damage and mental health damage

- Physically: When the tumor invades deep into the vagina or begins to metastasize to nearby organs such as intestines, bladder, the cancer grows large and presses on the ureter, preventing drainage urine out of the kidney. If water accumulates too long inside the kidneys, it will lead to kidney dilatation due to fluid retention. Over time, most of the basic functions of the kidneys will be lost. In addition, cervical cancer makes patients more likely to form blood clots because the tumor presses on veins in the pelvis, slowing the flow of blood. In some more dangerous situations, blood clots are formed that travel up to the lungs, blocking the blood supply. That leads to the most dangerous complication, which is death. In fact, according to the data obtained in 2020, the mortality rate from cervical cancer over the total number of cases is more than 56.5% (Deependra Singh, 2022) due to lack of knowledge and screening from society. In addition to dangerous complications after cervical cancer treatment, the treatment process also gives patients a lot of pain when using chemotherapy and radiation methods; accompanied by pain due to growing tumors and pressing on other organs. Thereby creating mental pressure for patients with the disease.

- Mentally: When cervical cancer has developed to a serious stage that cannot be treated with drugs, it will be forced to remove part or all of the uterus and pelvic organs. This makes women lose their motherhood. According to Carter J et al. (2005) the loss of fertility, whatever the cause, is a significant factor in psychological distress in women. Some studies show that people undergoing treatment for cervical cancer have significantly more fertility concerns than others of the same age, including sadness about not being able to have children as well as being open about fertility issues (Wenzel L et al., 2005). This has an even stronger impact on unmarried women; Fear of social judgment, inferiority complex, and sexual relationship with one's partner are also heavily influenced by cervical cancer (Thomas J. Herzog et al., 2007). As a result, quality of life as well as spiritual life decline.

How to prevent and control cervical cancer

With the development of world medicine, prevention and control of cervical cancer has become much easier. The core key of effective prevention and control comes from social awareness.

The incidence of cervical cancer is closely related to socioeconomic level; this rate is highest in developing countries (Xingxing Zhang et al., 2021). This can be explained by limitations in sexual knowledge, screening services and behaviour. In contrast, in Middle Eastern countries, this rate is much lower, likely due to conservatism in sex life due to cultural and religious factors. One of the main causes of this disease is the HPV virus - a sexually transmitted virus capable of causing cervical cancer and other gynecological diseases (mainly caused by strains 16 and 18). According to the HCM City Center for Disease Control, about 11-12% of the global population (700-800 million people) are currently infected with HPV in both men and women. In Vietnam, the HPV infection rate is about 8-11% depending on the region. More importantly, more than 50% of women have had HPV at least once

in their lives. Currently, the HPV vaccine has been widely produced and used, the HPV vaccination is one of the optimal solutions to help prevent cervical cancer. In several countries around the world a downward trend in cervical cancer incidence has been found, most clearly in the Maldives, Taiwan and Singapore, due to government-funded HPV vaccination programs (Chen YY et al., 2009; Lim GH et al., 2012;Basu P. et al., 2014). In addition to raising women's awareness in actively vaccinating against HPV, a safe sex life, using condoms when having sex, proper genital hygiene, avoiding stimulants and Birth control pills are also a way that each woman protects herself from the risk of cervical cancer. (Janicek MF et al., 2001; Gaffney DK et al., 2018; Mancuso P et al., 2020).

As discussed above, early detection of cervical cancer plays an important role in the treatment and survival rate of patients. To do that, actively preventing disease and improving screening is the optimal solution. The basis of cervical cancer prevention by screening is mainly to reduce morbidity through detection and removal of precancerous lesions and to reduce disease progression through detection of cancer invasive cancer at an early stage, thus improving the chances of cure and reducing mortality. Several cervical screening strategies have been used effectively in different settings: routine cytology (Pap smear); in recent years, liquid-based cytology (LBC) and HPV testing; and, in the LMIC, visual inspection with acetic acid (VIA) (Rengaswamy Sankaranarayanan et al., 2009). Research by Deependra Singh (2022) indicates that it is estimated that by 2020, the incidence of cervical cancer has decreased in most countries of the world, with the incidence becoming stable and at a similar level relatively low (2005) in some high-income countries. In contrast, during the same period, incidence increased in several countries in East Africa and Eastern Europe. This difference stems mainly from the relatively good screening and treatment services in developed countries while in developing countries screening services and facilities are inadequate. Similar to the above study, Rifat Atun et al (2015) through the investigation also showed that the impact of screening examination creates a difference in the incidence of cervical cancer among national groups. Accordingly, cervical cancer is the most commonly diagnosed cancer in 23 countries and the leading cause of death in 36 countries, the majority of which are developing countries and middle-income countries such as sub-Saharan Africa, Melanesia, South America and Southeast Asia. In particular, the highest regional morbidity and mortality rates are in sub-Saharan Africa, whereas in North America, New Zealand and Australia the incidence rates are 7 to 10 times lower. Research by Gakidou E et al., 2008 showed that only about 20% of women in less developed regions were ever screened for cervical cancer compared with more than 60% in more developed regions. In developed countries around the world, cervical cancer screening is done on a large scale and completely free of charge. All of these help reduce the incidence and transmission of cervical cancer effectively.

Regarding the role of health facilities from local to central, there should be propaganda to help raise awareness about cervical cancer and the role of screening and vaccination. In addition, it is necessary to build a consistent information system including statistics on cervical cancer in Vietnamese women of all ages and professions, towards more effective control and research on the root cause of this cancer.

Background

Background in the world

According to WHO and the International Agency for Research on Cancer (IARC) in 2020, there will be about 604,000 new cases of cervical cancer worldwide and 342,000 deaths from cervical cancer. More than 90% of these cases are reported in developing countries. New cervical cancer cases found in developed countries are 83,000 and in less developed countries 445,000. Among WHO's six regional offices, the highest number of new cases were reported in Southeast Asia (175,000 cases), Western Pacific (94,000 cases), Africa Region (92,000 cases), the Americas (83,000 cases), the European Region (67,000 cases) and the Eastern Mediterranean (15,000 cases). The three countries with the highest number of new cases are India (123,000), China (62,000) and the United States (13,000) (Ferlay J et al., 2019).

According to research by Nguyen Trung Kien (2021), the new incidence of cervical cancer is about 17/100,000 women in less developed countries, while this rate is about 10/100,000 women in developed countries. High

incidence rates of cervical cancer are reported in Africa at more than 40/100,000 women and mortality has at times approached 40/100,000. The incidence of cervical cancer is quite high in Caribbean countries (10 North and South American countries) (Vesna Kesic et al., 2012), South Central Asia (about 20/100,000 women), the lowest in countries in Northern, Southern and Western Europe, East Asia, North Africa, North America, Western Asia, New Zealand and Australia (5-9/100,000 women).

In sub-Saharan countries, there are about 34.8/100,000 new cases of cervical cancer and 22.5/100,000 female deaths each year; In North America, 6.6/100,000 women are newly diagnosed with cervical cancer each year and 2.2/100,000 women die; In the United States, the incidence was 9.6/100,000 women for the period 1996-2000, the 5-year survival rate of cervical cancer patients after 5 years was 72%. The trend of cervical cancer in the last 40 years, the incidence of cervical cancer has been significantly reduced in all developed countries due to the implementation of the screening program. In developing countries, cervical cancer incidence has stabilized or increased, but without an active intervention program, cervical cancer rates will increase by 25% over the next 10 years.

Background in Vietnam

So far, studies on the incidence and mortality from cervical cancer in Vietnam are very limited. The Cancer Control Program has conducted research to document cervical cancer in several provinces/cities. Cervical cancer registries reported by K hospital show an estimated crude incidence of cervical cancer of 13.1/100,000 women in 2000 and 12.7/100,000 women in 2010. Age-normalized rates was 17.3/100,000 women in 2000 and 13.6/100,000 women in 2010. The incidence of cervical cancer varies between regions and provinces. This rate is highest in Ho Chi Minh City (19.7/100,000 women in the period 2009-2010), Can Tho City (17.7/100,000 women in 2008-2009), in Ha Noi (10.5/100,000 women in the period 2004-2008), in Hai Phong (8.3/100,000 women in 2008). The lowest rates are in Thai Nguyen Province (4.1/100,000 women in 2006-2010) and Thua Thien-Hue Province (5.8/100,000 women in 2008) (WHO/ICO, 2011).

Vietnam has about 30.77 million women aged 15 years and older at risk of developing cervical cancer and this poses a major public health problem for the country. Current estimates indicate that 5,174 women are diagnosed with cervical cancer each year and 2,472 die from the disease, with an age-standardized incidence estimate of 11.5/100,000 women. However, these figures are modeled based on data obtained from a number of cancer treatment centers and may not be a true reflection of the situation in the country. Cancer registration reports made in two big cities, Hanoi and Ho Chi Minh City, published nearly 15 years ago show a significant variation in the incidence of cervical cancer by region. The age-standardized incidence in Hanoi is only 6.5/100,000, in stark contrast to the high prevalence in Ho Chi Minh City (26/100,000). No validated data on cervical cancer incidence and mortality have been published from population-based cancer registries recently. To develop a public health strategy for cervical cancer prevention and monitor its impact, it is essential to have quality data on disease burden and population trends in morbidity and mortality. Data related to the survival of people with cervical cancer after treatment is an important indicator of the quality and effectiveness of treatment services (Nguyen Trung Kien, 2021).

According to a study by Hanoi K Hospital, the rate of cervical cancer is different in different regions (Pham Hoang Anh, 1995). In Can Tho, the age-standardized cervical cancer rate is 20.8/100,000, in Hue it is 7.4/100,000, in Hanoi it is 7.5/100,000 and tends to increase in recent years (15). Some screening studies in the community in the 1990s by cytology (TBH) showed that the average rate of UTI in the North was 3.51% according to Nguyen Vuong (2000, 2007) and 3.03% according to Nguyen Vuong (2000, 2007) Ngo Thu Thoa (2001). The rate of invasive cancer in the North ranges from 0.029% (Nguyen Van Tuyen, 2008) to 0.037% (Nguyen Vuong, 2000), in the South it is 2.36% (Trang Trung Truc, 2007), the rate of cervical cancer is 2.36%. The age standard is 26.8/100,000 women.

Author Trinh Quang Dien studied screening for cervical cancer and cervical cancer in some communities in the North and Can Tho province from 1992 to 1999 and showed that the lowest proportion of cervical cancer at 1.4%, the highest at 4.33%. The lowest invasive cancer rate was 0.02%, the highest was 0.22%, the average was 0.04%.

A study at Hanoi K Hospital by Dang Thi Phuong Loan (2000), showed that the rate of cervical cancer increased gradually with age, the highest in the 40-49 age group.

According to the Department of Maternal and Child Health (Ministry of Health), as of 2021, only 28% of Vietnamese women participate in cervical cancer screening. This number is relatively low. For ethnic minority women in Vietnam, records of cervical cancer incidence, mortality, as well as participation in screening and vaccination visits are extremely meager official compilations. However, according to research trends from foreign works, the percentage of women from minority groups participating in screening is always low compared to women of other groups (Downs et al., 2008, Miranda et al., 2012), leading to The incidence and mortality from cervical cancer is much higher in this group than in non-ethnic women. A study by the US National Cancer Institute (2014) on cervical cancer mortality among black women and other races confirmed this. Research conducted in Western countries also shows that ethnic minority women are less likely to access cancer screening services and they face more barriers than others due to: customs, values and traditional beliefs. Therefore, the implementation of outreach strategies, community education, individual-oriented approaches and culturally appropriate interventions adopted by many countries to increase the prevalence of reception of screening in ethnic minority women (Legler et al., 2002; Masi et al., 2007; Han et al., 2009; Han et al., 2011). This is also a remarkable suggestion for the Vietnamese government in its efforts to promote ethnic minority women to participate in cervical cancer screening and vaccination.

Methods

Prior to conducting the interviews, the study prepared an open-ended questionnaire and scenarios based on the topic of barriers and motivations for cervical cancer screening in ethnic minority women in Vietnam. First, the study contacted leaders of 7 northern midland and mountainous provinces (including Ha Giang, Cao Bang, Lao Cai, Lai Chau, Dien Bien, Son La, Hoa Binh) for assistance in finding information and contact. The study exposed 200 women from ethnic minority communities with different classification criteria (ethnicity, age, education level and financial status). After receiving the consent of 155 people to participate, the research was conducted to arrange face-to-face interviews in groups, prioritizing convenience in terms of time and space (subject groups in the same village or in the vicinity). A total of 37 interviews were conducted with the help of two researchers for transcripts and audio recording. On average, each interview lasted from 30 to 60 minutes. In addition, the study also conducted in-depth interviews with 12 health workers (mainly female nurses) in the village or group interviews to learn more about the ability of Vietnamese ethnic minority women to access cancer screening services.

Descriptive statistics of the study sample are shown in Table 3.1.

Table 3.1. Demographics of interviewees

Characteristics	**Number**	**Ratio**
Ethnic		
Tay	33	21%
Muong	36	23%
Thai	28	18%
H'mong	26	17%
Others	33	21%
Total	155	100%

Characteristics	**Number**	**Ratio**
Family income ($/month)		
<0.3$	50	32%
[0.3$; 0.5$)	38	25%
[0.5$; 0.7$)	33	21%
≥ 0.7$	34	22%
Total	155	100%
Number of screening		

Age		
[20,30)	28	18%
[30;40)	54	35%
[40;50)	42	27%
Over 50	31	20%
Total	155	100%
Education		
Bachelor	17	11%
High school	37	24%
Junior High school	50	32%
Others	51	33%
Total	155	100%

0	70	45%
1	33	21%
2	27	18%
> 2	20	13%
Periodic	5	3%
Total	155	100%
Marital status		
Single	42	27%
Married	113	73%
Total	155	100%

Source: Research interview

Because this is a study on cervical cancer screening, women aged 21 and older were selected because these are the subjects who already have independence and the ability to self-study and take the initiative in the gynecological examination. Specifically, the largest number of participants were women from the age group of 30 to 40 years old (35%), and from 40 to 50 years old (27%). The number of women under 30 years old accounts for the lowest percentage (about 18%). In terms of education level, the majority of women in the survey have a lower secondary education (65%), only 11% have a bachelor's degree. This ratio shows that ethnic minority women's ability to access knowledge is limited. Many people had to stop studying early to earn a living and support their families. This can prevent women from receiving essential information about reproductive health and cervical cancer problems. Regarding marital status, the majority of women interviewed are married (73%) because they have a lot of life experiences and are likely to have many opinions about cervical cancer screening and more comfortable expressing opinions about reproductive health. In terms of economic status, most of the household income of women interviewed is less than $0.30/month (accounting for 32%). This reflects the relatively difficult and lackluster life of ethnic households living in the northern midlands and mountainous areas of Vietnam.

Results

Awareness of Cervical cancer

The uptake of screening and treatment of the disease depends greatly on public awareness about cervical cancer and the locations of screening services. Low awareness of screening programs was identified by some studies as a significant impediment to the uptake of cervical cancer screening (Bukirwa et al, 2015; Binka et al., 2019). The majority of ethnic minority women, according to the results of the interviews, do not have access to information about cervical cancer, so they are not adequately informed about the symptoms, dangers, and necessary preventive measures. More than 47% (73 women) of the 155 women interviewed hold false beliefs about cervical cancer. Some people indicated that they were unaware of any cervical cancer screening services since they had not sought out information about the disease. Some people's perceptions about this illness include things like "*only affects elderly women," "cannot be treated," "cannot be prevented*," etc.

"*I've heard about the disease on the radio, but I haven't heard about screening, so I haven't tested,"* (Woman who has never undergone screening).

"*I didn't know that having sex with someone causes cervical cancer; I was assuming it may be an illness like the most common ailment.*" (Woman who has never undergone screening).

"*I have never visited a doctor because I believe I am in good health. I believe that the only time I can receive a proper diagnosis and require medical care is if there is pain or other unusual symptoms."* (Woman who has never undergone screening).

"*My sister got cervical cancer; we took her to an oncology facility, but she passed away. Cervical cancer is an incurable disease. This is a sentence to death*." (Woman who has never undergone screening).

Even some individuals who have undergone screening for cervical cancer may not be completely informed about this condition. They believe that having unhealthy sex makes a person more likely to develop cervical cancer, which is genetic.

" *Cervical cancer in young women is inherited from previous generations*." (Woman who had screened once).

"*Only grandmothers and mothers like me should be concerned about those issues. Since they are still young, I don't take my children to the doctor until it is absolutely essential*." (Woman who had screened once).

"*Cervical cancer can be cured, according to what I've heard. It can be treated by just grinding it and drinking it*." (Woman who had screened twice)

There seems to be a lot of speculation regarding what happens during screening due to the lack of knowledge about the screening process. The idea that medical professionals were taking bits of flesh from patients and occasionally the entire uterus was one of the myths and misconceptions that kept women from screening.

Some of them are informed that during the examination process, the womb is removed and set aside. Others claim that they sliced off some flesh. (Woman who had screened once)

"*The issue a certain woman had, it terrified me too much, her womb was tampered with after she completed the screening until she was operated on*" (Woman who had never screened).

Some of the myths were known to the nurses. Furthermore, they mentioned patient rumors.

"*People think that getting a chunk of flesh removed from the privates is how cancer is screened."* (Nurse).

"*I know of a lady who was tested, and she said that for a month after the checkup, she continued to have an odd discharge*." (Woman who had never screened).

The remaining 34 women (of whom 21 had at least once conducted a cervical cancer screening) all had some awareness of cervical cancer. They were aware of their elevated risk of contracting this disease. They listed the following two factors as ones that raised their likelihood of developing cervical cancer: 1) They were infected, indicating that they had decreased immunity and were more susceptible to infection; and 2) They were still engaged in sexual activity, suggesting that they could get the illness through sexual contact. These women, including those who had never undergone screening, had a fundamental understanding of cervical cancer; they knew that it could be prevented and treated.

"*I can acquire it because maybe my immunity is low, but even someone who doesn't have HIV may get it. Maybe my odds are higher than someone who doesn't have HIV*" (Woman who had screened once).

"*Screening for cervical cancer makes sense because I've heard that it's one of the sexually transmitted diseases... It gets simpler to treat it if you test early enough. They provide advice on what precautions you need to take if they determine that you don't have it.*" (Woman who had never screened three times).

All group members understood the importance of screening early, but some women were still waiting for a warning sign, such as an irregular vaginal discharge, to prompt the screening. Even those that underwent screening did not recognize they were in danger until they noticed a warning sign.

"I actually haven't seen any symptoms that would indicate I might have it" (Woman who had never screened).

"I went for a checkup because I had begun to exhibit signs." (Woman who had screened once).

It is clear that women in ethnic minority populations still lack a proper and comprehensive understanding of cervical cancer. One of the causes is the lack of informational resources, which makes it difficult for people to learn about this disease. This is also the reason that some myths about the disease and the screening process persist and are held by women of ethnic minorities. Even though many of these women are aware of the causes, signs, and prevention of cervical cancer, they still do not participate in screenings or look for measures to ward off the illness. The two main factors cited, namely financial and medical barriers, were found as the study looked more into the factors preventing ethnic minority women from participating in cervical cancer screening.

Financial barriers

One of the things that prevents women from getting screened for cervical cancer is low income. Some say the lack of income prevents them from accessing the media. Women and their families bear a severe financial burden due to the high cost of cervical cancer treatment. Depending on where the service is obtained, some women reported spending close to USD 1000 or more for screening, surgery, or other forms of treatment when their family's monthly income is just about USD 0.3. Some women claimed that the costs of the screening and treatment actually put a financial strain on their families as a whole. This is due to the fact that several partners and their spouses were primarily low-income farmers. They now face financial difficulties as a result, delaying the screening process. The absence of health insurance, prohibitive consultation fees, and other medical expenses were also discussed in terms of finance.

"I'm not working right now. I would have covered the expense of the test if I had a job. Some women were unable to go for screening because they lacked the funds, transportation, or health insurance." (Women had never screened).

"I wanted to be screened, but I put it off until I had insurance."(Women were once screened.)

"*No treatment is possible without cost. We need money to enter the hospital.*" (Women had never screened).

Some women claimed that the absence of government funding for screening and treatment programs was a barrier to the use of cervical cancer screening and treatment. Some claimed that despite being aware of the disease, they were unable to pay for screening and treatment.

" *Some of us are unable to cover the expense. Many of us will participate if the screening and some of the treatments are free*." (Women have been frequently tested)

Individuals sometimes note indirect costs and opportunity costs in addition to the stress of household expenses and money. Indirect costs of screening include the hassle of traveling to the location, trouble making appointments, waiting periods, and the possibility of other important health exams for many women, especially those who are currently employed.

"*I have to get blood and urine tests done when I visit the hospital for screening. I therefore hesitate to go due to the additional cost."* (Women had screened once)

After learning their test results were negative, some women claimed they stopped going to the screening because they felt that continuing to do so would be a waste of money. One woman advocated for making screening completely free to remove the financial barrier, while other women felt that a 50% discount would be reasonable and encourage people to go. They believed that a drop in screening costs would lessen the barrier preventing women from using a screening and that it was unrealistic to expect the government to carry the entire financial

burden of the service. Increasing accessibility to screening locations, including breast and cervical cancer screening in routine physicals, lowering health insurance premiums for screeners, and cutting costs are some other suggestions.

"*We take a step back because of money. If we received a treatment discount, we would be overjoyed.*" (Women had screened once).

On the other hand, several of the participants believed that it might ultimately be detrimental to them if they were overly preoccupied with money as opposed to placing a high premium on their health. Additionally, some people hold the opinion that men made decisions even when it came to women's health. As a result, several people responded that they required their partners' consent before undergoing the illness test.

" *"Traditionally, other men should never touch a married woman's private parts. So we women must first secure our husband's consent."* (Women have undergone a third screening).

Women's reliance on male partners for a variety of assistance, including financial support, was related to the aforementioned. Some respondents who had never undergone screening stated that they needed their spouses' financial help in order to do so. They did this because they believed their spouses should bear the expense of screening and care. Given this, some women still rely on their husbands for financial support even when they could afford to pay for screening and treatment. As a result, the women's conduct to seek health gets challenged if the males put off or fail to provide for them financially.

"*Screening costs money, and the only person who can give me that type of financial assistance is my spouse*." (Woman who has never undergone screening).

It is clear that the biggest barrier keeping ethnic minority women from taking care of themselves is their inability to pay for screening and treatment. Some of the difficulties stopping individuals from participating in cervical cancer screening include difficulty obtaining health insurance, paying extra for additional tests, and not receiving a screening subsidy.

Medical barriers

Medical issues include the insufficient supply of medical facilities and services, the lack of appropriate tools, the lengthy screening wait times, the lack of privacy, the inadequate uterine cancer knowledge of medical staff, and the attitudes of healthcare professionals. Barriers to the uptake of screening and treatment for the condition among women in the study communities include distance from the testing site, a lack of nearby services, and inappropriate information about the availability of screening services. Some claimed that because they came from a very rural place, there was no screening and treatment center in their community. They indicated that it was challenging for them to travel to health facilities for screening and treatment because of the distance. Some respondents stated that the uptake of screening and treatment would increase if more facilities could be created nearby where they resided.

"*We are from a rural location without any medical services. Before we can come and film, we must travel thus far. The government may encourage the use of cervical cancer screening and treatment in our areas by building additional health facilities*." (Woman who had never screened).

"*I had a long-standing urge for cervical cancer screening, but I was unsure of where I could access screening services*" (Woman who had never screened).

"*I worry that, at 55, I'm too old for a cervical cancer test*." (Woman who had never screened).

Additionally, some persons who had undergone screening eventually discontinued routine screening due to the lengthy process, perceived invasion of privacy, attitudes of the medical staff, their ignorance of treatment standards, or their suspicion of a staff misdiagnosis.

"I may decline to do the test if there is no privacy in the lab, if the staff is unfriendly, or if they don't explain it better to me." (Woman who hadn't ever been screened)

Another major obstacle to continuing cervical screening was the lengthy wait times. Some of the women didn't get screened because they visited the clinic when they had other commitments at home and at work, although the clinic's screening wait time seemed excessive.

"There are occasions when you must arrive fast for work yet must wait a long time for screening. Sometimes the line is long, but you just got off duty, so you keep pushing it off, but time is still an issue." (Woman who had undergone screening once)

Nurses who claim that many patients have given up on screening because they lack the patience to wait for their turn to see the doctor reaffirm this. "They must receive additional services on that day. When someone has counseling and blood work done at the same time, they occasionally feel that the wait is too long and postpone until another day." (Nurse)

In this regard, the nurses mentioned a shortage of medical equipment (screening agents, screening beds, and lighting, etc.) and low-quality health care as reasons for the lengthy wait times.

"A significant issue was the lack of room for cervical cancer screening. There were few screening rooms, and they were overrun by SRH services." (Nurse).

"I believe the equipment, so they are probably rescheduled because, say, there aren't many beds and the women have to wait, and I believe some of them occasionally say, "I can't wait this much longer." (Nurse).

Some people express reluctance because they feel uncomfortable with the loss of privacy, particularly when their intimate parts are exposed during the treatment. According to the respondents, if they were unsure that the medical staff would keep their information private, they might not go for screening.

"*Consider a woman who is not yet married, who has never given birth, who is very worried about her privacy, who might be bashful,... Is there an alternative to screening that doesn't involve disclosing a private area of the body*?" (Woman who had screened twice).

"Can you conduct blood tests or use other screening techniques, such as ultrasound?" (Woman who had never screened).

Some of the respondents expressed concern about potential misdiagnosis by the medical staff, which they feared might lead to unneeded stress or deterioration of their health. Their worries stemmed from prior instances in which they had gone to screen or receive treatment for various diseases and received misleading results. One lady who had never undergone cervical cancer screening said that because her health problem had once been misdiagnosed, she would no longer participate in any screening program.

"*I've promised myself I won't participate in any screening programs since when one of my kids got sick and we were all requested to get checked, I got a false diagnosis of sickle cell disease. I therefore made the decision not to attend the screening. Since the outcomes were frightening whenever I went, even though they were untrue*." (Woman who had never screened).

Some women claim that when they went for screening, the medical professionals did not provide them with enough counseling and direction. The medical personnel did not provide extensive and frequent information regarding the disease, related services, or the significance of these services; they merely provided brief screening results and advised follow-up appointments. Some women who had previously undergone screening were unaware of the need for and frequency of further screening. Those that followed the plan believed they had not been provided a compelling argument for why they needed to get screened again; they had simply gone through the motions as part of the care package. Patients get confused about their own health status, the course of their treatment, and their psychological stability as a result. They declined to register for the screening service since they were unable to earn confidence and credibility.

"*The health professionals simply advised us that women should visit and get checked, but they did not go into much detail regarding this malignancy*" (Woman who had screened once).

"*I have my health tested, but no one has ever suggested that I might have the disease, and occasionally I wonder if I shouldn't go back again*." (Woman who had screened twice).

"*I have no idea how cervical cancer is treated; perhaps they give pills, perhaps they inject them, perhaps they just put them there. They informed me when I went for the checkup that if it is discovered that you have it, you will be given some pills, but I am unfamiliar with those medications and how they are used to treat it."* (Woman who had screened tiwwe).

Some respondents expressed concern about the unfriendly demeanor of the healthcare professionals. They clarified that a deterrent to their use of the screening service is some health care workers' hostile demeanor.

"*I'm not sure whether I'll go there for screening if the healthcare providers are not friendly."* (Woman who had never screened).

The twelve nurses who were interviewed concurred that they faced staffing issues, including low staff numbers, employees who lacked sufficient training, and staff who had a negative attitude toward cervical screening. The fact that there was inadequate personnel for cervical screening is acknowledged by all service providers. This was primarily brought on by two problems: first, the clinic's staff was under trained in cancer screening, which led to a job overload in cervical screening because they also provided other clinic-related medical services. In addition to having a small staff, one service provider claimed that given the nature of the work, several employees with expertise in cervical screening were not motivated to take the job.

"*There are few health workers who have received training in cervical screening, however there are others who have received training but are uninterested due to the nature of their jobs because not all health workers are knowledgeable about this malignancy*." (Nurse).

In conclusion, the study's findings indicate that there are still significant gaps in Vietnam's medical infrastructure for screening cervical cancer in women of ethnic minorities. Many women lack access to services or live too far away to get medical attention. Additionally, non-medical and non-medical equipment are not adequately and appropriately provided in ethnic minority areas, which has a negative impact on the effectiveness of medical examinations. Female gynecological patients' requirements for privacy guarantee have not been taken into consideration. In addition, medical staff in facilities serving ethnic minority communities lack the knowledge, abilities, and attitudes necessary to provide advice on women's cervical cancer prevention, screening, and treatment.

Motivations

The topics of motivation at the individual, family, and communal levels were covered. Participants think that ultimately women should be encouraged to attend screening clinics for themselves and other women. They also think that more women would go to screenings if they placed a higher priority on their own bodies and health. A few women claimed that they made the choice to get screened for cervical cancer on their own, without any other influence. If the results were favorable, they believed they were improving the prospects of recovery.

"*Women ought to be willing to go first. No one prevents her from going*." (Women have undergone periodic screening).

"*If you have an illness when you get screened, they will start treating you as soon as possible and cure you. Additionally, they will tell you more about prevention if they discover that you do not have cancer."* (Women had screened three times).

The participants stated that family support and permission to attend screening clinics were crucial, and they thought that if their family members approved of or encouraged them to go for checkups, more women would attend. Many people stated that their friends and family encouraged and counseled them to have a cervical cancer

test. Many mothers claim that they start worrying about their children's sexual health issues at a young age and that they take them for the essential screenings when they reach adulthood.

"*My friend had repeatedly urged me to get screened for cervical cancer*." (Women have been screened once).

"*My daughter has cervical cancer; before we sought the advice of several hospitals, she had no idea that it was cancer and was seriously weighing about 20 kg, but now that she has received treatment, she is doing well with more than 55 kg and is healthy*." (Women had screened four times).

Women who had friends or family members who had had cancer screenings or who had a history of cervical cancer were encouraged to use screening services. Others claimed that after hearing about the risks and hazards of cervical cancer from their own loved ones, they made the decision to join up for routine screening services.

"*I considered being screened for cervical cancer after learning that my mother had passed away from the disease, but I held off since I lacked insurance."* (Women had never screened).

"*I came because I had a grand sister who had cervical cancer*," (Women had screened once).

In terms of the community, respondents believed that if women's groups helped to promote more openness among women, it would be beneficial since learning from others would encourage them to take part in screening programs:

"*We used to be restricted to our house. We remained silent to one another. We were able to communicate difficulties with one another after creating groups, which gave us more confidence to go for screening*." (Women had screened twice).

"*Going inside [to receive a gynecological examination] used to make us feel ashamed. But now things are different; in our own group, we make plans for ourselves, manage our time, set up classes, and request health screening camps*." (Women had screened once.)

"*In order to increase the number of women who visit cervical cancer screening clinics, a competitive environment regarding screening practices should be established amongst nearby communities*." (Nurse)

Women from ethnic minorities are also encouraged to participate in cervical cancer screening through the care of the government and healthcare providers. Government marketing through various means, such as mobile phones, radio and television broadcasts, and local leaders, served as a motivator for using screening services. Additionally helpful were private healthcare providers.

"*I got a text message from a short messaging service promoting cervical cancer screening. Nurses educate us about cervical cancer screening when we visit for antenatal care or for the health of our children."* (Women had screened once)

In conclusion, the study's findings indicate that people who value themselves and care about their personal health will actively explore and take part in cervical cancer screening programs. They are also encouraged to undergo screening by their friends and family members' interest in and engagement in the process. Reminders and encouragement from the authorities and medical professionals are also helpful in promoting the uptake of cervical cancer screening among ethnic minority women. The interview findings will be discussed and utilized to make recommendations for raising ethnic minority women's participation in cervical cancer screening.

Conclusion & Discussion

Based on the research results obtained from section 4 of this study, the main barriers that prevent ethnic minority women from participating in cervical cancer examination and treatment include: , Economic/Financial Barriers and Health Barriers. In the following, the study will discuss these barriers

For women belonging to ethnic minorities in Vietnam, they often live in mountainous areas, or remote areas, with difficulty in mobility and lack of basic means of living such as electricity and water, hospital, school, phone signal,

internet, etc. Therefore, accessing information about cervical cancer in these subjects is extremely difficult. When symptoms appear, instead of going to medical facilities, according to outdated customs, they believe that they are haunted and look to spiritual factors, invite the sorcerer to do magic, ask the god for help heal yourself. Research by Charity Binka et al (2019) on barriers to cervical cancer treatment for rural Ghanaian women has shown that individual factors and social environment strongly influence the decision to participate. Screening and treatment of cervical cancer in women in this country. Ethnic minority women themselves have a certain shyness, because of the conservative view of life, they are not ready to be examined for sensitive parts such as the uterus. Accompanied by fear and anxiety about the risk of death from the disease. This is also one of the factors leading to their reluctance to go to the doctor and get treatment for cervical cancer. Expanding in their social relationships and living environment, where the education level is often not high and gender stereotypes are placed heavily on women. In that environment, a dangerous gynecological disease like cervical cancer is believed to be the result of an unhealthy lifestyle, promiscuity, or divine punishment on a woman for her sins. The social prejudices formed from the lack of medical knowledge have put women in a dilemma, embarrassed and dared not to intervene when having symptoms of cervical cancer. In addition, belief in traditional medicine and folk remedies makes ethnic minority women lack faith in the treatment capabilities of modern medicine, but instead use medicinal plants available in medicine habitat.

The cost of cancer treatment has never been easy to pay, for cervical cancer, the cost of domestic treatment depends on the stage of the disease and the treatment method, which ranges from 3-18 million VND. Not to mention the complications that come with and the cost of chemotherapy and radiotherapy per day. For ethnic minority women, who live mainly on agriculture, building the above expenses is too much for them. Besides, gender discrimination still exists deeply among the minimum ethnic groups, women are highly dependent on fathers and husbands in the family. They could not be financially eligible or do not want to explore screening such as cervical cancer treatment without the support of their husbands because in part they see this as the responsibility of the breadwinner of the family (Benka et al., 2019). Thus, if men are delayed or do not financially support them, it becomes a relation to women's health-seeking behavior. This is controversial, because in some cases the woman is fully qualified for medical examination but still waiting for the financial support of her husband to go for medical examination and treatment. From there, there must be propaganda to raise women's sense of self-protection, to protect their own fertility, not to depend on anyone. In addition, due to the lack of banks, in developing countries like Vietnam, it is not possible to provide free cervical cancer screening, vaccination and therapy services. Therefore, many people know about the existence of this disease but do not have the conditions to discover it.

In the main residence areas of ethnic minorities, there is a lack of many discovery facilities without disease, making the terrain dangerous again, and traffic is limited. The good doctors and the modern medical examination and treatment equipment are also very strange, even the private examination areas are uncertain. Therefore, when wondering about dangerous diseases such as cervical cancer, if women want to be examined and treated effectively, they must move to localities where medical conditions are better. And these locations are often quite far from their residences, increasing waiting and treatment times and incurring additional costs. According to Jean Pierre Gafaranga (2022) when studying the population of women in Rwanda - an underdeveloped country in Africa, it was found that the lack of availability or inability to access screening and treatment facilities has also emerged as a barrier to screening and treatment of disease in women in the research community. Some respondents reported that there are no ready and treated screening facilities in their vicinity because they are from a relatively remote area. They explained that the long distance to economic facilities made it difficult for them to discover and treat. Some respondents asked whether more screening and treatment facilities could be built closer to where they live, which would improve reception of screening and treatment. In addition, the lack of gynecological specialists in women's living areas is at least a barrier, sometimes the medical staff is not enough to meet the medical examination and treatment needs of women.

In addition to the main barriers Preventing minimal women's access to cervical cancer screening and treatment services, the motivations to promote screening and treatment are also focused on pushing to give women the minimum amount of chance for a healthier life and health. Those motivations come from both external factors including government policies, relatives and friends and even the minimal women themselves. Currently facing an increasing rate of cervical cancer infections and disease-related deaths, WHO has established World Cancer

Day (February 4) In order to raise awareness and propagate the role of play of early detection and preventive measures in the therapeutic work and prevention of cancer recurrence. For cervical cancer WHO developed a “Global Strategy” to Accelerate Cervical Cancer Elimination, launched on November 17, 2020, setting out three important columns: vaccination, readiness screening and treatment. In Vietnam, the Ministry of Health has cooperated with the Center for Disease Control to organize communication events "Joining hands to prevent cervical cancer" in major provinces and cities across the country, starting from Ho Chi Minh City. These are very active efforts towards raising awareness and completely eliminating cervical cancer. In addition to the role of health organizations, the government and each person in the community also need to join hands in propagating and persuading relatives and acquaintances to actively participate in cervical cancer screening, to avoid leading to unnecessary losses. For women themselves, who are directly affected by cervical cancer, it is necessary to have a deep awareness of the danger of the disease as well as attach importance to their own health. Actively participating in periodic screening to prevent and improve treatment effectiveness in case of infection is essential.

Recommendations

From the harm to the cause, the minimum number of women with cervical cancer screening and treatment has not yet been paid attention, leading to a high mortality rate from this disease in women. The more the development gap between ethnic groups is accelerated, hindering the nation's opportunities to protect health, the study would like to make some recommendations as follows:

- Raise public awareness and especially women with minimum parameters through specific policies of the State such as: setting up inspection teams, organizing free screening and counseling for women at ethnic groups in deep-lying and remote areas; organize practical classes to learn about cervical cancer for the compatriots, propagate the role of scientific cure; training to raise awareness on self-health protection for minority women, eliminating superstitious and sexist behaviors.

- The State should promote investment in medical facilities, medical examination conditions as well as medical staff at remote medical examination and treatment points. Besides actively connecting, asking for support from world health organizations and NGOs Advertise free HPV injections, screenings and therapies for women with cervical cancer . There should be centralized medical screening points according to regions that are convenient for women with a small number of investigations and treatments without spending too much time and money.

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