

## Knowledge And Awareness On Cervical Cancer Screening Services Among Mothers attending Maternal Child Health Clinics In Mwala Subcounty Of Machakos County, Kenya

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**ABSTRACT:** Cervical cancer is a disease that is peculiar to women, and has adverse effect on their sexual and reproductive health as well as their general condition and family life. Family type may be monogamy, polygamy or polyandry. Cervical cancer mortality rates have fallen in much of the developed world during the past 30 years, largely due to screening and treatment programmes. During the same time, however, rates in most developing countries have risen or remain unchanged, often due to limited access to health services, lack of awareness and absence of screening and treatment programmes. A descriptive cross sectional study design was used involving both qualitative and quantitative methods of data collection. A total number of 117 MCH mothers were interviewed on an exit interview that was systematically randomly selected to the even numbered mothers on exit. Data were cleaned, coded and entered into Statistical Package for Social Sciences (SPSS) for analysis. Data was analyzed using descriptive statistics and presented in frequency tables. Qualitative descriptive data were summarized and reported.

The mothers interviewed ranged from 10 – 59 years. 48.7% 20 - 29 years were between 20 had the highest number of birth and the lowest was between 40 – 49 years with 12%. More than half of the MCH mothers (71.8%) were married whereas 24.8 % were single. On deliveries, 93% of the participants had deliveries between 0 – 9 children and the lowest 0.9% between 10-19 children. On knowledge on Cervical Cancer, most of the MCH mothers reported to have (63.3% ) where on the other hand 65.8% were not aware of preventive measures of Cervical Cancer which indicated that they were not very much knowledgeable on cervical cancer. The community on the other hand had little awareness on cervical cancer screening and only 5.8% of the entire MCH mother interviewed had knowledge on the preventive measures of cervical cancer.

**Key words:** Community, knowledge, awareness, cancer, Screening, Mwala

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### I. Introduction

A Women's Reproductive health needs are very important to the health of the family as women have important roles to play in their families. They need to be healthy in order to function optimally. Thus, women's health must be seen as a holistic concept that includes all biopsychosocial aspects of the women's being.<sup>1</sup> A woman is healthy when she is free from organic disorders, diseases and deficiencies that interfere with sexual and reproductive functions.<sup>2</sup> Cervical cancer is a disease that is peculiar to women, and has adverse effect on their sexual and reproductive health as well as their general condition and family life. Family type may be monogamy, polygamy or polyandry.<sup>3</sup>

Cervical cancer mortality rates have fallen in much of the developed world during the past 30 years, largely due to screening and treatment programmes. During the same time, however, rates in most developing countries have risen or remain unchanged, often due to limited access to health services, lack of awareness and absence of screening and treatment programmes. Rural and poorer women living in low- and middle-income countries, as well as poorer women living in high-income countries are at an increased risk of invasive cervical cancer, because they often do not have access to crucial prevention, screening and treatment services.<sup>4</sup>

In fact, all women are at risk of cervical cancer. However, individual risk factors increase this factor. Majority of these risk factors are closely related to unfavorable health behaviors. But most of the women are unaware that these unfavorable ways of behavior are directly associated with cervical cancers. The factors increasing the risk for cervical cancer are Coitus at an early age (< 16 years of age), polygamy, Sexual

intercourse with a polygamist Not using contraceptive pills for more than five years ,Human Papilloma Virus (HPV), Smoking, Other Untreated Vaginal Infections, Immunosuppression, The First Menstruation Age, Genetic, Socio-Economic Status, The Numbers of Pregnancy and Fertility, Viral Infections, Age, Race, Failing to Attend Gynecologic Examinations Regularly, Diet and Vitamins, Poor Genital Hygiene, Prolonged Time Oral Contraceptive Use.<sup>5</sup>

Almost all women may be infected with HPV in their lifetime, but in most cases, HPV infections will be cleared by the body's immune response without treatment.<sup>5</sup> HPV infections may lead to cervical cancer and may be completely asymptomatic in the early stage; women can live in a pre-cancerous state for 10–15 years without any symptoms.<sup>6</sup>

Human papillomavirus (HPV) is the most common viral infection of the reproductive tract. Most sexually active women and men will be infected at some point in their lives and some may be repeatedly infected. The peak time for acquiring infection for both women and men is shortly after becoming sexually active. HPV is sexually transmitted, but penetrative sex is not required for transmission. Skin-to-skin genital contact is a well-recognized mode of transmission. There are many types of HPV, and many do not cause problems. HPV infections usually clear up without any intervention within a few months after acquisition, and about 90% clear within 2 years. A small proportion of infections with certain types of HPV can persist and progress to cancer. Cervical cancer is by far the most common HPV-related disease. Nearly all cases of cervical cancer can be attributable to HPV infection.<sup>7</sup>

Fortunately, cervical cancer is a preventable and treatable disease; screening of precancerous lesions can reduce its incidence and mortality. The major screening techniques include Papanicolaou smear, visual inspection using acetic acid, and HPV tests; the latter two of which have been found to be cost-effective for low-resource countries. The World Health Organization (WHO) recommends that all women between the ages of 30 and 49 years should be screened for cervical cancer at least once.<sup>6</sup>

Africa has an estimated population of 372.2 million women aged 15 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year 99,038 women are diagnosed with cervical cancer and 60,098 die from the disease. Cervical cancer ranks as the second most frequent cancer among women in Africa.<sup>7</sup>

Kenya has a population of 13.45 million women ages 15 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year 4802 women are diagnosed with cervical cancer and 2451 die from the disease. Cervical cancer ranks as the 1st most frequent cancer among women in Kenya and the 1st most frequent cancer among women between 15 and 44 years of age. About 9.1% of women in the general population are estimated to harbor cervical HPV-16/18 infection at a given time, and 63.1% of invasive cervical cancers are attributed to HPV 16 or 18.<sup>8</sup>

In Kenya, second after cancer of breast among women of ages 18-49 years is cancer of the cervix. Close to 10.32 million women aged 15 years and above within the population are said to be at risk of contracting HPV leading to development of cervix cancer. and above It is projected that Kenya has 10.32 million women of ages 15 years and above and all are at a risk of getting HPV contagions and developing cancer of cervix (WHO, 2010).<sup>9</sup> Estimates as of current show yearly in Kenya, 2454 new incidences of cancer of cervix are registered and 1676 deaths from the disease.<sup>9</sup>

The Kenyan Government has demonstrated commitment to reducing cancer mortality, as evidenced by policies such as the National Cancer Control Strategy<sup>10</sup> and others.<sup>11</sup> Additionally, the <sup>12</sup>called for the establishment of a National Cancer Institute of Kenya (KNCI) to advise the Cabinet Secretary, collect and analyze research data, collaborate with partners, disseminate information, and support treatment facilities and training.<sup>13</sup> yet Substantive evidence relating to knowledge and awareness for Mwalasubcounty of Machakos county women attending the MCH clinics in cervical cancer screening is currently lacking. Therefore, the main aim of this study was to assess the knowledge and awareness of cervical cancer screening services among MCH women in MwalaSub County.

The low uptake for screening has been observed as a cause for illness and death. Through consistent cervix screening and timely management, mortality and morbidity resulting from the condition can be greatly achieved. Uptake of cervical cancer screening services still remain low despite efforts made by the government to incorporate screening programs in the regular patient care through the nationwide cervical cancer prevention strategy that is focusing on primary avoidance, screening and early detection and treatment.<sup>14</sup>

## **II. Materials And Methods**

### **Study Site**

Mwala subcounty is one of the 8 sub counties of Machakos county covering an Area in Sq. Km (Approx.): **1,018.00** and with a Population: **163,032**.

**Study design and methods**

This study adopted a descriptive cross sectional study design that used both quantitative and qualitative methods in order to assess the knowledge and awareness on cervical cancer screening services among MCH women in Mwala sub county of Machakos county. A total number of 117 MCH mothers were interviewed on an exit interview who were systematically randomly selected to the even numbered mothers on exit.

**Data Management**

Data were cleaned, coded and entered into Statistical Package for Social Sciences (SPSS) for analysis. Data was analyzed using descriptive statistics and presented in frequency tables. Qualitative descriptive data were summarized and reported.

**Ethics approval**

Approval was obtained from the Kampala University and Sub county Medical officer of health and health facility administrators. All information obtained was confidential and used for the sole purpose of the study. The study protocol was explained to each of the health facilities administrators, and a written consent was obtained from each prior to interview. No identifying data was collected from the participants.

**III. Results**

**Table 1: Characteristics of MCH mothers**

Variable	Frequency(n=117)	Percent
age		
10-19	14	12.0
20-29	57	48.7
30-39	30	25.6
40-49	14	12.0
50-59	1	9
<b>Marriage status</b>		
Married	84	71.8
Singles	29	24.8
Deliveries		
0-9	109	93
10-19	8	6.9
<b>Number dead</b>		
0-4	115	98.2
5-9	2	1.7
Number alive		
0-4	79	67.5
5-9	38	32.4
<b>Knowledge on cervical cancer</b>		
knowledgeable	74	63.3
Not knowledgeable	41	35.0
<b>Prevention awareness on cervical cancer</b>		
Aware	40	34.2
Not aware	77	65.8
<b>Awareness of examination to early detection cervical cancer</b>		
Aware	64	54.7
Not aware	53	45.3

*Source: Primary Data*

**COMMUNITY AWARENESS**

In the study 117 MCH mothers consented and were interviewed as they exited the hospital.

**General characteristic of MCH mothers.**

One hundred and seventeen mothers participated in the study. The mothers interviewed ranged from 10 – 59 years. 48.7% 20 - 29 years were between 20 had the highest number of birth and the lowest was between 40 – 49 years with 12%. More than half of the MCH mothers (71.8%) were married whereas 24.8 % were single. On deliveries, 93% of the participants had deliveries between 0 – 9 children and the lowest 0.9% between 10-19 children.

98.2% had of the MCH mothers reported that they had 0 – 4 dead children while 1.7% were reported having 5 – 9 die in their deliveries while most of them reported 67.5% had 0-2 children alive as shown in table above.

On knowledge on Cervical Cancer, most of the MCH mothers reported to have (63.3% ) where on the other hand 65.8% were not aware of preventive measures of Cervical Cancer which indicated that they were not very much knowledgeable on cervical cancer. Fifty four percent of the participants reported that examination can detect cervical cancer early.

These results call for creation of health promotion and disease prevention policies as well as awareness campaigns and screening programs at all levels of the health sector. Integration of screening services into already existing programs, such as family planning and reproductive health services, would be an effective strategy in an already financially and human resource challenged health sector.

#### **IV. Discussion**

##### **Community awareness on Cervical Cancer screening**

Public Awareness campaigns, either in the run up to the introduction of organized screening or designed to improve uptake of existing screening programs, need to build on the level of pre-existing knowledge. Because of the diversity of reasons for not having had a pap smear, a variety of approaches will need to be incorporated into the educational programs the results are consistent with earlier findings by Rian and colleagues. Socioeconomic groupings remains the strongest predictor of both knowledge and uptake, therefore, specific targeted information programs are required for women living in deprived.<sup>15</sup>

The community should be aware that Cervical Cancer is a type of cancer that affects the cervix that Cervical Cancer screening is a test done to check the health of the cervix and that it does not diagnose cervix cancer but aims to prevent cancer from developing. They should also be aware of the causes of cancer and those who are at risk, the early detection can prevent cancer from developing in around 75% of cases. Studies by Bingham et al recommend Regular check up usually yearly for early detection of any abnormal cells in the cervix.<sup>14</sup>

Several ACCP project evaluated the effect of educating approaches. The TAT project in Peru found that significant factors, such as the intensity of community promotion efforts, affected coverage. Among the indicators examined, women's educational sessions contributed to increasing coverage levels in both large and small health networks with static services or mobile campaigns.<sup>16</sup>

In RoiEt province in Thailand, health authorities established an official target for screening (using visual inspection with acetic acid [VIA] of 80 percent coverage with five years among women aged 30 to 45 years. Efforts to achieve the 80 percent coverage goal are co-ordinated at the district level and rely heavily on community outreach. Nurse provider teams based at the district hospitals collaborate with district health officers to organize mobile units in the primary health centre. These visits generally occur on two to five days each week, depending on the district. Village health volunteers, each assigned 6 to 12 homes in their villages, assist by informing eligible women about the days and times when mobile unit will visit the local health centre. Some health centre directors keep registry of eligible women, note whether they have been screened, and distribute letters to encourage participation. The results of these efforts were positive. In Atsamat, the focal expansion district, the project achieved nearly 60 percent of women aged 30 to 45 (10,061 eligible women). In the district after only 20 months of service overall, 25 percent of all eligible women living in Roi Et province (181,420 eligible women) had undergone screening by March 2004, only four years after the program was launched.<sup>17</sup>

In a IARC<sup>17</sup> a recent literature review confirms that women who learn or perceive that Cervical Cancer screening test is necessary or beneficial are more likely to participate in screening. Data from studies conducted in developed and developing countries about determinants of participation demonstrate that women with greater knowledge about Cervical Cancer screening are more likely to participate. On the basis of project experience, it appears that face to face contact via word of mouth or direct invitation from health care providers or satisfied clients and audio visual methods have more impact on women's participation in screening than do printed materials such as pamphlets, photo comics, posters, and brochures. Because developing materials is often a costly component of Cervical Cancer prevention program, it is important to assess the value of these materials before investing in them.

Scientific evaluation of the effects of educational interventions on coverage level is sparsely especially in developing countries. Data from developed countries are conclusive with regard to the effect of print materials, video/slide presentations, face to face contact, and combinations thereof. Data show however, that print materials do not appear to increase women's participation in Cervical Cancer screening.<sup>17</sup>

The synergistic effect of lack of resources on Cervical Cancer risk is particularly evident in sub-Saharan countries such as Kenya ,where Cervical Cancer is most common diagnosed among women and the most common cause of cancer related death.<sup>18</sup> Owing to lack of surveillance programmes, the exact incidence of Cervical Cancer in Kenya is unknown but it has been estimated at approximately 29-200 cases per 10,000 women .Historically, the large burden of disease is attributed to lack of national screening guidelines and funding for Cervical Cancer preventio.<sup>19</sup>

Most programs are not successful at achieving broad coverage. Most Cervical Cancer screening programmes in developing countries reach only a small fraction of population, usually young urban women. This is the result of a lack of knowledge and awareness of the most at risk population, as well as of the accessible and acceptable screening services. As an example, private family planning clinics in Indonesia, Kenya, Thailand and Uganda offer Cervical Cancer screening services to clients for a fee.<sup>20</sup>

The respondents in this study had ages that spread from between 10-19(12%) and 50-59% with the highest having a percentage of 48.7% (20-29) According to,<sup>21</sup> earlier age of sexual debut is risk with HPV within 5 fold more in women whose sexual debut was at 18 years of age than those whose debut was 22 years and above. In Kenya the median age of sexual debut among women aged 25-40 years is 17.6 years.<sup>22</sup> Earlier age of sexual debut implies a longer period of sexual activity and a higher likelihood of having many sexual partners.<sup>23</sup> The lowest being 9 % (59-59). 72.8% were married whereas 24.85% were singles.

About ninety three percent of the participants had 0-9 deliveries. According to,<sup>24</sup> there is risk for cervical cancer in women with more than 7 term pregnancies compared with those who had the 1-2 pregnancies. In this study this is a risk factor to the MCH mothers because most of them have many children.

About 65.8% of the MCH mothers were not aware of the preventive measures of cervical cancer an indication that a lot is required to be done only a minimal percentage of 34.2% had knowledge on cervical cancer prevention. The findings are concurring with studies by

The administrators (70%) reported that they did not sensitize the community on cervical cancer. Community awareness on cervical cancer is important as it makes the health sector available and accessible.<sup>25</sup>

### **Authors' contributions**

Lynette Muthoki J. Kiamba, Wilberforce Cholo contributed equally to this work.

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