



Audit on well-women clinic attendance and cervical screening in Mahaoya MOH Area.

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Abstract

Introduction

Cervical cancer can be successfully treated if identified early, considering its long pre-malignant phase. Sri Lanka has the lowest incidence of cervical cancer in South Asia owing to strong public health screening programmes and universal vaccination. Despite that, the participation in the screening of susceptible women is only around 50–70%, which is lesser in rural areas and the majority (70%) of Sri Lankan cervical cancer is identified at advanced stages. Pap smear is offered to all women between 35 & 45 years at multiple delivery points, free of charge.

Methodology

This audit was conducted in the Mahaoya MOH area, a rural farming community, with poor socio-economic & educational background. MOH data suggest that women in Mahaoya are exposed to sexual activities in their teen years and remain sexually active until the sixth decade. Data were extracted from an audit conducted by the same team on perimenopausal contraceptive practice among women attending the Mahaoya Base hospital, who were above 45 years.

Results

Majority (n=51, 77.3%) of the women attending the gynaecology clinic were active recipients of the services provided by the well-woman clinic (WWC). A considerable amount of perimenopausal women (n=24, 34.6%) had never undergone a Pap smear, despite being freely offered at 35 & 45 years at WWC and at gynaecology clinics in government hospitals. Only a minority (n=9, 13.6%) of the women who had regularly attended WWC but had never undergone a Pap smear. This was attributed to a poor understanding of the importance of the screening test and the fear of undergoing an invasive procedure.

Discussion and Conclusions

Despite pap smears being offered freely and widely in the Sri Lankan public health system, the utilization of cervical screening seems to be at a low rate. Certain gaps in knowledge on cervical cancer need to be filled and an effective method of knowledge transfer on Pap smear procedure is in need in the rural areas of the country.

Suggestions

Implementing opportunistic screening programmes, educating and motivating women at all possible occasions on the need for cervical screening, training health care staff to counsel and perform cervical screening, provision of infrastructure and necessary equipment for WWC and conducting mobile screening clinics more frequently can enhance the cervical screening in the community.

Keywords: Well Women Clinic, Cervical Screening, Pap smear, cervical cancer, early identification

Introduction and Background

HPV is the most common viral infection of the female genital tract. Most sexually active



women and men become infected with HPV at some point in their reproductive life. Cervical cancer is the most common HPV-related cancer. Naturally, most HPV infections are clear on their own, yet there is a risk that HPV infection becomes persistent in some leading to invasive cervical cancer. It takes approximately 1-2 decades for a woman with persistent infection to develop cervical cancer. Out of known HPV genotypes, low-risk (non-oncogenic) genotypes 6 and 11 mainly cause genital warts (90%) and recurrent respiratory papilloma. High-risk (oncogenic) genotypes 16 and 18 are the main agents responsible for most of the cervical precancerous lesions and cervical cancers. These genotypes also cause anal, oro-pharyngeal, vulval, vaginal, and penile cancers. It has been observed that nearly all cervical cancers are due to the Human Papilloma Virus (HPV) with rare exceptions of genetic origin cervical neoplasms. According to a prevalence study carried out by the Epidemiology unit, in Sri Lanka, the prevalence of HPV infection among married, asymptomatic women (aged 20-59 years) was 3.3% and genotype 16 and 18 prevalence was found to be 1.2% in 2009. In Sri Lanka, the most prevalent genotypes in cervical cancers were 16 and 18, accounting for 69% of risk attribution in the development of cervical cancer in which the global figure was 70%.

Globally cervical cancer is the fourth most common cancer in women. The burden of cervical cancer falls on the women who lack access to health services, mainly in low- and middle-income countries. Cervical cancer is one of the most successfully treatable forms

of cancer, as long as it is detected early and managed effectively considering its long latency in the pre-malignant phase. In 2018, an estimated 570,000 women were diagnosed with cervical cancer worldwide, and about 311,000 women died from the disease¹. Most new cervical cancer cases are reported in Asia (55%) and Africa (21%). With a comprehensive approach to preventing, screening, and treating, cervical cancer can be eliminated as a public health problem within a generation¹. The Well Women Program screens women for breast, thyroid, and cervical cancer at ages 35 and 45, in line with WHO recommendations². All eligible females are contacted for appropriate screenings; however, the screening participation rate for cervical cancer in Sri Lanka is only 50 – 70%². Sri Lanka has the lowest incidence of cervical cancer in South-Central Asia; however, the country's incidence rate is still well above the incidence rate of fewer than 4 cases per 100,000 women, which is the rate required to eliminate cervical cancer as a public health problem¹. In Sri Lanka, cervical cancer is the commonest gynaecological malignancy. There were 1114 new cases reported in 2019². According to World Health Organization (WHO) statistics for 2012, 690 women in Sri Lanka died due to cervical cancer per year. The majority of these patients, about 70% are diagnosed at an advanced stage of the disease. With early detection and treatment, about 80-93% of patients survive at least 5 years. However, in advanced stages, this survival drops to about 50-60%⁴.



Screening test	Sensitivity to detect CIN2+	Specificity to detect CIN2+	Test provider	Personnel for processing and interpretation	Major limitations
Conventional cytology	53%	96.3%	Doctor / nurse/ midwife/ reproductive health care provider	Cytotechnician/ cytopathologist	Results take time. Low-moderate sensitivity
Liquid-based cytology	79%	78.8%	Doctor / nurse/ midwife/ reproductive health care provider	Cytotechnician/ cytopathologist	Expensive
HPV DNA as primary	96%	90.7%	Doctor / nurse/ midwife/ reproductive health care provider	Laboratory technician	Expensive Time-consuming
VIA	80%	92%	Doctor / nurse/ midwife/ reproductive health care provider	not necessary	Performers' skills influence results, false positive results high
VIL⁸	88%	86%	Doctor / nurse/ midwife/ reproductive health care provider	not necessary	Performers' skills influence results, false positive results high
Simple visual examination	?	?	Doctor / nurse/ midwife/ reproductive health care provider	not necessary	Performers' skills influence results, false positive results high
Colposcopic evaluation as secondary⁷	66.7%	73.7%	Doctor	Histopathologist for tissue analysis	Not widely available

Table 01

Cervical cancer incidence increases with age, and it commonly occurs between the ages of

50 to 75-year-old women in Sri Lanka. At present, cervical cancer prevention has two



main approaches worldwide. In Sri Lanka, in line with WHO, primary prevention is initiated as HPV vaccination and secondary prevention are done by screening and treatment for premalignant lesions.

Screening methods vary with available resources (Table 1).

Achieving the elimination target will rest on three key pillars as identified by the WHO⁴.

1. Vaccination: 90% of girls get fully vaccinated by HPV by the age of 15
2. Screening: 70% of women screened using a high-performance test by the age of 35, and again by the age of 45
3. Treatment: 90% of women with pre-cancer treated and 90% with invasive cancer managed accordingly.

The Ministry of Health of Sri Lanka implemented HPV vaccination through National Immunization Program in the year 2017 with the aim of preventing and controlling cervical cancer incidence among women in Sri Lanka⁴. Currently, two doses of recombinant quadrivalent HPV vaccine (effective against HPV types 6, 11, 16 and 18) are given to all grade 6 female students on completion of 10 years of age through a school vaccination program. The HPV vaccine is proven to be a safe and effective

vaccine. It is recommended only for prophylactic use, thus effective if used in naive females.

Justification

Over a 5-month duration (05-01-2023 to 01-06-2023) review of histopathology reports in BH-Mahaoya, it was found that two positive cervical cancer patients. Diagnosed individuals were at 38 years and 57 years of age respectively. Approximately about 170 women of reproductive age attended to gynaecology clinic for various gynaecological problems. Out of them, 87 women are aged 35 years or more. And 66 of them was over 40 years.

Mahaoya is a rural farming community with many underprivileged families and the average female education hardly exceeds GCE Ordinary Level Examination. Many women are exposed to sexual life at early ages and ages at first childbirth is often in late teens or early twenty years. In addition to that they remain sexually active until about 6th decade.

As these women have risk factors such as low socio-economic background and early exposure to sexual activity, cervical screening is of utmost importance to them.

WWC (Well Woman Clinic) attended	51/66	77.3%
Has not attended WWC	15/66	22.7%
Underwent Pap smear test	42/66	63.6%
Has not undergone Pap smear test	24/66	36.4%
WWC not attended but Pap done	09/66	13.6%

Table 02 – Results



Methodology

We conducted this audit by analysing data retrieved from an audit which evaluated perimenopausal contraceptive practice in Mahaoya. The considered age group was 40-55 years, which involved the age 45 cohort of cervical screening. This covers the first screening opportunity completed at the age of 35 years and if not the second screening opportunity cohort 45 years. The total number of women in the sample was 66 between the ages of 40-55 years.

Results

See Table 02

Discussion

According to MOH-Mahaoya, 207 women are included in the 35-year age cohort. But out of them only 125 (60.4%) had attended

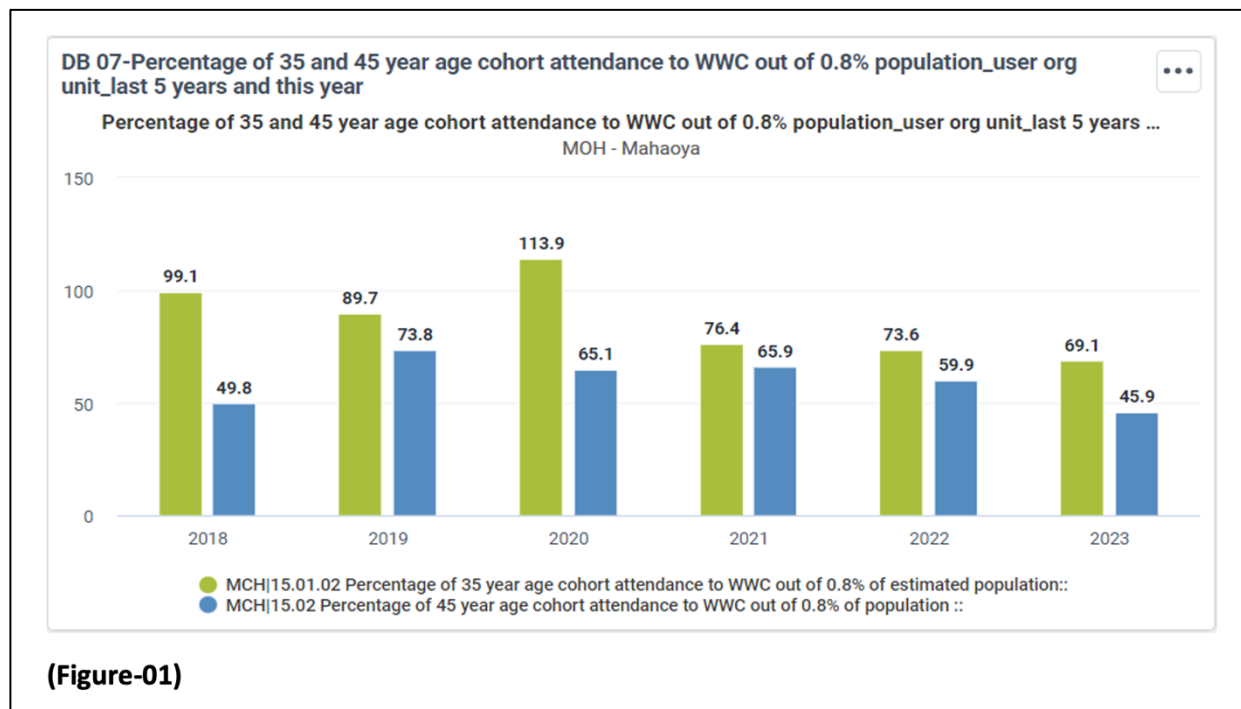
WWC in 2023 until now. In addition to that, out of 201 women in the 45-year age cohort, only 89 (44.3%) had attended WWC.

Figures 1 and 2 demonstrate a progressive reduction in participation in WWC and Cervical screening in Mahaoya.

Even though screening facilities are widely available, utilization seems to be in an all-time low level and declining with time. This could be contributed by the lack of knowledge on the importance of cervical screening, given the poor educational and socio-economic background of the community.

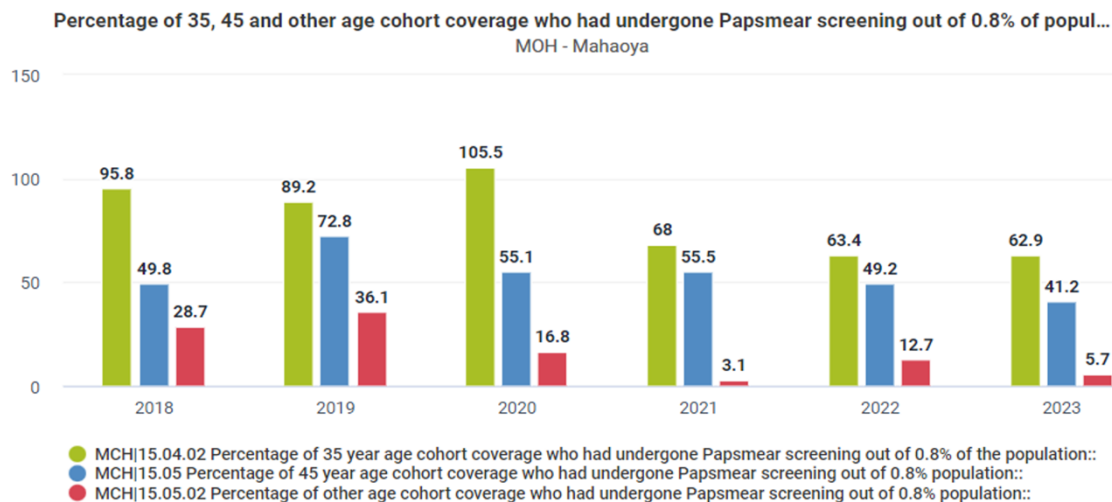
Conclusion

Despite the low incidence, the rate of screening for cervical CA remains at a much





DB 07-Percentage of 35, 45 and other age cohort coverage who had undergone Papsmear screening out of 0.8% of population_user org unit_last 5 years and this year



(Figure-02)

lower level, than national standards. This may be contributed by a multitude of reasons, which needs to be addressed and strengthen the screening programme.

Suggestions

1. Implement opportunistic screening strategy (E.g.-Ask about WWC participation and cervical screen status at the hospital gynaecology clinic and offer if not had before).
2. Educate and motivate women at all possible occasions on the need for cervical screening.
3. Motivate and train health care staff to counsel and perform cervical screening.
4. Provision of infra-structure facilities and necessary equipment for WWC.
5. Conduct Mobile Screening Clinics more frequently.
6. Utilize mass media, and social media to improve public awareness of cervical cancer-free future.

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Conflicts of interests – None

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