Reducing Cervical Cancer Prevalence in Malawi

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Introduction

Cervical cancer is a major public health problem that kills approximately 250,000 women globally every year. It especially affects women in low income countries. Low income countries accounted for 370 000 out of a total of 466 000 cases that were estimated to occur in the world in the year 2000 (Sankaranarayanan et al., 2001). It is the third most common cancer worldwide and the leading cause of cancer death among women (Anorlu 2008).

Malawi has the highest rate of cervical cancer worldwide, estimated at 75.9 per 100,000 population (Ferlay et al., 2015). It is the second common cancer overall (25.4%) of all cancers in the country and the most common (45.4%) cancer among women in Malawi (Msyamboza et al., 2012). The high rates of cervical cancer are linked with high prevalence of HPV infection, HIV and a non-performing screening programme (Maseko et al., 2015).

Cervical cancer is preventable and curable at low cost, when screening is done to detect the early lesions coupled with appropriate diagnosis, treatment, and follow-up. The incidence of cervical cancer can be reduced by as much as 80% if coverage, quality and follow-up of screening are high (Sangwa-Lugoma et al., 2006). It is important to have a wellestablished and vibrant screening programme.

In Malawi, Visual Inspection with Acetic acid (VIA) is the screening method used for diagnosis of cervical cancer. VIA involves examination of the cervix with the naked eye, using a bright light source, after one minute of 3-5% dilute acetic acid application. The equipment for VIA is the least expensive among all screening techniques.

A study on health systems challenges in cervical cancer prevention programme in Malawi in 2015 found that only seven out of 21 surveyed health facilities were providing both cervical cancer screening and treatment. These facilities were secondary level facilities and women had to travel long distances to access the services. Majority of the facilities have inadequate equipment for screening and treatment. Slightly above half (52%) of the facilities reported stockouts of medical supplies, with some facilities reporting that women contributed money to buy acetic acid (Maseko et al., 2015).

On average, only 10 women undergo cervical cancer screening per clinic day, and most clinics are operated once a week. The facilities have very few service providers and these providers often have poor knowledge of the national

Key Messages

- Cervical cancer is the third most common cancer worldwide and the leading cause of cancer death among women. Malawi has the highest rate of cervical cancer worldwide, with cervical cancer being the most common cancer among women.
- Cervical cancer is preventable and curable when detected in the early stages. In Malawi, Visual Inspection with Acetic Acid (VIA) is the major screening method used. The screening programme is under-performing, with the services being largely inaccessible to most women in the country due to long distance to facilities that provide these services, shortage of providers, equipment and supplies, and communities not being aware of the service or its benefits.
- In order to improve the programme, the Ministry of Health should scale up the "screen and treat" approach as well as cervical cancer screening to primary health facilities, and strengthen monitoring and evaluation at both central and district levels. The Ministry should also intensify community awareness and introduce vaccination against the Human Papiloma Virus (HPV).

therapeutic guidelines for cervical cancer. These providers also rarely report to Health Management Information System (HMIS) and are not consistently supervised by the district and central levels (Maseko et al., 2015).

A study on barriers to cervical cancer screening in Mulanje conducted in 2009 found that a lot of women lacked knowledge about cervical cancer and the availability of a screening programme. The women who accessed the service had all heard about it while at the hospital for another service. Some thought it was useless until they had symptoms and thought it could be used for diagnosis in a similar way as HIV and Malaria testing. Other women shied away from accessing screening services because of their fatalistic views of cervical cancer (Fort et al., 2011).



Methodology

This policy brief is based on a comprehensive review of existing literature. The literature reviewed included scientific papers, research reports and government policy documents.

Discussion of Policy Options

The essential requirements for a successful cervical cancer screening programme in low-resource settings, which include screening, diagnosis and treatment, should be provided onsite or in clinics accessible to the majority of women. This is because there is availability of reproducible, validated, low-cost, low-technology screening tests that can lead to immediate treatment of abnormalities. The programme should have a wide coverage of at-risk women, educational programmes directed towards health workers and women to ensure correct implementation and high participation and built-in mechanism for evaluation of the screening programme (Cuzicka et al., 2008).

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The advantages of VIA are that it yields an immediate result, making it possible for treatment of abnormal lesions to be performed at the same visit—the so-called "screen-andtreat" approach. It is inexpensive and can be carried out using modest equipment and widely available consumables without the need for a laboratory infrastructure. A range of personnel including doctors, nurses, midwives and paramedical health workers can be trained to perform VIA in short courses of 5-10 days duration. A wide range of teaching materials is now available for VIA training courses, making VIA particularly attractive as a screening test in lowresource settings (Denny et al., 2006).

"A study on barriers to cervical cancer screening in Mulanje conducted in 2009 found that a lot of women lacked knowledge about cervical cancer and the availability of a screening programme. The women who accessed the service had all heard about it while at the hospital for another service." "The incidence of cervical cancer can be reduced by as much as 80% if coverage, quality and follow-up of screening are high."

Therefore screening for cervical cancer can take place in most primary health care in low resource regions in Africa. But availability of acetic acid and adequate light source may limit the adoption of these methods in many low resource settings (Sangwa-Lugoma et al., 2006).

Studies that modeled the cost-effectiveness of a variety of cervical cancer screening strategies in Kenya, South Africa, India and Peru show that the "screen and treat" approach where VIA is done in one visit with immediate treatment or two visits with treatment on subsequent visit, as one of the most cost effective screening methods in resource-poor settings. Costing less than US\$ 500 per year of life saved and reducing lifetime risk in women tested at 35 years by 25-36% (Cuzicka et al., 2008). The quality of screening services can be maintained if screening and treatment facilities have the basic infrastructure, equipment and medical consumables required to offer quality and affordable services.

Community awareness is essential to improve client participation and use of the screening programme (Cuzicka et al., 2008). Taking extra measures to target women in the rural areas who have poor knowledge and little access to cervical cancer prevention services is especially critical. The messages need to take into account the educational, socio-cultural and religious barriers hindering women from accessing cervical cancer prevention information and services (Maseko et al., 2015).

> "Cervical cancer screening is inexpensive and can be carried out using modest equipment and widely available consumables without the need for a laboratory infrastructure."

A major breakthrough in cervical cancer control was the development of a vaccine against HPV. However, very high costs have hindered the introduction of HPV vaccination in developing countries (Arbyn et al., 2011). The vaccine prevents over 95% of HPV infections. The WHO recommends vaccination of girls aged 9-13 years who have not yet become sexually active to prevent HPV infection (WHO, 2013).



Recommendations

To reduce the prevalence of cervical cancer and expand access to treatment for affected women, the MoH should:

i. Scale up the "screen and treat" approach to enable all women across the country to access this service.

ii. Ensure screening, diagnosis and treatment are provided in primary health care facilities.

iii. Train more providers and ensure that service providers are reporting in the HMIS and that they are technically supported through regular supervision.

iv. Strengthen community awareness of cervical cancer and encourage more women to seek cervical cancer screening.

v. Introduce vaccination against HPV.



References

Arby. M., Castellsague, X., de Sanjose, S., Bruni, L., Saraiya, Bray F., & Ferlay, J.,: Worldwide burden of cervical cancer in 2008. Annals of Oncology 22: 2675–2686, 2011.

Anorlu, R. I.: Cervical cancer: the sub-Saharan African perspective. Reproductive Health Matters 2008;16(32):41–49.

Cuzicka, J., M. Arbynb., R. Sankaranarayananc., V. Tsud., G. Roncoe., M. Mayrandf., J. Dillnerg., and C. J. L.M. Meijer: Overview of Human Papillomavirus-Based and Other Novel Options for Cervical Cancer Screening in Developed and Developing Countries. Vaccine 26S (2008) K29–K41.

Denny, L., M. Quinn, R. Sankaranarayanan: Screening for cervical cancer in developing countries. Vaccine 24S3 (2006) S3/71–S3/77.

Ferlay, J., Soerjomataram I., Ervik M., Dikshit R., Eser S., Mathers C;, Rebelo M., Parkin D.M., Forman D., Bray, F. GLOBOCAN 2012 v1.1, Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 11 [Internet]. Lyon, France: International Agency for Research on Cancer; 2014. Available from: http://globocan.iarc.fr, accessed on 16/01/2015.

Fort, V. K., M. S. Makin, A. J. Siegler, K. Ault, and R. Rochat: Barriers to cervical cancer screening in Mulanje, Malawi: A qualitative study. Patient Prefer Adherence. 2011; 5: 125–131.

Maseko, F. C., M. L. Chirwa. and A. S. Muula: Health systems challenges in cervical cancer prevention program in Malawi. Glob Health Action. 2015; 8: 10.3402/gha.v8.26282.

Sankaranarayanan, R., A. M. Budukh, and R. Rajkumar: Effective screening programmes for cervical cancer in low- and middle-income developing countries. Bulletin of the World Health Organization, 2001.

Sangwa-Lugoma, G., S. Mahmud, S.H. Nasr, J. Liaras, P. K. Kayembe, R. R. Tozin, P. Drouin, A. Lorincz, A. Ferenczy and E. L. Franco: Visual inspection as a cervical cancer screening method in a primary health care setting in Africa. Int. J. Cancer: 119, 1389–1395 (2006).

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