Cervical cancer prevention and the Millennium Development Goals
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Abstract The advent of new technologies such as the human papillomavirus (HPV) vaccine and HPV DNA tests – along with new insights into the appropriate use of low-resource technologies such as visual inspection of the cervix and treatment of cervical lesions with cryotherapy – have increased optimism about the potential for effective disease control in low-resource settings. Nevertheless, it is also important to ask ourselves how new health initiatives contribute, or fail to contribute, to major global undertakings such as achievement of the Millennium Development Goals (MDGs).

While reproductive health in general, and cervical cancer prevention in particular, are not explicitly mentioned among the MDGs, they are implied; and it is certain that women cannot contribute to sustainable development without good health. The question is, in what ways do scaled-up cervical cancer prevention activities, including introduction of the new HPV vaccines and increased access to precancer screening and treatment, contribute to attainment of the MDGs?


Cervical cancer kills about 270 000 women every year.1 It has been called “a case study in health equity” because most (85%) of these deaths occur in the developing world. In large part, this inequity is due to the lack of cervical cancer screening programmes in those countries – the same programmes that are taken for granted in Australia, Europe and the United States of America. And since cervical cancer affects relatively young women (mortality rates climb as women enter their forties), it results in many lost years of life – 2.7 million age-weighted years of life were lost to the disease in the year 2000.2

The biggest impacts of cervical cancer are on poverty, education, and gender equity – the first three Millennium Development Goals (MDGs). Many of those who die are breadwinners and caretakers of both children and elders. For example, in sub-Saharan Africa women head one-third of all households and in Botswana, over half of the children who have lost a parent are being cared for by grandmothers – women also at risk of cervical cancer.3,4

The fabric of the family and the community is weakened significantly when these women die. This is especially true in communities also ravaged by the loss of working adults to HIV/AIDS.

In addition to the emotional trauma, cervical cancer deaths have significant economic costs over the short- and long-term (though these are seldom considered when calculating the financial burden of disease). Family members may lose work opportunities and can incur overwhelming medical costs while caring for women with cancer.5

Reduction in family income resulting from the death of a working-age adult can force remaining family decision-makers to prioritize immediate needs (food and shelter) over investment in human capital (e.g. education). As poverty increases, more children (especially girls) may be kept out of school for lack of school fees, books, or uniforms, but also so that they can contribute to family income through work. Cervical cancer can impact education in other ways as well, such as when schools lose experienced teachers to the disease. The differential economic and social impact on women and girls makes it more difficult to achieve gender equity. Finally, it should be noted that lower levels of female education are linked to decreased maternal and infant health – the focus of two other MDGs.

Developing successful cervical cancer screening and human papillomavirus (HPV) vaccination programmes opens the door to many other interventions including, for older women, opportunities to screen for other cancers and reproductive problems, and for school-age girls and boys, deworming; treatment for schistosomiasis, onchocerciasis, filariasis and trachoma; iron and/or iodine supplementation; distribution of bed nets to prevent malaria; hand washing, anti-tobacco and anti-drug education; nutritional supplementation; body-awareness education; and guidance on life choice decision-making and sexual health.6

All of these interventions are in the immediate interest of the individual, but also will help improve maternal health and result in healthier newborns.

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when the girls who are screened become older.

Some of the benefits of improved cervical cancer prevention are obvious—the reduction in suffering and death of mature women and the grief and economic burden felt by their families. As demonstrated above, prevention programmes can also support development in other ways, including contributing to lowering poverty, increasing primary education, empowering women, improving child health and providing the basis for global partnerships. The many barriers to realizing this potential, such as the current high cost of HPV vaccine, weakness of existing cervical cancer screening and adolescent health systems, and low levels of knowledge about HPV, now are being challenged. With sufficient political will and resources, these barriers surely can be overcome in the interest of the family and the MDGs.

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Résumé
Prévention du cancer du col utérin et objectifs du Millénaire pour le développement
L’avènement de nouvelles technologies, comme le vaccin contre le papillomavirus humain (HPV) et les tests ADN pour ce virus, ainsi que les nouvelles perspectives d’utilisation de technologies peu onéreuses, telles que l’examen visuel du col et le traitement des lésions cervicales par cryothérapie, amènent à être plus optimiste quant aux possibilités de lutter efficacement contre ce cancer dans les pays à faibles ressources. Néanmoins, il importe aussi de se demander comment les nouvelles initiatives sanitaires contribuent ou ne contribuent pas aux activités mondiales majeures comme la réalisation des objectifs du Millénaire pour le développement (OMD).

Resumen
Prevención del cáncer cervicouterino y Objetivos de Desarrollo del Milenio
El desarrollo de nuevas tecnologías como la vacuna contra el papilomavirus humano (PVH) y las pruebas de ADN del PVH, unido a los nuevos conocimientos sobre el uso apropiado de tecnologías de bajo costo como la inspección visual del cuello uterino y el tratamiento de las lesiones cervicouterinas mediante crioterapia, han generado un mayor optimismo respecto a las posibilidades de combatir eficazmente esa enfermedad en los entornos con pocos recursos. No obstante, es importante también determinar los mecanismos por los que las nuevas iniciativas sanitarias podrán contribuir o no al éxito de importantes proyectos mundiales, como por ejemplo los Objetivos de Desarrollo del Milenio (ODM).

Malخص
الوقاية من سرطان عنق الرحم، والمرامى الإنجابية للألفية
أدت التكنولوجيات الجديدة المتكررة، مثل تطعيم فيروس الورم الجلدي، وتجارب هذا الفيروس، وكذلك الأفكار الجديدة المطورة بشأن استخدام السليم لتكنيك الثقبة المواد، مثل الفصام الجري للرحم مع عناية أقئ عنق الرحم، إلى ذلك كل ذلك إلى مزيد من التفاوض حول إمكانية مكافحة سرطان عنق الرحم بفعالية في الأمانات القليلة المحتملة. وفيما بعد، نحن الآن نستطيع أن نفهم كيف تنظم المبادرات الصحية الجديدة، أو كيف نفشل في الإهتمام في المهام الأولية الكبرى، مثل بلوغ المرامي الإنجابية للألفية.
References


