The lost benefits of not using visual inspection with acetic acid nationally to screen for cervical cancer in South Africa

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INTRODUCTION: cervical cancer

• Most common cancer among African black women who constitute ~80% of the female South African population.
• Commonest cancer affecting females aged 15 to 45 years.
• ~4 000 women die yearly from cervical cancer in South Africa (SA).
• The national screening policy launched in 2002 based on the Papanikolaou (Pap) smear aiming to reach 70% coverage in 10 years has failed abysmally (current coverage about 14%).
• Neighboring countries; Botswana, Zimbabwe and Zambia have recognized the limited effectiveness of the Pap smear and have adopted visual inspection with acetic acid (vinegar) also known as VIA as the mainstream method to detect pre-cancerous lesions of the cervix for about five years now.
• Multiple studies have found VIA to be safe, effective, acceptable, affordable and scalable. A large randomized controlled trial (RCT) found VIA saves lives. HIV positive > five times likely to develop cervical cancer.

OBJECTIVE:

To estimate the impact on cervical cancer high grade pre-cursor lesions, new cases and deaths from cervical cancer had SA implemented a nurse driven VIA based screen and treat strategy in 2008.

South Africa is punching below its weight:

METHODS:

Using publicly available published evidence-based data a statistical model was developed to generate the estimates. The number of women that could have been feasibly screened was obtained from a Zambian study. The number of high-grade cervical pre-cancer lesions in a VIA screened and unscreened population was obtained from a 2005 South African RCT. A Botswana study provided data on the rate of successful treatment and an Indian RCT gave the hazard of death from cervical cancer in an unscreened population.

RESULTS:

South Africa could have prevented over five years at least 3 300 high-grade cervical pre-cursor lesions, and assuming one round of VIA screening and treatment, 50 cases of cervical cancer and 40 deaths from cervical cancer. (The estimates were deliberately conservative).

CONCLUSION:

Had SA adopted a pragmatic low cost method to prevent cervical cancer like Zambia, Botswana and Zimbabwe did, substantial morbidity and mortality from cervical cancer could have been prevented. Important public health lessons for politicians, policy makers and others can be drawn from this missed opportunity.

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