Cervical cancer screening using primary Human papillomavirus (HPV) testing in Mozambique: preliminary results of the Capulana Study

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Background

- In May 2018, the Director-General of the World Health Organization (WHO) announced a global call to action towards the elimination of cervical cancer (1)
- Cervical cancer is preventable, yet globally 266,000 women die annually from this disease. More than 85% of cervical cancer cases occur in low and middle-income countries, where there are not enough medical specialists to provide prevention, screening and treatment services, particularly in sub-Saharan Africa (2)
- Mozambique is a sub-Saharan Portuguese speaking country and has one of the highest burdens of cervical cancer in the world, with an incidence rate of 42.8 and mortality rate of 35.7 per 100,000 women (3). Cervical cancer is the leading cause of cancer and related deaths among women in Mozambique
- There is limited access to screening and few trained personnel to manage women with abnormal results

Objectives

- The objective of our study was to to implement primary HPV screening in Mozambique and navigate women with abnormal results to appropriate diagnostic and treatment services.

Methods

- We prospectively enrolled women aged 30 to 49 at Mavalane General Hospital in Maputo, Mozambique.
- All participants underwent a pelvic examination by a nurse and a cervical sample was collected and tested for HPV DNA using careHPV (Qiagen, Gaithersburg, MD, USA).
- Women who tested positive for HPV (HPV+) underwent visual assessment for treatment (VAT) using visual inspection with acetic acid (VIA) to assess eligibility for cryotherapy.
- All HPV+ women were treated with cryotherapy, loop electrosurgical excision procedure (LEEP), or referred for cancer management based on results.

Mozambique

- Country in sub-Saharan Africa
- Population of ~28 million
- Approximately 48% of the population living below the poverty line

Source: The World Bank, 2014.
Available: <http://worldbank.org> [Accessed 24 Jan 2019]

Source:
<https://www.mozambiqueembassy.ch>

Results

From April 2018 to February 2019 :

- 427 women underwent HPV testing
- The median age was 39 years
- 86/426 patients (20.2%) were HIV positive
- 93 patients (21.8%) were HPV+
- 97.8% (91/93) returned for VAT and treatment including cryotherapy (n=75, 82.4%), LEEP (n=10, 11.0%) and referral for cancer management (n=4, 4.4%). Two patients moved from Maputo and did not return for treatment

Conclusions

- Cervical cancer screening with primary HPV DNA testing, including appropriate follow-up and treatment, is feasible in Maputo, Mozambique
- This study is ongoing and includes training medical providers to diagnose and treat cervical preinvasive disease and cancer.

Next steps

- The outcomes of this study will help support an expansion initiative to deliver cervical cancer screening using HPV testing in Mozambique

References

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Funding: This research was supported in part by the National Institutes of Health through MD Anderson's Cancer Center Support Grant P30CA016672; The Anadarko Petroleum Corporation; The Prevent Cancer Foundation; The Dunaway Family Fund; The Joe Family Fund; The Giles-O'Malley Foundation.