# CERVICAL CANCER KNOWLEDGE AND ATTITUDES AMONG HIV-POSITIVE MEN IN MALAWI

#0624

Corrina Moucheraud[1], Samuel Lewis[2], Misheck Mphande[3], Ben Allan Banda[3], Hitler Sigauke[3], Paul Kawale[4], Aubrey Dkangoma[3], Kathryn Dovel[2], Alemayehu Amberbir[2,3], Agnes Moses[3], Sundeep Gupta[2,3], **Risa M. Hoffman**[2]

[1]University of California Los Angeles, Fielding School of Public Health, USA; [2]University of California Los Angeles, David Geffen School of Medicine, USA; [3]Partners in Hope, Lilongwe, Malawi; [4]African Institute for Development Policy, Lilongwe, Malawi

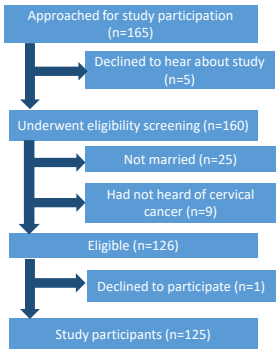
## Background

- Despite having the world's highest cervical cancer burden, Malawi has low rates of routine cervical cancer screening[1]
- HIV+ women face particularly high risks related to cervical cancer[2]
- Women have previously reported unsupportive male partners as a barrier to seeking and receiving cervical cancer services[3]
- However, very little is known about men's knowledge and perceptions of cervical cancer screening
- In Malawi, cervical cancer prevention and control uses a single visit "screen-and-treat" approach: screening by Visual Inspection with Acetic Acid (applying vinegar to the cervix to visualize pre-cancerous lesions) and removing amenable lesions with high heat (thermocoagulation) or extreme cold (cryotherapy)[4]
- **Study objectives:**
  - Investigate HIV+ Malawian men's knowledge and views of cervical cancer disease and services
  - Investigate the association between male characteristics and partner screening status

## Methods

- Data were collected June-July 2019 at Partners in Hope (PIH), an urban, PEPFAR-USAID supported HIV treatment site in Malawi
  - PIH provides free cervical cancer "screen and treat" for HIV+ women
- Eligible participants were HIV+, married, adult male ART clients at PIH who had previously heard of cervical cancer
- We performed a cross-sectional study using closed- and open-ended questions about:
  - Knowledge of cervical cancer risk factors and prevention & treatment
  - Acceptability of harmful gender norms (GEM scale)
  - Reported partner experience with cervical cancer services (focusing on their primary sex partner)

### Figure 1. Participant flowchart




### Table 1. Description of the sample

| | n=125 |
|---|---|
| **Age, mean (IQR)** | 44 (35-50) |
| **Education, % (n)** | |
| Completed less than secondary | 46% (57) |
| Completed secondary or greater | 54% (68) |
| **Partner screened for cervical cancer, % (n)** | 58% (73) |
| **Knows someone who died from cervical cancer, % (n)** | 21% (26) |
| **Perceptions of cervical cancer danger, % (n)** | |
| Believes more dangerous than HIV | 78% (97) |
| Believes more dangerous than high blood pressure | 38% (47) |
| **Cervical cancer screening decisions, % (n)** | |
| Wife responsible only | 6% (8) |
| Both partners jointly responsible | 54% (68) |
| Male partner responsible only | 39% (49) |

### Table 2. Respondent knowledge of cervical cancer risk factors, screening, and treatment

| Risk factors | % correct |
|---|---|
| Sex without a condom | 90% |
| Poor diet | 46% |
| Lack of male circumcision | 87% |
| Poor male hygiene | 8% |
| Inherited or genetic causes | 68% |
| Multiple sexual partners | 100% |
| Washing vagina too vigorously | 52% |
| Having >5 children | 45% |
| Applying herbs to vagina | 6% |
| **Screening and treatment** | |
| Only HIV+ women are at risk | 87% |
| Screening should begin at 30 years old | 36% |
| Screening should occur even if there are no symptoms | 100% |
| Screening looks for changes on the cervix that indicates a woman is at risk for cancer | 90% |
| Screening takes place at this clinic | 80% |
| Treating first signs prevents cancer from occurring | 96% |
| Treatment affects fertility | 52% |
| Following treatment, women should not have sex for 4 weeks | 33% |

### Table 3. Male characteristics and odds of primary partner being screened for cervical cancer

| | OR | 95% CI | aOR[1] | 95% CI |
|---|---|---|---|---|
| Multiple partners | 0.80 | 0.36-1.79 | 1.05 | 0.40-2.77 |
| Partner HIV+ | 2.00 | 0.93-4.30 | 1.63 | 0.65-4.10 |
| Knows someone who survived or died of CC | 1.81 | 0.77-4.25 | 1.38 | 0.50-3.75 |
| GEM score, sex domain[2] | 1.51** | 1.10-2.07 | 1.46* | 1.00-2.13 |
| Cervical cancer knowledge score[3] | 1.04 | 0.85-1.26 | 0.97 | 0.77-1.22 |

[1] Adjusted for listed variables in addition to respondent age, educational attainment (categorical), occupation (categorical), income sufficiency (categorical), and age difference between respondent and partner
[2]Summary of responses to 5 agree/disagree statements of harmful gender norms relating to sex; disagreement with harmful gender statements earned 1 point and agreement 0 points (scale: 0-5)
[3]Number of correct responses to 16 true/false questions about cervical cancer risk factors and screening (scale: 0-16)
*p < 0.10, ** p < 0.05

## Results

- Most (58%) respondents reported having a screened primary partner (Table 1)
- Over 1 in 5 men knew a woman who died of cervical cancer (Table 1)
- 78% of men reported that cervical cancer is more dangerous than HIV (Table 1)
- Many men believe they should be exclusively (39%) or partially (55%) responsible for decisions about whether their partner is screened for cervical cancer (Table 1)
- Men demonstrated moderate overall knowledge of cervical cancer risk factors, screening, and treatment (Table 2)
  - Awareness varied widely by question: ranging from well-understood concepts (e.g. *multiple sexual partners is a risk factor*, 100% correct), to common misconceptions (e.g., *applying herbs to the vagina is a risk factor*, 6% correct)
- Men with more equitable gender views relating to sex (higher GEM sex domain score) were more likely to have a previously screened partner (Table 3)
  - There was no significant association between cervical cancer knowledge and partner screening history (Table 3)

## Conclusions

- Despite high awareness of cervical cancer preventative services, widespread misconceptions and knowledge gaps about cervical cancer persist among men
- Most men believe they should be involved in decisions about cervical cancer care
- Men's gender views, but not knowledge, are associated with their partner's screening history
- Future interventions should engage male partners, address their concerns, and promote positive health gender norms in order to increase coverage of cervical cancer screening

## References

1. Bray et al. Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA: A Cancer Journal For Clinicians 2018;68(6):394-424.
2. Gakidou et al. Coverage of cervical cancer screening in 57 countries: Low average levels and large inequalities. PLoS Medicine 2008;5(6):e132.
3. Moucheraud et al. "It is big because it's ruining the lives of many people in Malawi": Women's attitudes and beliefs about cervical cancer. Forthcoming.
4. Malawi Ministry of Health. National Service Delivery Guidelines for Cervical Cancer Prevention; 2005.

## Acknowledgements

This research was funded by the UCLA Jonsson Comprehensive Cancer Center and the National Center for Advancing Translational Sciences through UCLA CTSI Grant UL1TR000124. Partners in Hope receives support from the U.S. Agency for International Development (USAID) and the Presidents Emergency Plan for AIDS Relief (PEPFAR) under Cooperative Agreement [AID-OAA-A-15-00070]. CM also receives support from the Center for HIV Identification, Prevention, and Treatment (CHIPTS) NIMH grant MH58107. The content is solely the responsibility of the authors and does not necessarily represent the official views of NIH or USAID/PEPFAR. We thank the individuals who participated in this research and the staff at Partners in Hope for their support of the project.