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# Background

- Despite having the world's highest cervical cancer burden, Malawi has low rates of routine cervical cancer screening<sup>1</sup>
- HIV+ women face particularly high risks of cervical cancer-related disease and death<sup>2</sup>
- Women have previously reported unsupportive male partners as a barrier to seeking and receiving cervical cancer services<sup>3</sup>
- In Malawi, cervical cancer prevention and control uses a single visit "screenand-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)<sup>4</sup>
- Malawi's national guidelines recommend regular screening<sup>4</sup>:
  - HIV+ women: annual screening for all adult women
  - HIV- women: screening every 3 years starting at age 30
- Little is known about men's knowledge or beliefs about cervical cancer

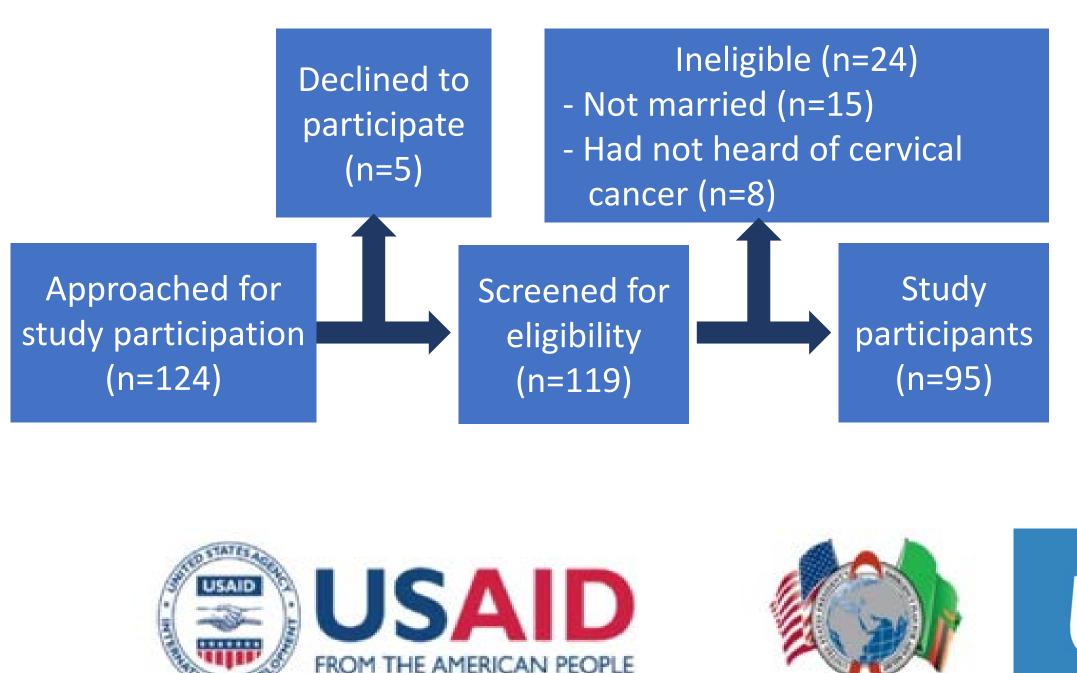
# Objective

To assess men's knowledge and beliefs about cervical cancer and cervical cancer screening and treatment services.

# Methods

- Surveys were conducted from June 6 July 3, 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 clients at PIH who had previously heard of cervical cancer
- We performed a mixed-methods study that included:
  - A survey of close-ended questions about:
    - Knowledge of cervical cancer risk factors and of cervical cancer prevention and treatment
    - Gender attitudes (GEM scale)
  - Experience with cervical cancer and reported partner experience with cervical cancer services, if known
  - A set of open-ended questions on related topics

### **Figure 1: Participant enrollment**



# Assessing Malawian men's knowledge and opinions about cervical cancer

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#### Table 1. Description of the sample Age, mean (range) 45 Education, % (n) Completed less than secondary 419 59% Completed secondary or greater Occupation, % (n) Formal wage employment 459 39% Household or self-run business, non-agricultural Non-wage agricultural or casual work 16% Figure 2. Respondent experiences with cervical car and cervical cancer services 100% 90% 80% n=68 70% 60% 50% 40% 30% n=20 20% 10% **Discussed cervical** Knows someone Knows someone

# Table 2. Reported partnership characteristics

who has died of

cervical cancer

who has survived

cervical cancer

	Partner screening status		
	Not previously screened (n=37)	Previously screened (n=55)	p-value
Multiple current sexual partners, % (n)	27% (10)	27% (15)	0.98
Primary partner age, mean (range)	35 (21-65)	40 (23-56)	<0.01
Partnership duration with primary partner (years), mean (range)	11 (1-45)	16 (4-35)	<0.01
Primary partner HIV positive, % (n)	54% (20)	72% (40)	0.06







cancer screening

with primary partner

=95				
26	5-71)			
%	(39)			
%	(56)			
%	(43)			
%	(37)			
%	(15)			
n	cer			



Primary partner has been screened

Table 3. Men's knowledge of cervical cancer						
Knowledge of risk factors	% answered correctly (n)	Knowledge of screening and treatment services	% answered correctly (n)			
Sex with multiple partners is a risk factor	100% (95)	Screening should occur even if there are no symptoms	100% (95)			
Sex without a condom is a risk factor	89% (85)	Treating first signs prevents cancer from occurring	97% (92)			
Inherited or genetic factors cause higher risk	73% (69)	Only HIV+ women are at risk for cervical cancer	87% (83)			
Sex with a male partner with poor hygiene is a risk factor	9% (9)	Treatment affects fertility	55% (52)			
Applying herbs to the vagina is a risk factor	7% (7)	Following treatment, women should not have sex for 4 weeks	33% (31)			

# **Results**

- The mean age of the sample was 45 and 59% of men had completed secondary school or higher, with a majority reporting formal wage employment (Table 1)
- Reflecting Malawi's high disease burden, ~25% of men knew a woman with cervical cancer (Fig. 2)
- Most men (72%) had discussed screening with their primary partner, but only 58% said that she has been screened
- Knowledge of risk factors and service features ranged from 7% to 100% correct responses (Table 3)
- The majority of men correctly identified the role of sexual activity in increasing risk
- Though most men were knowledgeable about general concepts of health screening, responses were less accurate concerning the specifics of cervical cancer services
- Mean knowledge score was 59/100 for men with screened partners and 60/100 for men with unscreened partners (p=0.18)

# Conclusions

- Despite high awareness of cervical cancer preventative services, widespread misconceptions and knowledge gaps about cervical cancer persist among men
- There is no apparent association between knowledge and partner screening status
- Future interventions should target multiple levels of influence and should engage male partners 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.

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#### **Qualitative Results:**

Preliminary qualitative findings suggest that men's primary concerns about partner screening include the gender of the provider and pain caused by screening.

"The problem will be the doctor in charge.... it has to be a female doctor to do such a procedure on female patients. This is because it involves checking of private parts."

"Most women would say this doctor was showing sexual feelings for me or this doctor did this to me, now that is one thing that is discouraging men from allowing their wives to get screened."

"My worry is on the metal instrument... Can't it hurt a person when inserting? [My wife] was in pain for a few days because of the instruments used to screen cervical cancer."

**Figure 3. Select quotes from interviews**