



Effects of Education on Cervical Cancer Screening in Tanzania

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TAP TO GO
BACK TO
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Introduction

Cervical cancer incidence has been significantly reduced in developed countries with the introduction of the Papanicolaou smear¹, but remains the leading cause of cancer death in women in Tanzania². In 2011, the Tanzanian government implemented a cervical cancer screening program which offers visual inspection of the cervix with acetic acid (VIA) at no cost to the public³. This “screen and treat” method has shown to be feasible and effective by the World Health Organization⁴. Despite this, even in an urban setting, the prevalence of cervical cancer screening was only 6%⁵. Previous studies have shown that in Tanzanian rural settings, community misunderstanding and poor CHW knowledge were potential significant negative effectors on cervical cancer screening prevalence⁶.

The purpose of this study was to see if educating community health workers (CHWs) and women in the community, on cervical cancer, would increase the number of women who receive cervical cancer screening.

Methods

- In this phase I study, CHWs from various villages were trained on June 14th, 2019 and given pre and post tests to assess cervical cancer knowledge.
- The villages of Masike, Masonga, Raryana, and Sota, all within the Shirati KMT Hospital catchment area, were chosen for different interventions.
- Masike received both CHW and community training. Masonga received community training. Sota received CHW training, and Raryana (control) did not receive any education.
- All screening was performed, free of charge, at Shirati KMT Hospital.
- The number of women who came in to Shirati KMT hospital from the 4 villages between June 18th and July 31st, 2019 were compared to determine which intervention would be the most feasible and effective.

Results

Table 1: Community Health Worker Training

Pre-Test Average (%)	Post-Test Average (%)	Improvement (%)
47.5%	72.92%	53.5%

Table 1: Each Community Health Worker was given the same test before and after undergoing same training.



Bryant Chee and Janeth Sillah teaching community health workers about Cervical Cancer

Table 2: Women Screened from Each Village / Intervention from June 18th to July 31st 2019

Village Name	Masike	Masonga	Raryana	Sota
Intervention Given	CHW and Community Training	Community Training	CHW Training	No Training
Number of Women Screened	3	18	8	3

Table 2: All women screened came to Shirati KMT Hospital and were screened at no cost.



Janeth Sillah teaching women in the community about Cervical Cancer screening

Conclusions

- **Both community education and CHW training may be effective and feasible in increasing the number of women who receive cervical cancer screening. Community training may have the largest impact compared to control**
- There are several limitations to this study. Each village was different in terms of income, distance from the screening center, and population. The cost and time it takes to come to the screening center is one of the biggest obstacles to cervical cancer screening. Masike was 3-5x farther by time and costs 2-4x as much to reach the screening center, compared to the other villages. These two factors alone could account for the relatively small number of women who came in for screening from Masike.
- Phase II and III of this study will look at the effects of these interventions over a longer period to assess how often these interventions should be performed and if finance and village distance are stronger factors.

References

1. IARC Working Group . Int Agency Res Cancer World Heal Organ; 2005. IARC Handbooks of Cancer Prevention Volume 10: Cervix Cancer Screening.
2. Bruni L, Albero G, Serrano B, Mena M, Gómez D, Muñoz J, de Bosch FX SS. Human Papillomavirus and related diseases report. 2018;(December).
3. Ministry of Health. United Republic of Tanzania the National Road Map Strategic Plan to Improve Health in Tanzania (2016–2020) 2016. Community development, gender, elderly and children. (June 2016)
4. Mgomella G., Chikamata D., Lucas E. Prevention of cervical cancer through screening using visual inspection with acetic acid (VIA) and treatment with cryotherapy. World Health Organ. 2012;1-33.
5. Cunningham M.S., Skrastins E., Fitzpatrick R. Cervical cancer screening and HPV vaccine acceptability among rural and urban women in Kilimanjaro region. Tanzania. BMJ Open. 2015;5(3):1-9.
6. Alwan O, Guzman I, Kaur D, Mock S, Nguyen J, Sila J, Mahmoud E. Community Health Worker Perspectives on Barriers to Providing Effective Cervical Cancer Screening and Treatment in the Catchment Area of Shirati KMT