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# Cervical cancer screening in rural Tanzania

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*Augsburg College*

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# AUGSBURG COLLEGE

## Cervical Cancer Screening in Rural Tanzania

Augsburg College  
Department of Nursing  
Doctor of Nursing Practice Program  
Scholarly Project Approval Form

This is to certify that Shangwe A. Kiliaki has successfully presented her scholarly doctoral project entitled "Cervical Cancer Screening in Rural Tanzania" and fulfilled the requirements for the Doctor of Nursing Practice degree.

Shangwe Kiliaki, MAN, APRN, NP-C, RN

Date of presentation: April 24, 2015.

Submitted in partial fulfillment of the

Committee member signed: requirement for the degree of

Doctor of Nursing Practice

Major Advisor: Cheryl L. Manning Date: April 24, 2015

Faculty Member: Jody L. Smith Date: April 24, 2015

AUGSBURG COLLEGE

MINNEAPOLIS, MINNESOTA

Faculty Member: Helen J. Smith Date: April 24, 2015



**Cervical Cancer Screening in Rural Tanzania**

Shangwe Kiliaki, MAN, APRN, NP-C, RN

Submitted in partial fulfillment of the  
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Doctor of Nursing Practice

AUGSBURG COLLEGE  
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2015



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Date of presentation: April 24, 2015.

Committee member signatures:

Major Advisor: Carol Leuning Date April 24, 2015

Faculty Member: Joyce M. Smith Date April 24, 2015

Faculty Member: Kathleen S. Johnson Date April 24, 2015



Presentations:

Geriatricians and Geriatric Nurse Practitioners

Park Nicollet Senior Services Department

March, 2015

St Louis Park, Minnesota

Abstract accepted:

Interprofessional Approaches to Health Care: Transcultural Nurses Leading the Way

41<sup>st</sup> Annual Conference of The Transcultural Nursing Society

October 28-31, 2015

Portland, Oregon



## Dedication

This project is dedicated to the countless and courageous women around the globe who are affected by cervical cancer. I wish them strength and hope as they strive toward holistic wellness. Additionally, I dedicate this project to my grandmother who succumbed to cervical cancer in 1982 and continues to impact my life every day.



## Acknowledgements

I would like to express my gratitude to the immediate members of the Kiliaki family for their immeasurable love, support, and guidance. I am truly blessed and proud to be a part of this remarkable family. I would like to especially thank my mother for always believing in my visions and dreams.

To my professors, there are no words to express the impact you have had in my life. You all have such passion for advancing transcultural nursing through research, practice, and theory to ensure culturally appropriate care for all. Your wisdom and thoughts about achieving holistic wellness by eliminating cultural, social, and political barriers will guide me always. I am thankful our paths have crossed.

I am also grateful to my classmates for the thought-provoking discussions and the friendships that have formed as a result. I eagerly await the opportunities that will unfold from here on out.

Finally, my vision became a reality because of my collaborative efforts with government officials, public health personnel, nurses, and patients in Iringa, Tanzania. I want to recognize and thank them for their role in making my project successful. I look forward to enhancing these relationships as we work to transform the health of women in the rural regions.

*There are no shortcuts to any place worth going.- Beverly Sills*



## Abstract

Healthcare is complex, ever-changing, and unpredictable, and the healthcare system in Tanzania is susceptible to such complexities. As one of the poorest countries in the world, with approximately 75% of the 50,000,000 people residing in rural areas, increasing access to health services in remote regions is crucial. While HIV continues to be the leading cause of death among adults ages 15-49, cervical cancer is the leading cause of death among women in Tanzania. This is due to limited preventive health services such as cervical cancer screening programs, vaccination programs for HPV, a shortage of healthcare facilities in rural areas, and simple lack of cervical cancer awareness in rural communities. The situation is complicated by the high prevalence of HIV infection because HIV is associated with a rapid progression of invasive cervical cancer. As such, rural areas have the highest need for cervical cancer educational programs and screening services. To make a difference in these communities, one has to understand their cultural values, beliefs, and ways of knowing. As a starting point, a cervical cancer awareness and screening event was hosted in Iringa, Tanzania. The goal of this week long event was to screen at least 50 women free of charge, provide education about cervical cancer through half hour informational sessions, and raise awareness about cervical cancer through the distribution of t-shirts and tote bags specifically designed and worded to encourage women to get screened. After implementing the plan, a total of 106 women were screened, 50 t-shirts were distributed as well as 50 tote bags. To continue the fight against cervical cancer, an NGO (Non-governmental Organization), called Mama Na Mwana (MNM) Tanzania has been established. MNM means "mother and child" and reflects the NGO's dedication to improving the health of women in rural communities. Mama Na Mwana is registered in the U.S.A as a 501c3 charitable organization and will focus on establishing



women's health clinics in rural Tanzania and offering cervical cancer awareness and educational programs through seminars and radio broadcasting.



# **CERVICAL CANCER SCREENING IN RURAL TANZANIA**

**Shangwe Kiliaki, MAN, APRN, NP-C, RN**

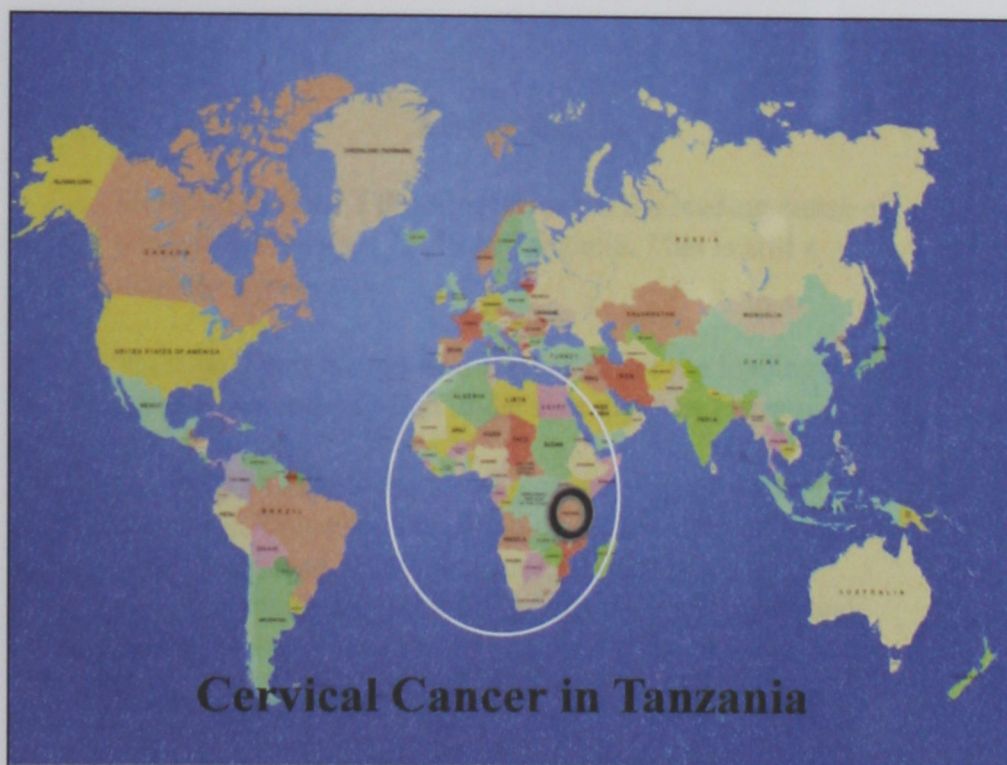
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Doctor of Nursing Practice

**Augsburg College**  
April 2015

## **Objectives for the Presentation**

- Provide an overview of my journey and the local context for my practice project---*rural Tanzania*
- Present key demographics of cervical cancer in Tanzania
- Describe my Cervical Cancer Screening Project
- Explain how nursing theory guided the design & beginning implementation of the project
- Discuss my vision for the future







## Tanzania



- 2 x size of California
- Population = 49,639,138
- 72-75% of the population lives in rural areas
- Life expectancy = 61 years
- High rural poverty rates
- Agriculture is the main means of income and food security in rural areas

## Tanzania

**HIV/AIDS (and TB co-infection)** is the leading cause of death in adults ages 15-49 in Tanzania. This is still a national emergency.

**Malaria, Pneumonia and Diarrhea** are the leading causes of death among children under five years in Tanzania.

**Cervical cancer** is the leading cause of death among women in Tanzania. The situation is complicated by the high prevalence of HIV because HIV infection is associated with a rapid progression of invasive cervical cancer.



## Cervical Cancer in Tanzania

	Tanzania	Developed countries
Mortality rate	35-45 deaths/100,000/year	3-9 deaths/100,000/year
Survival rate	30%	70%

### Why are cervical cancer mortality rates high in Tanzania in comparison to developed countries?

- 1) Lack of cervical cancer awareness in rural communities (72-75% of the population)
- 2) Limited preventive health services and cervical cancer screening programs
- 3) Vaccination programs were introduced in March of 2014 (2006 in developed countries)
- 4) High prevalence of HIV in the country  
HIV infection is associated with a rapid progression of invasive cervical cancer. It is recommended to screen HIV positive women for cervical cancer and vice versa.



## Why are cervical cancer mortality rates high in Tanzania in comparison to developed countries?

- 5) Shortage of healthcare facilities in rural areas
- 6) Lack of government funding. 11% of the healthcare budget is allocated towards the prevention and treatment of Malaria and HIV/AIDS and <5% towards cancer prevention and treatment programs

## Purpose of Project

- To host a Cervical Cancer Awareness and Screening Week/Event in Iringa (rural Tanzania)



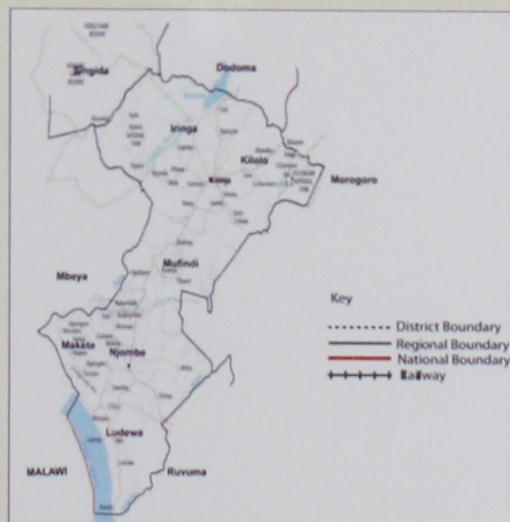


## Project Objectives

- Screen at least 50 women **FREE** of charge
- Provide education about cervical cancer through informational sessions
- Raise awareness about cervical cancer through the distribution of t-shirts and tote bags specifically designed and worded to encourage women to get screened

## Iringa

- Chose to start in Iringa because of family ties and the fact that it is mostly rural
- Population of 941,238 as of 2012
- Highest HIV/AIDS cases in Tanzania

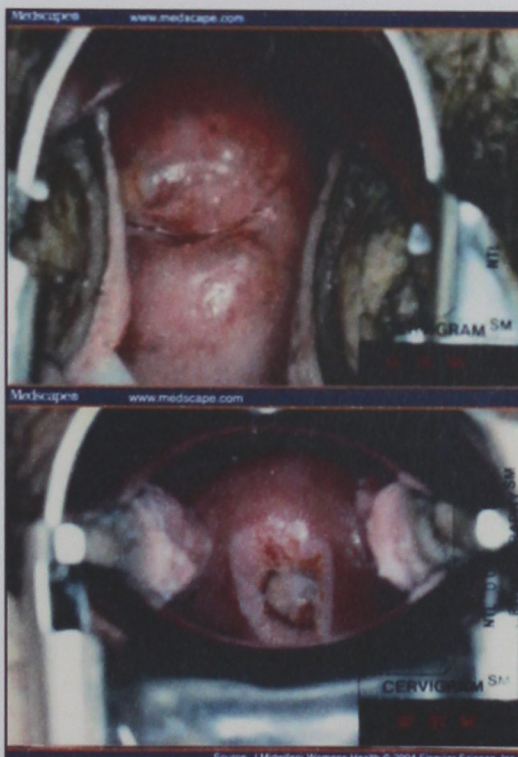






## Visualization with Acetic Acid (VIA)

- Practitioners brush the cervix with vinegar and within minutes, precancerous and cancerous lesions turn white
- Sensitivity of VIA is the same as Pap tests (70-80%) but specificity is lower than 85% (95% for Pap)



### Results are reported as:

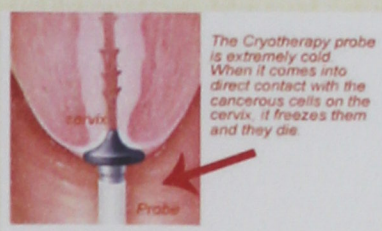
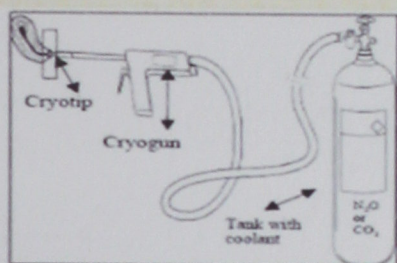
- VIA-negative (no acetowhite lesions)
- VIA-positive (dense, well defined opaque or white areas with or without raised margins)
- Suspicious for cancer (proliferative/ulcerative growths)

Source: J Maternity Women's Health © 2004 Elsevier Science, Inc.

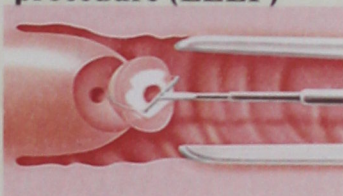


**VIA-positive lesions are treated with cryotherapy during the screening visit (single-visit treatment). The 3-5-3 freeze formula is used using the probe**

**If lesions extend into the endocervix then referrals are made to cancer centers**



**Treatment for very early stage invasive cervical cancer may include a hysterectomy or a loop electrical excision procedure (LEEP)**



**Options for later stage cancers include radiotherapy, chemotherapy and palliative care for pain/symptom management**

**1 year follow up is recommended after cryotherapy or LEEP because both procedures have a failure rate of 10-15%**



**During the Cervical Cancer Awareness and Screening Week/Event in Iringa;**

- I collaborated with the Iringa Regional Lutheran Hospital
- Project was supervised by a physician and nurses from the hospital
- Ads about the event were distributed through flyers and word of mouth 2 weeks prior

**Results from the Cervical Cancer Awareness and Screening Week/Event**

- Due to the great response to the event, a total of 106 women were screened and many others continued to show up. They will be screened through the hospital's women's health department
- Ages ranged from 20-54

74: HIV negative  
26: HIV positive  
6: unknown HIV status



1 VIA positive result (early stage so she received Cryotherapy immediately and she will follow up in 1 year)

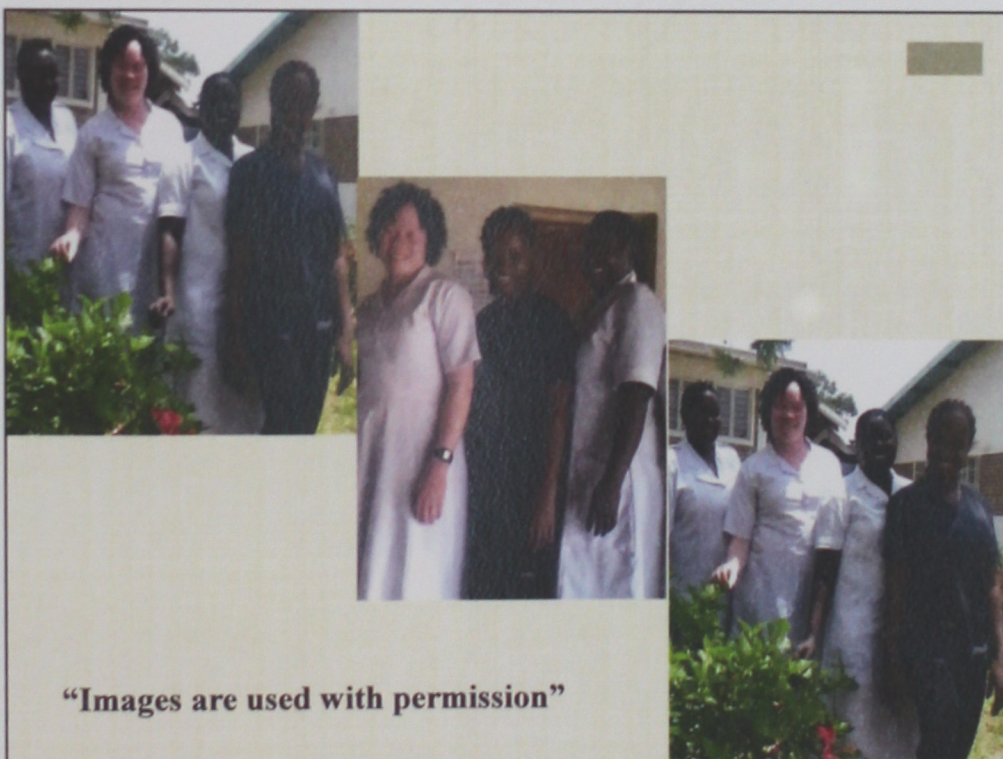
1 came for a follow up after receiving Cryotherapy July 2012. She was VIA negative 😊



## Results from the Cervical Cancer Awareness and Screening Week/Event

Education about cervical cancer was done through a half hour informational session every morning before screenings begun

Awareness about cervical cancer was done through the distribution of t-shirts and tote bags specifically designed and worded to encourage women to get screened for cervical cancer



"Images are used with permission"



## **Madeleine Leininger**

Cultural Care Diversity and Universality



## **How the world is changed**

- a) Top-down:** replication of validated best practices
- b) Bottom-up:** grassroots innovation grounded in indigenous knowledge & local context
- c) Muddled middle:** top down and bottom up collide. Real world complexities are adapted to local context. Both/and not either/or

(Patton, 2011)



## **The Future**

**To continue the fight against cervical cancer, I started a nonprofit organization called Mama Na Mwana (MNM) Tanzania**

**MNM means “mother and child”**

**It is registered in the U.S.A as a 501c3 charitable organization**

## **The Future**

**It will focus on:**

- 1) Establishing clinics in rural Tanzania**
- 2) Offering cervical cancer awareness and educational programs through seminars and radio broadcasting**

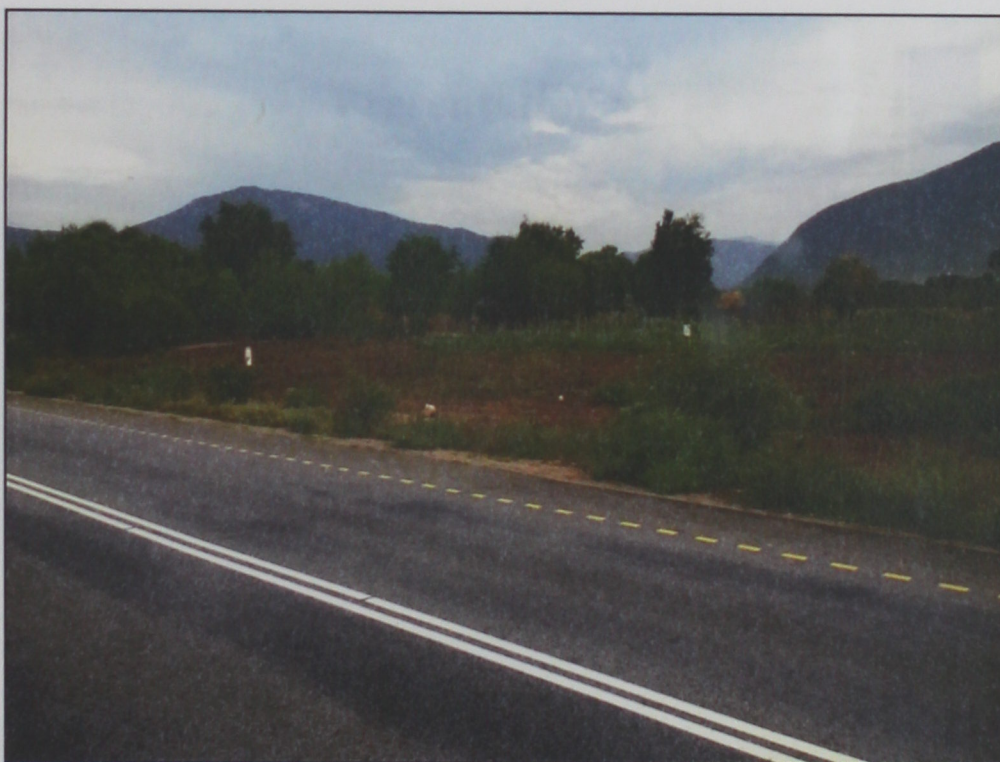
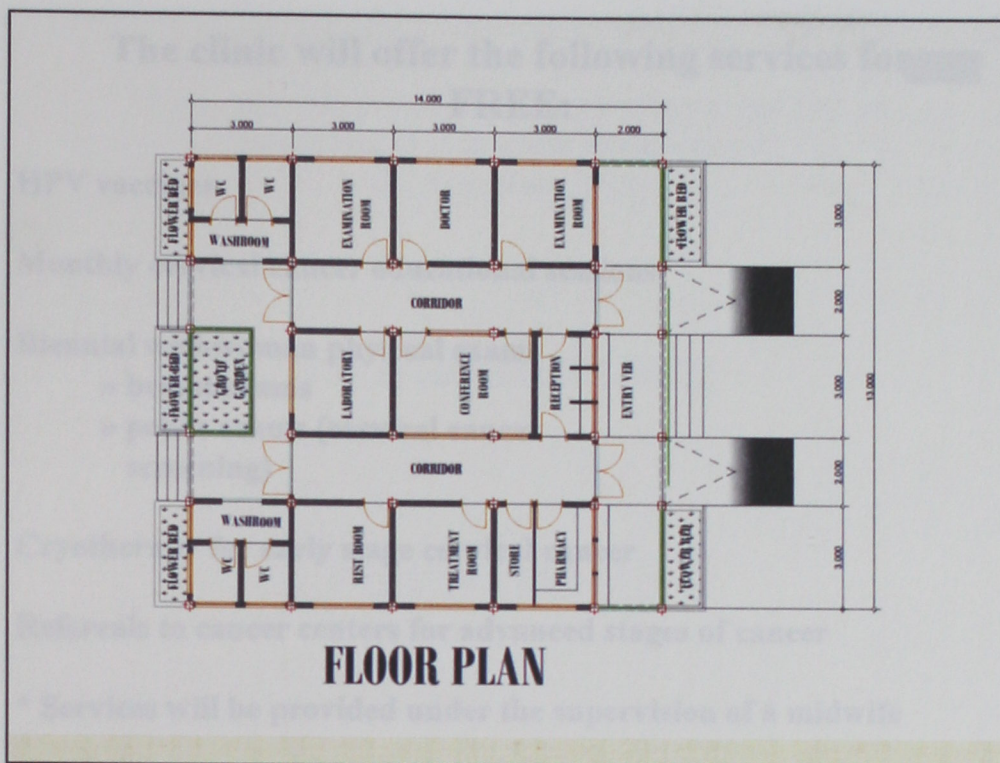














**The clinic will offer the following services for  
FREE:**

**HPV vaccines**

**Monthly cervical cancer educational sessions**

**Biennial well-woman physical exams**

» breast exams

» pelvic exams (cervical cancer  
screening)

**Cryotherapy for early stage cervical cancer**

**Referrals to cancer centers for advanced stages of cancer**

**\* Services will be provided under the supervision of a midwife**



**Presentations**

- **Park Nicollet Geriatric Nurse Practitioners  
and Physicians 3/2015**
- **Submitted to the Transcultural Nursing  
Society**



**“How easy it is to talk about the problems but just as important to talk about the solutions”**

**(Anonymous, 2013)**

**www.mnmtz.org**

**Questions?**

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