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# **Barriers to Mosquito Net Use in an Underserved, Vulnerable Population in Uganda, Africa**

**Cheryl Wallin, MSN, RN, NE-BC  
Doctoral Student**



# Disclosure

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## Authors:

- Cheryl Wallin, MSN, RN, NE-BC, Doctoral Student<sup>1</sup>  
Charlotte Barry, PhD, MSN, AS, RN, NCSN, FAAN<sup>2</sup>  
Shirley C. Gordon, PhD, RN, NCSN, AHN-BC<sup>2</sup>  
*(1)Christine E. Lynn College of Nursing, Florida Atlantic University, Boca Raton, FL*  
*(2)Christine E. Lynn College of Nursing, Florida Atlantic University, Boca Raton, FL*
- The authors have no known or perceived conflict of interest nor have they received any sponsorship or commercial support regarding the information in this presentation.



# Learning Objectives

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1. The learner will be able to describe culturally sensitive barriers for the use of mosquito nets as part of a malaria prevention program in Uganda.
2. The learner will be able to describe the importance of cultural sensitivity when entering global communities for the purpose of conducting research and developing malaria prevention programs.



# Purpose

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Describe the findings of a qualitative study that examined mosquito net use among an underserved population in Uganda, Africa.

Population: Persons with:

- Hanson's Disease or other stigmatizing health issues
- At risk for contracting the disease.





# Background

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- Uganda- highest in the world for malaria transmission (W.H.O. 2013)
- Sleeping under mosquito nets effectively prevents malaria (Pullan, R., Bukirwa, H., Staedke, S., Snow, R., & Brooker, S. 2010).
- 33% of surveyed Ugandan households reported sleeping under nets (W.H.O., 2013).



# Significance

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- Mosquito nets often misused or redirected for other purposes (Gitonga et al., 2012, Minakawa, Dida, Sonye, Futami, & Kaneko, 2008)
- Limited research describing the experience of sleeping under mosquito nets or barriers to sleeping under mosquito nets from the perspective of persons living in Uganda.



# Theoretical Perspective

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- Community Empowerment Theory (Persily & Hildebrandt, 2008)
  - Assumption: Answers to community problems lie within the community
  - Framework: Interventions at individual and community levels.
  - Call to nursing: Transfer knowledge from the nurse to lay people within the community. In this instance there is a reciprocal relationship: the nurse and the participants transfer knowledge.
  - Three major concepts: Involvement, lay worker and reciprocal health.



# Methods

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## Qualitative, descriptive study

- Experience of sleeping under a mosquito net and perceived barriers to sleeping under a net, approved by the Florida Atlantic University Institutional Review Board.
- April 2015, 2 communities selected based on researcher knowledge and input from a community chairman who granted approval for the study and presided over the communities. 5 participants were recruited by visiting hut to hut.





# Methods

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- The purpose of the study and verbal informed consent explained by researcher via Soga interpreters. Verbal consent was received and recorded for each participant.
- Face to face interviews, open-ended questions with the assistance of the Soga interpreters, recorded digitally and transcribed.
- Handwritten field notes were maintained.



# Results

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Data analyzed using Colaizzi's phenomenological method of data analysis as interpreted by Sanders (2003). Three themes emerged:

- (1). Protecting family members
- (2). Honoring older persons
- (3). Living connected to the community



# Theme 1: Protection

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- Protection emerged in the context of participants expressed understanding that family members could and should be protected against malaria.
- They believed sleeping under mosquito nets offered some protection against malaria but also believed malaria was caused by wind, coldness or water.
- Therefore, they did not believe sleeping under mosquito nets provided complete protection against malaria.



# Theme 2: Honoring Older Persons

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- Understanding that parents/grandparents must be well to provide for the family and care for children explained the local practice of reserving sleeping under mosquito nets for the oldest person in the home when an insufficient number of nets were available.



# Theme 3: Living Connected to the Community

## Theme

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Living connected to the community emerged as participants reported shared stigmatized health conditions drew the community together as well as their shared cultural beliefs about transmission and respect for elders.



# Researcher's Reflections

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- Researcher bias: we should sacrifice for our children and the children's needs should always come first.
- Ugandan cultural beliefs: honoring elders grants them the right to the nets.
- Ugandan practicality: if the parents are ill they cannot care for children, when children are grown, they will get nets.



# Cultural humility-Dynamic Self-reflection

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- Dynamic self-reflection occurs in one's inner most being.
- Dynamic self-reflection is the intentional act of evaluating one's preconceived ideas and experiences as well as ideas conceived from professional training.
- Self-reflection is reliant on active listening.



# Cultural Humility-Active Listening

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- Active listening is the first step outside of one's self, receiving input from the external world.
- Through active listening one can hear the other rather than arriving at conclusions based on one's previous thoughts and experiences.
- The intentional act of self-reflection reliant on active listening enables honest partnering with other and community.





# Cultural Humility-Honest Partnering

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- Honest partnering occurs when visiting with community individuals, with the intention to be with, not do for and the intention to be with to nurture the other's hopes and dreams.
- Active listening and open honest communication assist in developing a trusting relationship with the community and a willingness to partner with the nurse.
- The core qualities of dynamic self-reflection, active listening and honest partnering may culminate in community connectedness.



# Cultural humility-Community Connectedness

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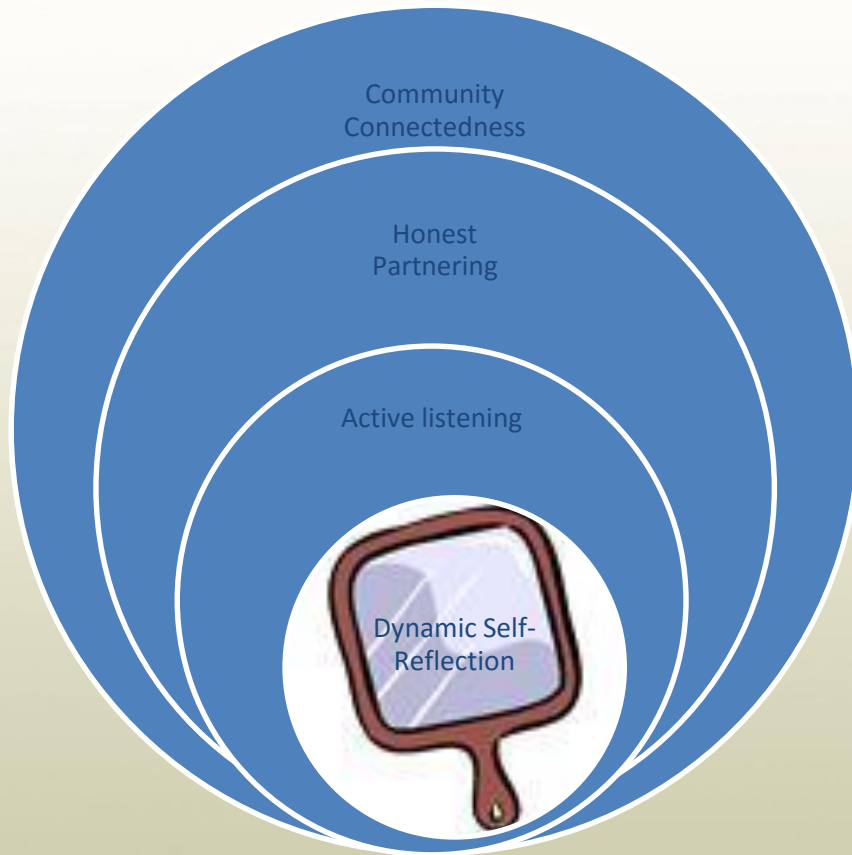
- Community connectedness is becoming a part of the community.
- Community connectedness is the evidence of a successful entry into and partnership with a community.



# Cultural Humility Model

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Cultural humility is a lifelong process of dynamic self-reflection reliant on active listening to enable honest partnering and connectedness with community.



# Conclusion

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Mosquito net use in Uganda can be described as being grounded in deep rooted cultural beliefs about transmission and respect for elders.

## Barriers to sleeping under mosquito nets

- Lack of access to a sufficient number of mosquito nets
- Misconceptions regarding malaria transmission.
- For children to be protected by nets- there must be enough nets for the older family members.

Tororo district of Uganda study: though 67.9% of households owned at least one net, only 9.9% reported having at least



# Implications

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Understanding culturally sensitive barriers to mosquito net use can be used to :

- Guide education programs delivered by an empowered community
- Improve individual community integration of prevention strategies
- Prevent malaria infections





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