



RESEARCHING INTERVENTIONS TO ADDRESS  
THE HUMAN RESOURCES FOR HEALTH CRISIS –  
AN APPLICATION OF DISCRETE CHOICE EXPERIMENTS  
IN KENYA, THAILAND AND SOUTH AFRICA

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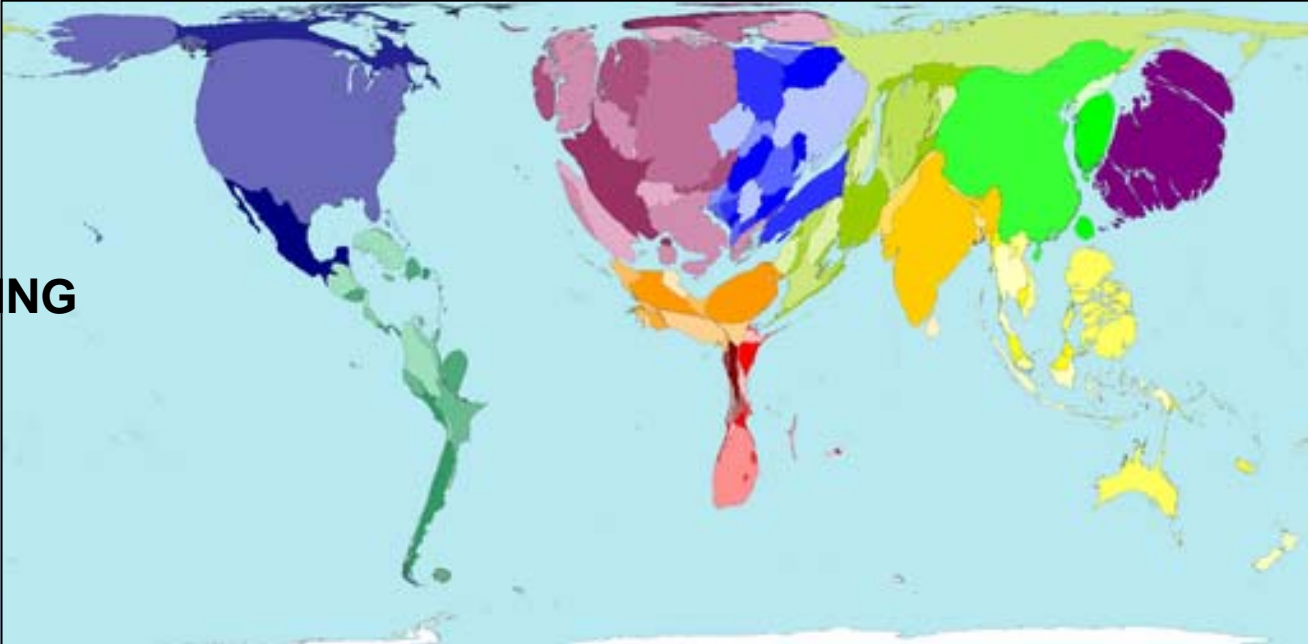
# Identifying policies to improve nurse recruitment and retention in rural Kenya: Results of a discrete choice experiment

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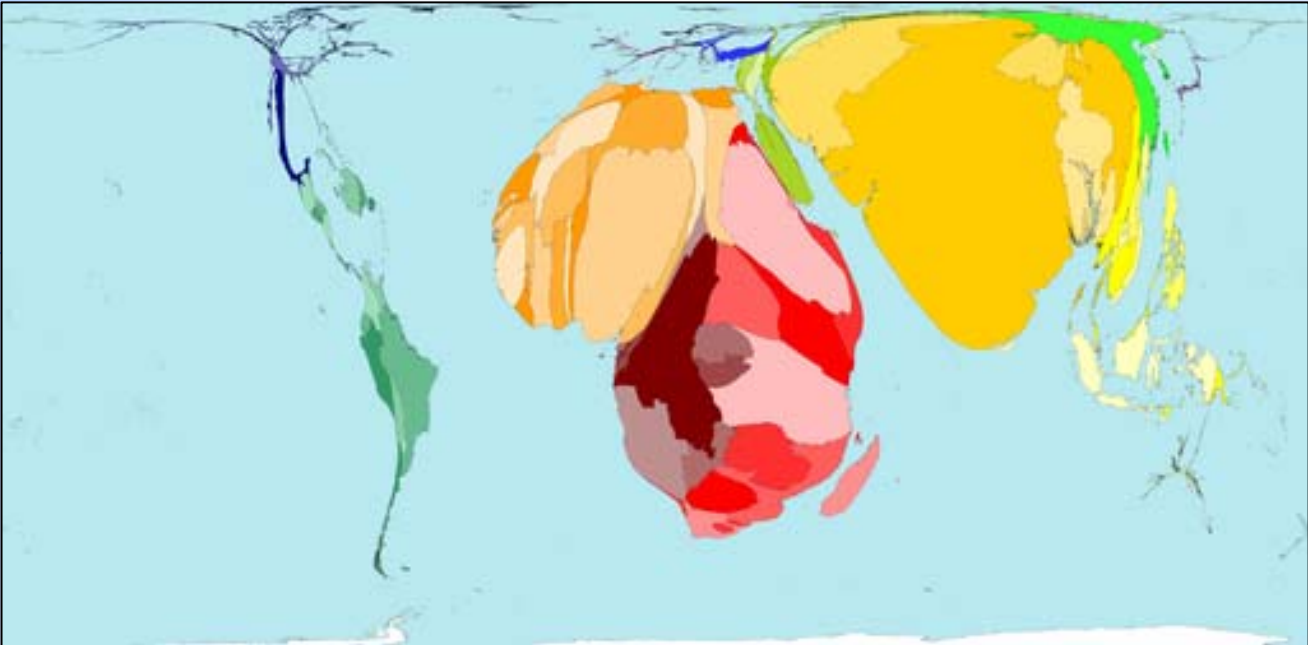
Sandra Mudhune, Kethi Mullei, Jackline Wafula, Mike English, Catherine Goodman, Mylene Lagarde, Duane Blaauw



**NURSES WORKING  
IN HEALTH  
SYSTEMS**



**MATERNAL  
MORTALITY**



# Background

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- Shortage of HW contributes directly or indirectly to increased inequalities of access to basic health care and therefore health outcomes
- Two major contextual issues in Kenya:
  1. Short term solutions have been found to the nursing recruitment
  2. Observation that government employed nurses frequently seek transfers from rural to urban posts soon after their employment

# Objectives

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- Set out to explore what package of policy-relevant incentives might need to be provided to registered nurses to encourage them to accept and remain in rural posts

- Used DCE to model relative importance of different job characteristics and the impact of different policy interventions.
- Utilised a labelled choice experiment -choice was driven by two factors.
  1. A labelled design allows more flexibility in the design, allows for the definition of alternative-specific levels.
  2. It was felt that the labels would appear less artificial than the usual generic headings ("job A" or "job B").
- Study done among a sample of nursing graduates (and doctors in one country)

- Attribute selection
  - policy options, KII, FGDs
- In addition to the DCE each interviewee completed SAQ covering individual characteristics, views on work in rural areas, sense of vocation and values, job preferences and intentions on graduation.

# Choice Experiment Design

	RURAL Facility	URBAN Facility
Type of facility	Hospital	Dispensary
Gross Monthly salary	KSH 18,500	KSH 18,500
Rural Monthly allowance	An additional KSH 1,850 per month	None
Opportunity to get study leave	1-year guaranteed study leave after 4 years of service	No guaranteed study leave
The housing provided	You can choose to stay in the subsidised accommodation provided which is a house just for you and your family.	
The number of years you would have to work before you get a (guaranteed) promotion	4 years	
The type of employment offered	3-year contract	Permanent government contract
The workplace culture	The workplace culture in this facility is personal and supportive: in their relationship with you, your supervisor(s) emphasise teamwork, high staff morale and developing the full potential of staff.	The workplace culture in this facility is formal and structured: in their relationship with you, your supervisor(s) emphasise stability, following rules, and keeping things running smoothly.

Which facility would you choose? Rural Facility  Urban Facility

**Labelled choice experiment**

**6 types of incentives in rural posts**



# Choice Experiment Design



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Which facility would you choose?

Rural Facility

Urban Facility

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Which facility would you choose?	Rural Facility <input type="checkbox"/>	Urban Facility <input checked="" type="checkbox"/>

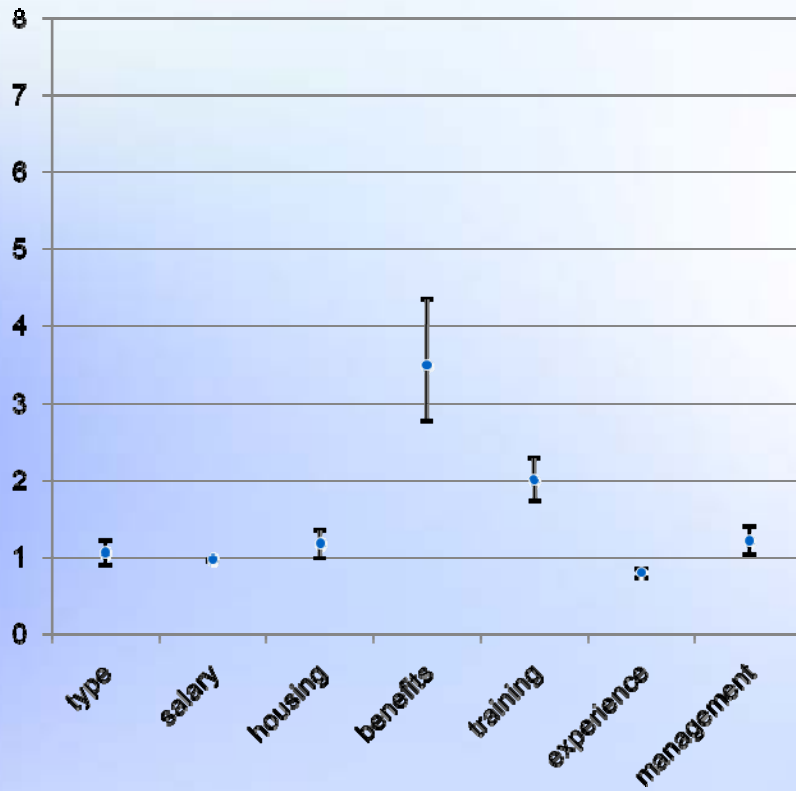
# Population Characteristics



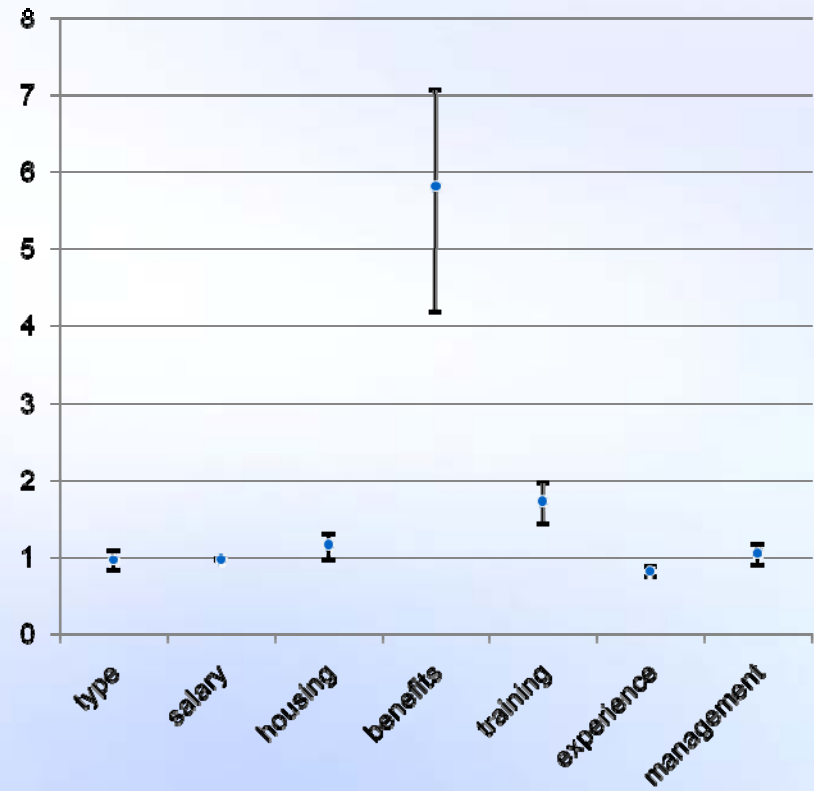
Variable	Pre-service Nurses (n=166)	Distance Learning Nurses (n=179)	P value
Mean age (SD)	23.96 (2.32)	37.53 (6.39)	<0.0001
Gender – female	68.07%	82.12%	<0.0001
Marital status – married	10.24%	70.95%	<0.0001
Rural background	90.36%	96.65%	<0.0001
Maternal education	72.29%	40.22%	<0.0001
Happy to accept rural posting	58.43%	46.37%	<0.0001
Nursing 1 <sup>st</sup> career choice	61.45%	77.65%	<0.0001

# Results: Job characteristics

## Pre service

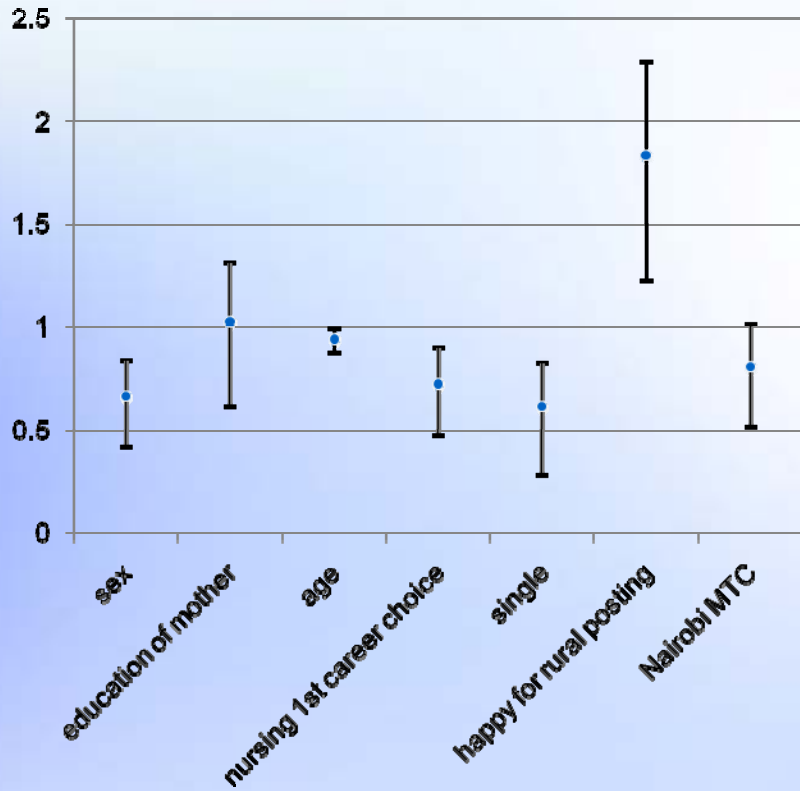


## Distance learners

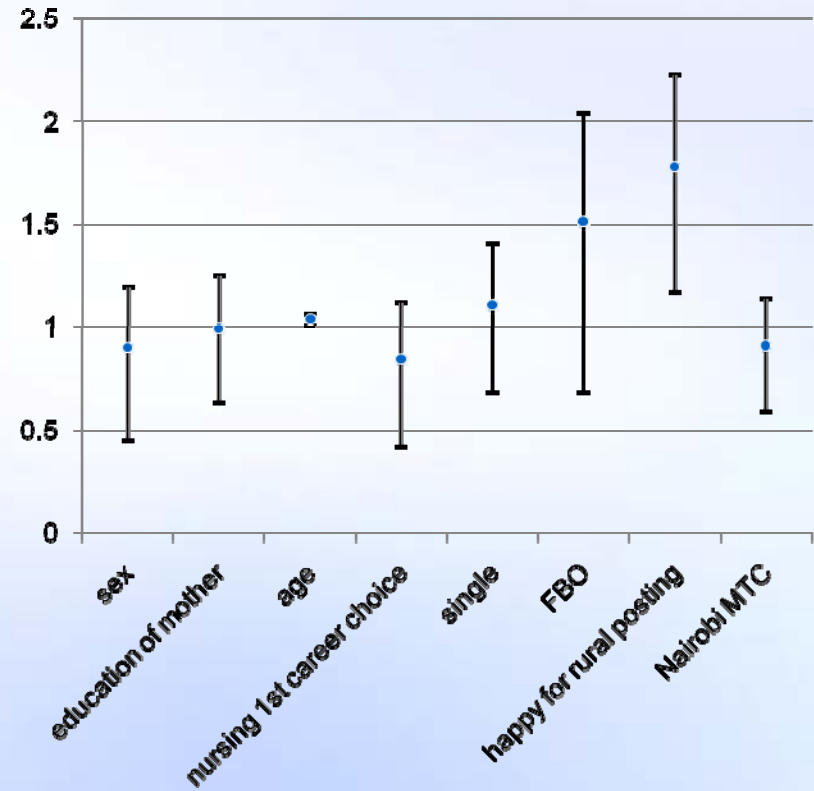


# Results: Socio-demographic

## Pre-service

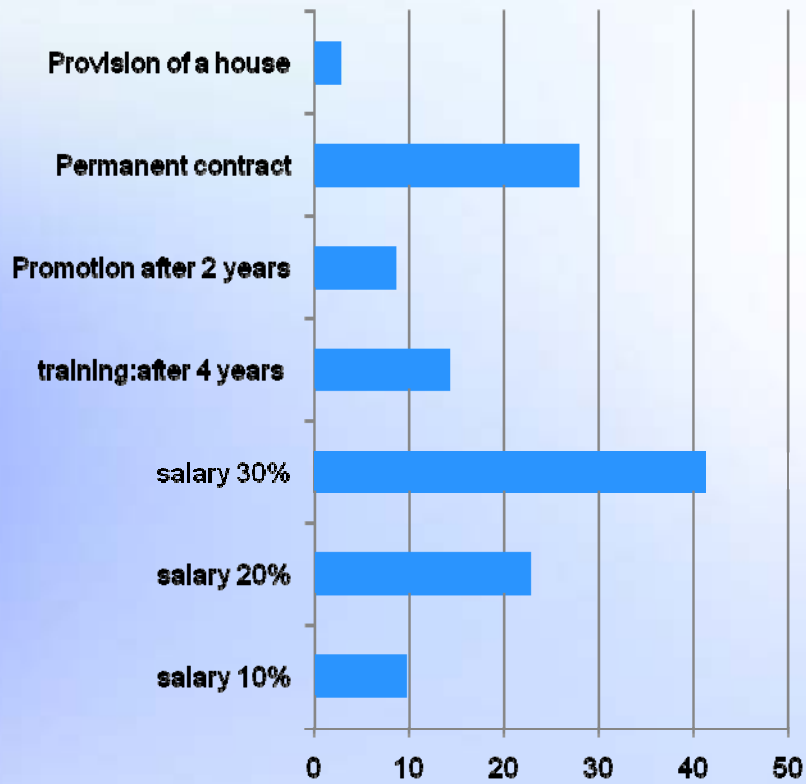


## Distance Learners

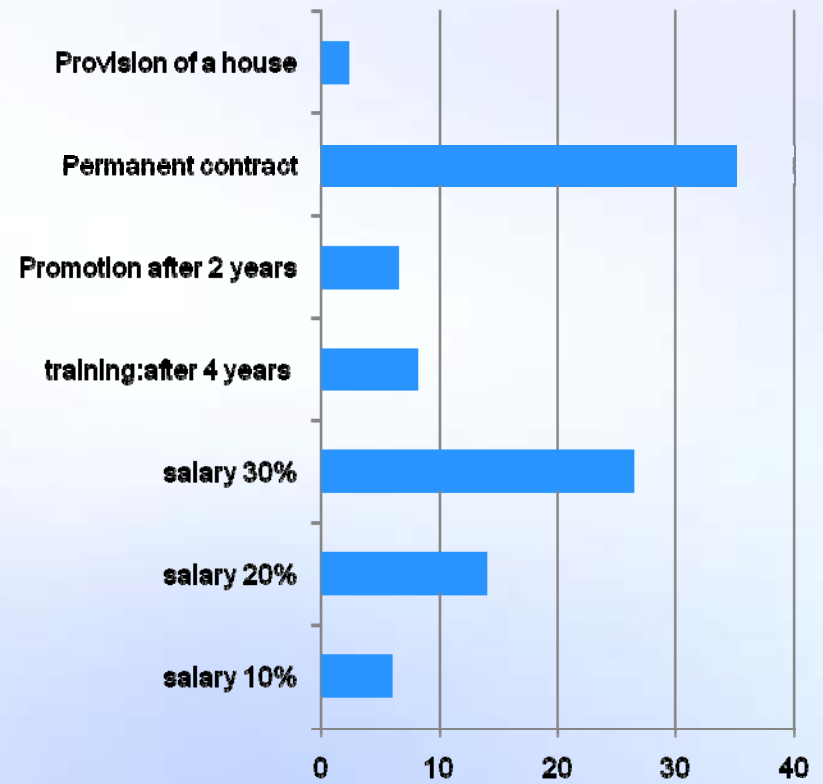


# Predicted probabilities

## Pre-service



## Distance Learners



# Discussion

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- Geo-imbalance and pseudo shortage – many nurses, they are just not willing to take up rural posts. What can keep them there?
- The job attributes that seem that they might be directly influenced by health policy to potentially increase the attraction of rural postings are
  1. Permanent contracts which can be tagged to rural posts. Important findings as fixed term contracts that have been funded over the past few years by donors come to an end.
  2. Allowances for rural postings
  3. Providing opportunity for training, and
  4. Reducing the years of experience before gaining a promotion.



