

Why Do India's Urban Poor Choose to Go Private?  
*Hospital Choice Experiments in Slums of Hyderabad*

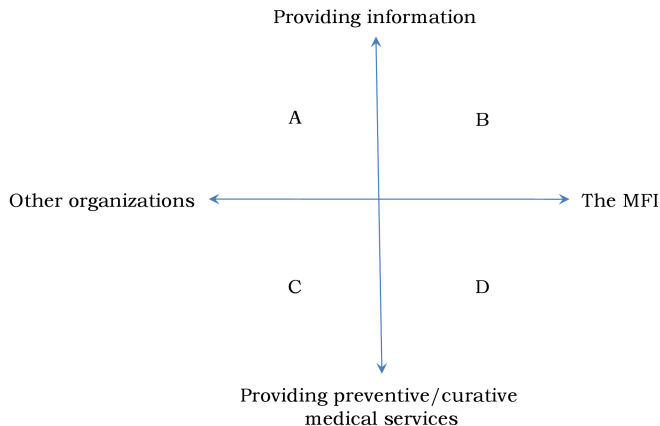
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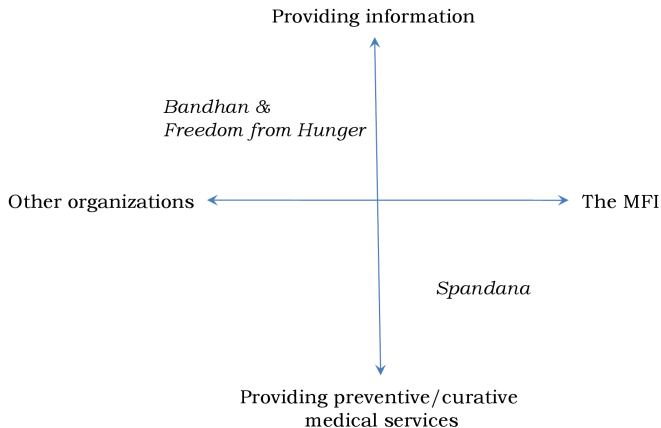
# Integrating Microfinance and Health

## Strategies for integrated Health and Credit Services



# Integrating Microfinance and Health (cont'd)

## Strategies for integrated Health and Credit Services (Examples)



# Public vs. private provision of public goods

## Education literature

- Test score performance  
→ Tooley & Dixon, 2005
- Teacher absenteeism  
→ J-PAL Experiments

## Health literature

- Provider attention  
→ Das & Hammer, 2005
- Drug availability  
→ More et al., 2009

## Common theme:

- Lack of accountability of public sector providers

## Focus of this study:

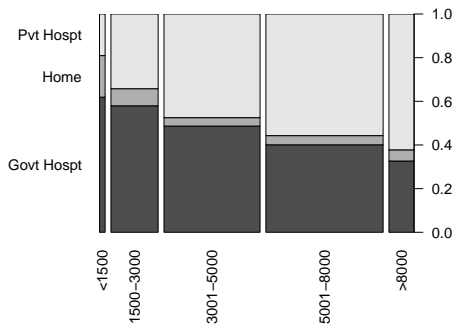
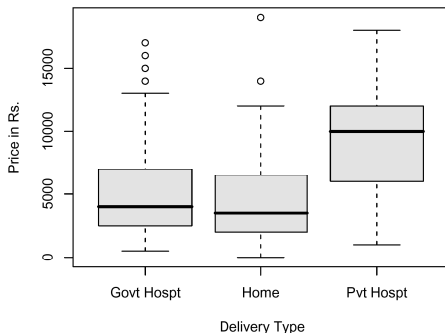
- “A normal delivery costs Rs 4,000 in the general ward Rs 5,500 in the semi-private ward, and Rs 7,000 in the private ward.

A normal delivery package is *all-inclusive* and includes a two-day stay, medicines, vaccinations, and a baby kit.”

– LIFE SPRING HOSPITALS PVT LTD

- “[...] after the *cost of external medicines* was added, the for-profit sector turned out to be cheaper than the government sector”.  
– WORLD BANK POLICY NOTE (2005)















# Hospital choice for maternity care in Hyderabad, India












Question: What explains lower income groups' predilection for private providers? Despite them generally being

- more expensive,
- *less* qualified, and
- demonstrably more responsive to patients *perceived*, rather than actual medical needs (Das and Hammer, 2005).









# Attribute levels used in Discrete Choice Experiments

ATTRIBUTES	LEVELS		
Price ధర	రూ॥ 1,000	రూ॥ 4,000	రూ॥ 7,000
			
Privacy of room స్వచ్ఛా వసతి	జనరల్ వార్డు లో వసతి	షీర్ రూమ్ లో వసతి	ప్రైవేట్ గర్ల లో వసతి
			
Professionalism of staff ఉన్నత వృత్తి నిర్వాహకులు	జగ్గినిచ్చురప్పడు మంత్రిశాలా/గర్ల సహాయం	జగ్గినిచ్చురప్పడు డాక్టర్ సహాయం	జగ్గినిచ్చురప్పడు ఇంజనీర్/డాక్టర్/మంత్రిశాలా/గర్ల సహాయం.
			
Quality of med. Equipment వైద్యపరికరాల నాణ్యత	విపైద్య పరికరాలులేవు	జాబీజన్ మరియు ట్రాన్స్ వైద్య పరికరాలున్నాయి	అన్ని వైద్య పరికరాలు ఉన్నాయి
			
Continuity of care నిరంతర సంరక్షణ	కొనుపు ముందు ఎప్పుడూ సంరక్షకురాలు తో కలవలేదు.	కొనుపు ముందు బ్రష్ నాల్ సంరక్షకురాలుతో కలిసారు.	కొనుపు ముందు రైడమనార్ల సంరక్షకురాలు తో కలిసారు.
			

# Choice cards used in experiments

HOSPITAL CHOICE CARD	
HOSPITAL A	HOSPITAL B
<p>ಆಸ್ಪತ್ರೆ/ವೈದ್ಯನು ಒಬ್ಬರೇ ಸಹಕಾರಿಯು</p> 	<p>ಆಸ್ಪತ್ರೆ/ವೈದ್ಯನು ಒಬ್ಬರೇ ಸಹಕಾರಿಯು</p> 
<p>ಕಾಸುವು ಹುಂದು ಎಷ್ಟುಕೂ ಸಂದರ್ಭಕುರಾಲುಕೊ ಕೆಲವು ಕೆಲವು.</p>	<p>ಕಾಸುವು ಹುಂದು ಎಷ್ಟುಕೂ ಸಂದರ್ಭಕುರಾಲುಕೊ ಕೆಲವು ಕೆಲವು.</p> 
<p>ಅಕ್ಕಿಹಣೆ ಮೂರು ಕೆಲವು ವೈದ್ಯ ವರಕರಾಲುಕುರಾಲು</p> 	<p>ವಿವಿಧ ವರಕರಾಲುಕುರಾಲು</p> 
<p>ಅನರ್ಥ ವಾಸ್ತು ಲೋ ಮೂಕಿ</p> 	<p>ಅನರ್ಥ ವಾಸ್ತು ಲೋ ಮೂಕಿ</p> 
<p>Price Rs 1,000</p> 	<p>Price Rs 1,000</p> 
<input type="checkbox"/> Hospital A	<input type="checkbox"/> Hospital B

(a) Choice Card 1

HOSPITAL CHOICE CARD	
HOSPITAL A	HOSPITAL B
<p>ಆಸ್ಪತ್ರೆ/ವೈದ್ಯನು ಒಬ್ಬರೇ ಸಹಕಾರಿಯು</p> 	<p>ಆಸ್ಪತ್ರೆ/ವೈದ್ಯನು ಒಬ್ಬರೇ ಸಹಕಾರಿಯು ಒಬ್ಬರೇ ಸಹಕಾರಿಯು ಒಬ್ಬರೇ ಸಹಕಾರಿಯು</p> 
<p>ಕಾಸುವು ಹುಂದು ಎಷ್ಟುಕೂ ಸಂದರ್ಭಕುರಾಲುಕೊ ಕೆಲವು ಕೆಲವು.</p>	<p>ಕಾಸುವು ಹುಂದು ಎಷ್ಟುಕೂ ಸಂದರ್ಭಕುರಾಲುಕೊ ಕೆಲವು ಕೆಲವು.</p>
<p>ಅಕ್ಕಿಹಣೆ ಮೂರು ಕೆಲವು ವೈದ್ಯ ವರಕರಾಲುಕುರಾಲು</p> 	<p>ಅಕ್ಕಿಹಣೆ ವೈದ್ಯ ವರಕರಾಲುಕುರಾಲು</p> 
<p>ಅನರ್ಥ ವಾಸ್ತು ಲೋ ಮೂಕಿ</p> 	<p>ಅನರ್ಥ ವಾಸ್ತು ಲೋ ಮೂಕಿ</p> 
<p>Price Rs 1,000</p> 	<p>Price Rs 1,000</p> 
<input type="checkbox"/> Hospital A	<input type="checkbox"/> Hospital B

(b) Choice Card 2

# Hierarchical Bayes random-effects logit estimates

	Price (Ref.: Rs 1000) Rs 4000    Rs 7000		Privacy (Ref.: General Ward) Shared    Private		Professionalism (Ref.: Doctor) Nurse    Team		Medicines & Equipment (Ref.: Medium) Low    Full		Continuity (Ref.: Never met) Once    Twice	
Mean	-1847***	-6000***	1886***	1532***	-1908***	1064***	-4372***	5248***	3434***	5592***
<i>Predisposing Factors</i>										
No. of Children	-9	-409*	-212	-171	108	74	-513**	-152	315	-121
Illiterate	-108	-452*	-183	-189	-644**	-179	-320	406*	437*	65
Muslim	-828***	-802***	164	344	38	-286	454*	-224	-62	-22
Household-size	-408*	-37	-409*	-6	-18	347	133	252	180	-59
Value to Homebirth	-1104***	-85	279	745***	129	135	680**	67	-269	-225
First month Antenatal Care	44	-265	-104	-58	636**	472*	-978***	-151	-588**	-327
<i>Enabling Factors</i>										
Income Rs 3,000 - 5,000	-250	-272	909***	160	-483*	157	-971***	361*	636**	84
Income > Rs 5,000	-97	-220	579**	321	-390*	735***	-885***	367*	406*	501**
Family Finance	-203	-61	495**	-104	316	204	-186	-51	186	-193
<i>Need Factors</i>										
Health at Risk	89	-237	-483*	103	-254	246	-254	-56	292	339
Birth by Cesarean	-321	-457*	-376*	-366*	249	521**	420*	76	40	-262

Significance codes: 0 '\*\*\*' 0.01 '\*\*' 0.05 '\*' 0.1 '.' 1

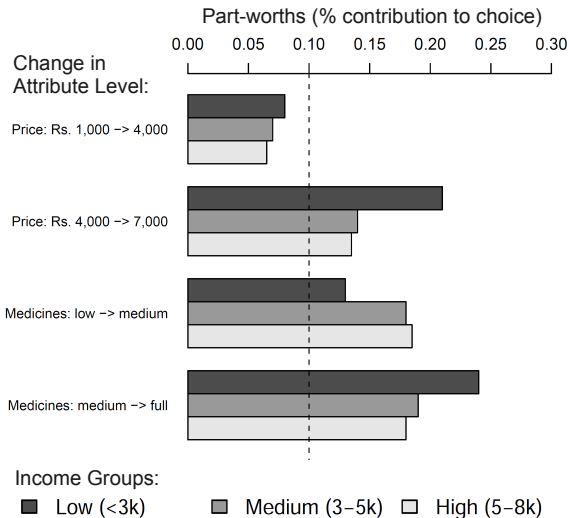
Number of Observations: 9,757

$$\text{Model: } u_{ijk}^* = \mathbb{X}_{ijk}(\beta + \eta_k) + \varepsilon_{ijk} \quad (1)$$

$$\eta_k = \Gamma s_l + \zeta_k \quad (2)$$



# Insurance demand by income groups



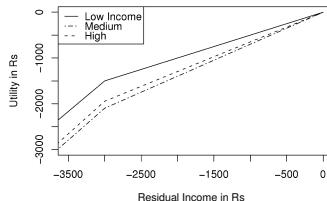
## Part-worth structure for 'medicines and equipment' attribute

- Higher part-worth (0.24 vs. 0.19) for a step-change from 'medium' to 'full' medicines (*uncertain* component)
- Lower part-worth (0.13 vs. 0.18) for a step-change from 'low' to 'medium' medicines (*certain* component)

# Theories of insurance demand

- Nyman's (1999) theory
  - classical Bernoulli (1738) utility function in income
  - changes in income are valued from a reference point, as in Kahneman and Tversky's (1979) prospect theory
  - net gain specification of von-Neumann-Morgenstern (1944) expected utility theory

Figure: Empirical utility functions by income groups



- Insurance demand explained by income levels
  - Access value of health insurance (Nyman, 2001)
  - State-dependent utility theory (Anscombe and Aumann, 1963)

# Conclusion

## Feasibility of DCE method for BoP markets?

- non-lexicographic preference orderings
- transitivity of preferences and rationality of choices made
- no response from Muslim women withdrawn into purdha
- decision-making in health care is a joint process!

## Policy implications

- key explanation why urban poor choose to go private: insurance demand with respect to medical expenses
- effective pro-poor policy should provide insurance in *urban* areas (instead of spending too much on efforts to provide free basic medication)
- such insurance cover is implicitly contained in contracts offered by private providers, as microfinance institutions.