The Prevalence and Nature of Food Insecurity in a HIV and AIDS Population Served by Emmanuel Hospital Association's Shalom Clinic in Delhi, India

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A Research Partnership

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Our research team

Purpose of These Remarks

- Introduce our research partnership with EHA and UIUC in Delhi, India
  - Observations on researcher/ngo partnerships
- Discuss preliminary findings from the first wave of survey data
- Argue for the potential usefulness of consistent food security monitoring tools across programs, countries and context

Varieties of Academic—NGO Research Partnerships

- Pure academic model
  - Primary output is research of interest to academic peers
  - NGO offers data or a site to conduct research, perhaps staff as assistants
  - Academic defines, implements and communicates
- Pure NGO model
  - Primary output aimed at NGO program or needs, no effort to communicate to scholarly audiences or through refereed journals
  - Academic as a consultant on methods and analysis
  - NGO defines research question, often an evaluation of a program for internal or donor use
- Mixed NGO/academic research model
  - Variety of outputs, multiple audiences
    - Items for disciplinary and academic journals
    - Input into program design or policy outreach of the NGO
  - Joint ownership and contributions by NGO staff and academic researchers
  - Sharing
    - Shared authorship, shared conference communication
    - High levels of communication

Practicalities and Programmatic Value

- Who benefits from research findings?
- How will we ensure they have a feedback into programming and inform practice?
  - We involve directly the practitioner in the research
- Authorship – deserves discussion early on
  - Recognize the value of the site, the program, and the input of the practitioners
- Ownership of data and research results
- Incentives
  - Understand why an NGO may be interested in partnership
    - Often multiple objectives here
      - Influence policy at a higher level
      - Remain connected to academic disciplines and research methods
      - Improve evaluation capacity
      - Build ties for access to funds, grant opportunities, education
      - Incentives for writing and publishing and communicating
- Why are you interested in this partnership?
- What assets do you bring to the partnership?

HIV and AIDS in India

- Debate over number of HIV positive people in India
  - UNAIDS 5.7 million (2006 Epi Update)
  - NACO roughly half that number
- Highest rates of prevalence found in Andra Pradesh, northeast India, portions of Maharashtra and Karnataka
- Key role of transmission from regular sexual partners who acquired HIV from paid sex
- Injecting drug use
- Control efforts – National AIDS Control Programme
  - Prevention, Strengthening care and support and treatment, Improving service delivery, mainstreaming and working in partnership
  - Cross-cutting strategies of women's rights and addressing gender disparities, working with commercial sex workers on alternative livelihood strategies

Emmanuel Hospital Association and Shalom Delhi HIV and AIDS Program

- EHA is the largest non-government provider of health care in India
  - 23 hospitals
  - 30 community-based projects
  - Focus on health of people in rural areas
  - Central, North, and Northeast India
  - A federation of hospitals – a network
  - “Fellowship for transformation through caring”
- Shalom Delhi is an HIV and AIDS program
  - Continuum of care for persons infected by HIV and their families
  - Home care
  - Team of two doctors, nursing staff, home-based care and outreach workers

Measuring Food Insecurity

- Little published research on prevalence of food insecurity and the role of food insecurity in improving health outcomes for people affected by HIV and AIDS
- Normen, Chan, Faitstein et al. (2005) report on food insecurity among 1213 HIV positive people in British Columbia
  - 52% food secure, 27% food insecure without hunger, and 21% food insecure with hunger
  - 5 times Canadian general population rate
  - Used modified Cornell/Radimer instrument
- Egge et al. (2007) report a significant improvement in anthropometric measures and mental QOL measures due to food supplementation in Zambia

Modified Cornell/Radimer Food Security Measure

- Food security: “all people at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life.” (USAID def.)
- More than 200 definitions
- HFIAS (Household Food Insecurity Access Scale)
  - Anxiety and uncertainty about hh food supply
  - Insufficient quality
  - Insufficient food intake and its physical consequences
  - scores into four categories

EHA/UIUC Study

- Survey of clinic patients, along with information obtained from the medical record
- Approved by UIUC IRB and EHA research board
- Two waves, 187 respondents as of Sept. 2007
- 9 question Household Food Insecurity Access Scale (HFIAS)
- Dietary Diversity Score
- Inadequate household food provisioning over previous 12 months
- Health measures: height, weight, stage of illness, ARV use and history, CD-4 count, opportunistic infections, mental health (K-6)
- Social, economic, living situation: income, source of income, assets, coping strategies

First Wave Results

- 187 surveys from April – mid-September 2007
- Approximately 21% of respondents reported having at least one month in past year without enough food
- Sample persons are poorer than Delhi average based on NFHS 2005/06 data

Sample Characteristics

	Freq.	%
Sex (n=187)		
Male	97	51.9
Female	90	48.1
Age (n=184)		
18-28	48	26.1
29-33	47	25.5
34-37	45	24.5
38+	44	23.9

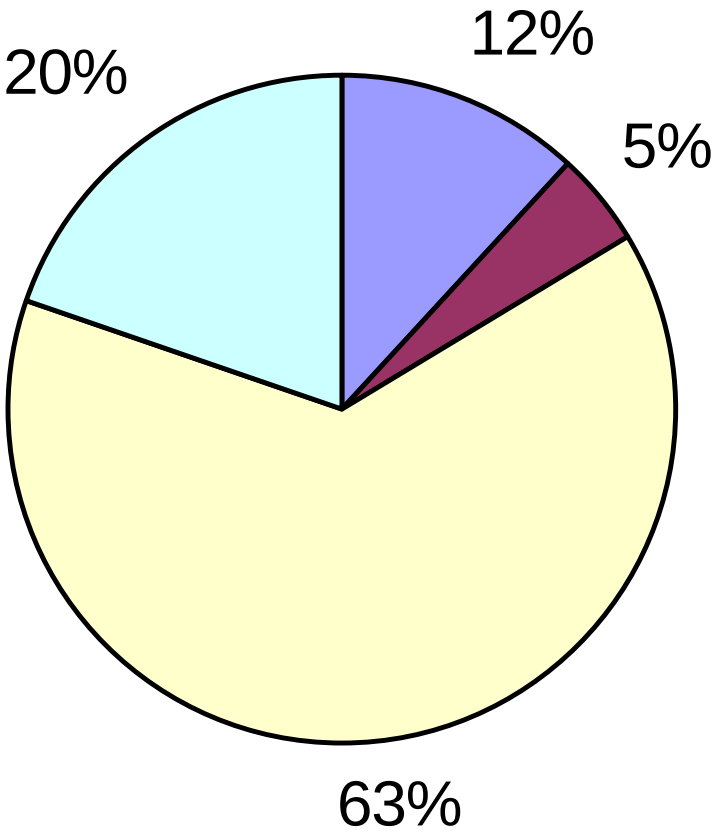
Sample Characteristics

	Freq.	%
Education		
Illiterate	22	11.9
Literate, no schooling	26	14.1
Less than Grade 5	11	5.9
Grade 5 – Grade 9	73	39.5
Matriculate	35	18.9
Intermediate	10	5.4
B.A./B.Sc.	8	4.3

Sample Characteristics

	Freq.	%
Single Parents (n=177)		
Female	45	25.4
Male	10	5.6
Number of Children in HH (n=187)		
0	34	18.2
1	41	21.9
2	49	26.2
3	33	17.6
4	21	11.2
5+	9	4.8

Household Food Insecurity Categories



Household Food Insecurity Access Scale Questions		Number of Positive Responses	Percentage of Total Responses
Did you worry that your household would not have enough food? (n=180)		157	87.2
If "Yes", how often did this happen?	Rarely	19	10.6
	Sometimes	36	20.0
	Often	101	56.1
Were you or any household members not able to eat the kinds of foods you preferred because of a lack of resources? (n=178)		151	84.8
If "Yes", how often did this happen?	Rarely	32	18.0
	Sometimes	92	51.7
	Often	27	15.2

Did you or any household member eat just a few kinds of food day after day because of a lack of resources? (n=178)		152	85.4
If "Yes", how often did this happen?	Rarely	73	41.0
	Sometimes	52	29.2
	Often	27	15.2
Did you or any household member eat food that you did not want to eat because of a lack of resources to obtain other types of food? (n=176)		142	80.7
If "Yes", how often did this happen?	Rarely	51	29.0
	Sometimes	74	42.0
	Often	16	9.1

Did you or any household member eat a smaller meal than you felt you needed because there was not enough food? (n=175)		133	76.0
If "Yes", how often did this happen?	Rarely	55	31.4
	Sometimes	69	39.4
	Often	9	5.1
Did you or any household member eat fewer meals in a day because there was not enough food? (n=177)		68	38.4
If "Yes", how often did this happen?	Rarely	42	23.7
	Sometimes	23	13.0
	Often	3	1.7

Was there ever no food at all in your household because there were no resources to get more? (n=179)		28	15.6
If "Yes", how often did this happen?	Rarely	16	8.9
	Sometimes	11	6.1
	Often	1	0.6
Did you or any household member go to sleep at night hungry because there was not enough food? (n=179)		7	3.9
If "Yes", how often did this happen?	Rarely	2	1.1
	Sometimes	5	2.8
	Often	0	0.0
Did you or any household member go a whole day without eating anything because there was not enough food? (n=179)		7	3.9
If "Yes", how often did this happen?	Rarely	4	2.2
	Sometimes	3	1.7
	Often	0	0.0

Table X: Dietary Diversity

Food Item	Frequency*
Chapati, rice, bread, noodles etc.	179
Potatoes, yams etc.	170
Vegetables	173
Fruits	133
Meat	13
Eggs	46
Fish	8
Lentils, beans, peas etc.	154
Yoghurt, cheese, milk etc.	86
Oil, fat, butter	18
Sugar, honey	24
Other (tea, coffee, condiments)	175

*Dietary diversity data are available for 180 respondents

Table X: Simple Regressions

Dependant Variable	Independent Variable	Coefficient	R^2	N
HFIAS (Range 0-19)	Asset Index (Range 0-13)	-0.51*	0.1067	165
Mental Health Scale (Range 0-21)	HFIAS (Range 0-19)	0.39*	0.2233	170

Note: * denotes significant at 1%

MH Results

- K-6 mental health scale
  - 45% of respondents have measures indicating significant mental health issue (depression or other mental illness)
- Positive relationship between increase in poor MH status and likelihood of food insecurity
- Unique protective aspect of food security on MH status of respondents?

Concluding Comments

- Evidence of significant food insecurity among this patient population
- Feasibility of using HFIAS as a food security monitoring tool
- Link between food security and health outcomes, including mental health