EXPLORING HEALTH SHOCKS AND COPING STRATEGIES AMONG RURAL HOUSEHOLDS IN BURKINA FASO: A ROAD FOR DEFINING UNIVERSAL HEALTH COVERAGE

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BACKGROUND

• Households in developing countries are faced with multiple risks and shocks

• Illness: most important shock associated with poverty (Leive and Xu, 2008)

• Each year, 100 million people fall into poverty (World Bank, 2014)

• Households use multiple mechanisms to cope with the economic consequences of illness
BACKGROUND

- Little evidence in Sub-Saharan Africa on:
  - Which health shocks predominate? What coping strategies are used by which households?

- Aim:
  Compare health shocks and their coping responses to exposure and coping of more common and potential frequent health problems.

STUDY AREA
METHODS

• Cross sectional study in November -December 2013
• 1500 households randomly selected from 30 villages
• A questionnaire exploring detailed information on:
  • the demographic characteristics of the household,
  • household production, consumption, assets, health care utilization, coping strategies, health shocks and frequent health problems
• Description of the characteristics of shock-prone households, chronic illness, frequent illness in 28 days.

FINDINGS 1

• Households (HH) characteristics
  • Male headed (94%) with 49 years on average.
  • The average number of member in HH: 7 members.
  • Education and literacy in HH is low (22%) .
  • HH mainly engaged in rain-fed, subsistence agriculture.
health shocks are more common than other types of shocks. Over half of the households reported health shock.

FINDINGS 3

DISTRIBUTION OF ILLNESSES IN PAST 28 DAYS

- Fever/Malaria
- Diarrhea/Stomach pain
- Skin/eye/heart problem
- Back problem
- Chronic illness
- Other

- 69% of the households reported at least one member suffering from a health problem.
- Fever/malaria, diarrhoea and chronic illness add further to the health burden of households.
FINDINGS 4

Distribution of chronic illness/handicap

<table>
<thead>
<tr>
<th>Type of chronic illness/handicap</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical handicap</td>
<td>134</td>
<td>14.6</td>
</tr>
<tr>
<td>Hearing/vision impaired</td>
<td>155</td>
<td>16.8</td>
</tr>
<tr>
<td>Arthritis/chronic pain</td>
<td>188</td>
<td>20.4</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>11</td>
<td>1.2</td>
</tr>
<tr>
<td>Hypertension</td>
<td>53</td>
<td>5.8</td>
</tr>
<tr>
<td>Diabetes</td>
<td>6</td>
<td>0.6</td>
</tr>
<tr>
<td>Mental health</td>
<td>54</td>
<td>5.9</td>
</tr>
<tr>
<td>Other</td>
<td>319</td>
<td>34.7</td>
</tr>
<tr>
<td>Total</td>
<td>920</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Every second household has one member with a disability/chronic illness.

At individual level the most common chronic conditions are arthritis or chronic pain (20.4%), hearing or visual impairment (16.8%) and other physical handicaps (14.6%).

FINDINGS 5

Likelihood of coping responses by type of households for shock

<table>
<thead>
<tr>
<th>SES</th>
<th>Transfer</th>
<th>Dissave</th>
<th>Lower cons.</th>
<th>Borrow</th>
<th>Assets depletion</th>
<th>Work</th>
<th>No resp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorest (1)</td>
<td>-0.188**</td>
<td>-0.137***</td>
<td>-0.115**</td>
<td>0.122***</td>
<td>-0.131*</td>
<td>-0.04</td>
<td>0.326***</td>
</tr>
<tr>
<td></td>
<td>(0.084)</td>
<td>(0.042)</td>
<td>(0.048)</td>
<td>(0.034)</td>
<td>(0.072)</td>
<td></td>
<td>(0.098)</td>
</tr>
<tr>
<td>Poor (1)</td>
<td>-0.109</td>
<td>-0.044</td>
<td>-0.060</td>
<td>0.110***</td>
<td>-0.085</td>
<td>-0.04</td>
<td>0.189***</td>
</tr>
<tr>
<td></td>
<td>(0.082)</td>
<td>(0.044)</td>
<td>(0.046)</td>
<td>(0.039)</td>
<td>(0.058)</td>
<td></td>
<td>(0.062)</td>
</tr>
<tr>
<td>Middle (1)</td>
<td>-0.100</td>
<td>-0.056</td>
<td>-0.038</td>
<td>0.121***</td>
<td>-0.160***</td>
<td>-0.01</td>
<td>0.230***</td>
</tr>
<tr>
<td></td>
<td>(0.072)</td>
<td>(0.037)</td>
<td>(0.037)</td>
<td>(0.039)</td>
<td>(0.050)</td>
<td></td>
<td>(0.059)</td>
</tr>
<tr>
<td>Rich (1)</td>
<td>-0.017</td>
<td>-0.049</td>
<td>-0.062*</td>
<td>0.068*</td>
<td>-0.123**</td>
<td>-0.01</td>
<td>0.126**</td>
</tr>
<tr>
<td></td>
<td>(0.078)</td>
<td>(0.043)</td>
<td>(0.032)</td>
<td>(0.036)</td>
<td>(0.053)</td>
<td></td>
<td>(0.049)</td>
</tr>
</tbody>
</table>

N adj. R-squared 0.088 0.085 0.117 0.176 0.055 0.533 0.126

Poor households are more vulnerable.
FINDINGS 6

Likelihood of coping responses by type of households for illness in the past 28 days:

<table>
<thead>
<tr>
<th>Type of Households</th>
<th>Dissave</th>
<th>Low. cons.</th>
<th>Borrow</th>
<th>Assets depletion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorest (=1)</td>
<td>-0.161***</td>
<td>0.0398***</td>
<td>0.0211</td>
<td>0.0149</td>
</tr>
<tr>
<td>Poor (=1)</td>
<td>-0.125***</td>
<td>0.0181</td>
<td>0.0307*</td>
<td>0.00908</td>
</tr>
<tr>
<td>Middle (=1)</td>
<td>-0.0342</td>
<td>0.0135</td>
<td>0.011</td>
<td>0.013</td>
</tr>
<tr>
<td>Rich (=1)</td>
<td>-0.00238</td>
<td>0.00231</td>
<td>0.0213*</td>
<td>-0.0309</td>
</tr>
</tbody>
</table>

N: 2336, adj. R-squared: 0.034

- The poorer households are less likely to rely on savings than richer households.
- The poor are more likely to lower consumption.

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FINDINGS 7

Likelihood of shock and recent illness by type of HH member:

<table>
<thead>
<tr>
<th># of members</th>
<th>Illness in past 28 days</th>
<th>Health shock</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 yrs.</td>
<td>0.0374***</td>
<td>-0.029 (0.025)</td>
</tr>
<tr>
<td>6-18 yrs.</td>
<td>0.0123** (-0.005)</td>
<td>-0.009 (0.013)</td>
</tr>
<tr>
<td>18-65 yrs.</td>
<td>0.008 (-0.011)</td>
<td>0.003 (0.020)</td>
</tr>
<tr>
<td>65+ yrs.</td>
<td>0.0580** (-0.028)</td>
<td>0.063* (0.033)</td>
</tr>
</tbody>
</table>

N: 1,492, adj. R-squared: 0.044

Households with more elderly members were at higher risk of health shocks and frequent health problems due to chronic illness.

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FINDINGS 8

- Health shocks are causing loss on annual average of 143 euro.
- The loss is largely resulting income foregone due to the inability to work (82.3% of total cost).

FINDINGS 9

Cost by type of illness

- Direct medical cost
- Direct non medical cost
- Indirect cost

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CONCLUSION

• Limit
• Bias of recall

Main findings
• Distinct coping strategies between health shocks and recent illness.
• Poor households and households with elderly people more vulnerable.

Implications
• Poor households could particularly benefit from a formal insurance mechanism
• Chronic illness in package of community health insurance ???
• Implementers of insurance mechanism should take different characteristics of households and their ability to cope with adverse events into account.

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Any requests or comments please email
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