



Fourth AfHEA International Scientific Conference  
(Rabat: 26-29 September 2016)

**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



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# BACKGROUND

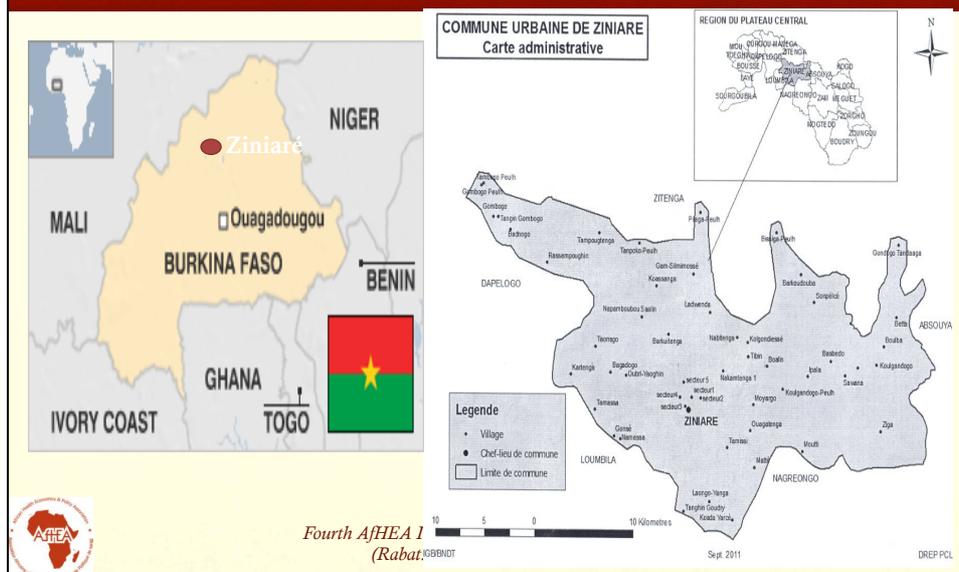
- Little evidence in Sub-Saharan Africa on:
  - Which health shocks predominate? What coping strategies are used by which households?
- Aim:
 

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



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# STUDY AREA



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## 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.



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## FINDINGS 1

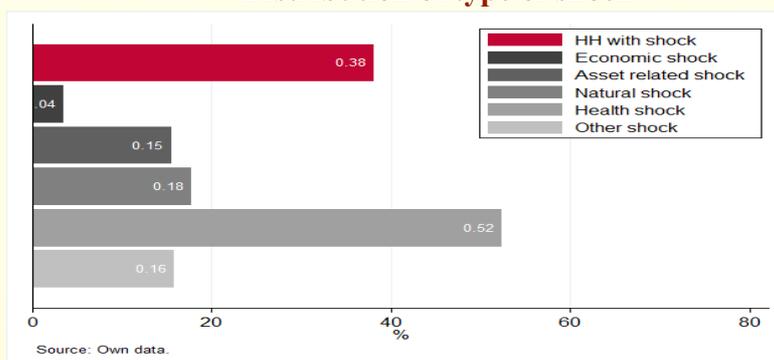
- **Households (HH) characteristics**
- Male headed (94%) with 49 years on average.
- The average number of member in HH: 7 members.
- Education and literacy in HH is low (22% ).
- HH mainly engaged in rain-fed, subsistence agriculture.



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## FINDINGS 2

### Distribution of type of shock



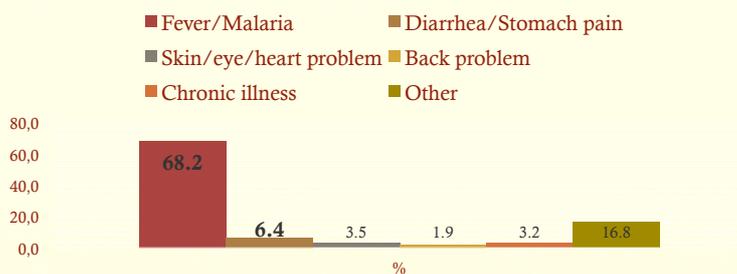
health shocks are more common than other types of shocks.  
Over half of the households reported health shock.



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## FINDINGS 3

### DISTRIBUTION OF ILLNESSES IN PAST 28 DAYS



- 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.



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## FINDINGS 4

### Distribution of chronic illness/ handicap

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

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%).



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## FINDINGS 5

### Likelihood of coping responses by type of households for shock

SES	Transfer	Dissave	Lower cons.	Borrow	Assets depletion	Work	No resp.
Poorest (=1)	-0.188** (0.084)	-0.137*** (0.042)	-0.115** (0.048)	<b>0.122***</b> (0.034)	-0.131* (0.072)	-0.04 (0.04)	<b>0.326***</b> (0.098)
Poor (=1)	-0.109 (0.082)	-0.044 (0.044)	-0.060 (0.046)	<b>0.110***</b> (0.039)	-0.085 (0.058)	-0.01 (0.03)	<b>0.189***</b> (0.062)
Middle (=1)	-0.100 (0.072)	-0.056 (0.037)	-0.038 (0.037)	0.121*** (0.032)	-0.160*** (0.050)	-0.01 (0.02)	0.230*** (0.059)
Rich (=1)	-0.017 (0.078)	-0.049 (0.043)	-0.062* (0.032)	<b>0.068*</b> (0.036)	-0.123** (0.053)	-0.01 (0.02)	0.126** (0.049)
N	622	622	622	622	622	553	622
adj. R-squared	0.080	0.085	0.117	0.176	0.055	0.23	0.126

**Poor households are more vulnerable.**



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## FINDINGS 6

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

SES	Dissave	Low. cons.	Borrow	Assets depletion
Poorest (=1)	<b>-0.161***</b> (-0,04)	<b>0.0398***</b> (-0,013)	0,0211 -0,02	0,0149 -0,032
Poor (=1)	<b>-0.125***</b> (-0,039)	0,0181 -0,012	<b>0.0307*</b> (-0,017)	0,00908 -0,033
Middle (=1)	-0,0342 (-0,039)	0,0135 -0,01	0,011 -0,015	0,013 -0,029
Rich (=1)	-0,00238 (-0,037)	0,00231 -0,006	<b>0.0213*</b> (-0,011)	-0,0309 -0,037
N	2336	2336	2336	2336
adj. R-squared	0,034	0,009	0,014	0,008

- 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

	Illness in past 28 days	Health shock
# of members 0-5 yrs.	<b>0.0374***</b> (-0,012)	-0.029 (0.025)
# of members 6-18 yrs.	0.0123** (-0,005)	-0.009 (0.013)
# of members 18-65 yrs.	0,008 (-0,011)	0.003 (0.020)
# of members 65+ yrs.	<b>0.0580**</b> (-0,028)	<b>0.063*</b> (0.033)
N	1 492	569
adj. R-squared	0,044	0.031

**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

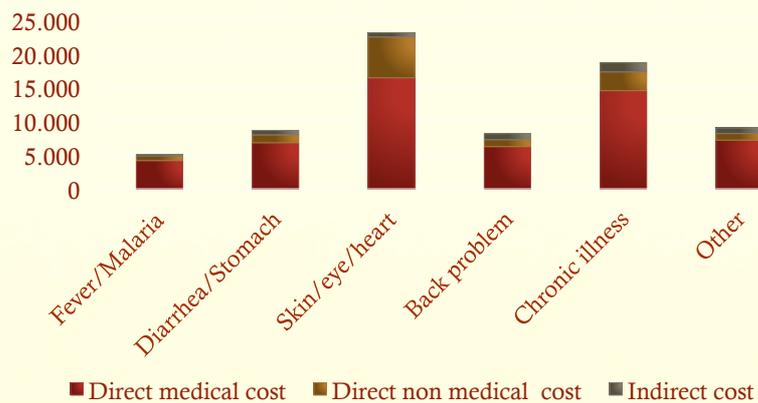
- Health shocks are causing loss on annual average of 143 euro.
- The loss is largely resulting income foregone due to the inability to work (82.3% of total cost).



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## FINDINGS 9

Cost by type of illness



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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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# THANKS FOR YOUR ATTENTION

Any requests or comments please email  
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