

# Health and Health Service Utilization in South Africa : Evidence from SAGE

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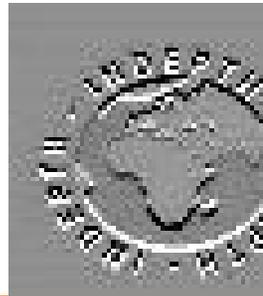
Ageing and health: from evidence to policy

Global Technical meeting, WHO, Geneva, 2-4 June 2010

# In this Presentation

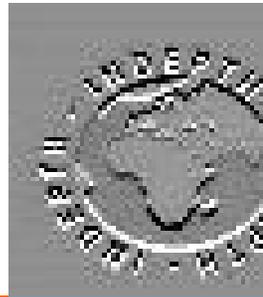
- We explore the comparability of SAGE data at national and INDEPTH site levels
- We provide background information on INDEPTH sites
- We provide an overview of sampling, sample size and measures used: SAGE National/SAGE INDEPTH site
- We compare selected results:
  - Health status – self rated health, difficulty in performing work
  - Health service utilization – hospitalization and out patients
- Conclusions
- Acknowledgements

# Sampling



- SAGE Sample – National
  - Multistage Stratified Random Cluster Sample using HSRC’s Master Sample (HSRC 2002) developed based on Census (Stats SA, 2001) was used as sampling frame – stratified by province, geotype & race
- SAGE Sample – Agincourt Health and Demographic Surveillance Site, INDEPTH
  - A random sample of 575 adults 50 plus was selected from the 6,206 adults permanently living in the census study area in May 2006.

# Defining INDEPTH sites



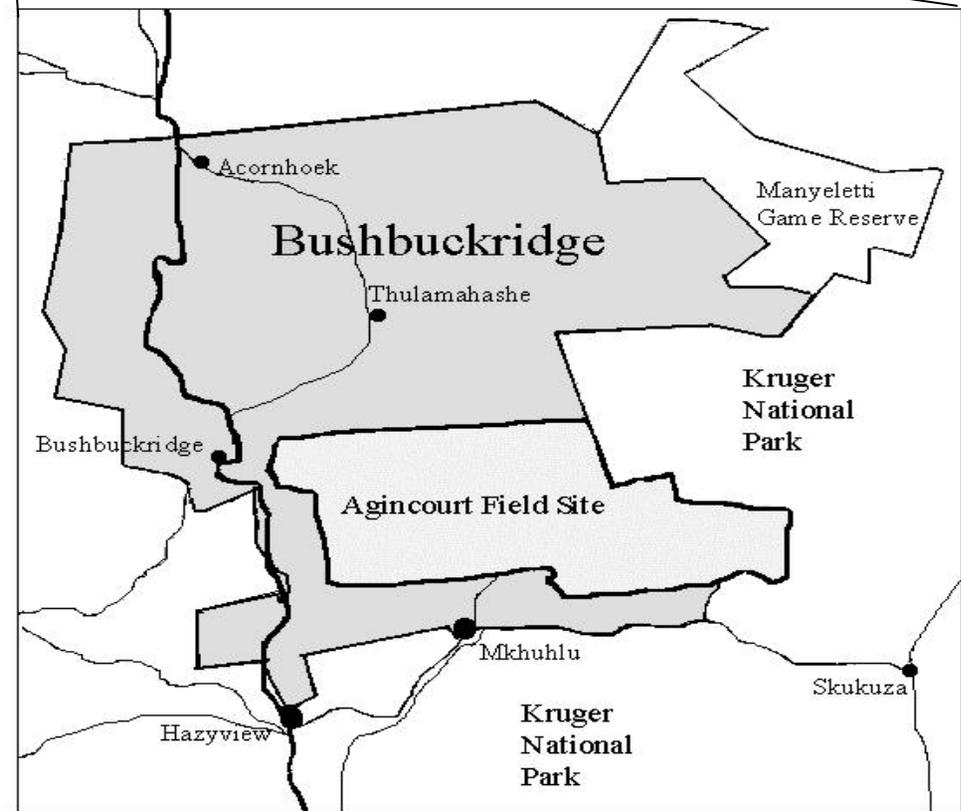
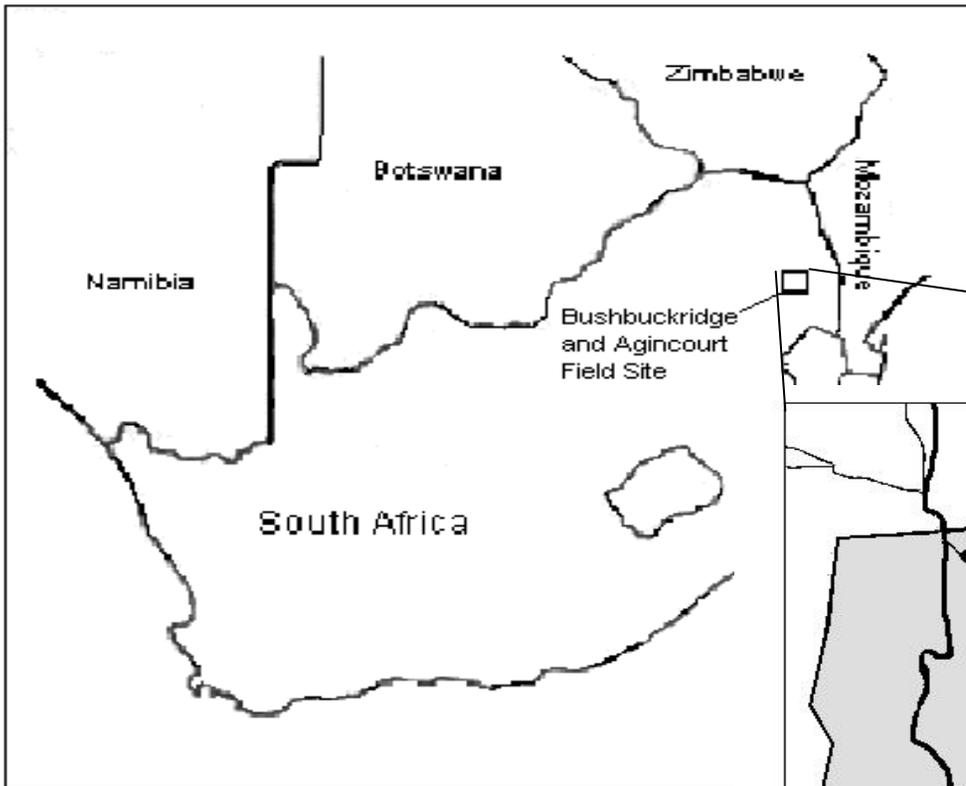
- A geographically-defined population under continuous demographic monitoring with timely production of data on all **births, deaths, migration** events and associated **health** indicators
  - Called a health and demographic surveillance system (HDSS).
- Additional information may be collected on
  - Verbal autopsies, morbidity & disability, pregnancies, economic / social activity, lifestyle etc.

Currently 38 sites in 19 countries  
6 sites in Africa  
1 sites in Asia  
1 site in Oceania



Over 2,000,000 people  
under surveillance

*Countries with Demographic Surveillance System (DSS)  
Field Sites participating in the INDEPTH Network*



## Agincourt HDSS

## South Africa

# Agincourt Study Site

5 villages over 450 sq km  
4,000 people; in 15,500 Households  
health centres, 6 fixed clinics  
hospitals 25 – 60 km away

Kruger  
National  
Park

## Medical Facilities

- ⊕ Clinic
- ⊞ Health Centre
- ⊕ Private Clinic
- ⊕ Visiting points

## Schools

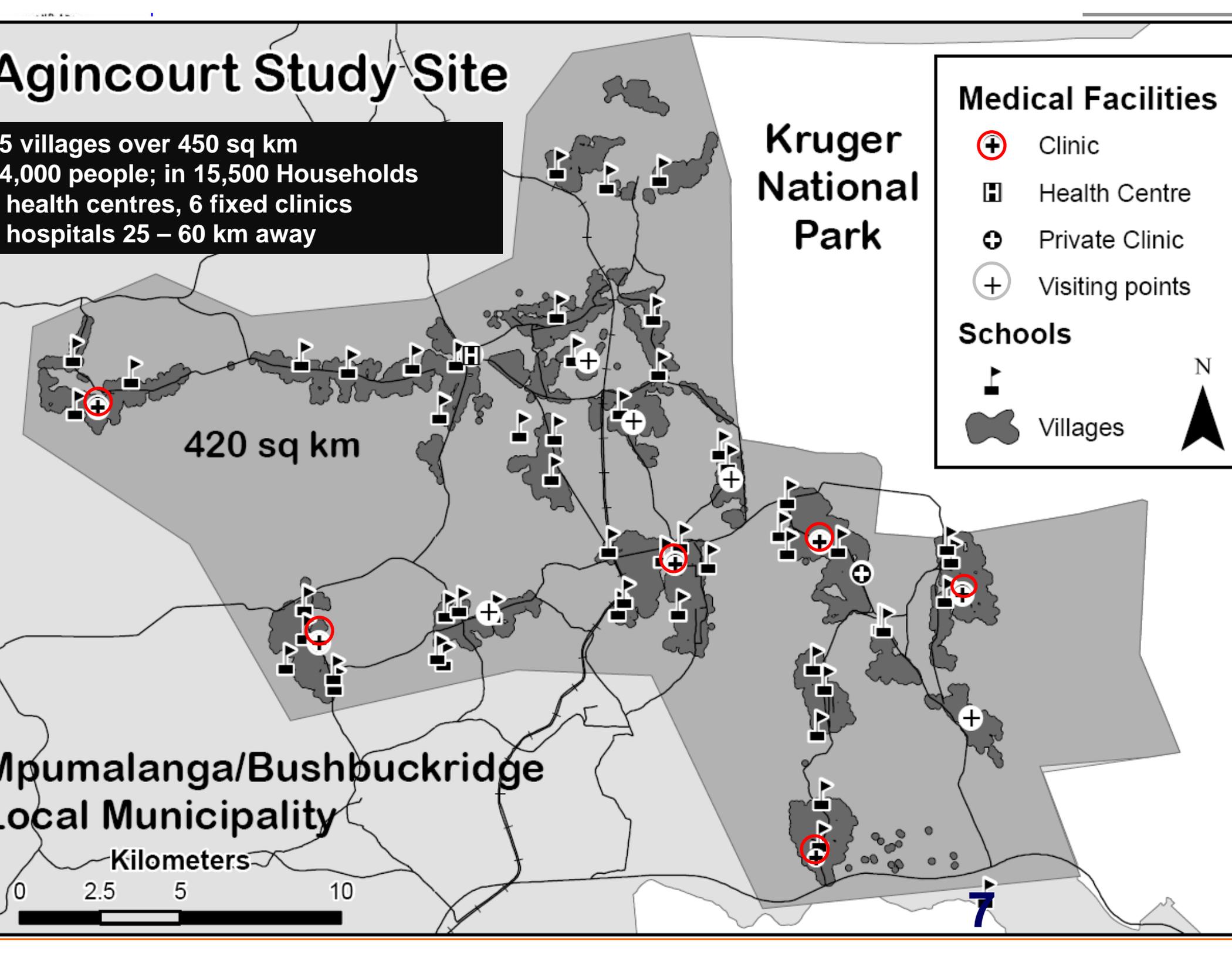
- ⚑ Villages
- ⬆ Villages



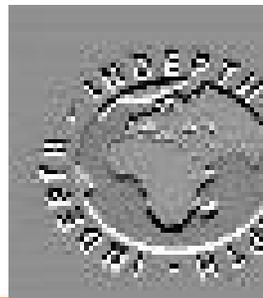
420 sq km

Mpumalanga/Bushbuckridge  
Local Municipality

Kilometers

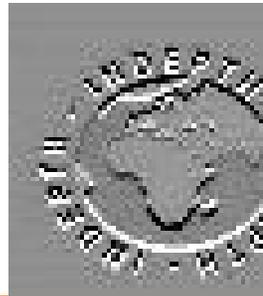


# Self Rated Health (SRH)



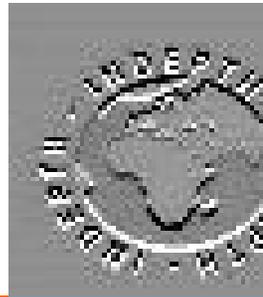
- Question asked is “*In general, how would you rate your health today?*”.
- Answers categorised from Very Good to Very Bad.
- Overall general self-reported health question has been well researched in epidemiological surveys.
- It has been a good predictor for numerous health and health-related outcomes.

# Difficulty on working or performing HH activities



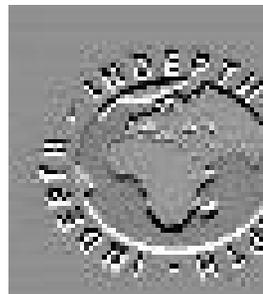
- Participants were asked *Overall in the last 30 days, how much difficulty did you have with work or household activities?*
- Answers categorised from None to Extreme.
- The time period was specified as the last 30 days and the respondents were asked to provide an average of the good and bad days.
- This question provides some indication of the impact of health on a person's functioning.

# Health Service Utilization



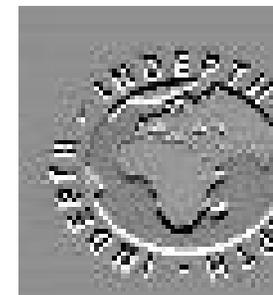
- Outpatient: measured as the mean number of outpatient visits for the last 12 months
- Inpatient: measured categorically as having had any hospital stay during the last 3 years
- Satisfaction: Overall satisfaction with health care services in own country—Very Satisfied to Very Dissatisfied

# Sample population



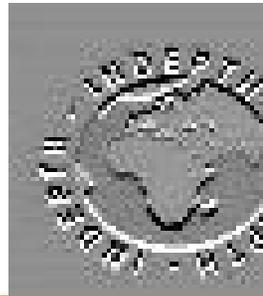
	SAGE National		Agincourt HDSS	
	Male N (%)	Female N (%)	Male N (%)	Female N (%)
	<b>1638 (44.1)</b>	<b>2202 (55.9)</b>	<b>136 (32)</b>	<b>289 (68)</b>
<i>Age</i>				
50-59	757 (52.1)	938 (48.1)	47 (34.6)	110 (38.2)
60-69	537 (30.7)	696 (30.6)	46 (33.8)	81 (28.1)
70+	344 (17.2)	568 (21.3)	43 (31.6)	97 (33.7)
<i>Locality type</i>				
Urban	1076 (65.9)	1485 (64.1)	0	0
Rural	561 (34.1)	715 (35.9)	136 (32)	289 (68)
<i>Population group</i>				
Black African	803 (73.7)	1250 (74)	136 (32)	289 (68)
White	132 (10.7)	137 (8.3)	0	0
Coloured	232 (11.8)	423 (13.5)	0	0
Indian or Asian	136 (3.7)	171 (3.9)	0	0

# Sample population



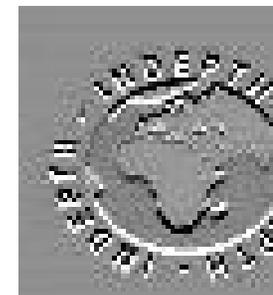
	SAGE National		Agincourt HDSS	
	Male N (%)	Female N (%)	Male N (%)	Female N (%)
	<b>1638 (44.1)</b>	<b>2202 (55.9)</b>	<b>136 (32)</b>	<b>289 (68)</b>
<b><i>Education</i></b>				
No education	315 (21.9)	539 (26.9)	78 (57.4)	192 (66.4)
Less than primary	310 (32.3)	493 (33.1)	38 (27.9)	72 (24.9)
Completed primary	305 (28.4)	474 (30.6)	13 (9.6)	18 (6.2)
Completed secondary	170 (16.5)	278 (20.7)	3 (2.2)	3 (1)
Completed high school	105 (11.5)	107 (10.7)	3 (2.2)	1 (0.4)
Completed college/university	69 (6.9)	59 (3.9)	0 (0)	3 (1)
Completed postgraduate	24 (4.5)	11 (0.9)	1 (0.7)	0 (0)
<b><i>Marital status</i></b>				
Never married	142 (8.4)	370 (18.5)	2 (1.5)	7 (2.4)
Currently married	1111 (71.9)	697 (31.9)	96 (70.6)	98 (33.9)
Cohabiting	119 (7.4)	80 (3.8)	2 (1.5)	4 (1.4)
Separated/divorced	87 (3.8)	143 (7.4)	20 (14.7)	41 (14.2)
Widowed	159 (7.6)	861 (36)	16 (11.8)	139 (48.1)

# In the Forthcoming Slides

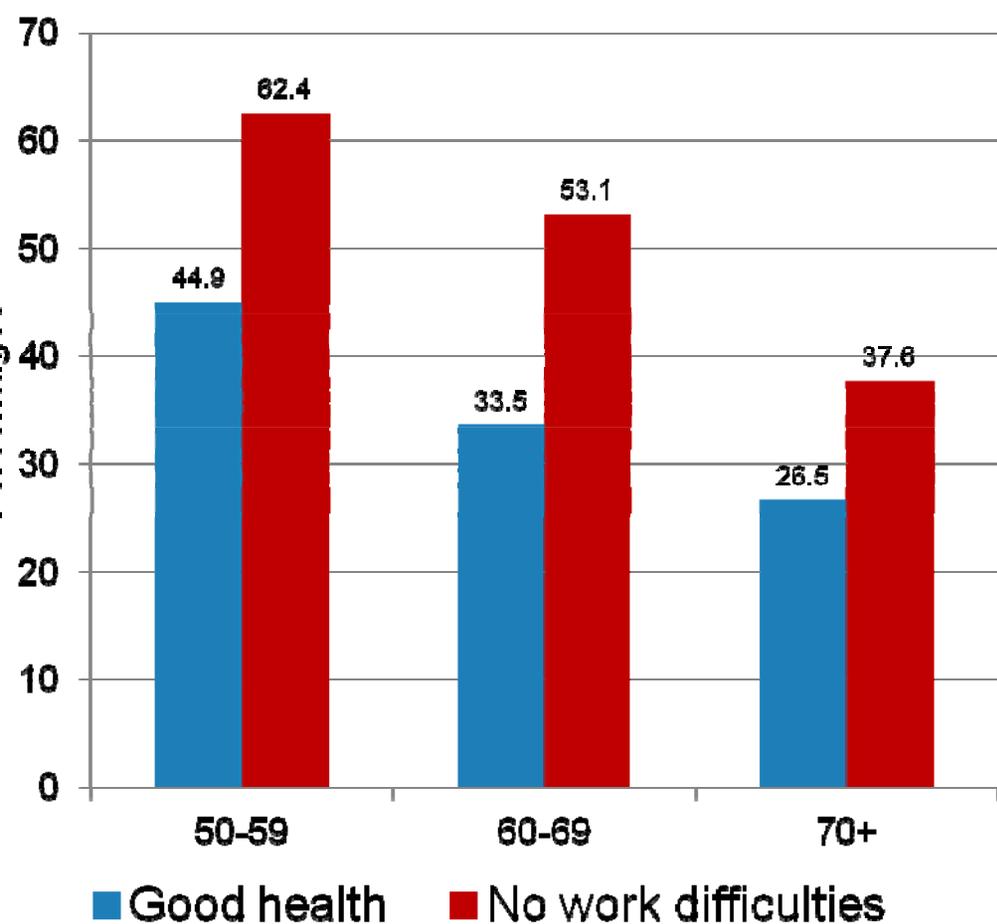


- Some basic frequencies of 3 variables to compare results between the SAGE National and INDEPTH site in South Africa by selected demographics
  - SRH, difficulty in performing HH activities, health care utilization
- Commonalities between the two samples – same measures, same age groups, same country
- Differences between the two samples: national vs site, large vs small sample
- Results are therefore presented not to make any conclusions but rather to stimulate desire for further analyses to compare results:
  - INDEPTH Site by INDEPTH Site
  - National by INDEPTH Site across all participating countries

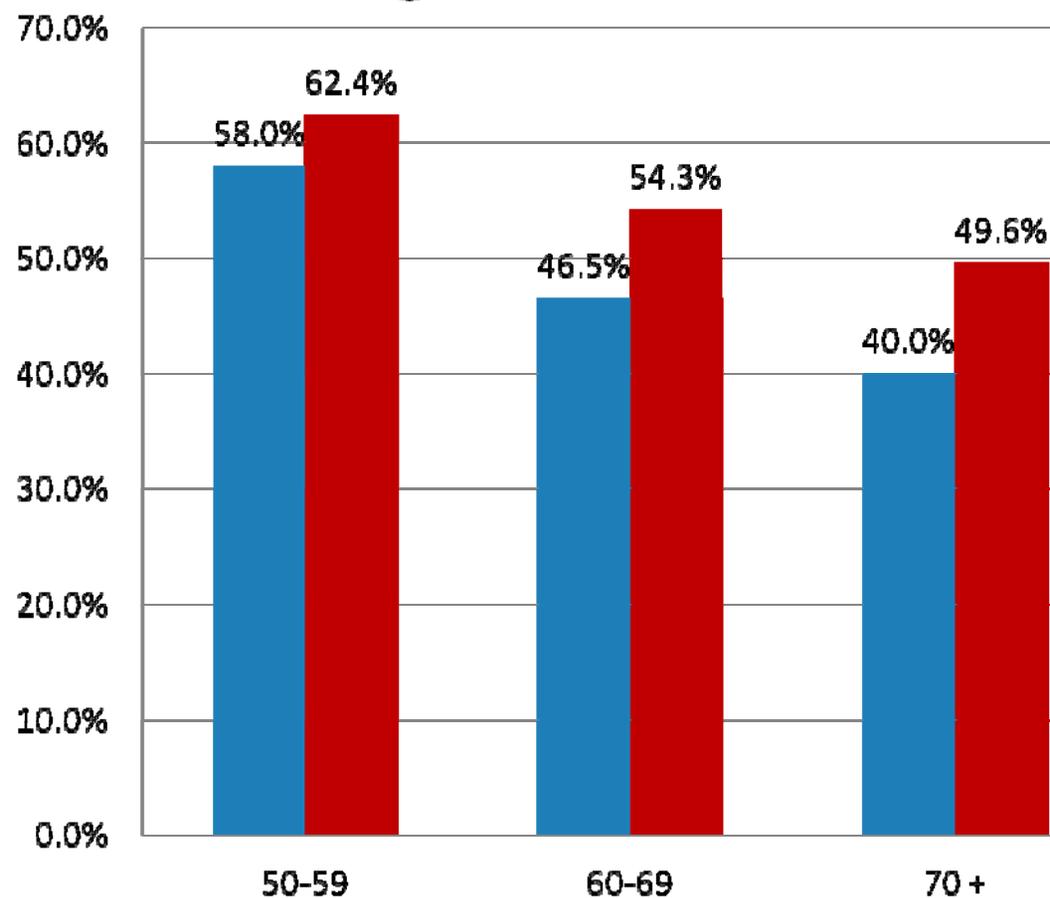
# SRH & work difficulties by Age



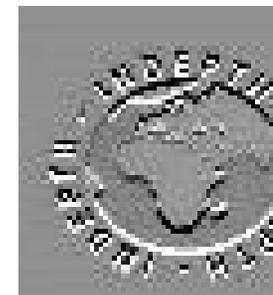
## SAGE National



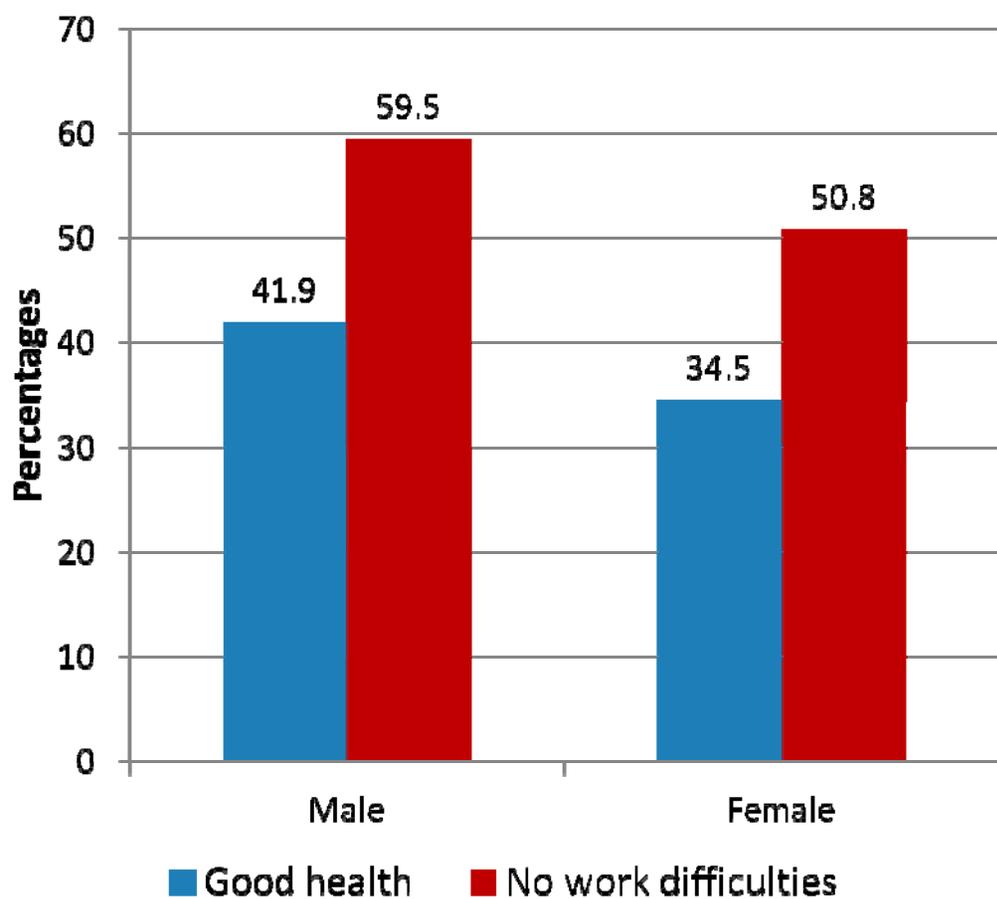
## Agincourt HDSS



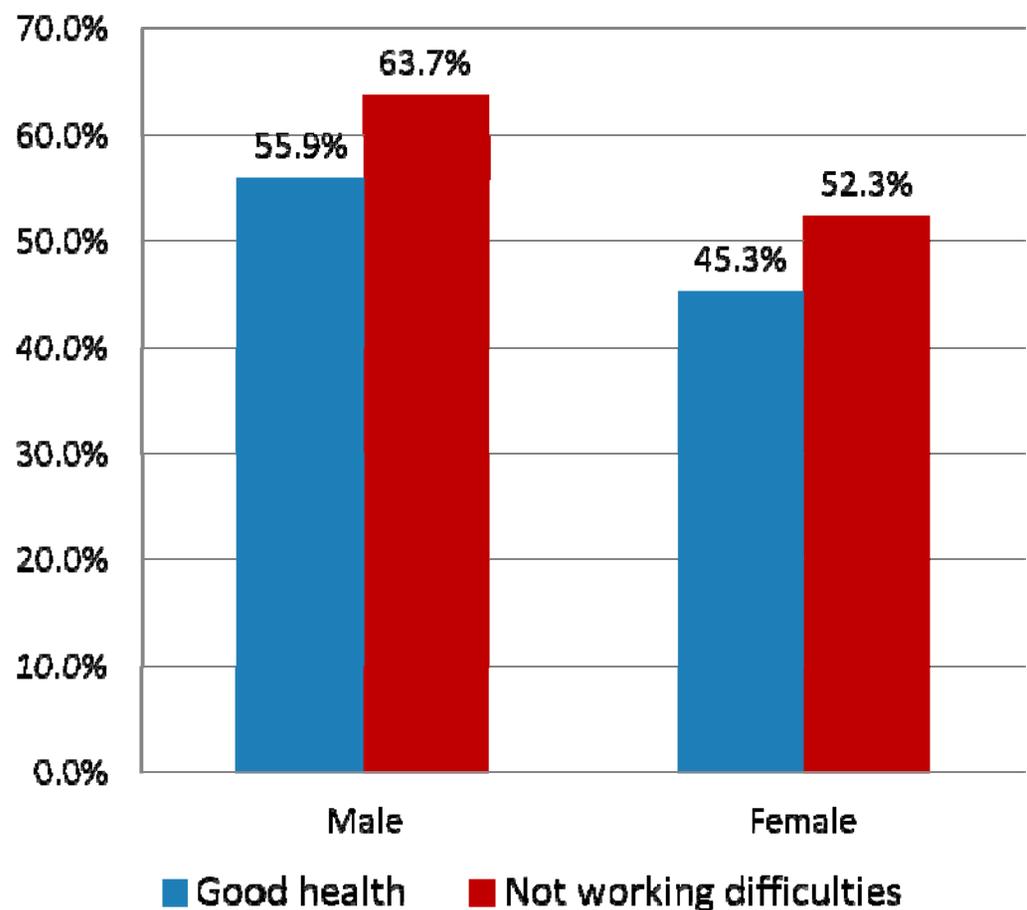
# SRH & work difficulties by Gender



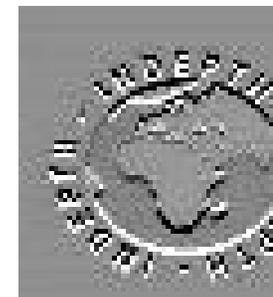
## SAGE National



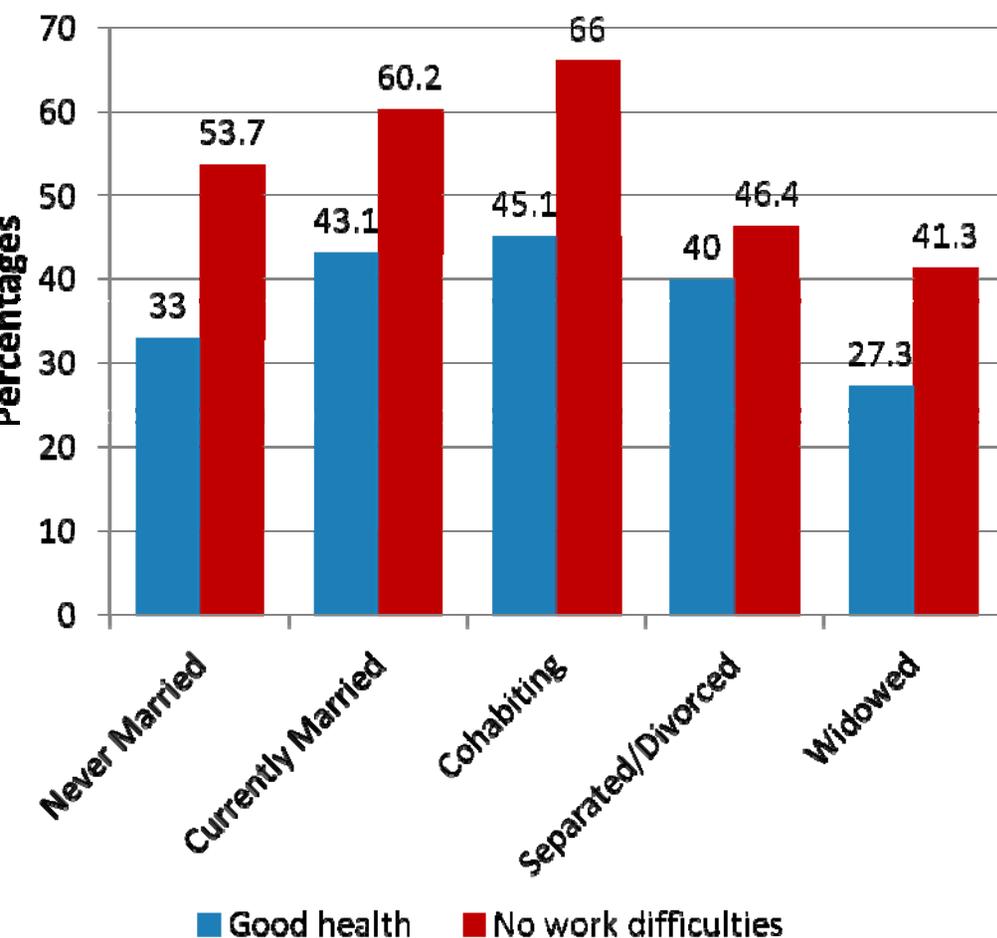
## Agincourt HDSS



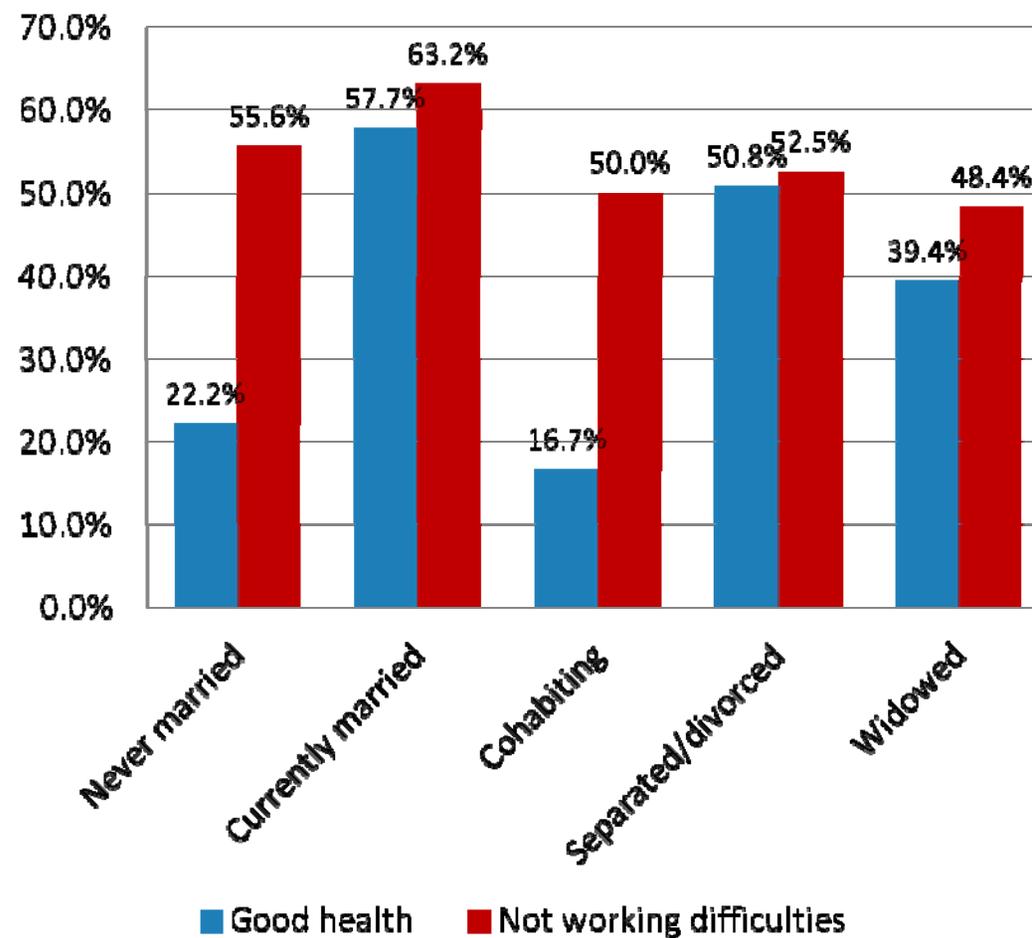
# SRH & work difficulties by Marital Status



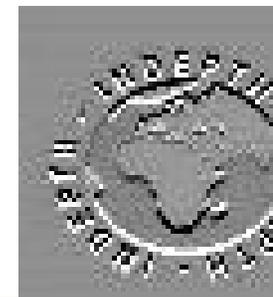
## SAGE National



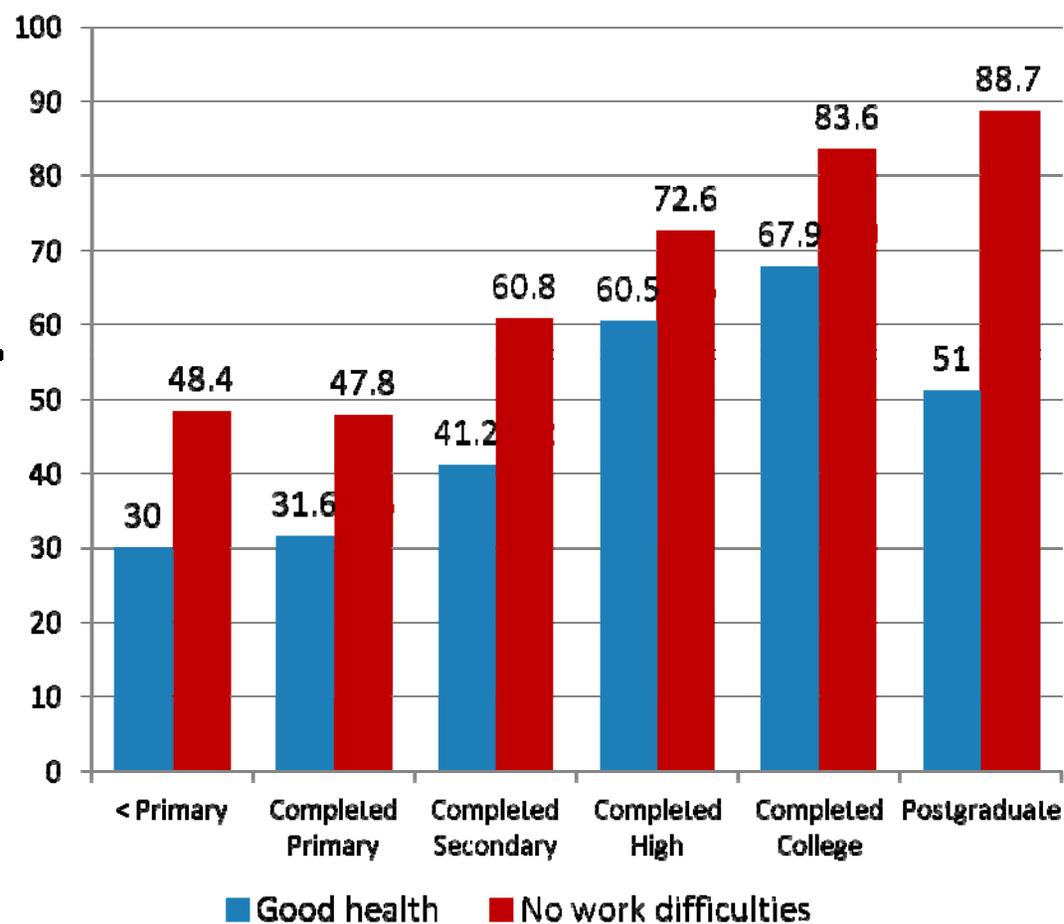
## Agincourt HDSS



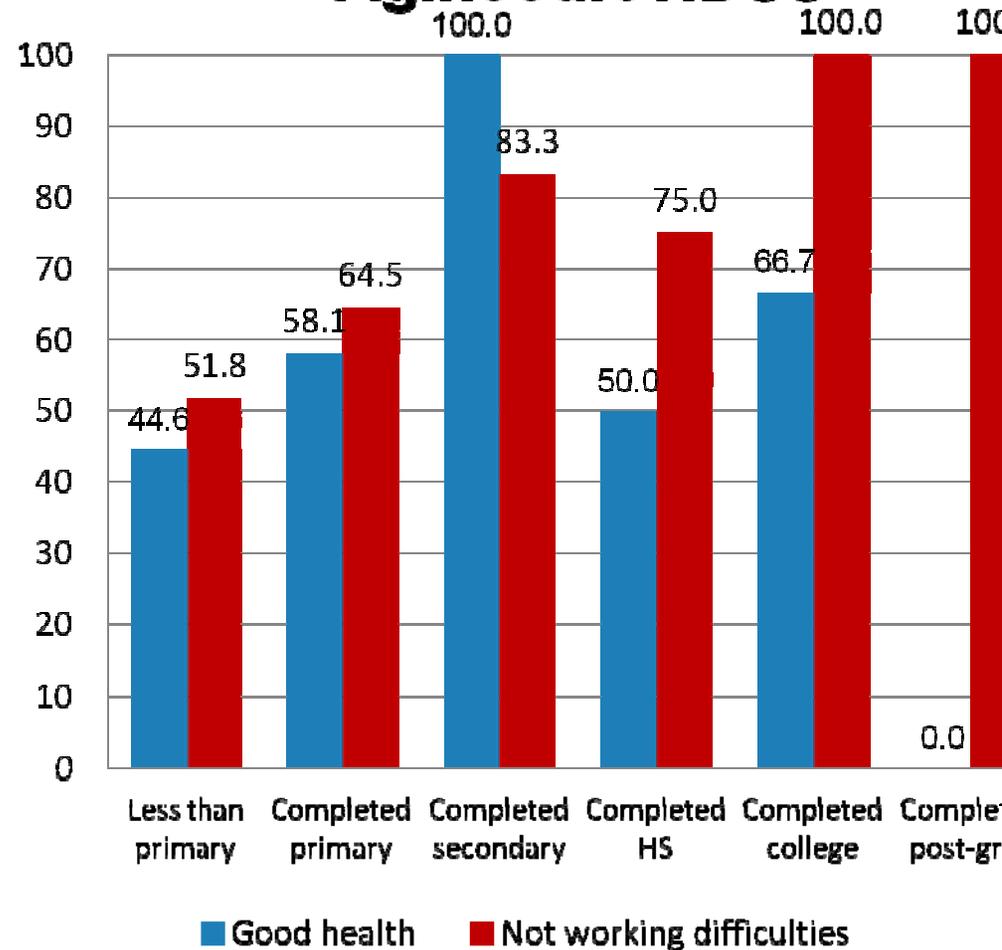
# SRH & work difficulties by Education



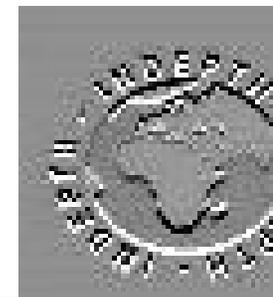
## SAGE National



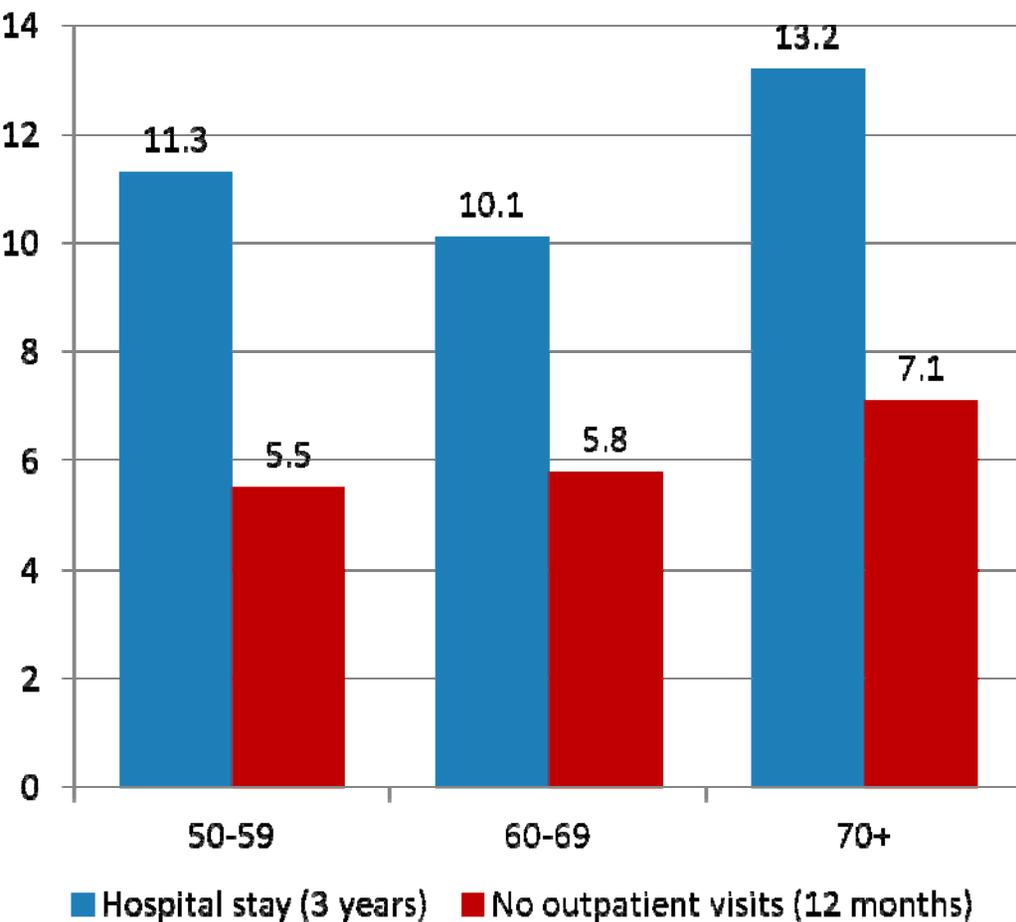
## Agincourt HDSS



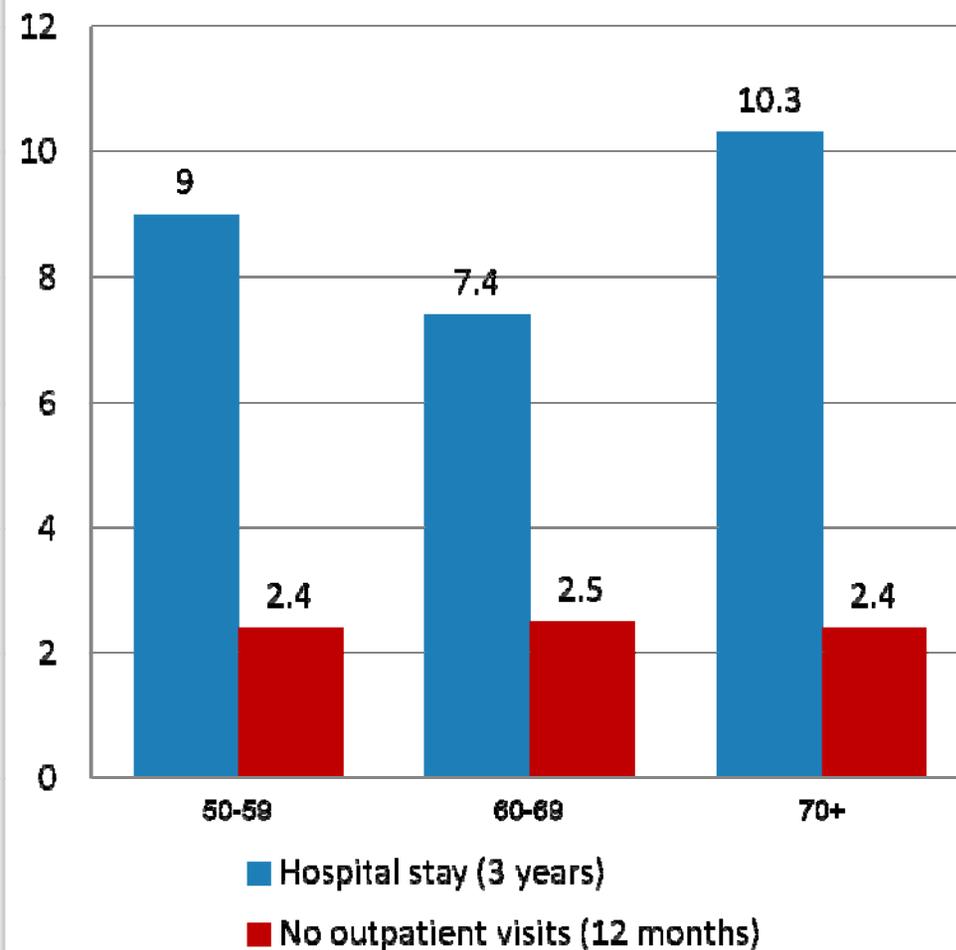
# Health care utilization by age



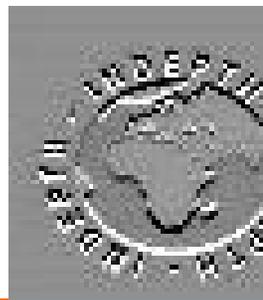
## SAGE National



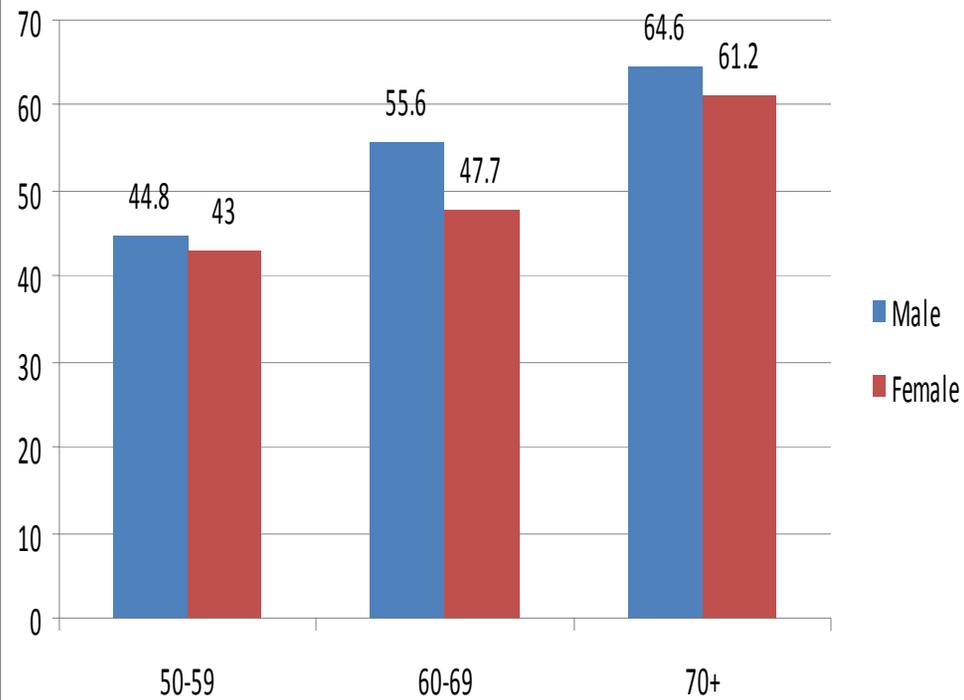
## Agincourt HDSS



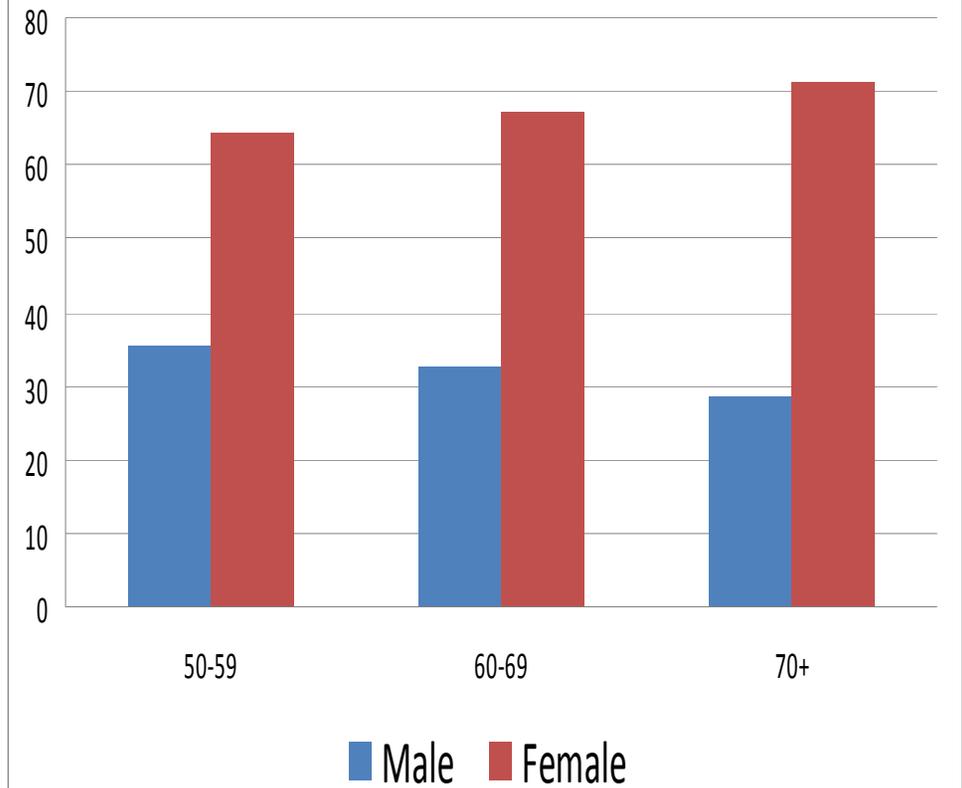
# Satisfaction with health services in country by Age & Sex



## National SAGE



## Agincourt HDSS



# Conclusions

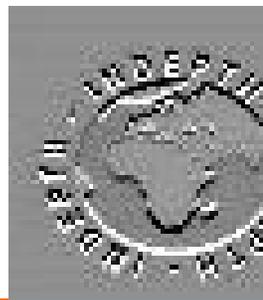
- The purpose of this paper is to explore comparability not to make conclusions due to following:
  - Large vs small sample
  - Nationally representative study vs site specific study
  - Rural/urban based study vs rural based study
- To a large extent, the results are comparable, e.g. in both sites:
  - Men tended to rate their health positively than females and report less difficulty in performing HH duties
  - Positive health rating and not having difficulty in performing HH duties was higher for respondents with higher education
  - Married/co-habiting respondents had none or mild difficulties in performing HH activities, tended to rate their health positively
- Further analyses are needed across INDEPTH Sites and countries

# Acknowledgements

- HSRC SAGE Research team
  - Prof Refilwe Nancy Phaswana-Mafuya – PI
  - Prof Karl Peltzer – Co-PI
  - Ms Margie Schneider – Co-PI
  - Dr Khangelani Zuma – Sampling Expert
  - Dr Monde Makiwane – Quality Control
  - Dr Cily Tabane – Project Manager
  - Mr Adlai Davids – GIS Specialist
  - Ms Margaret Mbelle – PhD Intern
  - Mr Shandir Ramlagan – PhD Intern
  - Ms Gladys Matseke – Masters Intern
  - Ms Khanyisa Phaweni – Masters Intern

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- Agincourt HDSS SAGE Research team
  - Prof. Stephen Tollman – PI
  - Prof. Margaret Thorogood – Co-PI
  - Prof. Katherine Kahn – Co-PI
  - Dr. F. Xavier Gómez – Olivé – Co-PI
  - Benjamin d Clark – Data Manager



THANK YOU