Health Status of Older South Africans: Evidence from SAGE

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17-20 OCT 2012

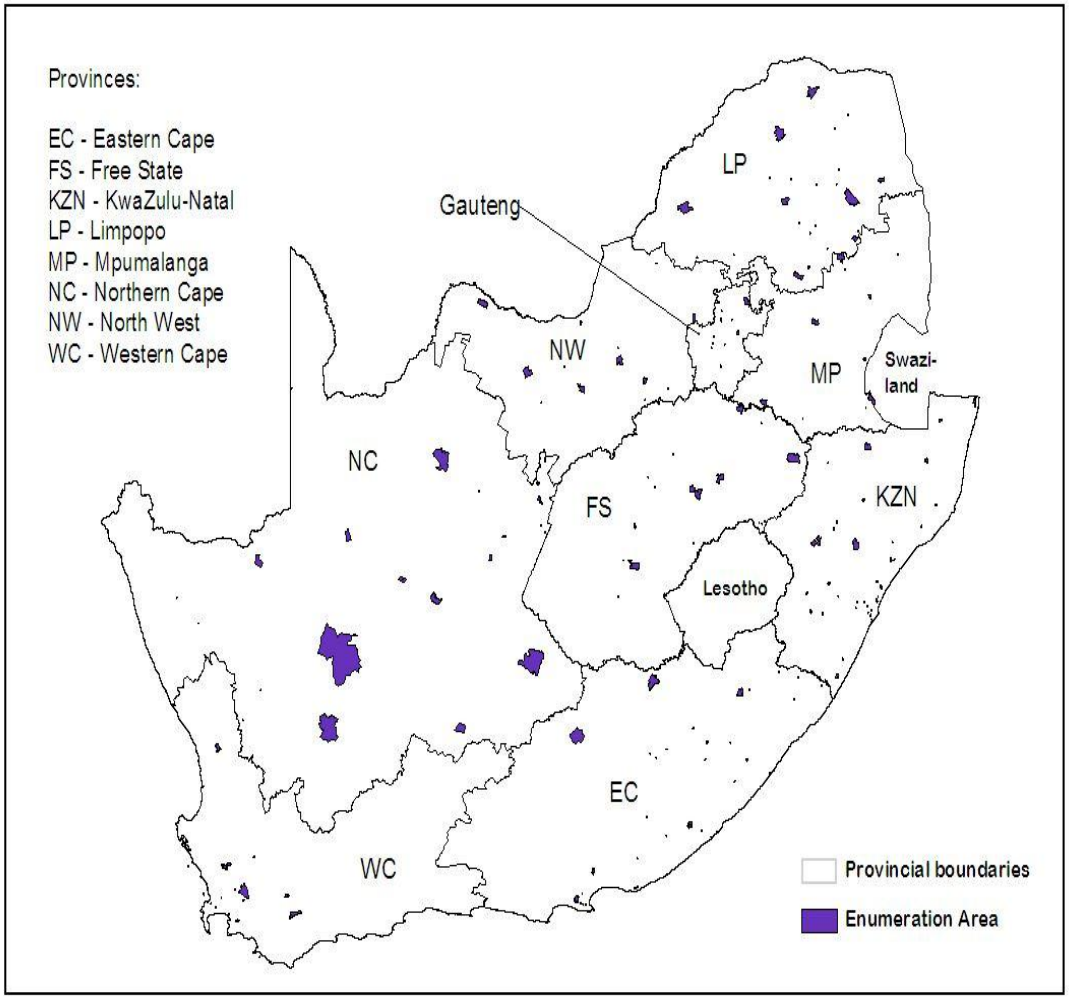
1st IAGG Africa Region Conference on Gerontology and Geriatrics: Cape Town

In this Presentation

- Self-reported ratings of overall health and functioning
- This is component of the WHO Global Study on Ageing & Adult Health (SAGE)
- World's population is **rapidly ageing** & increase will continue (UN 2008; Murray & Lopez 1997)
- Southern Africa has **continent's highest %**: **6.2%** of population 60+ yrs in 1997 (UN 2008)
- In Southern Africa, S. Africa has highest %: **15%** in 2009 - **19%** in 2030 - **26%** in 2050 (UNDP 2011)
- Public policy & service delivery attention must, of political and human necessity, be focused on needs of increasing older people.
- Thus, understanding health status of older people is important
- Full paper submitted to GHA Journal

Methods

- A **population based** cross-sectional survey, first wave of a longitudinal prospective cohort study
- Multi-stage stratified cluster sample of 3840 individuals aged 50+ years in SA, 2008.
- Standardized questionnaire, performance measures & biomarkers - pretested, pilot tested, and in-country adaptation
- The individual response rate was 77%
- Participants were mainly women (55.9%), black (74%) & < secondary school education (71.6%).
- 49.9% were aged 50 to 59 years old.
- Overall, there were no major wealth differentials

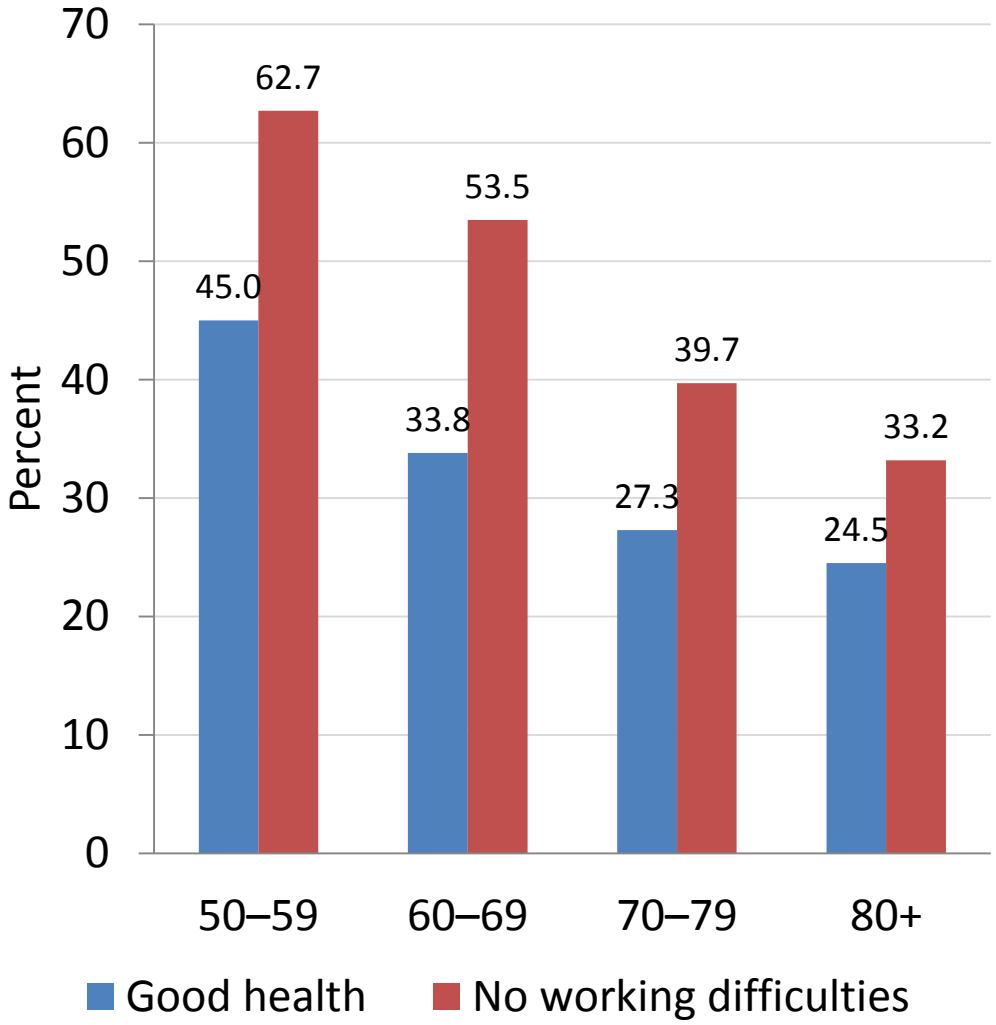


Measurement of SRH	Measurement of disability	Measurement of Subjective well-being & QOL
Used single overall general SRH: "In general, how would you rate your health today?" VG to VB Used SRH covering 9 domains (2 questions each): e.g. affect, mobility, sleep & energy, etc Above used to generate composite health score (Wilson et al 2006)	Used single overall functioning: "In last 30 days, how much difficulty did you have with work or HH activities? None to extreme Used 12-item WHODAS II having 6 domains (2 items each): e.g. getting around, self-care, etc Activities of daily living (ADLs), Instrumental activities of daily living (IADLs) (Üstün et al 2010).	Used overall life satisfaction (Skevington et al 2004; Power et al 2005). Used 8-item WHOQOL:4 domains, 2 questions each: physical, social, psychological, environmental (Schmidt 2005). Used Day Reconstruction Method measured experienced component (happiness) (Stone et al 1999).

Data Analysis

- Data entered using CSPro, analysed using STATA Version 10 & weighted using post-stratified individual probability weights based on the selection probability at each stage of selection.
- Individual weights post-stratified by province, sex and age-groups according to the 2009 Medium Mid Year population estimates from Statistics South Africa. Weights were not normalised. Outliers were removed after examining the data using box plot analyses.
- Associations between key outcomes of SRH and socio-demographic, social and health variables were evaluated using odds ratios (OR).
- Unconditional multivariable logistic regression was used for evaluation of the impact of explanatory variables for key outcome (SRH).
- All variables statistically significant at the $P < .05$ level in bi-variate analyses were included in the multivariable models.
- The two-sided 95% CI are reported. The P values less or equal to 5% is used to indicate statistical significance. Both the reported 95%CI and the P value are adjusted for the multi-stage stratified cluster sample design of the study.

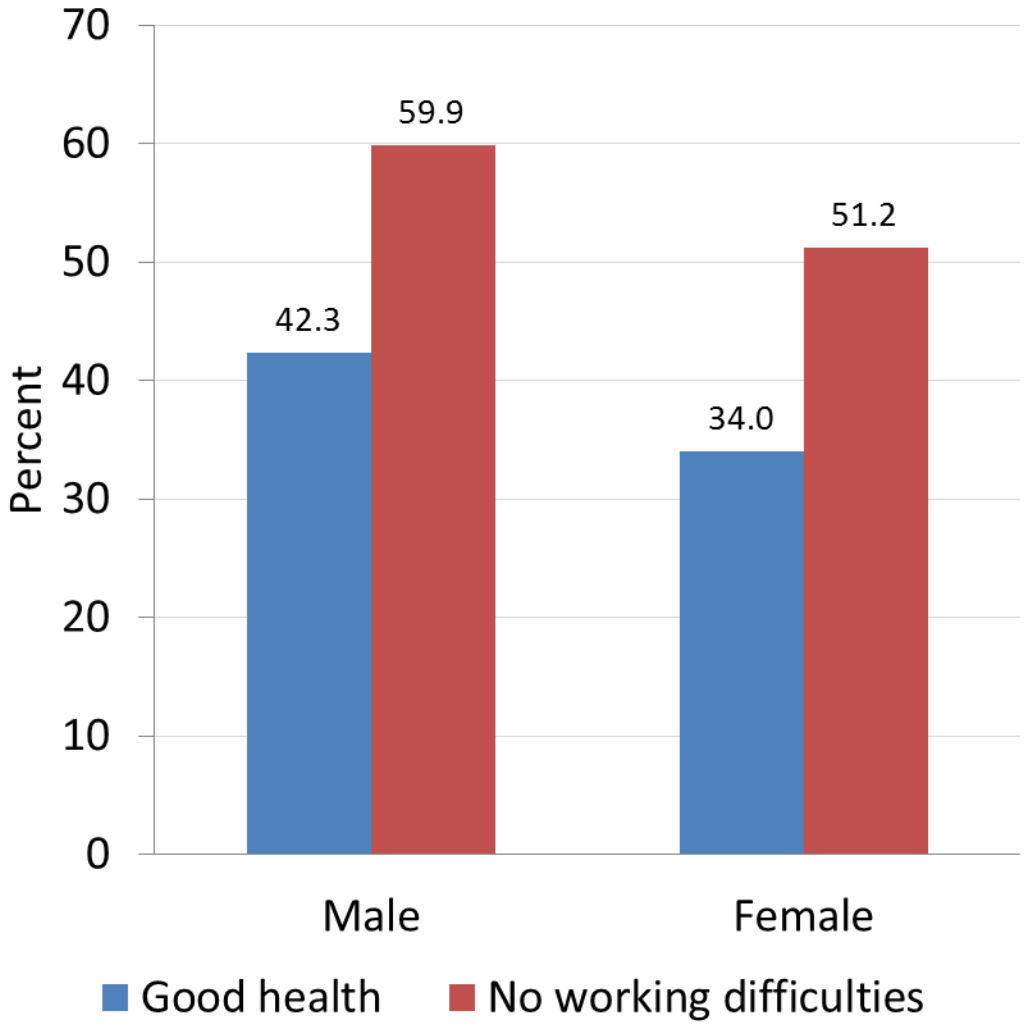
SRH & Work difficulty by Age



- >75% rated their overall SRH as moderate or good
- 70 + were 42% more likely to report poor SRH compared to the 50-59 age group
- Poor SRH & Work difficulties increased with age
- But SRH not significant after adjusting for gender

Age group	**Poor SRH**
	Unadjusted Odds Ratio (95% CI)
50-59	1.00
60-69	1.27 (0.93-1.72)
70 or more	**1.42 (1.05-1.92)**

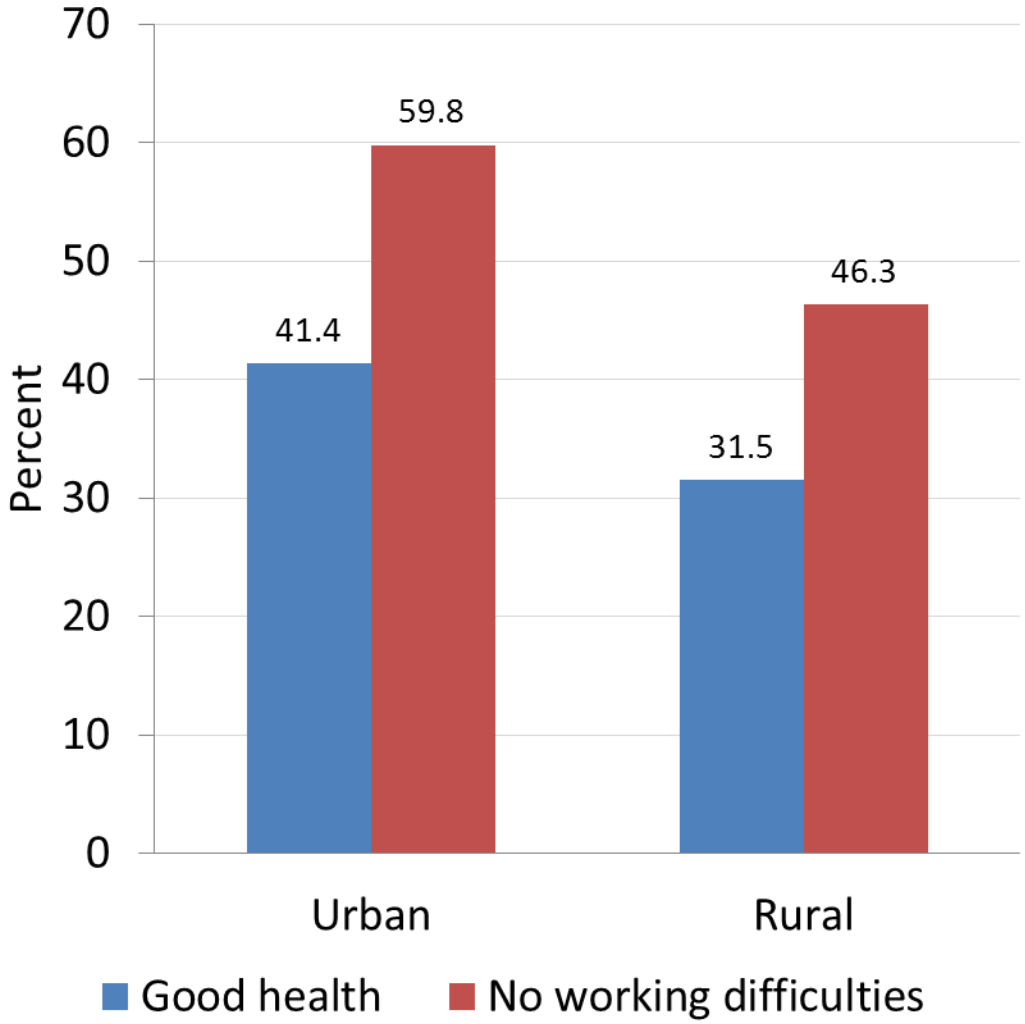
SRH & Work difficulty by Gender



- More men (42.3%) reported very good or good health than women (34.5%).
- More men (59.9%) reported not having working difficulties than women (51.2%)
- This was however, not significant, even when adjusting for age

Gender	**Poor SRH**	
	Unadjusted Odds Ratio (95% CI)	**P-value**
Female	1.00	
Male	0.97 (0.77-1.22)	0.790

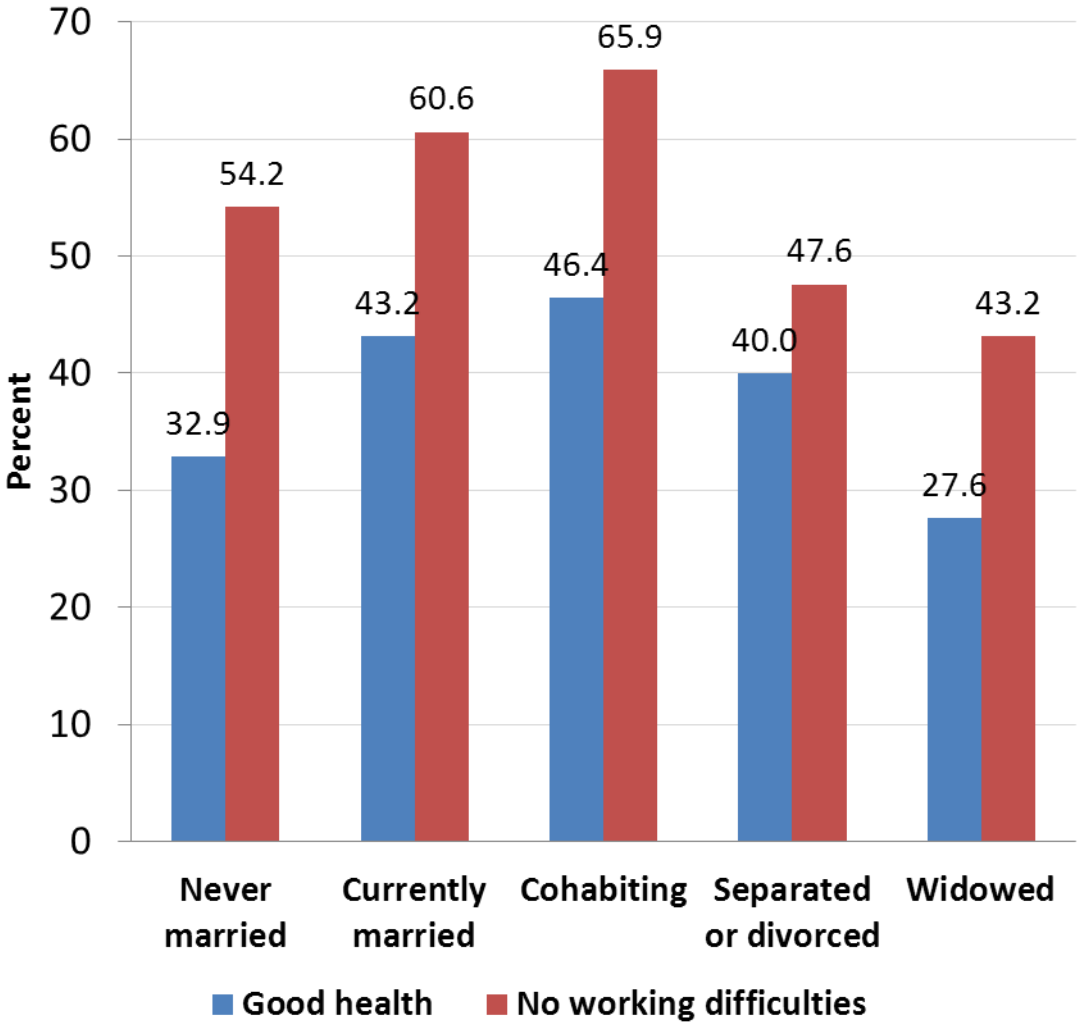
SRH & Work difficulty by Residence



- More urban dwellers (41.4%) reported their good SRH compared to rural dwellers (31.5%).
  - potentially due to rural households having less access to health care
- More urban dwellers (59.8%) reported no working difficulties compared to rural dwellers (46.3%)
- However, residence was not significant even when adjusting for age and gender

Geo-locality	**Poor SRH**	
	Unadjusted Odds Ratio (95% CI)	**P-value**
Rural	1.00	
Urban	0.61 (0.27-1.39)	0.235

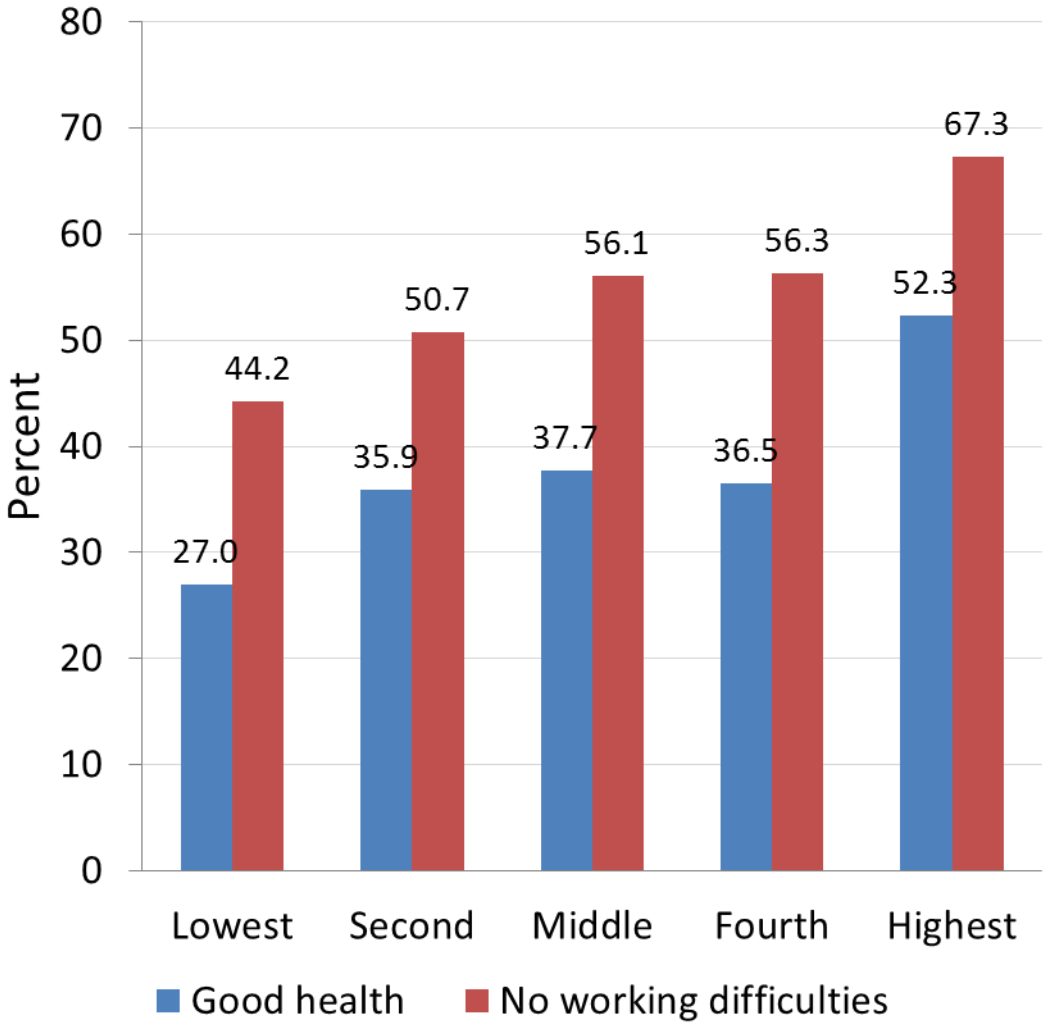
SRH & Work difficulty by Marital Status



- Currently-married or cohabiting people were more likely to report good SRH & no working difficulties
- However, marital status was not significantly associated with poor SRH even after adjusting for age and gender

Marital status	**Poor SRH**
	Unadjusted Odds Ratio (95% CI)
Single	1.00
Married	0.61 (0.31-1.21)
Separated/divorced	0.88 (0.33-2.31)
Widow	1.00 (0.55-1.80)

SRH & Work difficulty by Wealth Status



- Poor SRH decreased with increasing wealth
- No working difficulties increased with increasing wealth
- Those in high wealth class were significantly less likely to report poor health compared to low class (p = 0.04)
- This association remained after adjusting for age and gender (p=0.028)

Wealth	**Poor SRH**	
	Unadjusted Odds Ratio (95% CI)	**P-value**
Low	1.00	
Medium	0.77 (0.47-1.26)	
High	**0.44 (0.25-0.77)**	0.004

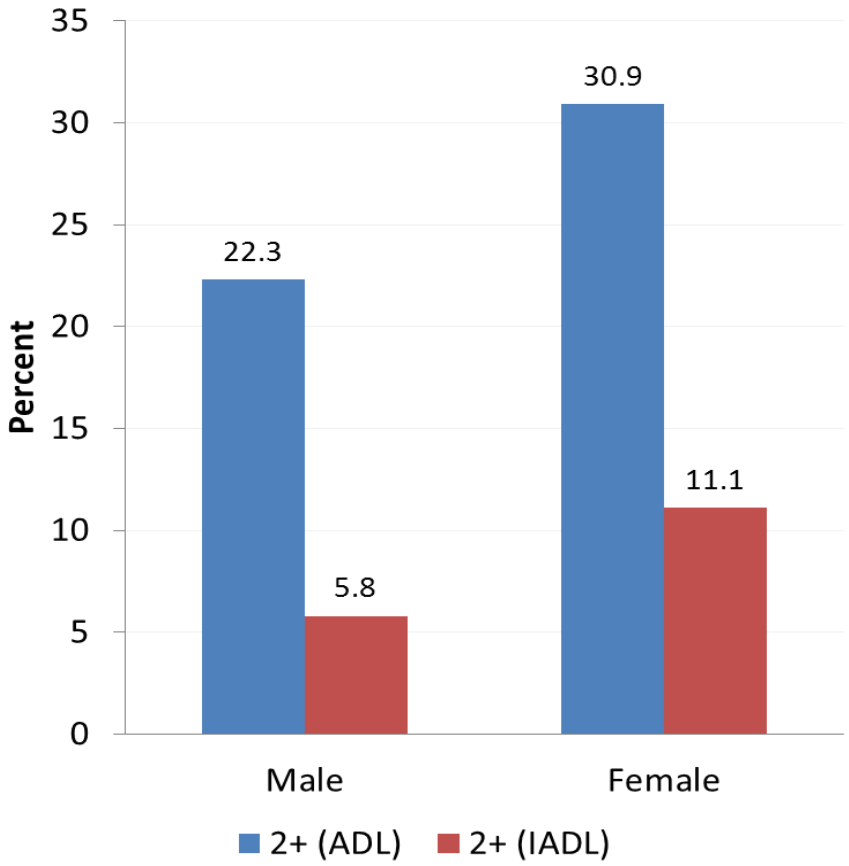
SRH by Race

- Race was found to be a determinant of poor SRH among older S. Africans.
- Compared to African Blacks, Whites and Coloureds were 83% and 54% respectively, less likely to rate their health status as poor
- After adjusting for age and gender, Indians/Asians were almost twice more likely to report poor SRH than Africans

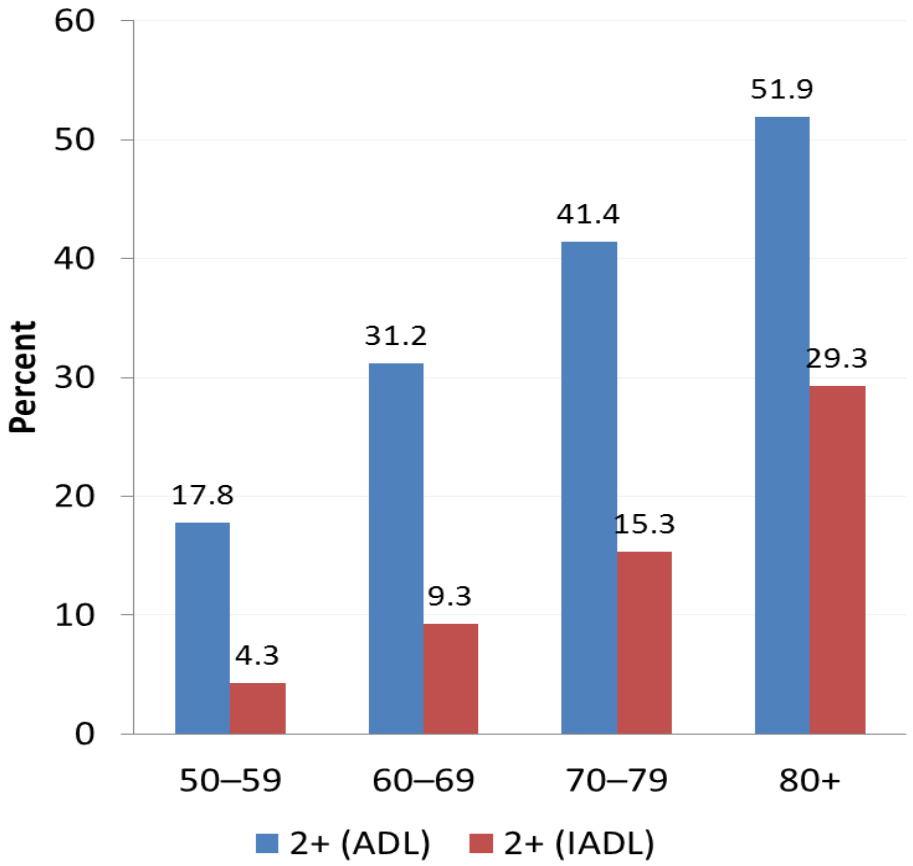
Population group	Poor SRH			
	Unadjusted OR (95% CI)	**P-value**	**Adjusted OR (95% CI)**	**P-value**
African Black	1.00		1.00	
White	**0.17 (0.07-0.40)**	0.001	**0.42 (0.18-0.98)**	0.045
Coloured	**0.46 (0.23-0.92)**		0.57 (0.29-1.10)	0.093
Indian or Asian	1.27 (0.76-2.14)		**1.90 (1.08-3.35)**	0.028

ADLs and IADLs by Gender & Age

More women had 2+ ADLs & IADLs

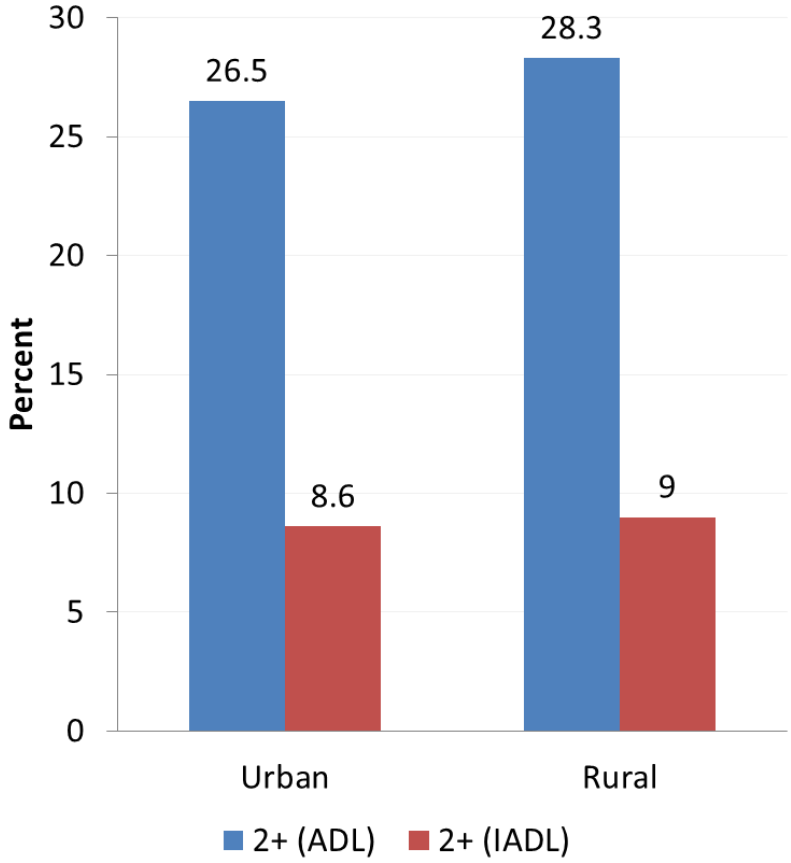


ADLs & IADLs increase with age

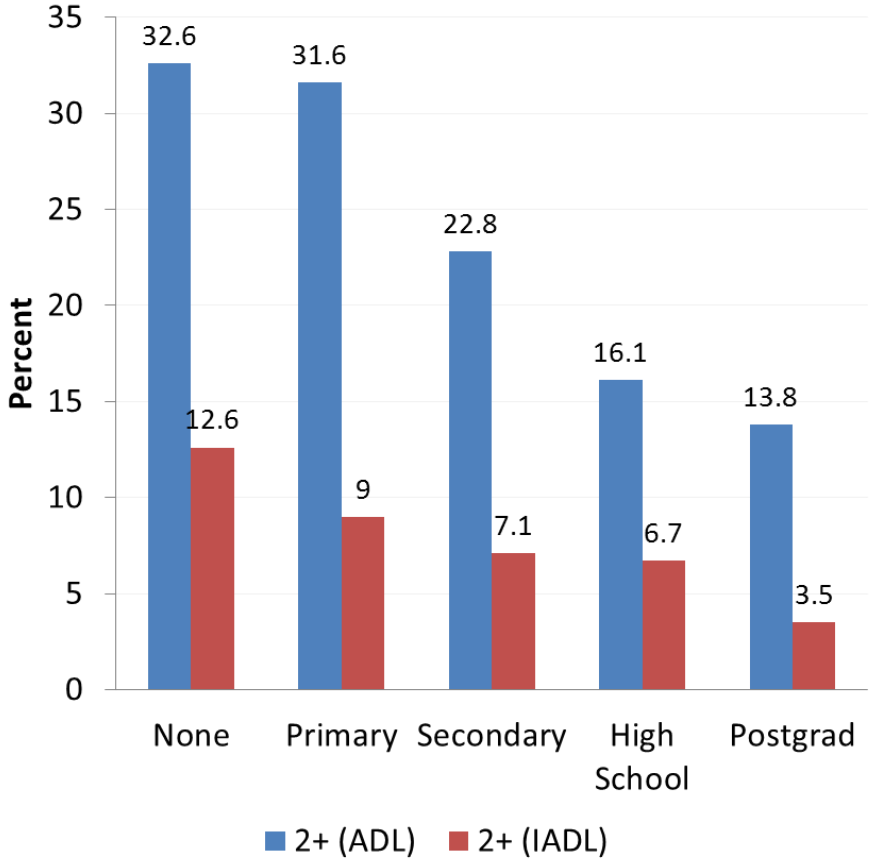


ADLs/IADLs by Residence & Education

ADLs/IADLs deficiencies didn't differ by residence

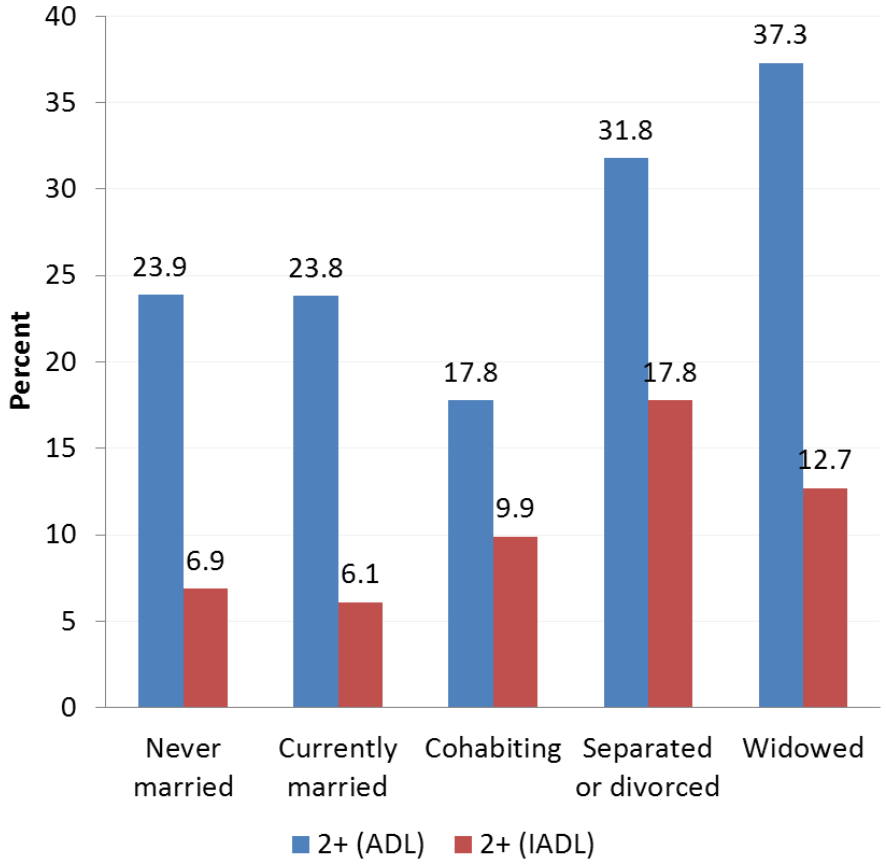


Higher levels of education were associated with better functioning

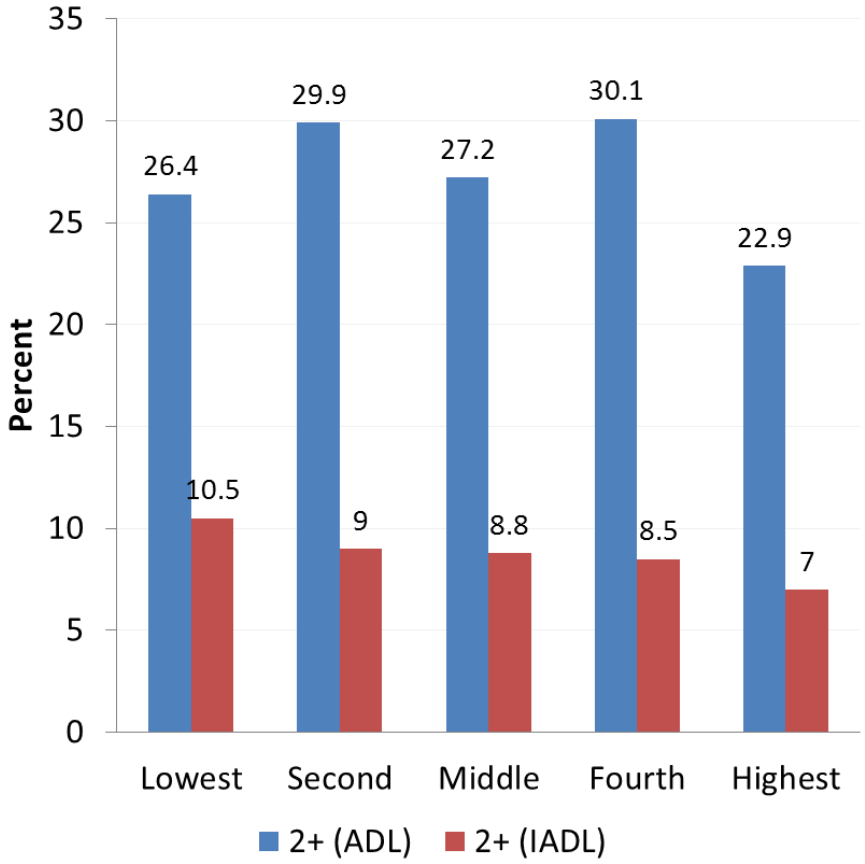


ADLs/IADLs by Marital Status & Education

Widowed elderly had greatest difficulty while those co-habiting had least difficulty



The decrease in IADLs by wealth was quite gradual

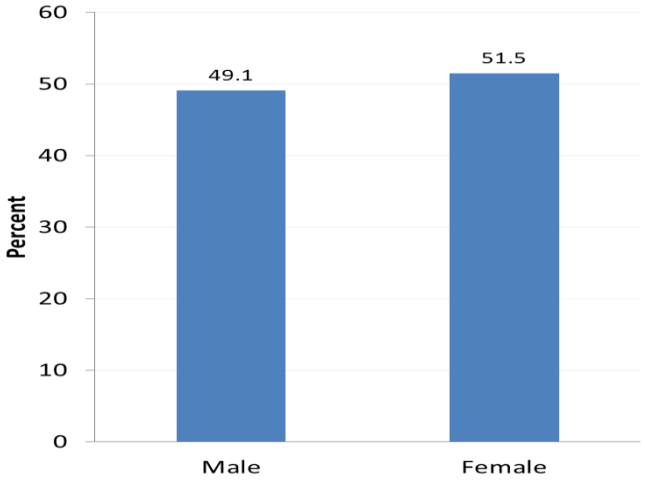


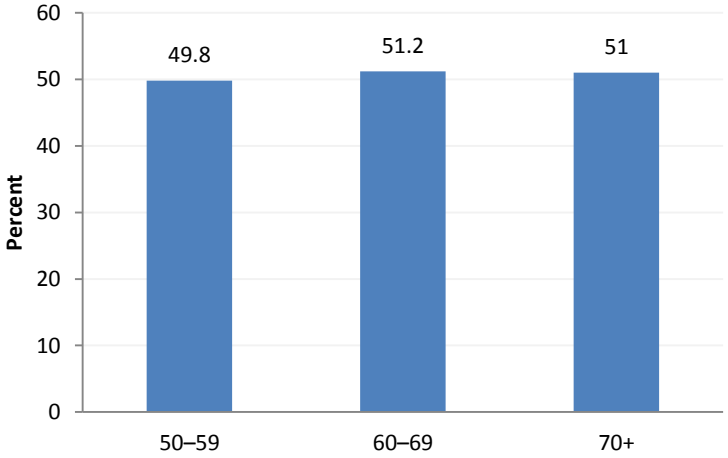
ADLs/IADLs & poor SRH

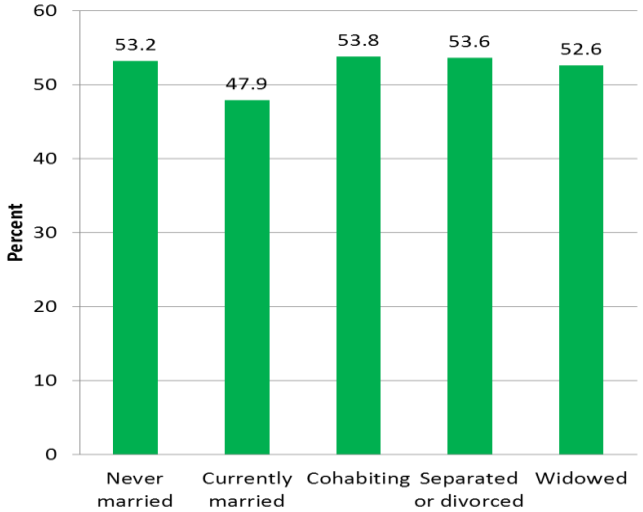
Activity limitation	Poor SRH	
	CrOR (95% CI)	AOR (95% CI)#
ADL		
Mild	1.00	1.00
Moderate	**4.85 (3.04-10.83)**	1.06 (0.63-1.78)
Severe	**9.47 (5.47-16.41)**	**1.86 (1.14-3.05)**
IADL		
Mild	1.00	1.00
Moderate	**4.85 (3.04-7.74)**	**3.40 (2.03-5.69)**
Severe	**17.80 (9.63-32.87)**	**7.79 (4.02-15.11)**

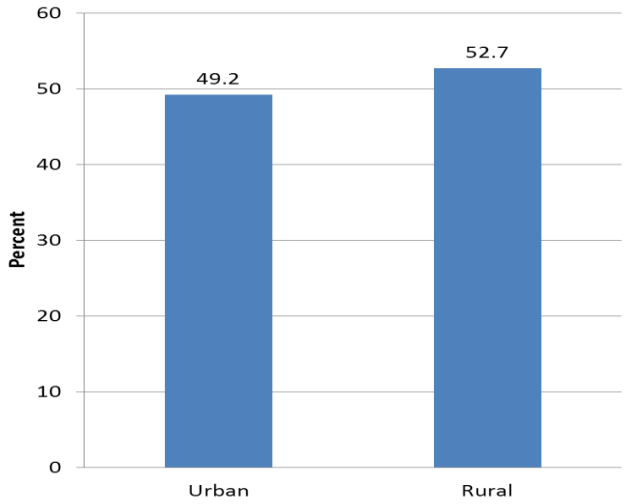
- Increasing levels of ADL and IADL were associated with greater odds of reporting poor SRH
- The same was found after adjusting for age and gender.

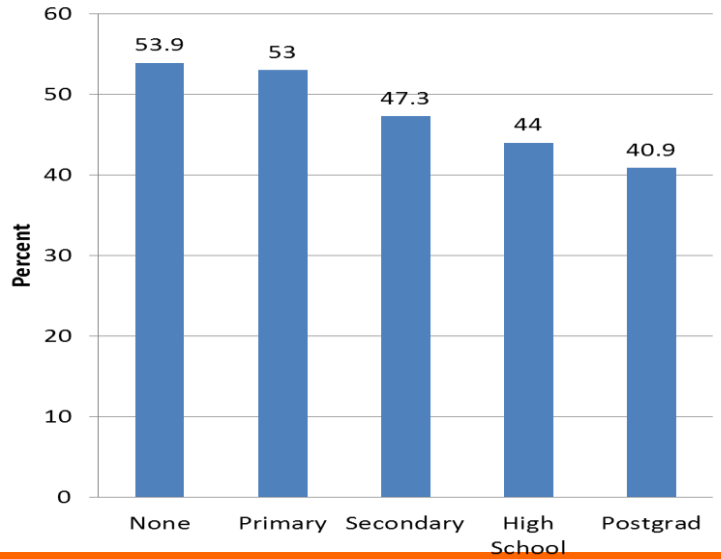
Poor Subjective well-being & QoL decreased with education & wealth. It was also slightly higher in females, rurals & elderly

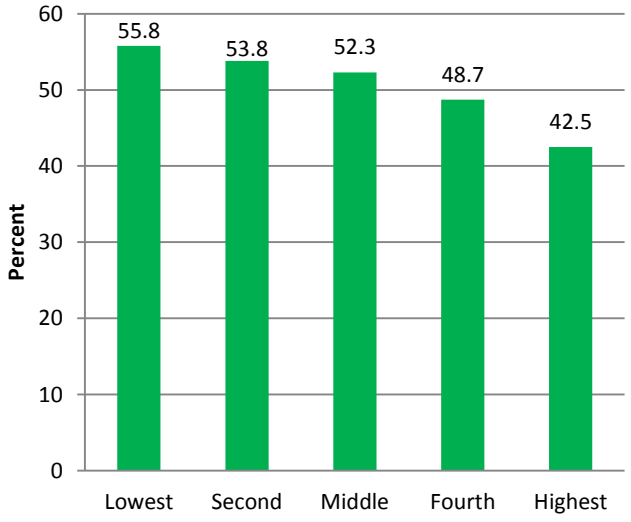










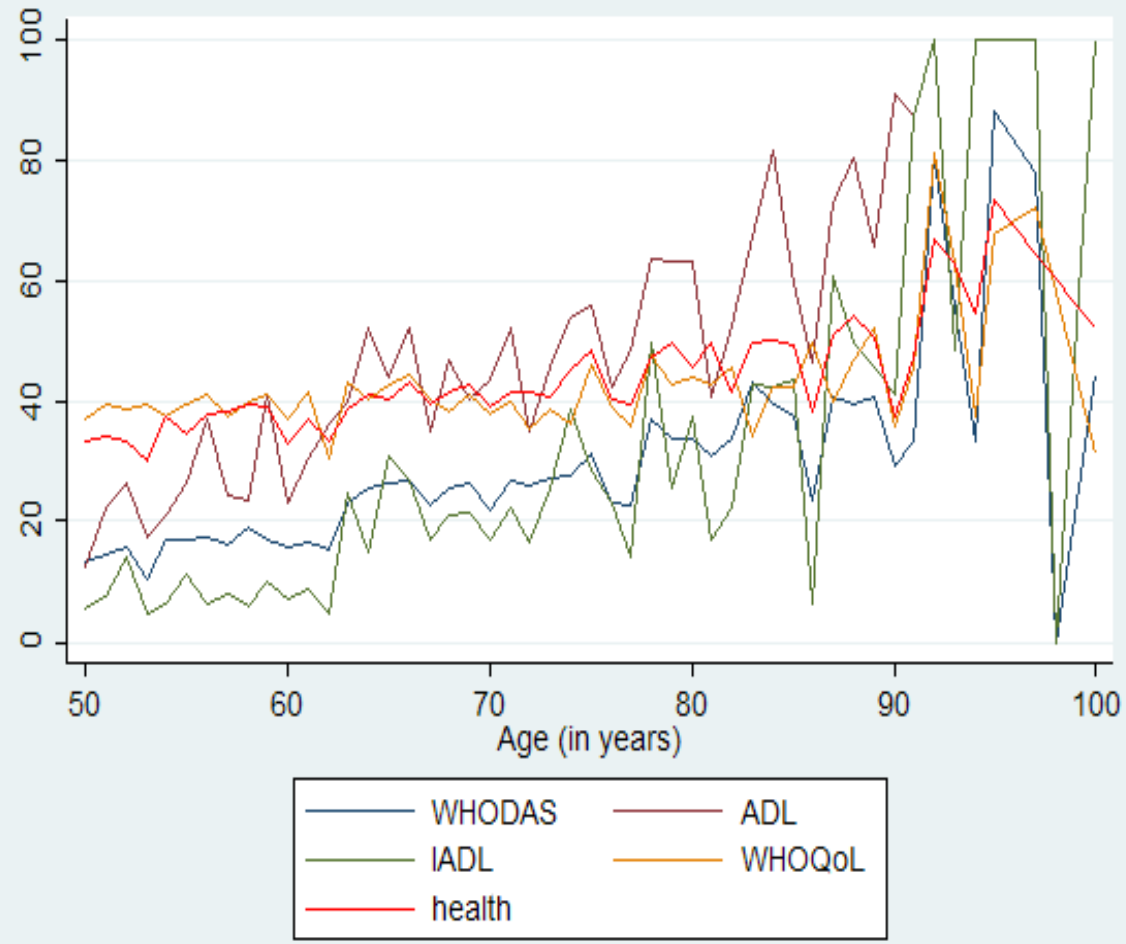


Quality of life and poor SRH

- Older people with medium to higher levels of personal satisfaction (WHOQoL) were 82% and 96% respectively, less likely to report ill-health compared to those who were less satisfied (low WHOQoL
- The possibility of collinearity cannot be ruled out between these two measures.

	Poor SRH	
	CrOR (95% CI)	AOR (95% CI)#
WHOQOL		
Low	1.00	1.00
Medium	**0.18 (0.12-0.27)**	**0.29 (0.20-0.42)**
High	**0.04 (0.02-0.08)**	**0.84 (0.04-0.16)**

Mean health, disability & wellbeing by age



- The health, WHODAS, ADL, IADL, WHOQoL measures were converted to a scale of 0 to 100, where higher scores represent poor SRH
- Disability increased with increasing age,
- Health state decreased steadily with increasing age.
- This confirms earlier patterns presented indicating decreasing health status with increasing age
- Variability of measures were larger after age 80, because of the smaller number of persons in the sample

Policy Considerations

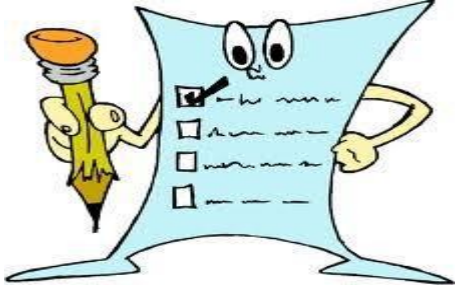
- The study confirms the **health challenges** faced by elderly people cited in other studies (Gomez-Olive 2010; Debpuur et al 2010; Hirve et al 2010; etc)
- Broad-based approach accommodating well & active elderly as well as disabled and frail elderly needed.
- Intervention options should consider inter-sectoral structures and multidisciplinary strategies to ensure that older people are well physically, socially & psychologically and for as long as possible.
- Families and local communities need to be empowered with resources and technical assistance to care for older persons in the community
- Access to amenities ranging from water, sanitation, transport, housing, and access to health promotion, disease and disability prevention strategies.
- National policies must incorporate the issue of ageing and appropriate support mechanisms for older people into the mainstream of their social and economic planning.
- Policies for employment, health, transport, housing and social care must take into account variety of needs of older people.
- Active involvement of older people research, policy implementation & all issues that are of concern

Conclusion

SAGE Report Foreword, Min. of Health Dr A.Motsoaledi:

"The Study of Global Ageing and Adult Health Wave 1 adds to SAGE Wave 0 by providing baseline information and an ideal platform for measuring future trends. In addition, a longitudinal cohort study is planned (to monitor health changes), with at least 3 rounds of data collected over a 5–10 year period. The NDOH considers this study to be of vital importance in the continuing monitoring of health and well-being of older South Africans. We look forward to future data collection rounds that will supplement the baseline findings reported here."

Selected References



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Acknowledgements

- South Africa's National Department of Health (NDOH) for funding the study & for chairing SAGE Advisory Committee
- The US National Institute on Ageing's Division of Behavioral and Social Research for co-funding SAGE through Interagency Agreements (OGHA 04034785; YA1323–08-CN-0020; Y1-AG-1005–01) and through a research grant (R01-AG034479
- Dr Richard Suzman, the Director of above division has been instrumental in providing continuous intellectual and other technical support to SAGE
- The WHO for providing financial and technical support- survey materials and instruments, analysis, report template and editing;
- HSRC for financial, technical, and administrative support
- SAGE Advisory Committee members: HSRC, NDOH, MRC, UCT, WHO Country Office
- All participants who consented to participate in the study; All the fieldwork supervisors and their fieldwork teams (interviewers) for collecting data;
- Mr Witness Chirinda, HSRC PhD Trainee, for working with me in putting together this presentation

End

Thank you