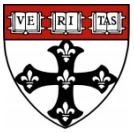

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Title

Health gradients in South Africa: Inequalities in the measure of the beholder

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Abstract

As the literature on health inequalities continues to grow very few studies have tested the sensibility of this measure to the choice of welfare indicator. In this paper we use data from an aging survey in South Africa to evaluate the health gradients using two measures of economic status: consumption per capita and an asset index. In particular, we measure the concentration indexes for a variety of health indicators ranging from general health service utilization to individual self-reported and biomarker outcomes. We find that the concentration indexes for different health indicators differ across economic indicators suggesting that the choice of welfare indicator can lead to different estimations of inequalities. In line with other studies, these results advocate for greater caution when selecting the economic indicator in the analysis of inequalities and for more explicit testing of different indicators in future studies. Overall, the results call for a greater understanding of how SES can influence health to generate appropriate measurements of health inequalities.

Keywords: Health inequalities, socioeconomic health gradients, elderly

Introduction

Inequalities in health have constantly captured the attention of academics and policy makers around the world. Consequently, there is an ever-growing body of literature measuring and attempting to explain socioeconomic health gradients in different domains. Overall, this literature has consistently shown the existence of important gradients in health outcomes, health service utilization, and even public spending in health care for most if not all countries [1-7]. More importantly, some of this evidence suggests that these inequalities are persistent despite different policy actions [8-10]. In response, different personalities from the academic and policy world have called for improved monitoring of health and health care services to foster better policy making [11-13].

Unfortunately, one challenge that limits this improved monitoring is the restricted understanding we currently have of how the choice of the economic indicator can influence the health gradient magnitude. Theory should a-priori guide the choice of measure that one makes, but it is often data limitations that influence empirical analysis of health inequalities. Furthermore, to address the difficulties in collecting expenditure or income data, different alternative measures have been developed using easier to collect household characteristics [14]. As a consequence, studies evaluating health inequalities employ a variety of SES measures such as income, consumption, and assets, without clarity of how the welfare indicator may influence the magnitude of health inequalities found. This becomes even more relevant with evidence showing that asset proxies are weak predictors of consumption per capita [15, 16].

The following paper seeks to build on the current literature and provides a comparison of inequalities across different welfare indicators. To do so, we use data from an aging survey in the Agincourt Demographic and Health Surveillance Site (DHSS). We measure health gradients employing consumption per capita and an asset index. This paper focuses on a variety of health service indicators, self-reported health outcomes, and individual-level biomarkers. For each health indicator we first show the general distribution of the across quintile of economic status, and then evaluate the concentration index with each socio-economic indicator. Our results first show that health gradients may differ across indicators. Furthermore, the difference in gradients and order

changes across different health outcomes. The findings of our paper resemble those in a previous study using data from the Household Survey on Living Conditions in Mozambique that found that the choice of economic indicator led to different levels of health inequalities in the use of health care services and immunizations [17]. Similar to that paper, our findings contrast a previous study finding no difference in health inequalities [18].

The main contribution of this paper is that it re-emphasizes the need for caution when choosing a welfare indicator to evaluate health inequalities since it may influence their magnitudes. This paper also highlights the need to anchor the choice of SES proxy measures in theory and not only in data collection pragmatism. Furthermore, this paper encourages future studies to evaluate health inequalities with different SES indicators to obtain a more comprehensive perspective of health gradients. Another contribution is that this study provides a measure of health gradients for an elderly population in a poor context. Evidence of inequalities in such resource-constrained scenarios are usually limited, and especially in such an understudied population segment as the elderly. Finally, in comparison to many previous studies, the richness of the dataset used allows us to evaluate health gradients across a wide range of health indicators, spanning from health service indicators to biomarkers.

Methods and data

The aim of this paper is to evaluate whether the distribution in use of health services or health outcomes across SES differs between the following economic indicators: consumption per capita and asset index. For this, we first evaluate the distribution of health indicators across SES quintiles. This provides a first descriptive approach to evaluate the gradients found for different health indicators. For each health indicator we estimate whether higher SES quintiles leads to significantly different health care use or health outcomes when compared to the bottom quintile in each measure.

Following this we take a more comprehensive approach and estimate the concentration curves for each health indicator. Methodologically, we use the continuous SES measures to rank the sample population and calculate the cumulative share of the population that has used the health service or

has endorsed the different health outcomes. From this we can estimate the concentration index as the area between the concentration curve and the line of perfect equality. This index will represent the degree of inequality and ranges from minus one to one. In a case with no SES inequalities the concentration index will be equivalent to 0 meaning that there is no difference between the concentration curve and the line of perfect equality. Positive values of the concentration index imply that the health indicator is concentrated amongst the wealthier individuals, and negative values will imply concentration amongst the poorest. From the literature, we calculate the concentration index from the covariance between the health indicator and the rank as follows [19, 20]:

$$2\sigma_R^2\left[\frac{h_i}{\bar{h}}\right] = \alpha + \beta R_i + \varepsilon_i$$

Where $\bar{h}$ is the mean value for the health indicator h, R_i is the fractional rank of the ith individual, and σ_R^2 is the variance of the rank ordering. We then follow a similar methodology and compare concentration index between the two income measures. It is important to acknowledge that the aim of this paper is to evaluate health inequalities and not health inequities which would imply controlling for other aspects.

For this paper we use data from the South African first wave of the Health and Aging Study in Africa: Longitudinal Studies of INDEPTH communities (HAALSI). This survey provides health and economic information on 5,059 individuals over the age of 40 living in 4,393 households within the Agincourt DHSS. The design and implementation of this survey was similar to that of other aging surveys across the world, and it was conducted between September 2014 and July 2015. To evaluate the effect of different SES measures on individual-level health inequalities we rely on the asset and consumption data collected at the household level, and the health service indicators and outcomes data collected at the individual level.

Consumption

The measure of consumption used in this study was calculated using recall monthly values of consumption across a range of food- and non-food consumption categories. This measure includes any production that was consumed within the household. The small geographical area covered by

the Agincourt DHSS implies that we do not need to deflate the consumption with price indexes to account for geographical differences. Following the approach used in this literature we calculate per capita consumption as the household consumption per household adult equivalent.

The asset index

The HAALSI study also collected asset data for all the households included in the survey. We use the assets data and follow the DHS methodology to develop a wealth index [25]. Briefly described, we identify household asset variables where variation exists across households, and then use PCA including all categories of categorical variables to generate an asset index score that is then divided into quintiles for the evaluation of inequalities. Table 1 presents the household asset variables included in the construction of the wealth index and their respective scoring coefficients.

[Insert Table 1 here]

Figure 1 presents the relation between the different asset index quintiles and the average total household consumption and consumption per capita. Both panels show that total consumption and consumption per capita increase as the asset index quintile increases. This confirms the positive association between the asset index and the consumption measures and confirms the validity of all measures insofar as that the consumption measures increase with the asset index.

[Insert Figure 1 here]

Health service indicators and health outcomes

One advantage of the HAALSI study is the inclusion of both health service indicators and health outcomes. This allows us to distinguish the effect of different SES metrics in inequalities across different health domains. With regards to health services we evaluate seven indicators: hospital visits, primary health care visits, blood pressure tests, diabetes tests, HIV tests, cholesterol level tests, and an adherence to medication score. Table 2 shows that while only 6% of our sample has had a hospital stay in the last 12 months, about 45% of the individuals have visited an outpatient health care facility. We can further see the difference in test where over 60% of our sample has

been tested for HIV or high blood pressure but less than 10% have been tested for diabetes and high cholesterol. Finally, table 2 also shows the adherence score where higher values imply lower adherence to self-reported adherence to medication.

[Insert Table 2]

In the case of health outcomes, we evaluate the health gradients for self-reported health, CESD depression score, total cognitive score, obesity, hypertension, and anemia. Similar to before, Table 3 presents their sample means. Approximately, 19% of our sample reports being in bad or very bad health. The average depression score is of 1.72 in a range from 0 to 8 where higher values imply a greater number of depressive symptoms. Furthermore, the average experiential wellbeing as measured by a ladder scale is 4.5 in a range from 0 to 10. The average cognitive score in our sample is of 14.3 with values ranging from 0 to 26. Finally, 30%, 58%, and 42% of the individuals in our sample are obese, hypertensive, or have anemia respectively. The wide range of outcomes considered in this paper allows us to thoroughly evaluate the effect of different SES metrics in the evaluation of health inequalities.

[Insert Table 3]

Results

We first study the distribution of health care indicators and outcomes by economic indicator. Table 4 presents the results for hospital stays in the last 12 months and visits to primary care services in the last 3 months. The results show that having visited and the number of visits is distributed similarly across the two measures of socioeconomic status. This suggests that both consumption and assets are not predictive of different access levels to health care services in Agincourt. A study using data from the SAGE survey in Agincourt found similar results where the asset index was not predictive of higher use of of health care facilities due to mainly the characteristics of health insurance coverage in the region [26].

[Insert Table 4]

Table 5 presents the results for blood pressure testing, hypertension testing, diabetes testing, cholesterol testing, and adherence to medication scores. In the case of blood pressure testing, the results for both household consumption per capita and the asset index show no clear gradient across quintiles but more an inverse-u relation where the middle quintile has the highest rate of blood pressure testing. Nevertheless, there is no difference in the values between measure of socio-economic status. The results for diabetes, HIV, and cholesterol testing are presented in columns 2, 3, and 4 respectively and show that individuals with in higher quintiles have a larger testing rate. More importantly, the gradient for household consumption per capita is larger than that of the asset index measure. For example, in the case of cholesterol testing the lowest asset index quintile has a 5.8% cholesterol-testing rate while the highest quintile has a cholesterol-testing rate of 10.1%. In the case of consumption the range between the quintiles is larger with the cholesterol-testing rate of 3% and 14.4% for individuals in the lowest and highest quintiles respectively. In the case of medical adherence, with the exception of the highest quintile of household consumption per capita there is no difference in the gradients found for consumption per capita and the asset index.

[Insert Table 5]

The patterns presented before are confirmed in the concentration curves in Figures 2 and 3. In the first case, Figure 2 confirms that distribution for hospital stays and numbers of visits to primary health care services are similar across the different welfare indicators. Figure 3 presents the concentration curves for the different testing indicators and highlights the contrasting results across different indicators. In particular, we can see that for diabetes and cholesterol testing the inequalities across economic indicators are larger when using household consumption per capita as an indicator of socio-economic status than the asset index. Finally, the results for medical adherence even show that the sense of the inequalities can be different when using different indicators since the inequalities when measured with the asset index suggest that a distribution towards the poorer segments while the inequalities using consumption per capita tends towards the wealthier economic groups.

[Insert Figures 2 and 3]

The results for different health outcomes are presented in Tables 6 and 7. The first presents the distribution of self-reported outcomes across different welfare indicators. We show that the distribution of all health outcomes is less equally distributed when ranking individuals by consumption per capita than when using asset index. For example, the average cognitive score of individuals in the lower quintile is 13.4 and 13.5 for consumption per capita and the asset index respectively. However, the average cognitive score for those in the highest quintile is 16.0 and 15.3. Figure 4, presents the concentration curve for these outcomes and further support the descriptive results form Table 6.

[Insert Table 6]

[Insert Figure 4]

A somewhat contrasting pattern is show in Table 7 for health outcomes based on biomarkers. The distribution of obesity and hypertension has a lower gradient when using the measure of consumption per capita than that of the asset index. Concerning the first, 20.4% individuals in the lowest quintile of consumption per capita are categorized as obese and this increases to 37.7% in higher quintiles of consumption per capita. However, the range is larger for asset index with 18.9% of individuals in the lowest asset index quintile being obese and 41.4% of those in the highest asset index quintile. The gradient for hypertension is only slightly larger for the asset indexes when considering the percentage of individuals in the fourth quintile that suffer from hypertension. Finally, the results for anemia suggest a very similar gradient between both measures of socio-economic status. Figure 5 presents the concentration curves for the biomarkers evaluated here.

[Insert Table 7]

[Insert Figures 4]

The tables and figures before have provided the descriptive results for the health gradients across different health variables. Table 8 presents the statistical comparison across concentration curves

by economic indicator. Overall, the concentration index for blood pressure testing, diabetes testing, HIV testing, cholesterol testing, cognition, obesity, and hypertension suggest significant inequalities in favor of wealthier individuals. In contrast, self-reported health and anemia is distributed significantly in favor of poorer individuals. More importantly, the comparison of concentration indexes shows significant difference in the magnitude of inequalities when measured by the difference indicators of socio-economic status. In the case of primary care visits, blood pressure testing, diabetes testing, cholesterol testing, medical adherence, depressive symptoms, and obesity the concentration index for household consumption per capita and the asset index are significant. Furthermore, the results for primary care visits and medical adherence suggest inequalities in different directions. Finally, when we compare the concentration index for consumption per capita and the asset index, there is no clear pattern of dominance. While the magnitude of inequalities is larger for consumption per capita in most health services indicators this is not the same for majority of health outcomes.

[Insert Table 8]

As discussed in the literature, the changes in the concentration index can be explained by the fact that when changing the ranking variable we also change the correlation between the health service indicator or outcome with the individual ranking. Table 9 presents the household ordering under the different welfare indicator alternatives. If all welfare indicators were consistent we would expect that the diagonals of each matrix would be 20, however this is not the case suggesting inconsistencies across the different measures. Overall, the results suggest that the re-ranking produced by different socio-economic indicators can influence both the magnitude and sense of inequalities found in different health outcomes..

[Insert Table 9]

Discussion

In this paper, we show that using different welfare indicators can lead to different conclusions on socioeconomic inequalities of health. These findings contrast that of Wagstaff and Watanabe who show that the choice of welfare indicators has little impact on the measure of inequality across 19

countries in wasting and stunting [18]. However our findings are similar to a study conducted in Mozambique resulting in important differences across welfare indicators and a larger gradient when measuring inequalities with an asset index in comparison to consumption per capita [17]. The combination of these results should raise caution when selecting an economic indicator to evaluate inequalities.

The results from this paper further the call for more clarity and carefulness in the measurement of health inequalities. While this measurement will be naturally limited by the availability of data, it is necessary to encourage the collection of economic indicators that are grounded in theory and further improve the data collection of these. This paper builds upon the previous literature debating how to best proxy SES and provides several contributions. First, it offers an evaluation of how welfare indicators may impact inequalities studies amongst the elderly. Most of the current literature has evaluated this at the population level, disregarding the possibility that health behaviors may differ for the elderly and that different financial aspects could influence their health consumption or outcomes. A second contribution is that it takes advantage of a unique aging survey that allows the evaluation of health inequalities across a wide range of health outcomes including health service indicators, self-reported health outcomes, and biomarkers. This is an addition to the current literature that had focused mostly on service indicators. Finally, this paper provides further evidence on how inequality measurements can depend on the choice of socio-economic indicator and highlights the need for caution when defining which indicator to use.

Overall, the results from this paper shed new light onto the results obtained with different welfare indicators. The inconsistencies found in the gradients highlights the need to further our understanding of the mechanisms that link SES and health. Future research should aim first to improve the collection of the current measures of SES and second to better ground in theory the decision of which welfare indicator they use. Finally, future studies concerning health inequalities should be explicit about the potential sensitivity of their measurements to the choice of welfare indicator and, where possible, include comparative measures across SES measures.

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Tables

Table 1. Household assets and scoring coefficients

	Mean	SD	Scoring coefficient
Has domestic servants	0.146	0.353	.1378257
Household member works households land	0.034	0.180	-.0238133
Household member owns the dwelling structure	0.897	0.300	.019408
Number of members per room	0.617	0.489	-.007586
Has electricity	0.908	0.290	.0750311
Source of water			
Tap in the house or yard	0.383	0.486	.13641
Tap in the street	0.539	0.498	-.1488941
Water truck	0.067	0.250	.0308925
Well	0.004	0.062	-.0072341
Surface water	0.006	0.078	.0096137
Wall material			
Brick	0.052	0.223	.0567977
Cement	0.931	0.253	-.0231065
Other	0.001	0.027	-.0088637
Natural	0.015	0.123	-.0531227
Floor material			
Tiles	0.134	0.341	.2821306
Cement	0.859	0.348	-.2698421
Carpet	0.001	0.027	.0109517
Natural	0.005	0.073	-.0328459
Other	0.001	0.027	-.0047115
Roof material			
Tiles	0.146	0.353	.2724302
Corrugate iron	0.847	0.360	-.2650452
Natural	0.007	0.082	-.0147708
Source of cooking power			
Electricity	0.393	0.489	.1946733
Gas	0.005	0.070	.0274421
Parafin	0.001	0.027	-.0162882
Wood	0.601	0.490	-.1970429
Other	0.000	0.016	-.0045507
Toilet facilities			
Has own flush toilet	0.098	0.297	.0827326
Uses shared flushed toilet	0.003	0.058	.0006877
Pit latrine	0.738	0.440	.0386325

Uses bush or field as latrine	0.093	0.291	-.1363468
Other type of latrine	0.068	0.252	.0129927
Vehicles			
Number of cars	0.328	0.767	.2340074
Number of trucks	0.005	0.087	.0694698
Number of other vechicles	0.011	0.117	.0529633
Number of bicycles	0.056	0.282	.0269313
Number of scooters	0.002	0.050	.0101694
Number of cart	0.013	0.117	.0253714
Durable assets			
Number of refrigerators	1.120	0.633	.1465757
Number of washing machines	0.094	0.292	.210997
Number of sewing machines	0.077	0.317	.0873819
Number of tube screens	0.920	0.702	.040284
Number of flat screen televisions	0.122	0.376	.2043938
Number of video recorders	0.569	0.607	.1480391
Number of satellite TV	0.211	0.406	.2697866
Number of radios	0.369	1.175	.0573543
Number of computers	0.092	0.350	.0858502
Number of stereos	0.022	0.184	.0927594
Number of cameras	0.012	0.115	.081637
Number of air conditioners	0.013	0.152	-.0283591
Number of cellphones	1.795	1.496	.1689145
Number of smartphones	1.524	1.720	-.0029774
Number of cement mixers	0.009	0.127	.157024
Number of clocks	0.237	0.534	-.0050507
Number of pressure cookers	0.255	0.825	.1008677
Number of sofas	0.023	0.170	.2470876
Number of beds	1.203	1.719	.06612
Number of cots	2.998	1.790	.1504337
Number of tables	1.041	0.885	.2083236
Number of electric fans	0.754	1.000	.1595989
Number of stoves	0.921	0.557	.1378257

Table 2. Sample means for health service indicators

	Service use (%)	n
Visited a hospital in last 12 months	5.9	5056
Visited primary care, private doctor, health or diviner in the last three months	45.4	5056
Ever measured blood pressure	69.2	5057
Ever tested for Diabetes	47.8	4648
Ever tested for HIV	63.9	5038
Ever tested cholesterol levels	8.1	5053
Adherence to medication scale score*	0.4	5031

*Higher score imply worse adherence

Table 3. Sample means for health outcomes

	Mean	n
Bad or very bad self-reported health	19%	5056
Depression score*	1.72	4929
Experiential wellbeing**	4.55	4953
Total cognition summary score***	14.31	3844
Obesity	30%	4689
Has hypertension	58%	4936
Anemia	42%	4493

*Higher score implies larger number of depressive symptoms

** Higher scores imply greater subjective wellbeing

*** Higher scores imply better cognitive functioning

Table 4. Hospital and primary care visits by quintile

Quintile	Hospital visits			Health center visits		
	Visit (%)	Average number of visits	Percent of all visit	Visit (%)	Average number of visits	Percent of all visit
Socioeconomic status measured by per capita consumption						
1 (Poorest)	5.2	0.11	19%	43.8	0.97	20%
2	5.8	0.12	20%	44.6	0.96	20%
3	5.8	0.12	20%	49.2*	1.00	21%
4	6.8	0.11	18%	48.2	1.01	21%
5 (Richest)	5.6	0.13	22%	41.2	0.89	18%
Socioeconomic status measured by asset index						
1 (Poorest)	5.6	0.11	19%	42.2	0.88	18%
2	5.2	0.12	21%	44.3	0.93	19%
3	6.6	0.11	20%	48.1**	1.02	21%
4	6.5	0.14	24%	47.9**	1.01	21%
5 (Richest)	5.2	0.09	16%	44.5	0.99	21%

*p<0.05, **p<0.01, ***p<0.001. Poorest quintile is reference group.

Table 5. Health service indicators by quintile

Quintile	Ever tested blood pressure (%)	Ever tested for diabetes (%)	Ever tested for HIV (%)	Ever tested cholesterol (%)	Adherence scale to medication
Socioeconomic status measured by per capita consumption					
1 (Poorest)	65.4	34.6	55.1	3.0	0.35
2	69.3	43.2***	60.4*	5.4*	0.33
3	74.9***	48.4***	64.2***	8.0***	0.27*
4	70.3*	55.3***	68.1***	9.5***	0.35
5 (Richest)	65.8	57.5***	71.5***	14.4***	0.50**
Socioeconomic status measured by asset index					
1 (Poorest)	65.6	41.1	57.6	5.8	0.43
2	67.4	43.6	60.5	6.1	0.37
3	72.3**	48.7***	64.8***	9.2**	0.30**
4	69.0	50.8***	65.6***	9.0**	0.35
5 (Richest)	71.4**	54.8***	70.7***	10.1***	0.34*

*p<0.05, **p<0.01, ***p<0.001. Poorest quintile is reference group. Larger values in adherence scale imply worst adherence.

Table 6. Self-reported health outcomes by quintile

Quintile	Self-reported bad or very bad health (%)	CESD Score	Experiential Wellbeing	Summary cognitive score
Socioeconomic status measured by consumption				
1 (Poorest)	23.3	1.71	4.51	13.4
2	18.2**	1.79	4.49	13.4
3	21.1	1.79	4.53	13.9**
4	18.9*	1.68	4.53	14.5***
5 (Richest)	13.8***	1.62	4.70**	16.0***
Socioeconomic status measured by asset index				
1 (Poorest)	21.7	1.80	4.50	13.5
2	20.6	1.79	4.56	13.8
3	20.2	1.78	4.56	14.1**
4	19.1	1.64*	4.59	14.5***
5 (Richest)	13.8***	1.58***	4.55	15.3***

*p<0.05, **p<0.01, ***p<0.001. Poorest quintile is reference group. Higher CESD scores imply greater number of depressive symptoms. Higher values of experiential wellbeing and cognitive score imply better wellbeing and cognition.

Table 7. Biomarkers by quintile

Quintile	Obesity (%)	Hypertension (%)	Anemia (%)
Socioeconomic status measured by consumption			
1 (Poorest)	20.4	52.2	48.1
2	26.2**	55.9	44.9
3	30.4***	61.5***	40.1***
4	32.6***	59.7***	38.7***
5 (Richest)	37.7***	62.8***	36.3***
Socioeconomic status measured by asset index			
1 (Poorest)	18.9	52.8	46.5
2	23.5*	56.1	42.4
3	30.1***	56.0	41.6*
4	33.4***	64.1***	40.8*
5 (Richest)	41.4***	63.0***	36.7***

*p<0.05, **p<0.01, ***p<0.001. Poorest quintile is reference group.

Table 8. Concentration indexes

	Consumption per capita		Asset index		(1)-(3)	
	CI	t-value	CI	t-value	CI	t-value
Health service indicators						
Hospital visits	0.05	0.994	-0.23	-0.455	0.702	1.424
Primary care visits	-0.004	-0.331	0.029*	2.508	-0.033**	-2.789
Ever tested blood pressure	0.003	0.644	0.015**	2.68	-0.011*	-2.017
Ever tested diabetes	0.104***	12.442	0.059***	6.992	0.045***	5.218
Ever tested HIV	0.054***	8.935	0.044***	7.189	0.010	.681
Ever tested cholesterol	0.307***	11.311	0.115***	4.194	0.192***	6.890
Medical adherence score	0.086***	3.808	-0.045*	-2.002	0.131***	5.717
Health outcomes						
Self-reported bad or very bad health	-0.062***	-3.688	-0.079***	-4.724	0.017	1.013
CESD Score	-0.006	-0.850	-0.028***	-4.084	0.022***	3.168
Experiential Wellbeing	0.005*	2.237	0.003	281	0.002	.937
Summary cognitive score	0.037***	14.429	0.027***	10.351	0.010***	3.743
Obesity	0.098***	7.554	0.157***	12.269	-0.060***	-4.495
Hypertension	.037***	5.295	0.038***	5.443	-0.001	-0.144
Anemia	0.051***	-4.998	-0.043***	-4.256	-0.008	-0.724

*p<0.05, **p<0.01, ***p<0.001

Table 9. Ranking consistency between different SES indicators

		Consumption per capita				
		Q1	Q2	Q3	Q4	Q5
Asset Index	Q1	9.31	5.12	2.75	.76	07
	Q2	5.44	5.30	4.17	3.32	1.78
	Q3	2.79	4.68	5.32	4.45	2.77
	Q4	1.88	2.87	4.45	5.77	5.04
	Q5	0.61	2.08	3.26	4.70	9.33

Figures

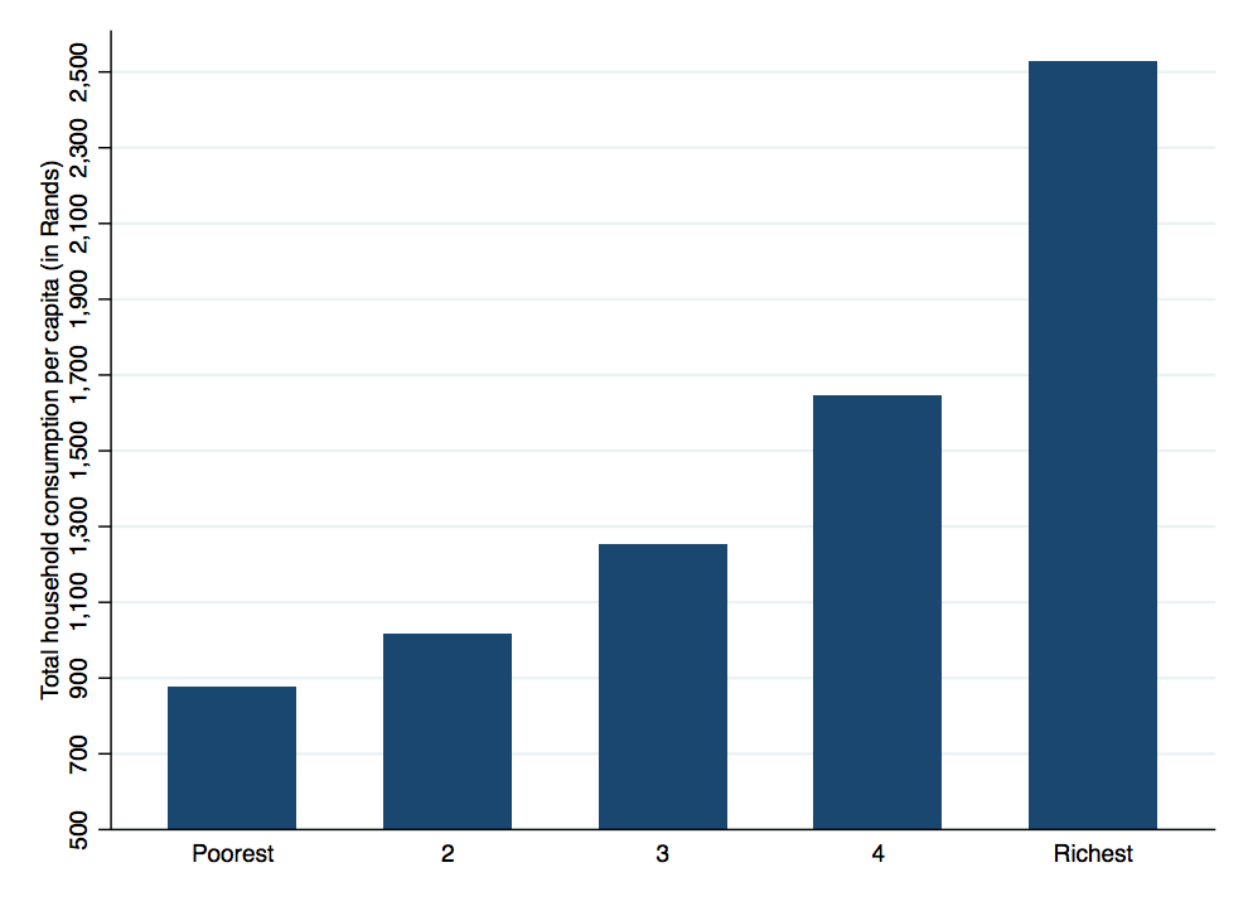

Figure 1. Relation between consumption per capita and the asset index

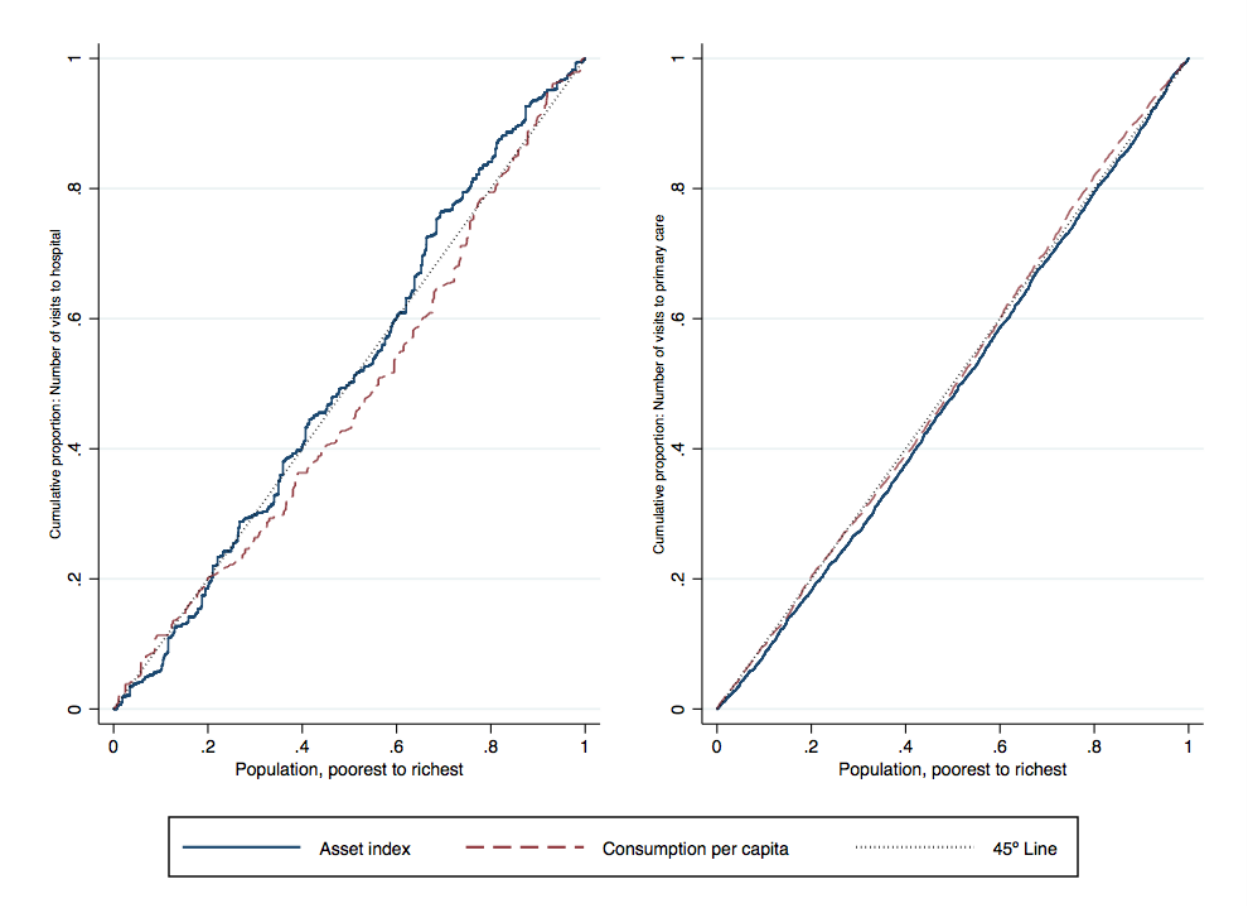

Figure 2. Concentration curves for number of hospital primary care visits

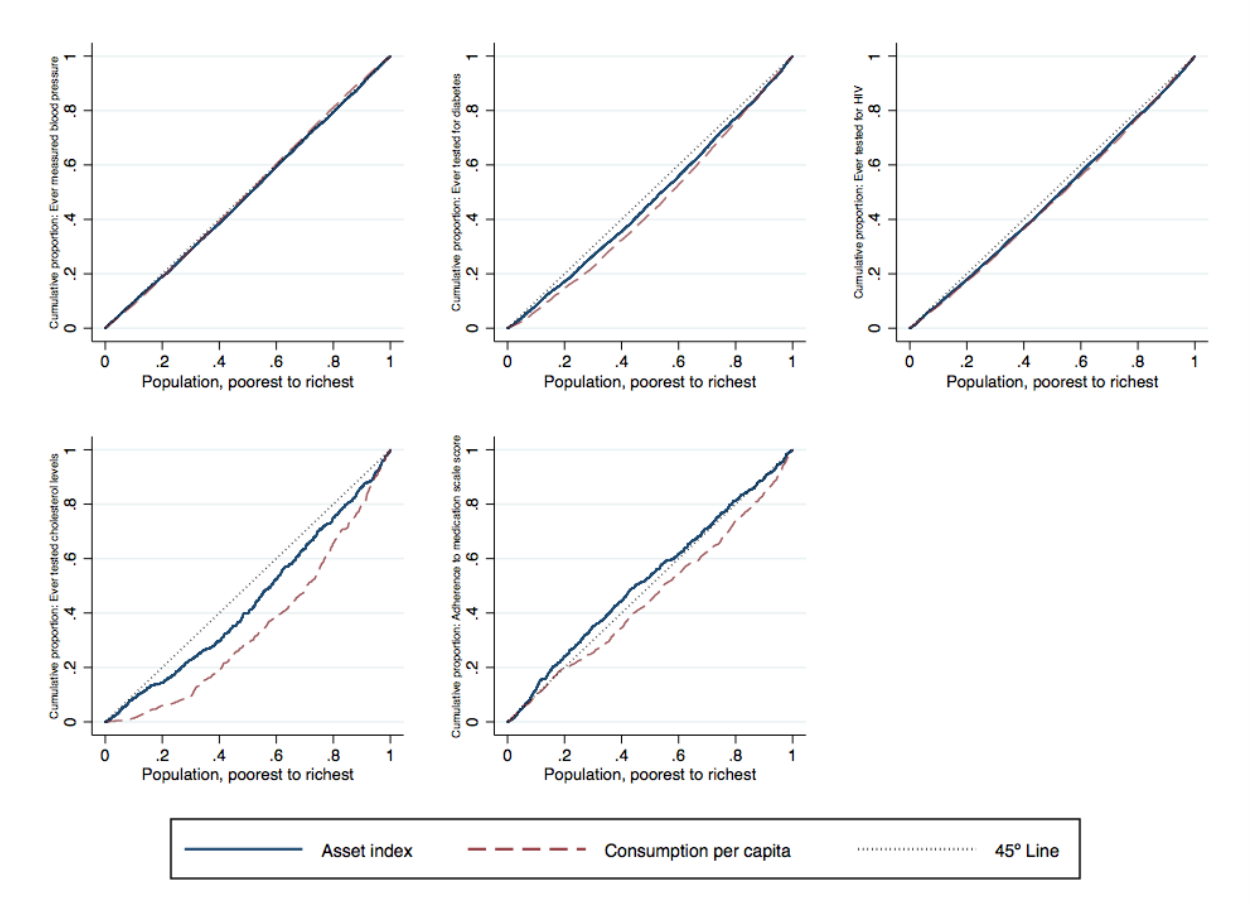

Figure 3. Concentration curve for blood pressure testing, diabetes testing, HIV testing, cholesterol testing, and medical adherence

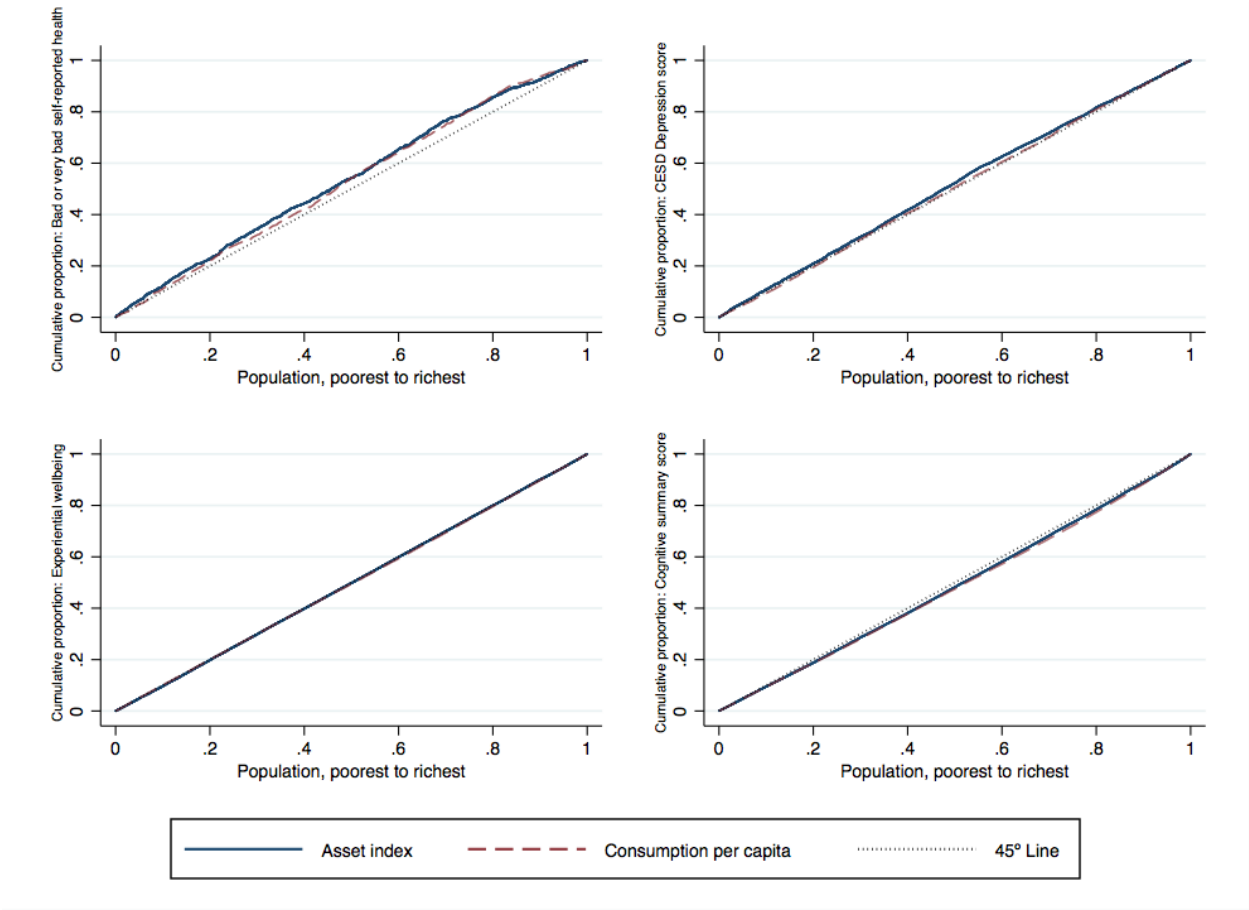

Figure 4. Concentration curve for self-reported bad or very bad health, depression score, experiential wellbeing, and summary cognitive score

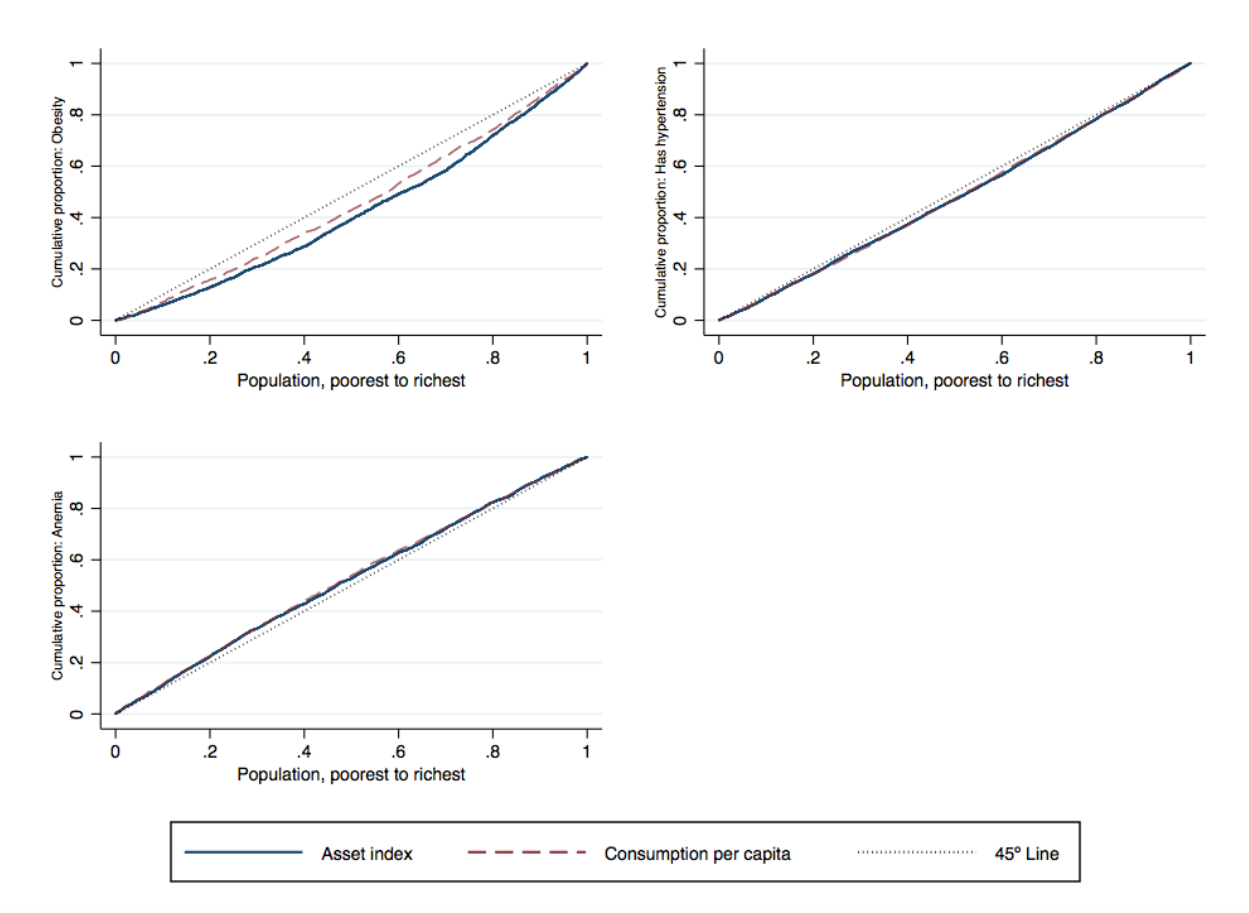

Figure 5. Concentration curves for obesity, hypertension, and anemia