Evidence on Social Determinants of Health and Health Inequities in Transitional Albania

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Definitions

- Social determinants of health
- Health inequalities
- Health inequities
- Social gradient

Social determinants of health

The social determinants of health are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels. The social determinants of health are mostly responsible for health inequities - the unfair and avoidable differences in health status seen within and between countries.

Health inequalities and health inequities

Health inequalities can be defined as differences in health status or in the distribution of health determinants between different population groups. For example, differences in mobility between elderly people and younger populations or differences in mortality rates between people from different social classes.

It is important to distinguish between inequality in health and inequity.

Some health inequalities are attributable to *biological variations or free choice* and others are attributable to *the external environment and conditions mainly outside the control of the individuals concerned*.

In the first case it may be impossible or ethically or ideologically unacceptable to change the health determinants and so the *health inequalities are unavoidable*.

In the second, the uneven distribution may be unnecessary and avoidable as well as unjust and unfair, so that the resulting ***health inequalities also lead to inequity in health***.

Health inequities are *avoidable* inequalities in health between groups of people within countries and between countries.

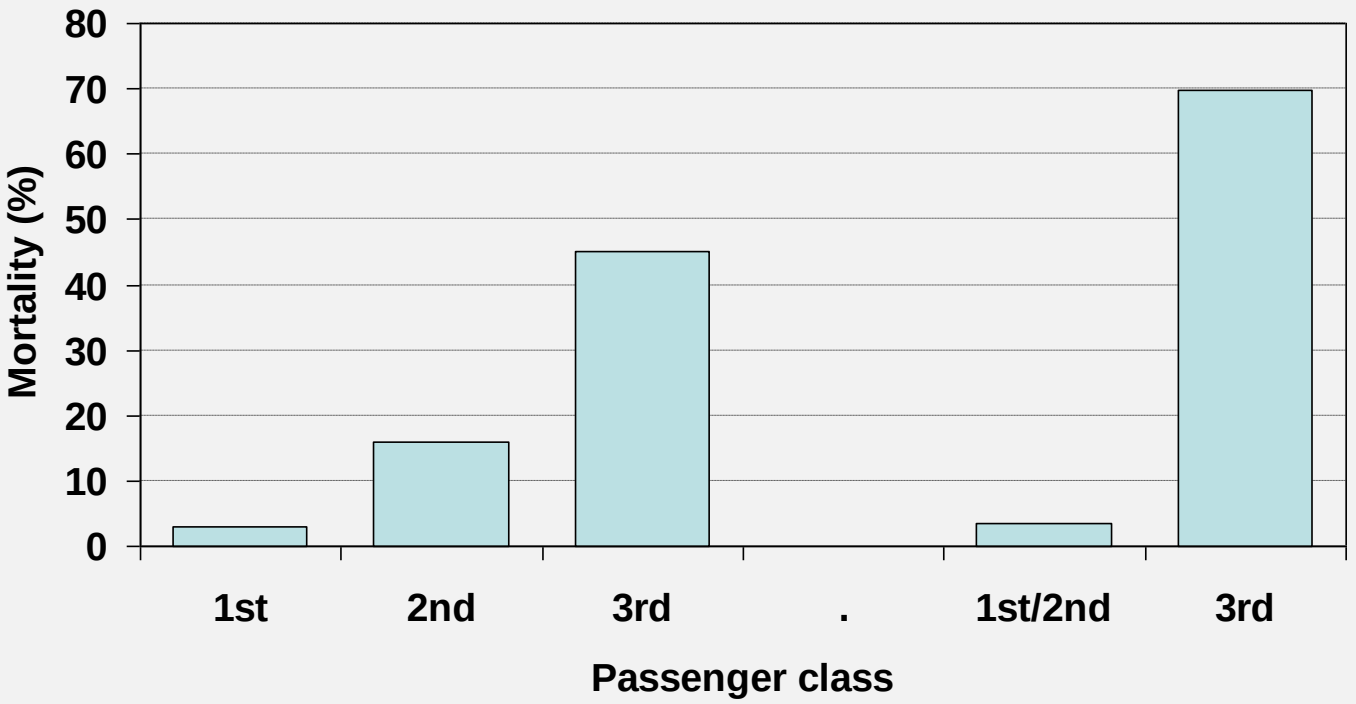
These inequities arise from inequalities within and between societies.

Social and economic conditions and their effects on people's lives determine their risk of illness and the actions taken to prevent them becoming ill or treat illness when it occurs.

Social gradient

The poorest of the poor, around the world, have the worst health. Within countries, the evidence shows that in general the lower an individual's socioeconomic position the worse their health. There is a social gradient in health that runs from top to bottom of the socioeconomic spectrum. *This is a global phenomenon, seen in low, middle and high income countries*. *The social gradient in health means that health inequities affect everyone*.

Mortality (%) at Titanic by passenger class (=SES)




Income and social status
Social support networks
Employment and working conditions
Physical environments
Education
Healthy child development
Biology and genetic endowment
Health services
Personal health practices and coping skills
Determinants of Health

Social determinants studied in Albania

- Geographical
- Urban/rural/suburban
- Education (including parents education)
- Social-economic status
- Gender
- Vulnerable subgroups
- etc (employment, marital status, …)

Indicators studied

- Mortality (infant, child, maternal)
- Morbidity (perceived health status, infectious diseases in community, physical mobility…)
- Mental health (depression, stress…)
- Metabolic risk factors (hypertension, anemia, obesity… in community)
- Behavioral risk factors (nutrition, tobacco, alcohol, drugs, physical activity, adverse childhood experiences…)
- Utilisation of health services (access, coverage with basic health services…)

Vulnerable Communities (Albania)

UCL Institute of Health Equity

Empowered lives.
Resilient nations.

Source: Bell, Grobicki and Hamelmann, IHE and UNDP 2014

Health Impact of Various Determinants

Early childhood
(=Neonatal, Post-neonatal, Infant ($_1q_0$), Child ($_4q_1$), and Under-five ($_5q_0$) Mortality Rates by socio-economic characteristics
[ADHS 2008-2009]

Background characteristics	Neonatal Mortality Rates	Post-neonatal Mortality Rates	Infant Mortality Rates ($_1q_0$)	Child Mortality Rates ($_4q_1$)	Under-five (U-5) Mortality Rates ($_5q_0$)
Residence					
Urban	7	5	12	0	13
Rural	12	11	24	5	28
Region					
Coastal	4	9	13	3	16
Central	14	7	22	3	25
Mountain	18	20	38	4	42
Urban Tirana	*	*	*	*	*
Mother's education					
Primary or less	13	9	21	3	24
Secondary +	6	9	15	3	18
Wealth quintile					
Lowest 60%	11	10	21	3	24
Highest 40%	9	6	15	2	17

* Mortality estimates for Urban Tirana have been suppressed because they were based on just one death among children under five.

All rates are expressed per 1,000 live births, except for child mortality, which is expressed as deaths per 1,000 children surviving to age one.

Wealth Index at ADHS

- Wealth is determined by scoring households based on a set of household assets, including access to electricity and ownership of various consumer goods.
- Households are then ranked, from lowest score to highest score.
- This list is then separated into 5 equal pieces (or quintiles) each representing 20% of the population.
- Households in the highest quintile may not be “rich,” but they are of higher socioeconomic status than the other 80% of households in the country.

Wealth Index at ADHS

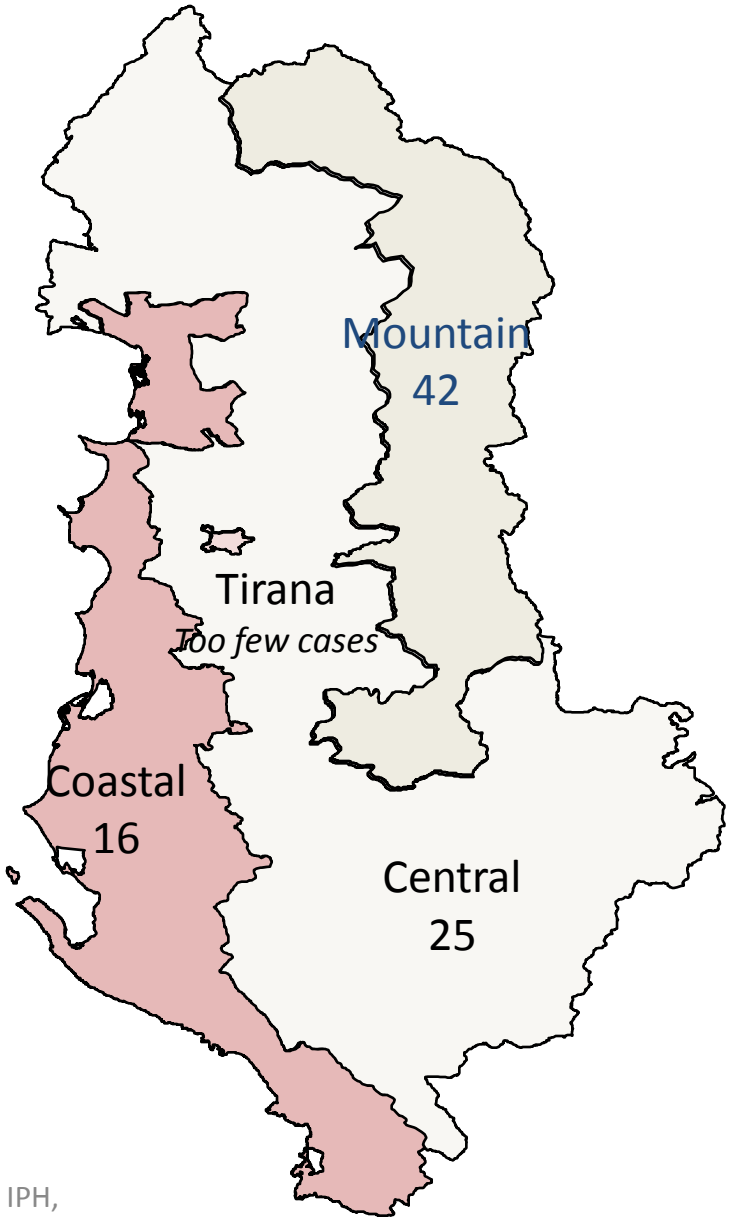
	Lowest	2nd	Middle	4th	Highest
Urban	1%	4%	16%	36%	43%
Rural	36%	33%	23%	7%	1%

Most households with high socio-economic status are in urban areas, while those with low are more often in rural areas.

The highest proportion of households with low socio-economic status are in the Mountain region (46% in the lowest quintile), and
the largest proportion of wealthy households are in Urban Tirana (64% in the highest quintile).

2008-09 ADHS: INSTAT, IPH, and ICF Macro

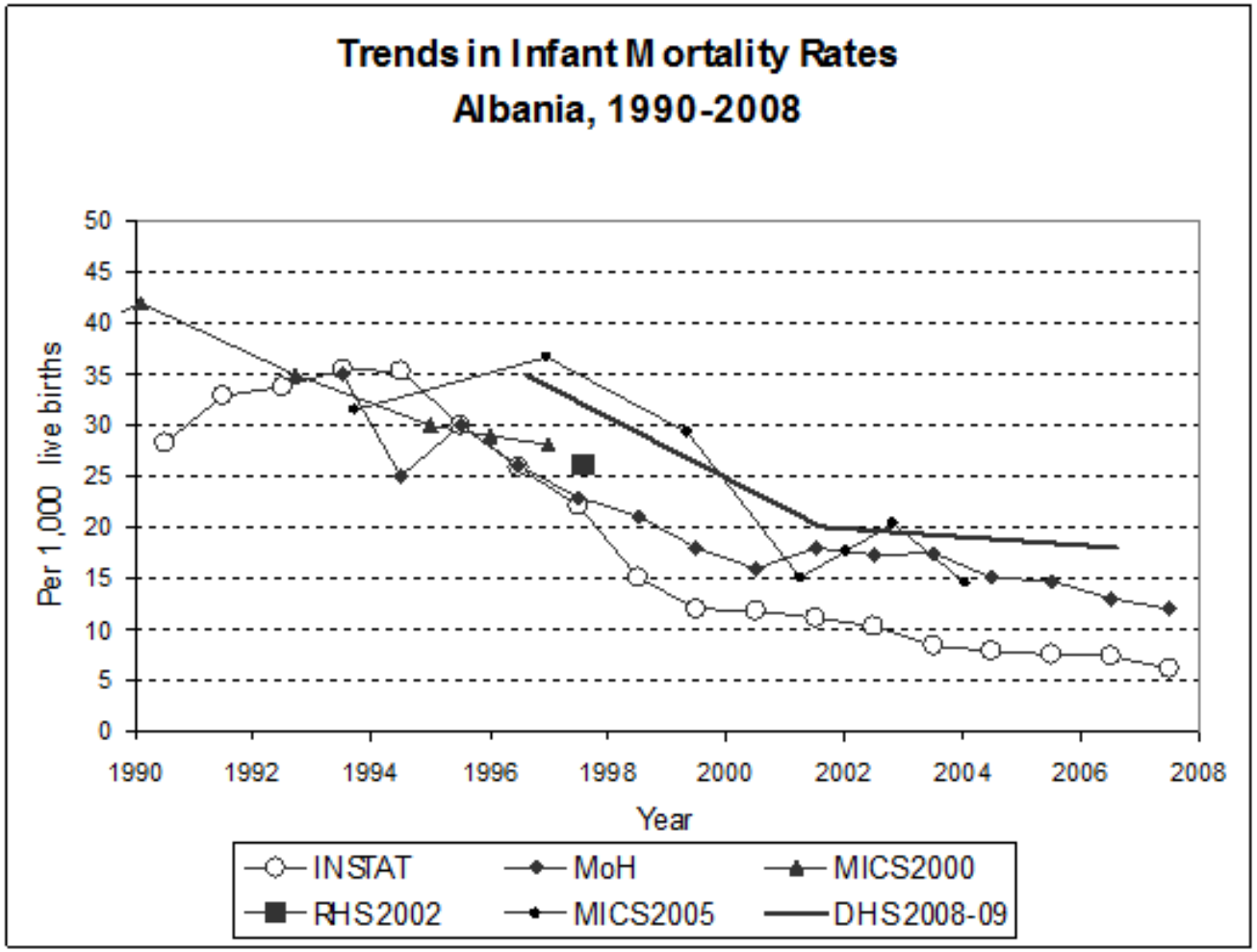
Under-five Mortality by Region

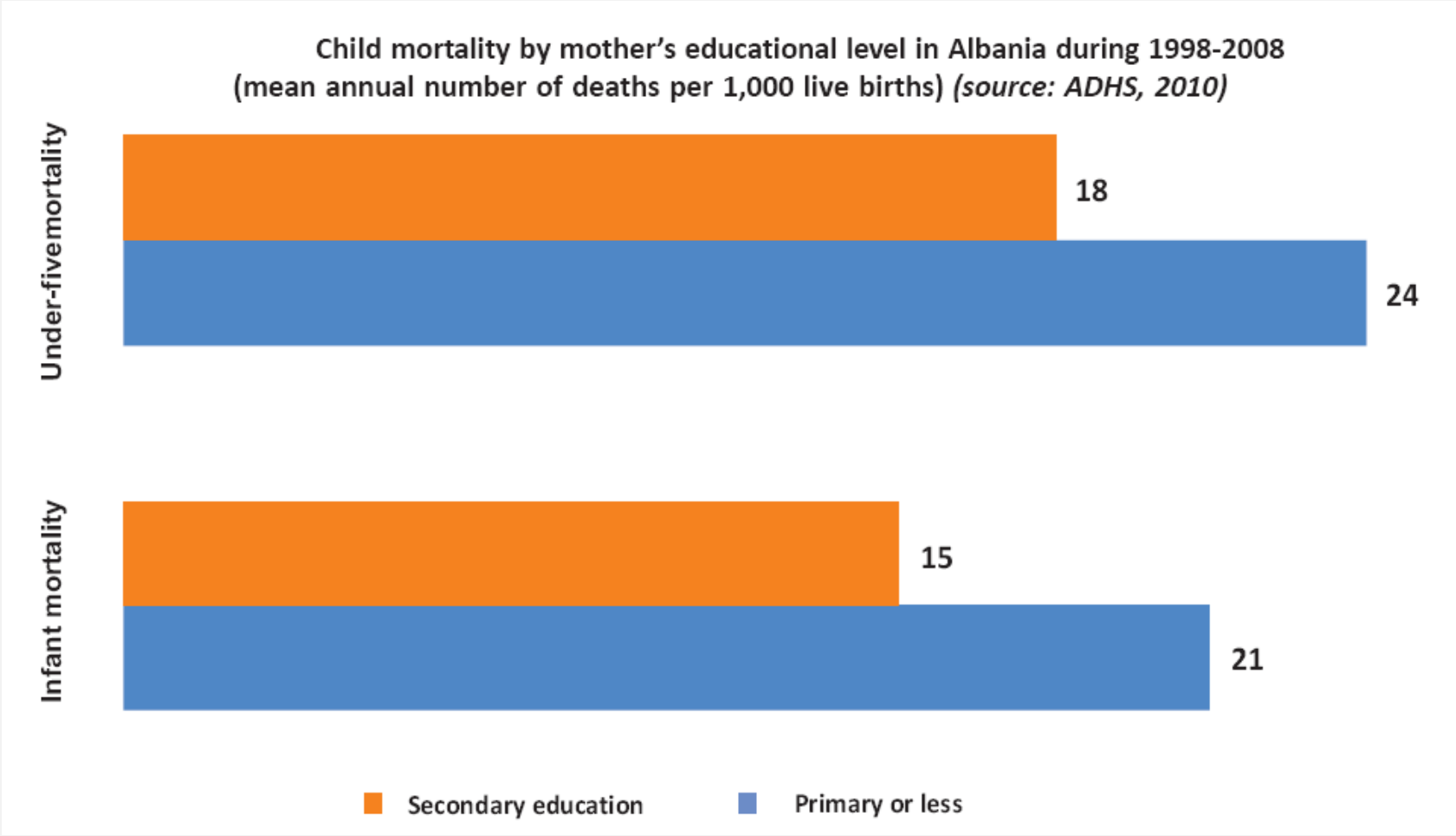


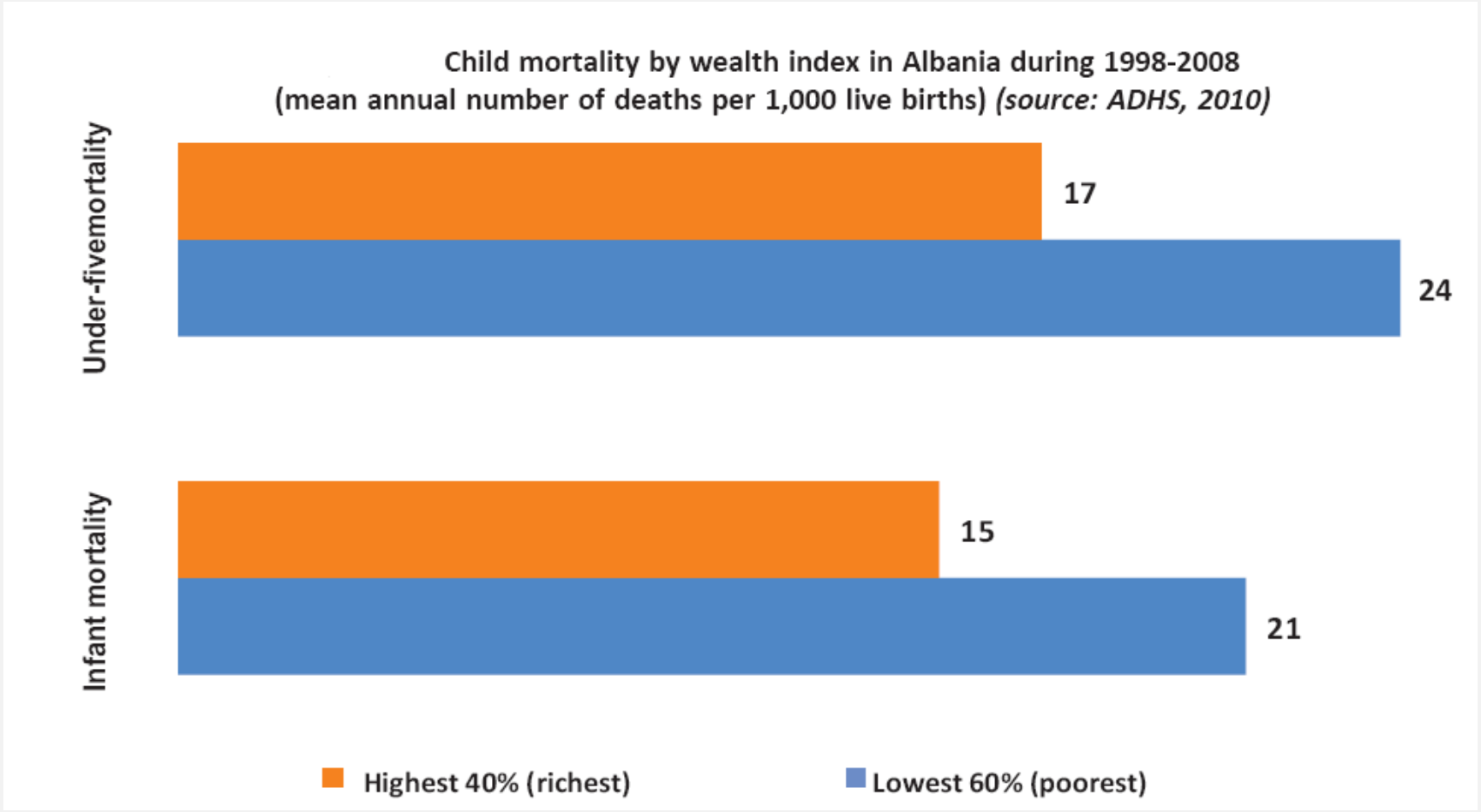
Deaths per 1,000 live births for the 10-year period before the survey

2008-09 ADHS: INSTAT, IPH, and ICF acro

Infant ($_1q_0$) Mortality Rates
for the 10-year period preceding the ADHS 2008-2009




Child mortality by mother's educational level in Albania during 1998-2008
(mean annual number of deaths per 1,000 live births) (source: ADHS, 2010)
Under-fivemortality
18
24
Infant mortality
15
21
Secondary education
Primary or less


Child mortality by wealth index in Albania during 1998-2008
(mean annual number of deaths per 1,000 live births) (source: ADHS, 2010)
Under-fivemortality
17
24
Infant mortality
15
21
Highest 40% (richest)
Lowest 60% (poorest)

Maternal Mortality
[MoH & IPH]

Maternal Mortality Rates (per 100 000 live births) according to Regions (=Prefectures, =Qarks) in Albania over the period 2001-2013

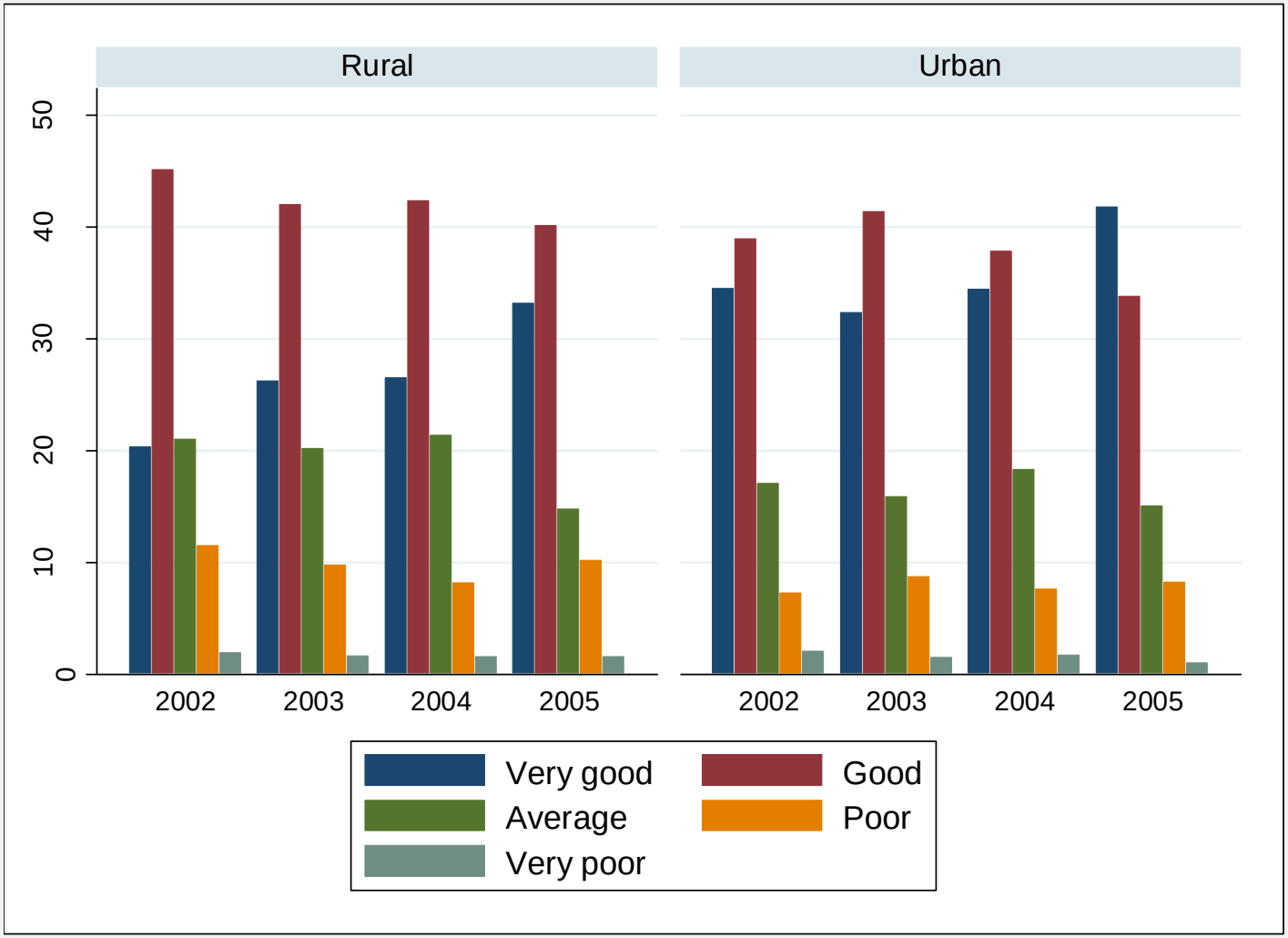
Regions	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Berat	0	0	0	48,1	0	0	0	0	0	0	0	0	0
Dibër	0	118,9	0	0	0	43,8	0	0	0	0	0	0	0
Durrës	28,1	0	0	0	27,7	0	29,0	0	0	0	0	0	0
Elbasan	0	0	0	21,8	22,9	24,9	0	0	0	0	0	0	30,1
Fier	17,6	22,6	43,0	0	23,4	0	30,4	56,3	0	0	0	0	0
Gjirokastër	0	0	0	0	0	0	0	0	0	0	0	0	0
Korçë	94,0	0	31,4	0	68,9	42,8	0	0	0	0	44,7	45,8	0
Kukës	0	0	51,0	0	122,9	0	0	0	0	0	0	0	0
Lezhë	32,9	0	0	0	0	0	0	66,4	0	0	0	0	0
Shkodër	47,9	0	0	0	0	0	0	0	0	0	0	0	43,6
Tiranë	27,5	43,1	18,5	9,6	19,6	9,6	28,6	28,6	0	17,7	0	0	16,7
Vlorë	0	102,6	80,6	0	0	102,0	0	56,9	0	0	0	0	0
ALBANIA	22,7	26,0	17,7	7,3	23,2	16,8	14,5	21,0	0	5,9	5,8	5,7	11,8

Maternal Mortality
[MoH & IPH]

**Maternal Deaths (absolute numbers)
according to Regions (=Prefectures, =Qarks) in Albania
over the period 2001-2013**

Regions	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Berat	0	0	0	1	0	0	0	0	0	0	0	0	0
Dibër	0	4	0	0	0	1	0	0	0	0	0	0	0
Durrës	1	0	0	0	1	0	1	0	0	0	0	0	0
Elbasan	0	0	0	1	1	1	0	0	0	0	0	0	1
Fier	1	1	2	0	1	0	1	2	0	0	0	0	0
Gjirokastër	0	0	0	0	0	0	0	0	0	0	0	0	0
Korçë	4	0	1	0	2	1	0	0	0	0	1	1	0
Kukës	0	0	1	0	2	0	0	0	0	0	0	0	0
Lezhë	1	0	0	0	0	0	0	1	0	0	0	0	0
Shkodër	2	0	0	0	0	0	0	0	0	0	0	0	1
Tiranë	3	4	2	1	2	1	3	3	0	2	0	0	2
Vlorë	0	2	2	0	0	2	0	1	0	0	0	0	0
ALBANIA Maternal deaths	**12**	**11**	**8**	**3**	**9**	**6**	**5**	**7**	**0**	**2**	**1**	**1**	**4**
ALBANIA Live births	**52888**	**42273**	**45132**	**41106**	**38789**	**35816**	**34383**	**33368**	**34044**	**33856**	**34297**	**34974**	**33994**

Self perceived health
[LSMS 2002-2003 & 2004-2005]



Acute Respiratory Infections (ARI) and Fever
[ADHS 2008-2009]
Among children under age five (<5 yrs), the percentage who had symptoms of ARI and the percentage with fever in the two weeks preceding the ADHS, by background characteristics

Background characteristic	Children under age five (<5 yrs)		
	Percentage (%) with symptoms of ARI	Percentage (%) with fever	Number of children
Residence			
Urban	4.6	9.0	600
Rural	5.9	7.1	949
Region			
Coastal	5.3	12.0	428
Central	6.7	6.8	726
Mountain	4.2	6.2	189
Urban Tirana	2.1	4.3	207
Mother's education			
Primary or less	5.9	9.0	1,024
Secondary +	4.4	5.5	525
Wealth quintile			
Lowest	7.5	8.1	346
Second	4.8	8.7	321
Middle	8.2	9.6	345
Fourth	2.8	6.8	289
Highest	2.4	5.0	249

Diarrhoea (Diarrhoeal Diseases – DD)

[ADHS 2008-2009]

Among children under age five (<5 yrs), the percentage who had diarrhea (DD) in the two weeks preceding the ADHS, by background characteristics

Background characteristic	Diarrhoea (DD) in the two weeks preceding the ADHS		Number of children
	Percentage (%) of all diarrhoea	Percentage (%) of diarrhoea with blood	
Residence			
Urban	5.7	0	600
Rural	5.1	0.4	949
Region			
Coastal	5.3	0.3	428
Central	6.0	0.3	726
Mountain	5.5	0.4	189
Urban Tirana	3.0	0	207
Mother's education			
No education/Primary 4-year	**11.3**	0	53
Primary 8-year	6.2	0.4	971
Secondary	3.1	0	364
University +	3.2	0	162
Wealth quintile			
Lowest	5.5	0.5	346
Second	5.9	0.8	321
Middle	7.1	0	345
Fourth	3.3	0	289
Highest	4.2	0	249

Self-Reported Mobility and Depression and in Older Men and Women (Elderly)

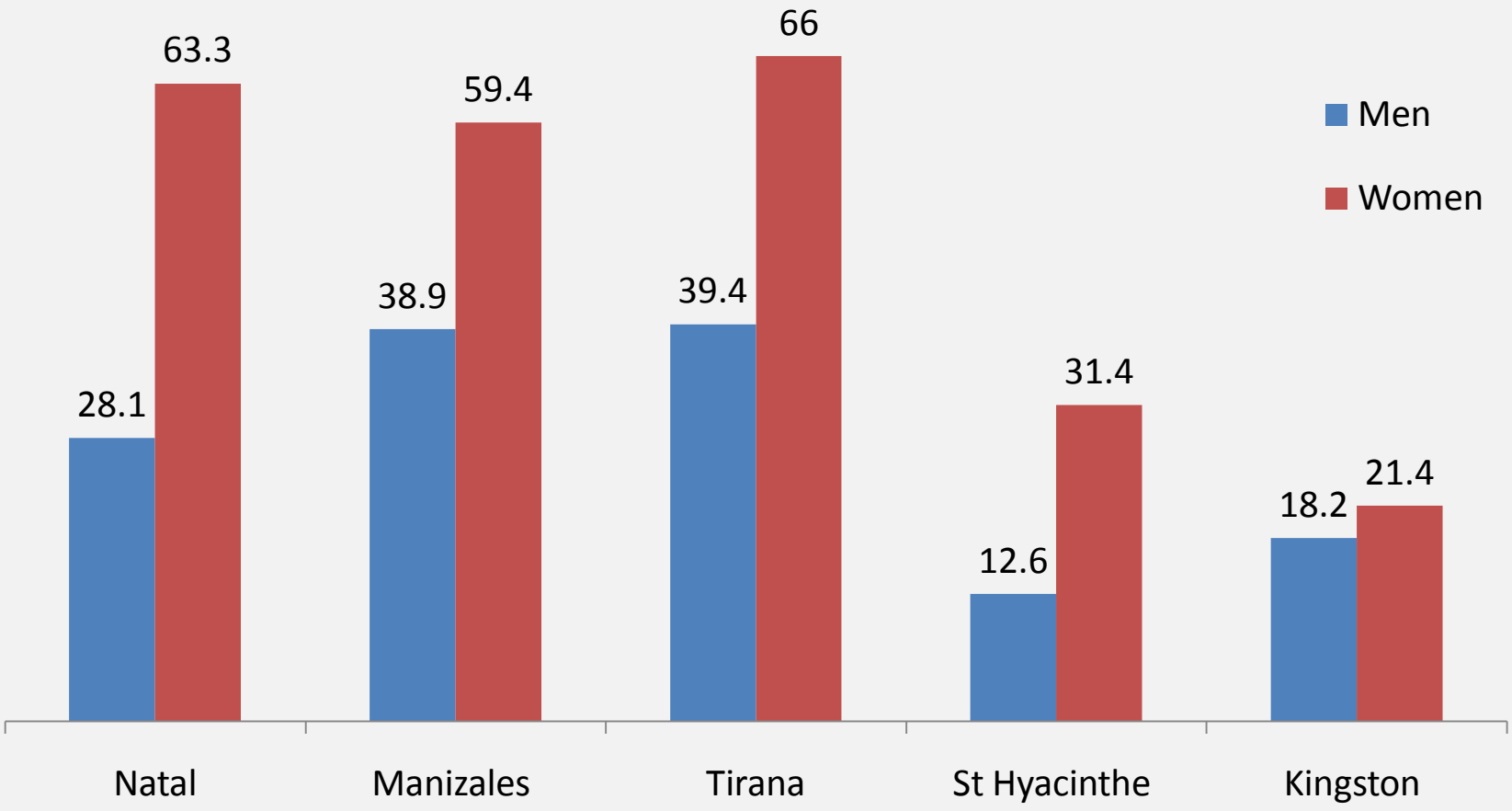
[**IMIAS study, 2012, in 5 cities of 4 countries:**
Tirana (Albania),
Kingston (Ontario-Canada),
St. Hyacinthe (Quebec, Canada),
Natal (Brasil),
Manitoles (Columbia)]

Measures:

- Health and physical function:
  - Health
    - a list of chronic diseases diagnosed by a doctor.
  - Physical function
    - mobility disability (difficulty to walk 400 meters or climb one flight of stars)
    and -
    - physical performance (Short Physical Performance Battery (SPPB), a timed test that detects impairment in gait, balance and muscular strength

- Depressive status:
  - 20-item self-reported (CES-D) of depressive symptoms experienced over the preceding week

IMIAS study:
Sex-specific prevalence of reduced mobility (at least one dificculty) (%)



Risk of depression and sociodemographic variables

- Women:

  Lower education,
  income insuficency
  and living alone
  were associated with higher risk for depression

- Men:

  None of the above was found associated with depression status.
  Only those who could not work had higher risk compared to those retired or receiving a pension.

Depression according to education and income (elderly females of Tirana)
[IPH]

	OR (95% CI)	p
Education		
Secondary vs Post-Secondary	1.32 (0.99 ; 2.26)	0.18
Primary vs Post-Secondary	2.26 (1.32 ; 3.89)	0.005
Income		
Sufficient vs Fully sufficient	1.50 (0.99 ; 2.26)	0.05
Insufficient vs Fully sufficient	2.73 (1.67 ; 4.45)	0.001

Depression and birthplace
(youth Tirana)
[IPH]

		Depression signs (CES-D >16)		Total
		No	Yes	
Born in Tirana	No	175 = **61.2%**	111 = **38.8%**	286 = 100.0%
	Yes	288 = **68.9%**	130 = **31.1%**	418 = 100.0%
Total		463 = 65.8%	241 = 34.2%	704 = 100.0%

Biomarkers and Various Health Determinants

Hypertension
[ADHS 2008-2009]
Prevalence (in percentage [%]) of hypertension (=blood pressure ≥140/90 mm Hg) among men and women (age 15-49 yrs) according to social-economic background characteristics

Background characteristics	Men (15-49 yrs)			Women (15-49 yrs)		
	Prevalence	Total		Prevalence	Total	
	%	No	%	%	No	%
Residence						
Urban	23.9	1,353	100.0	15.3	1,609	100.0
Rural	31.0	1,484	100.0	23.5	1,971	100.0
Region						
Coastal	36.9	752	100.0	21.5	1,011	100.0
Central	29.6	1,331	100.0	23.4	1,642	100.0
Mountain	26.9	267	100.0	24.4	364	100.0
Urban Tirana	8,3	486	100.0	4.9	564	100.0
Mother's education						
No education/Primary 4-year	27.8	53	100.0	18.0	56	100.0
Primary 8-year	32.0	1,101	100.0	24.4	1,737	100.0
Secondary	26.2	1,328	100.0	18.8	1,331	100.0
University +	19.1	354	100.0	7.4	456	100.0
Wealth quintile						
Lowest	32.5	432	100.0	26.3	638	100.0
Second	29.2	556	100.0	19.7	727	100.0
Middle	30.4	607	100.0	23.0	747	100.0
Fourth	27.7	603	100.0	19.7	725	100.0
Highest	20.3	638	100.0	12.4	743	100.0

Anaemia

[ADHS 2008-2009]

Prevalence (in percentage [%]) of anaemia, (any anaemia [mild/moderate/severe]), according to haemoglobin level (g/dl) among men and women (age 15-49 yrs), towards social-economic background characteristics respectively

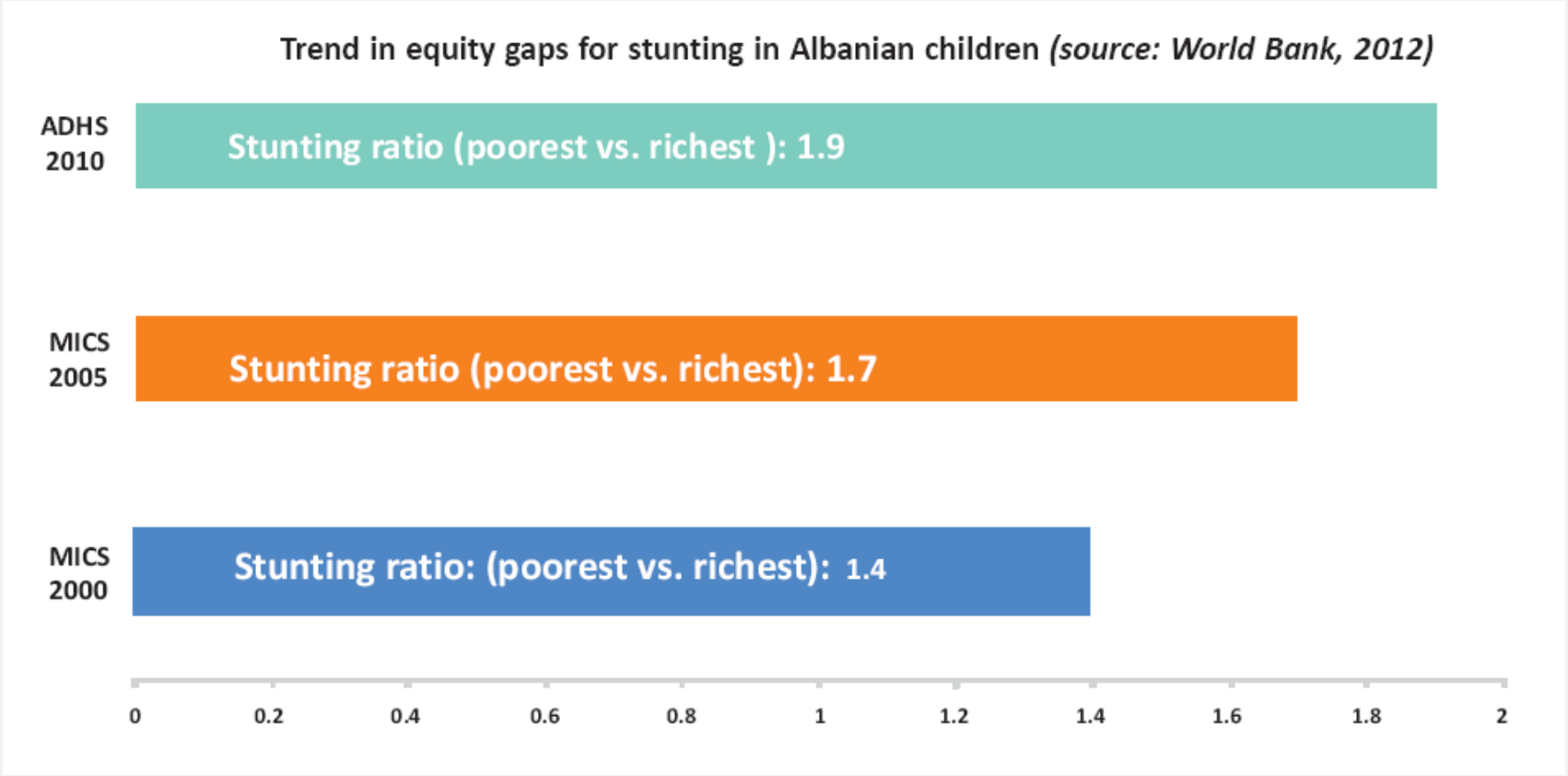
Background characteristic	Anaemia status by haemoglobin level (g/dl)			
	Men (15-49 yrs)		Women (15-49 yrs)	
	<13.0 g/dl		Not pregnant <12.0 g/dl Pregnant <11.0 g/dl	
	Prevalence (%)	No.	Prevalence (%)	No
Residence				
Urban	3.0	1,368	14.6	3,348
Rural	6.2	1,529	22.5	4,095
Region				
Coastal	4.5	784	20.2	2,101
Central	6.0	1,357	21.2	3,379
Mountain	4.8	270	16.9	769
Urban Tirana	1.5	486	11.9	1,195
Mother's education				
No education/Primary 4-year	13.1	54	27.3	124
Primary 8-year	5.8	1,123	21.4	3,641
Secondary	4.4	1,364	18.0	2,681
University +	1.3	356	11.2	996
Wealth quintile				
Lowest	7.9	458	23.3	1,470
Second	5.8	578	23.4	1,457
Middle	5.8	614	20.2	1,489
Fourth	3.8	605	15.6	1,466
Highest	1.3	641	12.9	1,560

Nutritional Status
(Over-weight & Obesity)
[ADHS 2008-2009]

Prevalence (in percentage [%]) of over-weight (BMI ≥25,0-29.9) and obesity (BMI ≥30) among men and women (age 15-49 yrs), by background characteristics

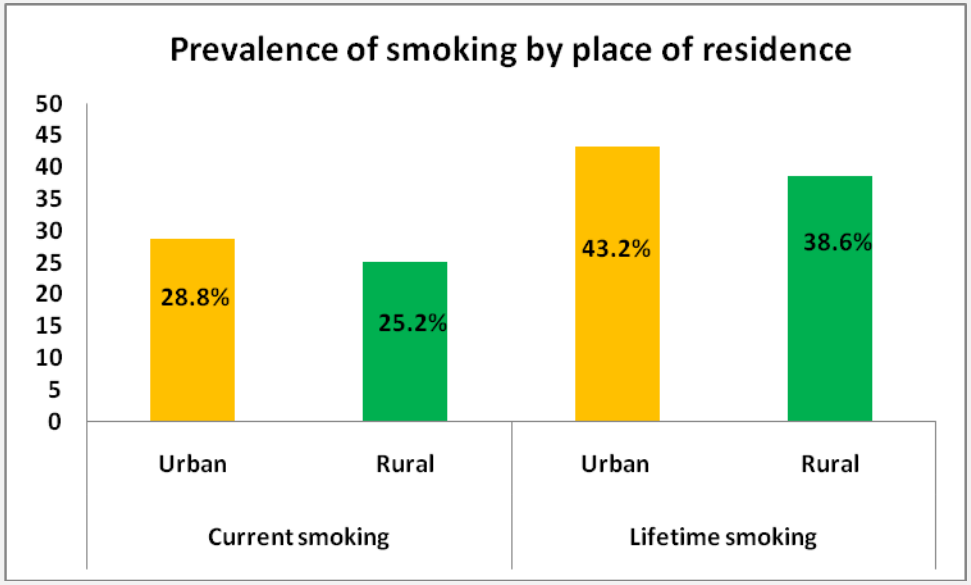
(∩ shape at women)

Background characteristics	Nutritional status based on BMI values			
	Men (15-49 yrs)		Women (15-49 yrs)	
	BMI ≥25.0-29.9 (=over-weight)	BMI ≥30 (=obese)	BMI ≥25.0-29.9 (=over-weight)	BMI ≥30 (=obese)
	Prevalence (%)	Prevalence (%)	Prevalence (%)	Prevalence (%)
Residence				
Urban	46.7	8.7	29.3	9.3
Rural	43.2	8.3	29.9	9.9
Region				
Coastal	44.0	10.0	32.9	11.6
Central	44.3	8.0	30.0	10.8
Mountain	44.3	5.0	27.3	6.5
Urban Tirana	47.7	9.3	24.2	5.2
Mother's education				
No education/Primary 4-year	40.6	3.4	23.4	6.1
Primary 8-year	45.1	8.5	32.9	10.9
Secondary	44.5	8.4	29.0	9.9
University +	45.5	9.3	20.0	4.8
Wealth quintile				
Lowest	43.5	6.0	26.0	6.8
Second	40.0	8.6	31.9	10.7
Middle	44.9	7.2	32.3	11.4
Fourth	48.2	9.7	29.5	10.2
Highest	46.6	10.2	28.4	9.2


Trend in equity gaps for stunting in Albanian children (source: World Bank, 2012)
ADHS 2010
Stunting ratio (poorest vs. richest): 1.9
MICS 2005
Stunting ratio (poorest vs. richest): 1.7
MICS 2000
Stunting ratio: (poorest vs. richest): 1.4
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2

Risky Behaviors and Various Health Determinants

Smoking
[General Population Survey – GPS, IPH 2014]
General population, males and females, age 15-64 years



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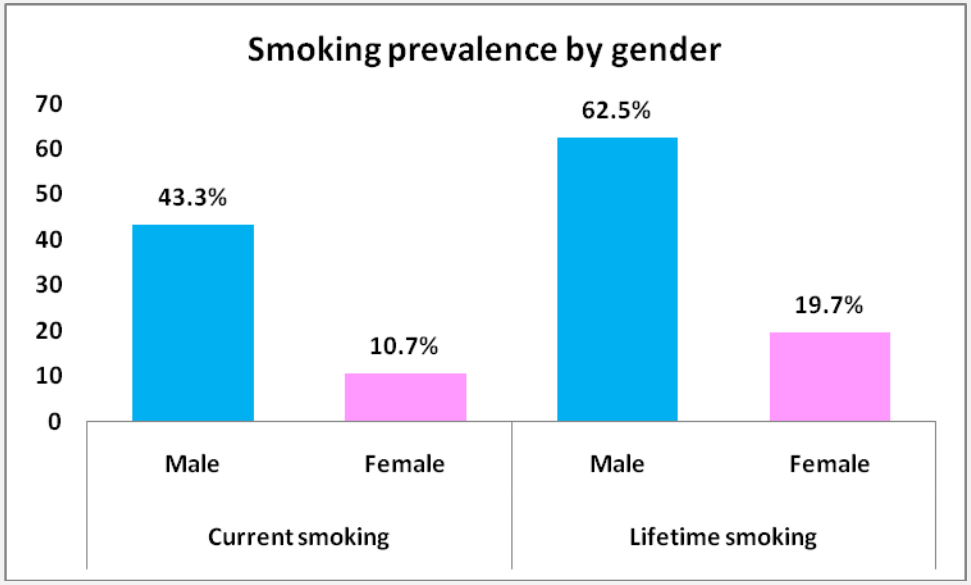
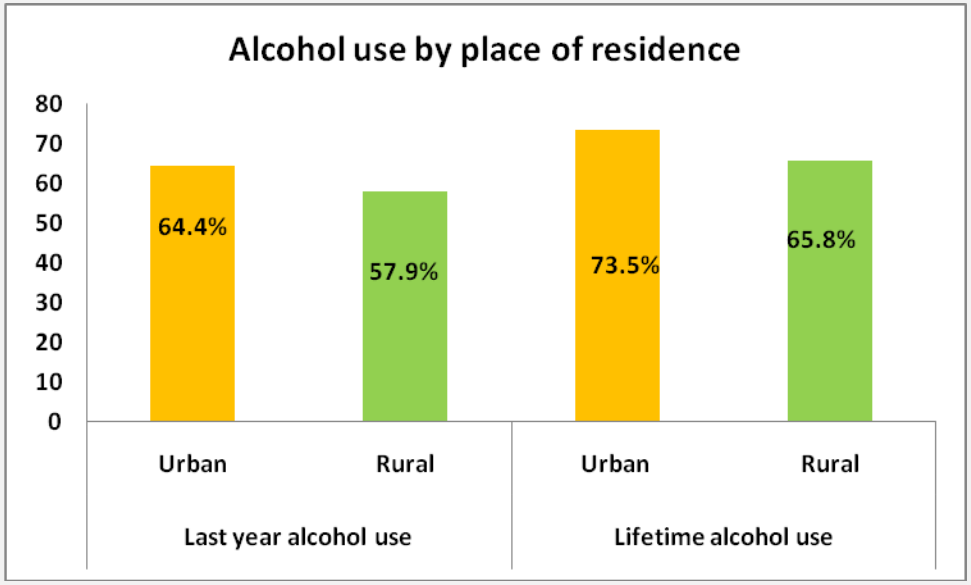


Tobacco among Women
[ADHS 2008-2009]
Percentage [%]) of women age 15-49 who are smokers

Background characteristics	Women who are smokers	
	Percentage (%)	No.
Residence		
Urban	7.9	267
Rural	1.2	50
Region		
Coastal	2.5	53
Central	2.5	87
Mountain	1.4	11
Urban Tirana	13.8	166
Mother's education		
No education/Primary 4-year	6.9	9
Primary 8-year	1.9	71
Secondary	3.0	83
University +	15.3	154
Wealth quintile		
Lowest	0.8	12
Second	1.1	17
Middle	2.1	32
Fourth	5.0	74
Highest	11.5	181

Alcohol
[General Population Survey – GPS, IPH 2014]
General population, males and females, age 15-64 years



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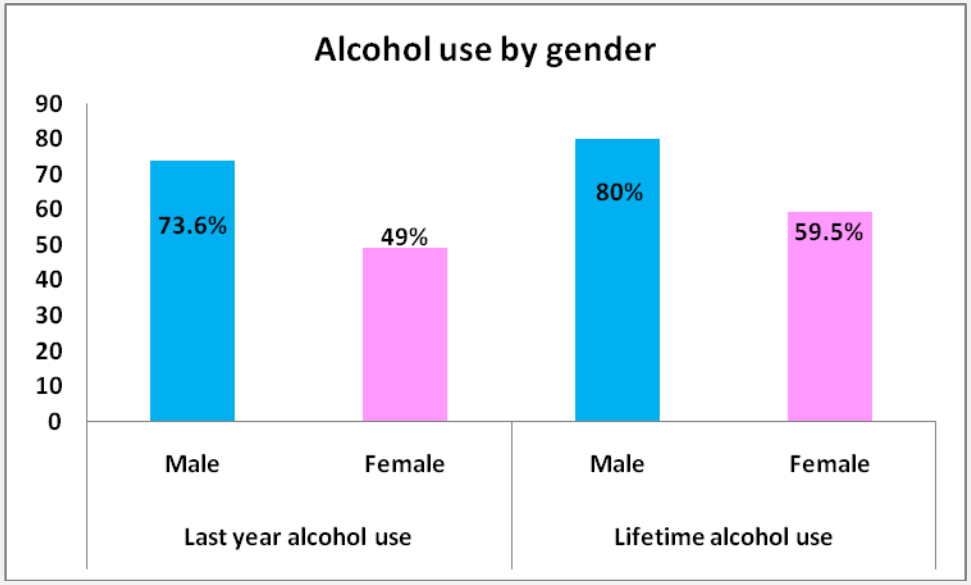
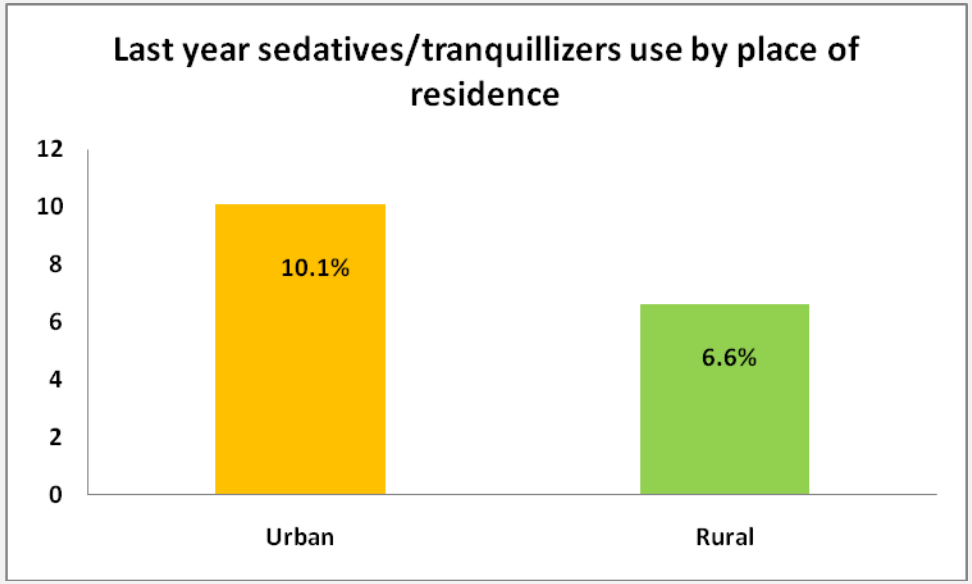


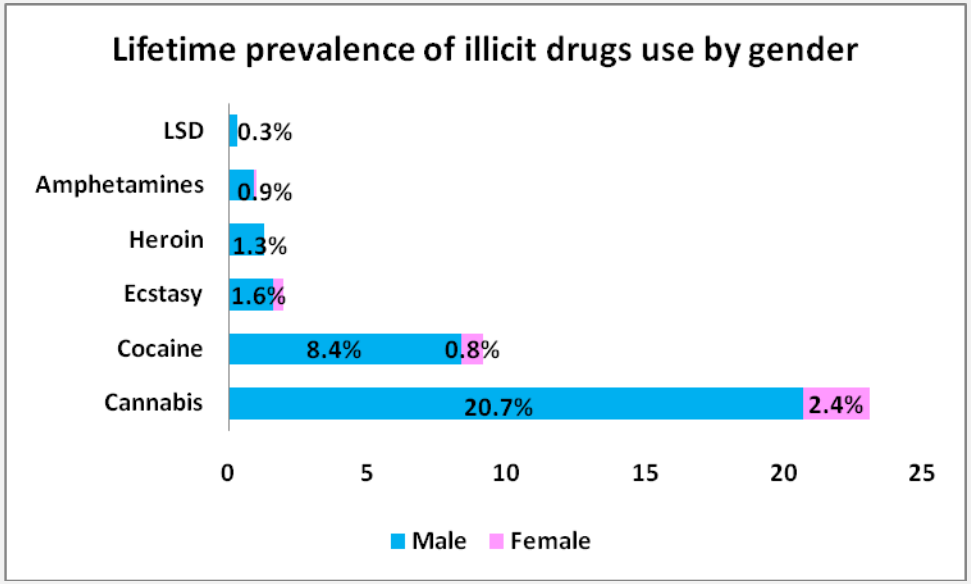
Alcohol consumption among Women
[ADHS 2008-2009]
Percentage [%] of women age 15-49 who have ever consumed an alcohol drink, percentage [%] who drank alcohol in the past 12 months, and the percentage [%] of alcohol drinking frequency 1-4 days per week

Background characteristics	Percentage (%) who ever drank alcohol	Percentage (%) who drank alcohol in the past 12 months	Percentage (%) of drinking 1-4 days per week
Residence			
Urban	37.2	35.8	6.0
Rural	27.8	25.9	3.4
Region			
Coastal	30.1	28.6	4.8
Central	34.7	32.8	4.8
Mountain	21.9	19.8	1.1
Urban Tirana	33.9	32.7	5.9
Mother's education			
No education/Primary 4-year	18.9	17.5	2.2
Primary 8-year	27.1	25.6	3.2
Secondary	33.1	31.1	4.7
University +	48.7	47.2	9.8
Wealth quintile			
Lowest	25.7	23.4	2.1
Second	30.4	28.2	3.5
Middle	29.1	28.1	3.9
Fourth	34.6	32.9	6.0
Highest	39.9	38.6	7.4

Pharmaceuticals (sedatives/tranquillizers [=benzodiazepines])
[General Population Survey – GPS, IPH 2014]
General population, males and females, age 15-64 years



Illicit Drugs
[General Population Survey – GPS, IPH 2014]
General population, males and females, age 15-64 years



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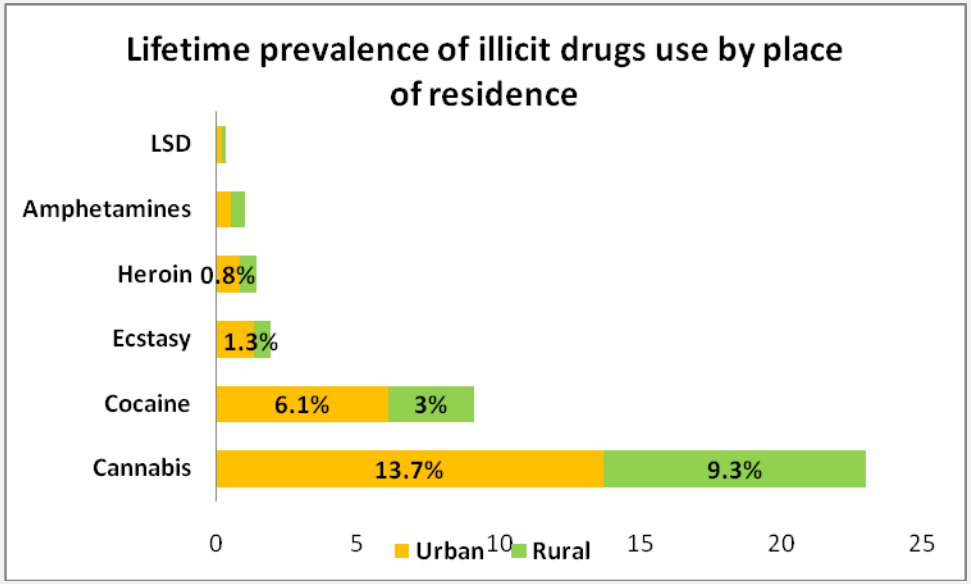


Adverse Childhood Experiences
[IPH & WHO, 2013]
Association of physical abuse with demographic and socioeconomic characteristics of the students and their parents

Background characteristics	Childhood experiences on physical abuse		
	OR	95% CI	p
Place of residence			
Rural area	1.51	1.02 – 2.25	0.041
Urban area	1.00	Reference	---
Father's education			
Low (0-8 years)	2.01	1.43 – 2.81	<0.001
Middle (9-12 years)	1.24	0.98 – 1.56	0.071
High (>12 years)	1.00	Reference	---
Mother's education			
Low (0-8 years)	2.07	1.50 – 2.83	<0.001
Middle (9-12 years)	1.09	0.86 – 1.37	0.476
High (>12 years)	1.00	Reference	---
Father's employment status			
Unemployed	1.52	1.19 – 1.93	0.001
Rest	1.00	Reference	---
Mother's employment status			
Employed	0.88	0.71 – 1.08	0.212
Rest	1.00	Reference	---
Income level			
Low	1.77	1.25 – 2.51	0.001
Middle	1.09	0.88 – 1.42	0.504
High	1.00	Reference	---

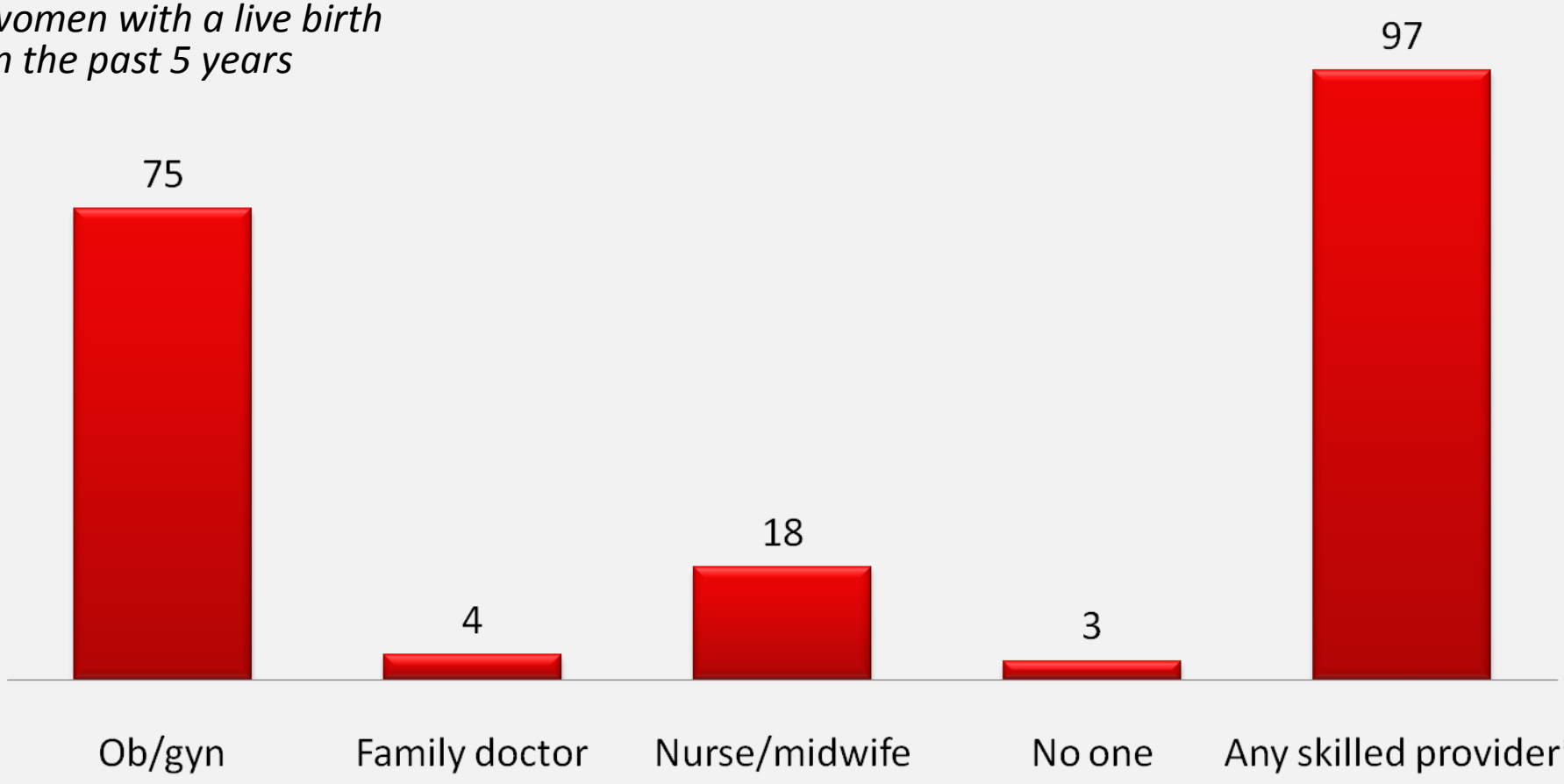
Access to Health Services and Health Determinants

Antenatal care
[ADHS 2008-2009]
Distribution in percentage (%) of women age 15-49 who had a live birth in the five years preceding the ADHS by antenatal care provider during pregnancy

Background characteristic	Antenatal care provider					Total
	Obstetrician/ gynaecologist	Family doctor	Nurse/ midwife	Other	No one	
Residence						
Urban	86.6	5.7	6.8	0	0.9	100.0
Rural	66.6	3.4	26.1	0.1	3.8	100.0
Region						
Coastal	75.1	4.1	19.8	0	1.0	100.0
Central	73.6	4.8	18.5	0	3.1	100.0
Mountain	61.2	1.9	29.4	0.4	7.2	100.0
Urban Tirana	88.7	5.5	5.9	0	0	100.0
Mother's education						
No education/Primary 4-year	59.4	2.1	35.3	0	3.1	100.0
Primary 8-year	70.8	4.3	21.5	0.1	3.3	100.0
Secondary	78.5	3.6	16.0	0	1.9	100.0
University +	90.4	6.8	2.2	0	0.6	100.0
Wealth quintile						
Lowest	59.0	3.7	30.6	0	6.7	100.0
Second	67.2	1.7	26.8	0.2	4.1	100.0
Middle	75.5	6.9	16.6	0	1.0	100.0
Fourth	85.5	4.2	10.2	0.1	0	100.0
Highest	90.0	5.2	4.1	0	0.7	100.0

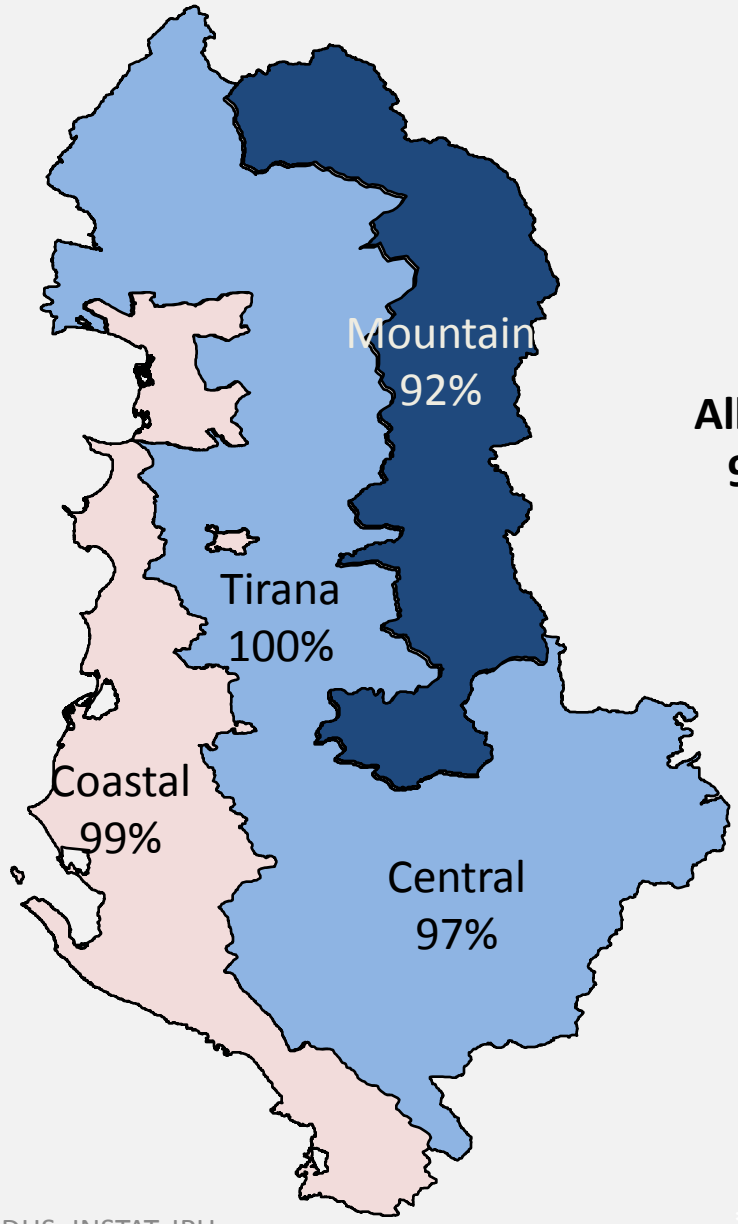
Antenatal Care

Percent distribution of women with a live birth in the past 5 years



*Skilled provider includes OB/GYN, family doctor or nurse/midwife

Antenatal Care from a Skilled Provider by Region



Albania
97%

*Percent of women with a live birth in the past 5 years who received antenatal care from a skilled provider**

2008-09 ADHS: INSTAT, IPH, and ICF acro

*Skilled provider includes OB/GYN, family doctor or nurse/midwife.

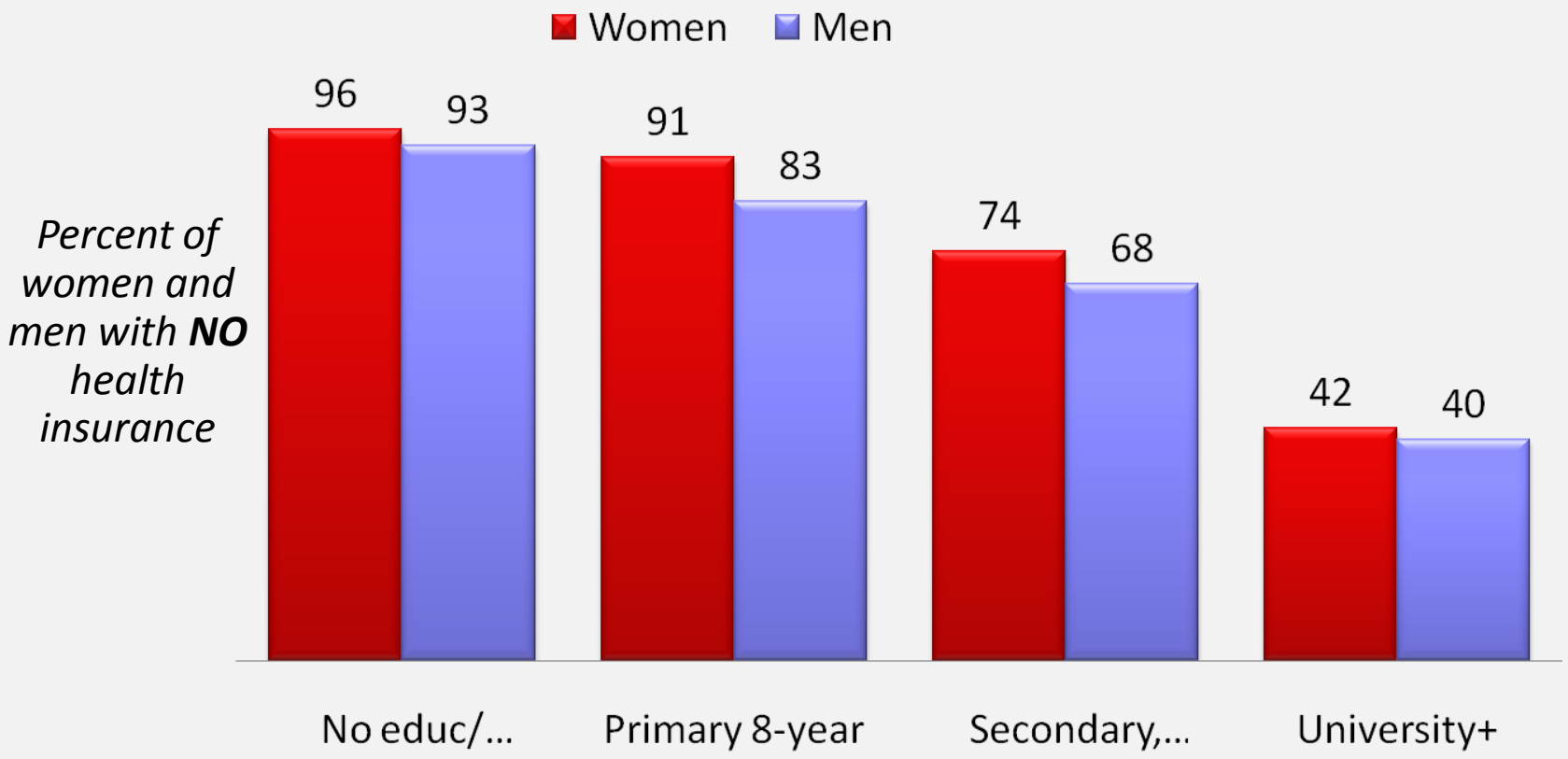
Problems in Accessing Health Care – Women

[ADHS 2008-2009]

Percentage [%] of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics

Background characteristics	Problems in accessing health care		At least one problem in accessing health care
	Getting permission to go for treatment	Distance to health facility	
Residence			
Urban	7.7	12.7	78.8
Rural	23.9	43.8	92.6
Region			
Coastal	15.5	24.6	86.6
Central	18.1	36.0	92.2
Mountain	30.5	49.8	92.0
Urban Tirana	5.6	9.1	65.4
Wealth quintile			
Lowest	33.2	61.1	98.3
Second	21.2	43.6	93.7
Middle	16.8	27.8	89.3
Fourth	8.2	12.6	85.8
Highest	4.4	5.6	66.1

Health Insurance Coverage by Education



2008-09 ADHS: INSTAT, IPH, and ICF Macro

THANK YOU FOR YOUR ATTENTION















Albania-the beautiful dream

Design by K.Gerxhani