

A country profile of NCDs using a gender analysis approach

GEORGIA

Second draft for discussion at the meeting on Gender and STEPS

January 28-29, 2020

Table of Contents

Acknowledgments.....	3
Introduction.....	4
NCDs constitute the main burden of disease for both women and men, but there are important differences.....	5
Differences in behavioural and biological risk factors	5
Significant differences between men and women.....	5
Odds ratios for behavioural and biological factors (STEPS 2016)	6
Prevalence of three or more risk factors	7
Mortality rates among men and women.....	8
Differences in specific risk factors among men and women between age groups.....	9
Geographic location – urban and rural.....	12
Education level.....	14
Employment status.....	18
Migrant health and risk factors	21
Age group.....	21
Education level.....	22
Employment status.....	24
Key messages for risk factors	25
Differences in the way men and women access services	26
Differences in men and women not measured for risk factors.....	26
Age group.....	26
Geographic location – urban and rural.....	27
Education level.....	28
Employment status.....	29
Differences in receiving treatment	29
Age group.....	30
Geographic location	31
Education level.....	32
Employment status.....	32
Migrant access to health services.....	33
Differences in being measured for risk factors	33
Differences in receiving treatment	35
Lifestyle advice given by a health care professional	38
Key messages for accessing services	39
References.....	41

Acknowledgments

This country profile has been prepared by Brett J. Craig, a consultant working in the Gender and human rights programme, headed by Isabel Yordi Aguirre, of the WHO Regional Office for Europe.

Input was provided by Isabel Yordi Aguirre and Åsa Nihlén of the Gender and human rights programme, Division of Policy and Governance for Health and Well-being; Ivo Rakovac of the Noncommunicable disease surveillance programme and Jill Farrington and Juan Tello, Noncommunicable disease programme, the Division of NCDs and Promoting health through the life-course; Lela Sturua and Marina Shakhnazarova of the National Center for Disease Control and Public Health of Georgia and Rosemary Morgan of Johns Hopkins University.

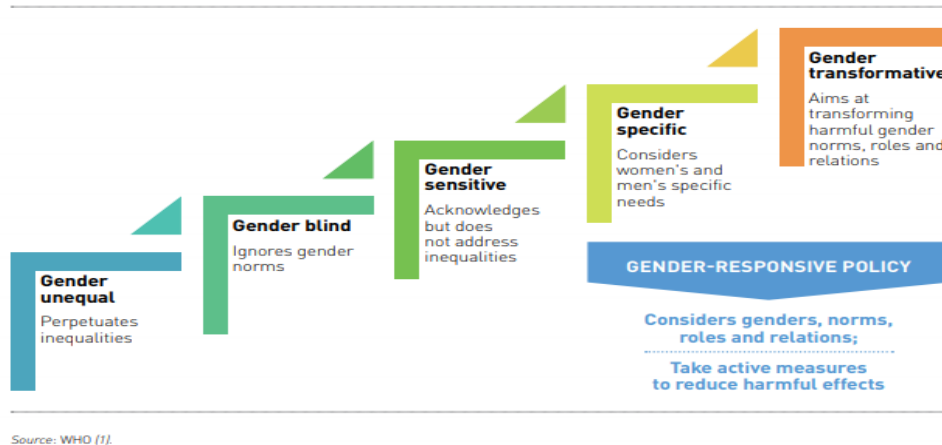
This effort has been a collaboration between the Gender and human rights programme and the NCD surveillance programme of the WHO Regional Office for Europe. Overall leadership and guidance has been provided by Piroska Östlin, WHO Regional Director for Europe ad interim and Director of the Division of Policy and Governance for Health and Well-being, Bente Mikkelsen, Director and Joao Breda, Head of the WHO European Office for the Prevention and Control of Noncommunicable Diseases, of the Division of Noncommunicable Diseases and Promoting Health through the Life-course.

The work to create the country profile has been made possible by the generous support of the Governments of Germany and Russian Federation. The work of the WHO STEPwise approach to Surveillance (STEPS) team in Georgia is acknowledged with gratitude.

Introduction

This country profile aims to conduct a gender relevant analysis on data gathered through the STEPs survey. Evidence generated within the country profiles is meant to provide an evidence-base and rationale for countries to strengthen the response of the health systems to the prevention, detection, management and control of NCDs, particularly at primary care levels by making it gender-responsive.

Fig. 7. WHO gender-responsive assessment scale



For background on using a gender approach within non-communicable disease prevention and control in the WHO European Region, refer to the paper: Why Using a Gender Approach Can Accelerate Non-Communicable Disease Prevention and Control in the Who European Region.

A gender analysis:

- Considers socially constructed norms, roles, behaviours and attributes that a given society considers appropriate for women and men and how this infers differential degrees of power between and among women and men.
- Recognizes that women and men are not homogenous groups and that their health opportunities and risks vary according to social, economic, environmental and cultural influences throughout their lifetime;
- Considers how gender intersects with other factors behind social inequalities, such as age, income, education, ethnicity, or place of residence.

A gender analysis of STEPS NCD Risk Factor Survey data:

- Describes how risks factors for chronic diseases differ between and among men and women.
- Explores and track the direction and magnitude of trends in risk factors and how this differs between and among women and men.
- Plans or evaluate gender responsive health promotion or preventive campaigns.
- Collects data from which to predict likely future demands for health services and how this differences between and among different groups of women and men.

An analysis of the STEPs data reveals important differences between men and women regarding NCD risk factors and accessing services. Higher percentages of men engage in behavioural risk factors than women, and less of them access services related to NCDs than women. Despite this, the prevalence of biological risk factors among women is generally higher than that of men, particularly in the older age groups.

This report will examine the different patterns and trajectories in the prevalence of risk factors among men and women as well as their access of services.

NCDs constitute the main burden of disease for both women and men, but there are important differences

Noncommunicable diseases (NCDs) are the leading cause of death, disease, and disability in the WHO European Region, and they are the greatest burden of disease in Georgia. NCDs are estimated to account for 93% of all deaths,¹ with cardiovascular diseases accounting for 69% of all deaths in the country.² As of 2016, approximately 32% of the adult population has raised blood pressure, 28% smoke tobacco, 19% are physically inactive, 23% are obese, and 10% use alcohol harmfully.³

Measures have been taken to address the responsiveness of health systems, and family doctors have expressed particular interest in receiving patient counselling training on NCD risk factors.⁴ However, the prevalence of risk factors that account for NCDs are different between and among men and women, and there are important differences in the ways men and women access health services.

Differences in behavioural and biological risk factors

The STEPs data focuses on behavioural and biological risk factors, specifically tobacco use, harmful alcohol consumption, unhealthy diet (low fruit and vegetable consumption, diet high in salt and/or processed foods), and insufficient physical activity for the behavioural factors and overweight/obesity, raised blood pressure, raised blood glucose, and raised cholesterol for the biological factors. Highlighting where the highest differences exist will help to uncover where inequitable gender norms, roles, behaviours and attributes are likely to have the greatest effect on risk factors. Having completed the STEPS survey in both 2010 and 2016, changes in these risk factors over time can also be observed.

Significant differences between men and women

The prevalence of these risk factors for men and women was examined and tested for significant difference in the same year using a chi-square test, $p < .05$.

Risk Factors		Year	Men	Women
Behavioural			% (CI 95%)	% (CI 95%)
Current tobacco use		2010	55.5% (52.7-58.4)	4.8%* (3.7-5.8)
		2016	57.0% (53.6-60.3)	7.0%* (5.8-8.2)
Alcohol consumption	Currently drink	2010	59.4% (55.5-63.4)	23.4%* (20.6-26.2)
		2016	58.9% (55.2-62.5)	20.7%* (18.6-22.9)
	Heavy episodic drinking†	2010	49.8% (45.7-53.9)	10.3%* (8.5-12.0)
		2016	35.3% (31.2-39.4)	2.6%* (1.7-3.5)
Unhealthy diet	<5 fruits/vegetables per day	2010	70.7% (66.8-74.6)	68.6% (65.6-71.5)
		2016	63.8% (59.6-67.9)	62.4% (59.5-65.3)
	Always or often add salt	2010	--	--
		2016	33.4% (29.4-37.3)	20.6%* (18.6-22.7)
	Always or often eat processed foods	2010	--	--
		2016	18.9% (15.3-22.5)	10.1%* (8.7-11.5)
Insufficient physical activity		2010	17.5% (14.7-20.4)	18.4% (16.1-20.8)
		2016	16.2% (13.6-18.9)	18.4% (16.3-20.4)
Biological				
Overweight (BMI ≥25)		2010	58.6% (55.5-61.7)	54.2% (52.0-56.4)
		2016	65.5% (61.4-69.7)	63.8% (61.4-66.3)
Obesity (BMI ≥30)		2010	21.8% (19.3-24.3)	28.5%* (26.6-30.3)
		2016	30.2% (26.9-33.6)	36.0%* (33.7-38.2)
Raised blood pressure	Raised blood pressure (or on medication)	2010	37.1% (34.0-40.3)	29.8%* (27.9-31.8)
		2016	38.6% (35.1-42.2)	36.9 % (34.7-39.1)
	Raised blood pressure NOT on medication	2010	30% (26.7-33.2)	16.4%* (14.8-18.1)
		2016	28.7% (25.2-32.3)	21.6%* (19.4-23.8)

Raised blood glucose (or on medication)	2010	19.7% (17.3-22.1)	13.0%* (11.5-14.4)
	2016	4.7% (3.5-6.0)	4.3% (3.4-5.2)
Raised cholesterol (or on medication)	2010	14.9% (12.1-17.7)	20.9%* (18.5-23.3)
	2016	21.9% (18.6-25.2)	33.0%* (30.4-35.6)

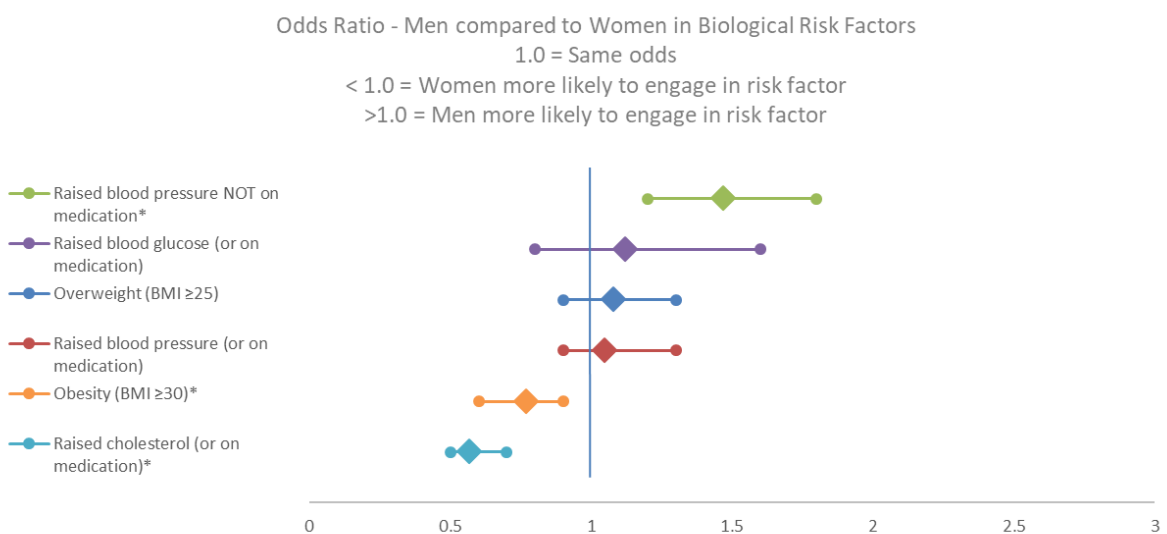
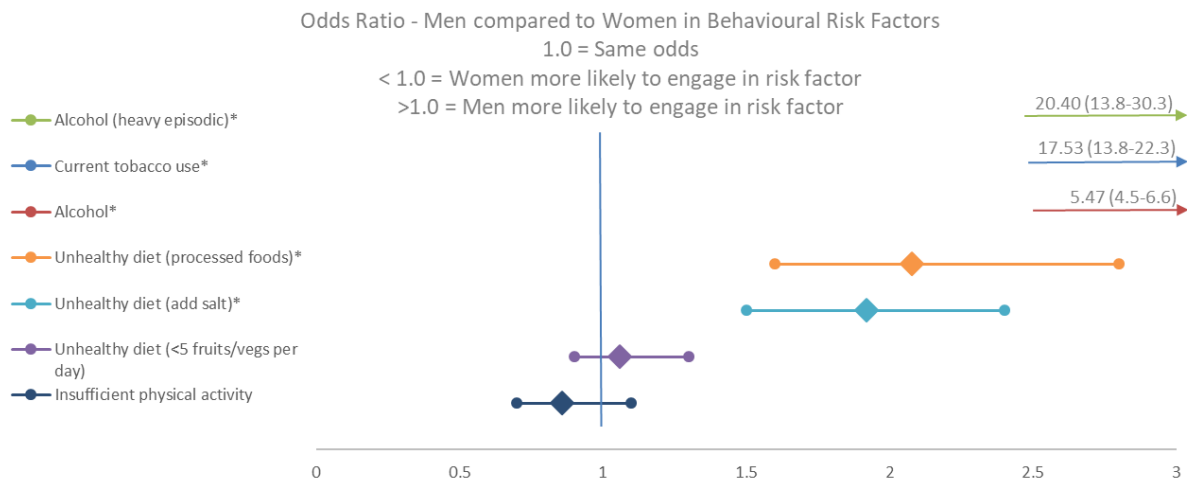
* statistically significant difference, $X^2, p < .05$.

† 2010 STEPS measured for men as 5+ drinks, for women as 4+ drinks. 2016 STEPS measured as 6+ drinks for both.

Odds ratios for behavioural and biological factors (STEPS 2016)

Comparing the difference in prevalence between men and women in these risk factors further by using an odds ratio provides further perspective into the significance of these differences. In this case, the closer the number is to 1.0, the more likely both men and women are to have that risk factor.

However, the more the number is greater than 1.0, the more likely men are to have that risk factor as opposed to women. Likewise, the less a number is than 1.0, the more likely women are to have that risk factor. In the following figures, the \diamond represents the odds ratio and the \circ and lines represent the confidence intervals at 95%. The risk factors with significant difference between men and women are designated with an *.



Prevalence of three or more risk factors

Per the STEPs data, selected risk factors were used to examine the prevalence of three or more risk factors in the population. These combined risk factors are:

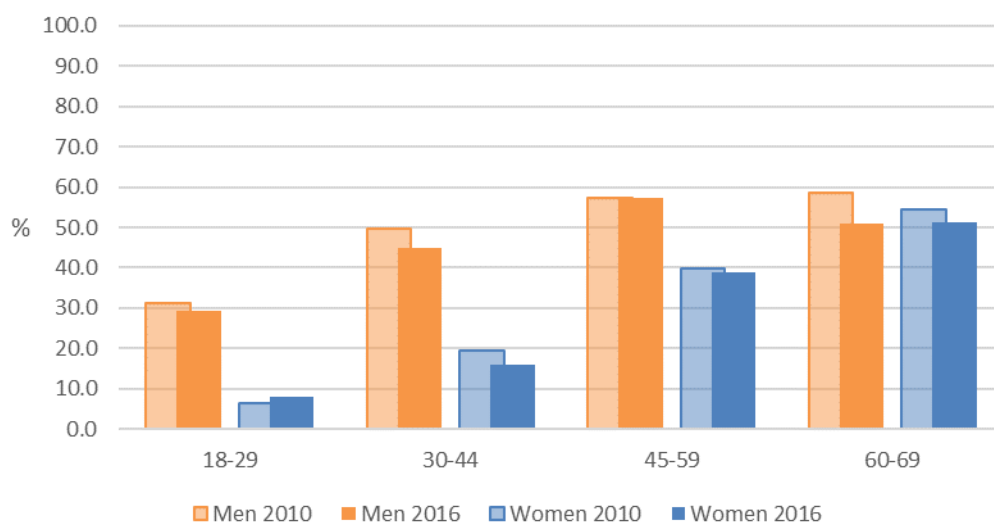
- current daily smokers
- less than 5 servings of fruits & vegetables per day
- insufficient physical activity (< 150 minutes of moderate-intensity activity per week, or equivalent)
- overweight (BMI \geq 25 kg/m²)
- raised blood pressure (SBP \geq 140 and/or DBP \geq 90 mmHg or currently on medication)

Overall, a significantly higher percentage of men (45.4%) have three or more risk factors compared to women (27.6%) in 2016. A significantly lower percentage of men (5.7%) than women (9.3%) do not have any risk factors. There is no significant difference between 2016 and the previous survey of 2010.

As expected, the percentage of men and women with three or more risk factors is higher in the older age groups than the younger age groups. Significantly higher percentages of both men and women in the first three age groups have three or more risk factors than the preceding age group. For men in the oldest age group, however, there is no significant difference from the previous age group while for women there is again a significant increase. For each age group the prevalence for men is significantly higher than for women until the oldest age group where there is no significant difference.

While prevalence for men steadily increases with each age group, the increase in prevalence for women is more drastic, causing the difference in prevalence between men and women to lessen with each ascending age group until there is no significant difference. The most significant narrowing of this gap can be seen between age group 30-44 and 45-59. That is, the accumulation of risk factors in women is more rapid, starting from middle age. On the other hand, the high mortality of middle-aged men may influence the fact that those men living to the older age groups are living with less risk factors.

Prevalence of men and women with three or more risk factors by age group - 2010 and 2016



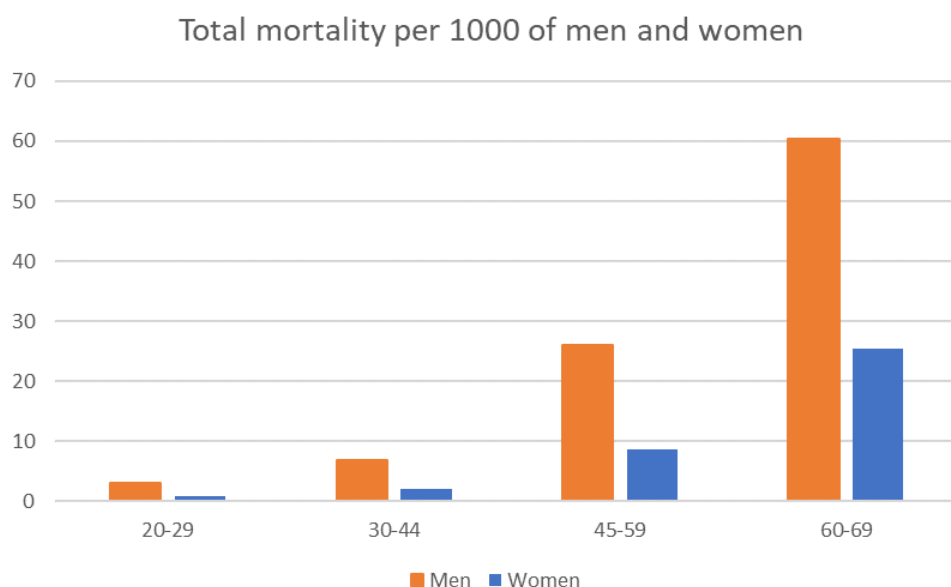
Prevalence of three or more risk factors	Year	Men	Women
Age 18-29	2010	31.2% (25.9-36.5)	6.3%* (4.2-8.4)
	2016	29.2% (21.7-36.8)	7.9%* (4.5-11.3)
Age 30-44	2010	49.7% (44.0-55.3)	19.5%* (16.4-22.5)
	2016	44.9% (37.8-52.0)	15.9%* (12.7-19.1)
Age 45-59	2010	57.4% (52.3-62.4)	39.9%* (36.9-43.0)
	2016	57.2% (50.8-63.5)	38.9%* (35.2-42.7)
Age 60-69	2010	58.7% (51.6-65.9)	54.3% (49.3-59.3)
	2016	50.8% (43.5-58.0)	51.2% (46.4-56.1)

*significant difference between men and women in the same age group.

The apparent trend is that the prevalence of three or more risk factors for both men and women has decreased between 2010 and 2016 across the life-course. These combined risk factors, however, do not include others from the data such as alcohol consumption or raised cholesterol. Additionally, not all risk factors are comparable. For example, at the individual level the risk of smoking is much higher than eating less than five servings of fruits and vegetables. Therefore, further analysis is warranted to examine differences between men and women as well as among men and women in these risk factors.

Mortality rates among men and women

The mortality rate for men is significantly higher than for women, and when it is examined by age group it can be seen how much more it increases in the older age groups.⁵

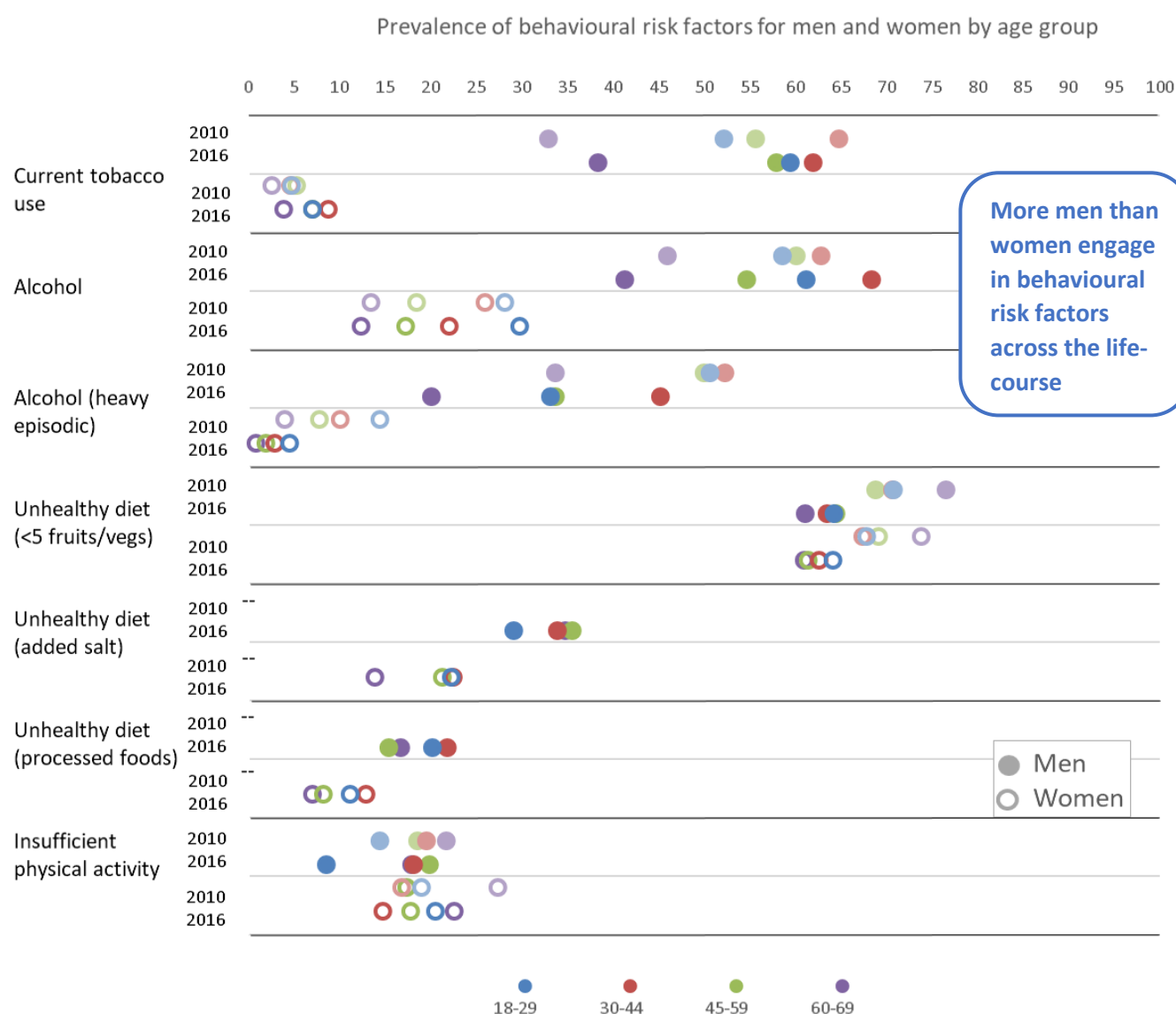


Mortality per 1000 - all causes	Men	Women
Age 20-29	2.94	0.90
Age 30-44	6.90	2.08
Age 45-59	26.05	8.70
Age 60-69	60.32	25.34

The higher mortality rates for men may account for some of the lessening of the gap between men and women in biological risk factors in the older age groups. The differences, however, are greater than the differences in mortality rates and therefore should be examined by risk factor to further understand how these populations are experiencing risk factors over the life-course.

Differences in specific risk factors among men and women between age groups

Examining the differences in more detail between men and women but also by age groups regarding risk factors reveals further how important a gender analysis is. The difference between age groups for each sex in each behavioural risk factor shows how many more men than women engage in nearly all risk factors across all age groups. Additionally, differences between 2010 and 2016 can be seen by sex and by age group.



Prevalence of behavioural risk factors for men and women by age group									
		Age 18-29		Age 30-44		Age 45-59		Age 60-69	
		2010	2016	2010	2016	2010	2016	2010	2016
Current tobacco use	Men	52.2% (46.8-57.6)	59.5% (52.2-66.9)	64.8% (59.6-69.9)	62.0% (55.8-68.2)	55.7% (51.1-60.2)	58.0% (52.3-63.7)	33% (27.1-38.9)	38.4% (31.7-45.1)
	Women	4.8%* (2.9-6.7)	7.0%* (3.8-10.1)	4.7%* (3.3-6.0)	8.8%* (6.4-11.1)	5.3%* (3.3-7.3)	7.1%* (5.3-8.9)	2.6%* (1.5-3.6)	3.9%* (2.2-5.6)
Alcohol	Men	58.6% (52.5-64.7)	61.3% (54.1-68.5)	62.9% (56.3-69.5)	68.5% (62.5-74.5)	60.2% (55.0-65.4)	54.8% (48.5-61.1)	46% (38.6-53.3)	41.4% (34.9-48.0)
	Women	28.2%* (23.3-33.0)	29.8%* (24.0-35.6)	26%* (22.2-29.8)	22.1%* (18.6-25.5)	18.5%* (15.5-21.4)	17.3%* (14.5-20.1)	13.5%* (10.3-16.7)	12.4%* (9.4-15.3)

Alcohol (heavy episodic)	Men	50.7% (44.0-57.3)	33.2% (25.8-40.6)	52.3% (45.6-59.0)	45.3% (38.7-52.0)	50% (45.1-54.8)	33.8% (27.6-40.0)	33.7% (26.9-40.4)	20.2% (14.1-26.2)
	Women	14.5%* (10.9-18.2)	4.5%* (1.7-7.3)	10.1%* (7.7-12.6)	2.9%* (1.3-4.5)	7.8%* (5.9-9.7)	1.9%* (0.9-3.0)	4%* (2.2-5.7)	0.8%* (0.0-1.5)
Unhealthy diet (<5 fruits/vegs per day)	Men	70.8% (64.4-77.3)	64.3% (55.8-72.7)	70.7% (64.8-76.6)	63.6% (57.1-70.1)	68.9% (64.2-73.7)	64.6% (58.7-70.6)	76.6% (70.4-82.8)	61.2% (54.0-68.5)
	Women	67.9% (62.9-72.9)	64.2% (58.1-70.3)	67.4% (63.3-71.5)	62.6 (58.0-67.3)	69.2% (65.7-72.6)	61.5 (57.4-65.6)	73.9% (68.9-78.9)	61.0% (55.4-66.6)
Unhealthy diet (add salt)	Men	-% (-)	29.2% (22.6-35.8)	-% (-)	34.0% (27.0-41.0)	-% (-)	35.6% (30.4-40.9)	-% (-)	34.9% (27.8-42.0)
	Women	% (-)	22.3% (17.6-27.1)	% (-)	22.5%* (18.8-26.2)	% (-)	21.3%* (18.2-24.5)	% (-)	13.9%* (11.0-16.9)
Unhealthy diet (processed foods)	Men	-% (-)	20.3% (14.1-26.5)	-% (-)	21.9% (15.6-28.1)	-% (-)	15.5% (10.7-20.4)	-% (-)	16.8% (11.4-22.1)
	Women	-% (-)	11.2%* (7.7-14.6)	-% (-)	12.9%* (10.0-15.7)	-% (-)	8.3%* (6.3-10.2)	-% (-)	7.1%* (4.9-9.2)
Insufficient physical activity	Men	14.4% (10.1-18.7)	8.6% (4.5-12.7)	19.6% (14.7-24.4)	18.2% (13.0-23.3)	18.6% (14.6-22.6)	20.0% (14.6-25.4)	21.7% (16.5-26.9)	18.0% (12.1-23.8)
	Women	19.0% (15.0-23.0)	20.5%* (15.7-25.3)	16.9% (13.7-20.1)	14.8% (11.7-18.0)	17.4% (14.5-20.2)	17.8% (14.9-20.8)	27.4% (23.0-31.7)	22.6% (18.6-26.6)

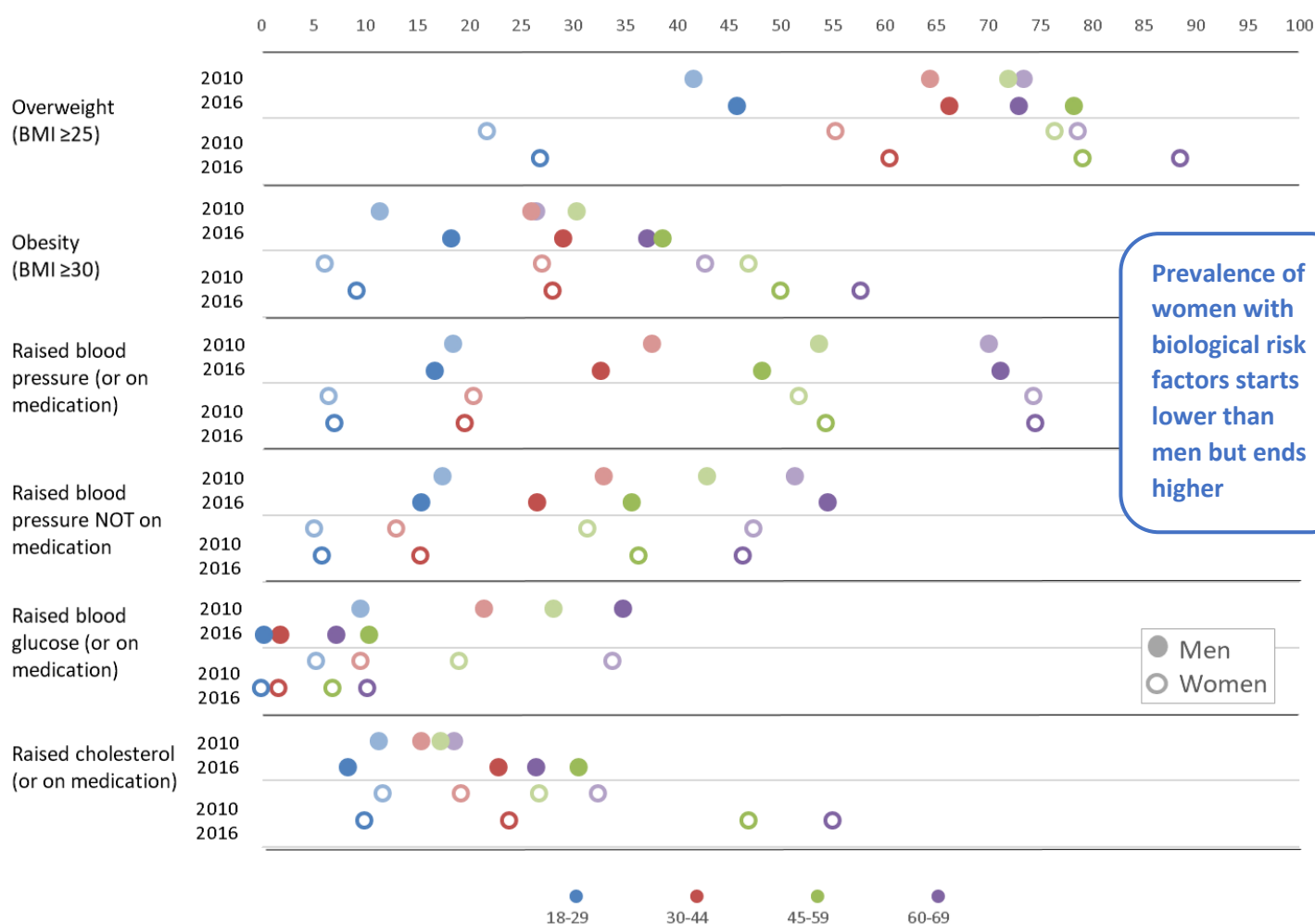
*significant difference between men and women in the same age group.

This also reveals that in most risk factors the age group with the highest percentage of men is between ages 30 and 44 while for women the age group 18-29 is highest in almost as many factors as the 30-44 group for 2016. In most risk factors, except for the obvious exception of physical activity, the age group of 60-69 has the lowest prevalence for men and women.

Prevalence in each risk factor varies differently between age groups and by sex. For example, where differences between age groups among men may be more pronounced such as with tobacco use, the differences are less for women. Comparing 2010 and 2016 by age groups also makes it possible to see which age groups have decreased in prevalence and which have increased.

With regards to the biological risk factors and age, however, the story is quite different. As can be seen in the following chart, the number of both men and women with biological risk factors increases across age groups. By sex, however, the prevalence of women in each risk factor (except for those with blood pressure not receiving treatment) surpasses that of men.

Prevalence of biological risk factors for men and women by age group



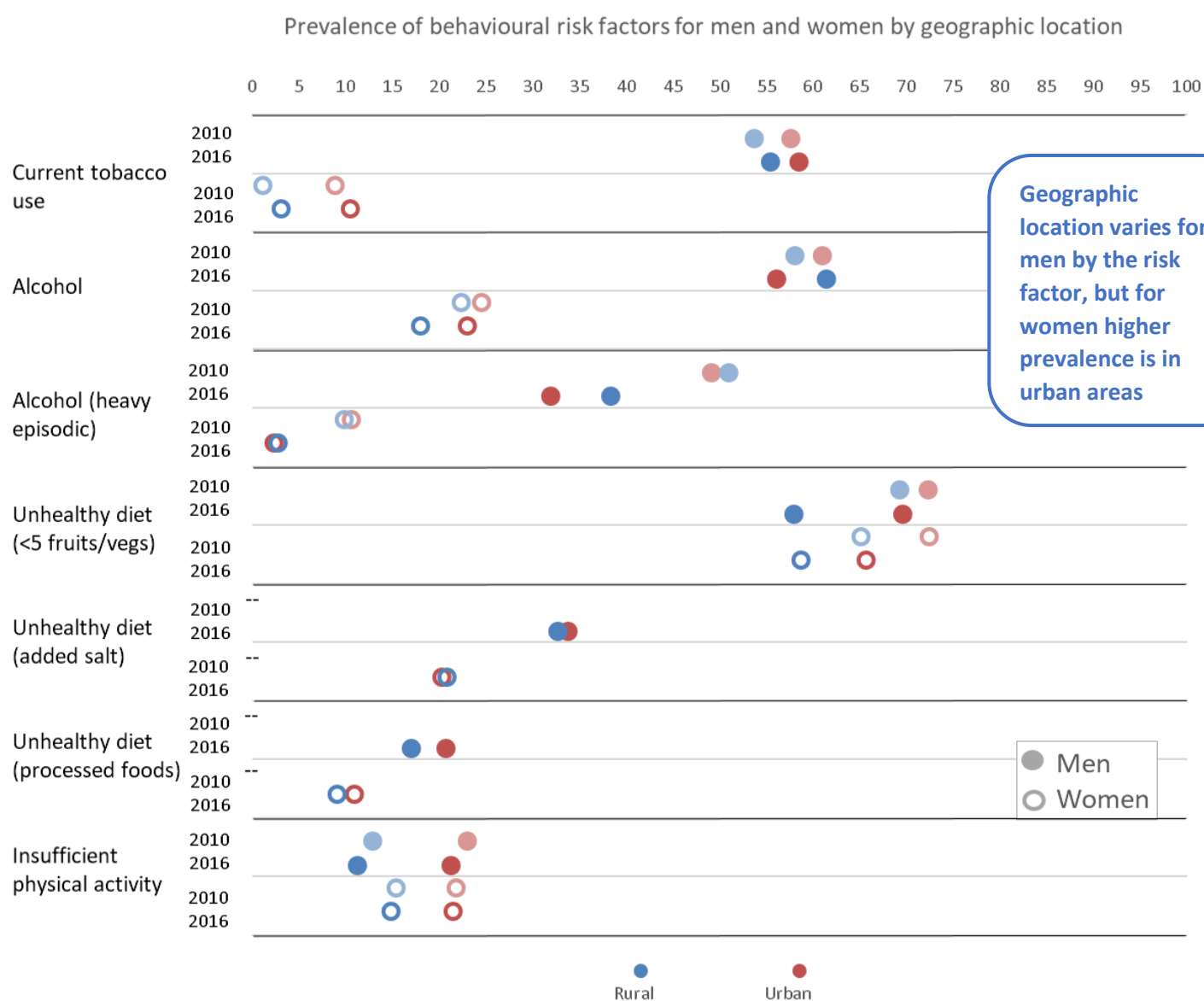
Prevalence of biological risk factors for men and women by age group									
		Age 18-29		Age 30-44		Age 45-59		Age 60-69	
		2010	2016	2010	2016	2010	2016	2010	2016
Overweight (BMI ≥25)	Men	41.6% (35.5-47.8)	45.9% (37.8-54.0)	64.4% (59.0-69.8)	66.3% (59.3-73.4)	71.9% (67.7-76.1)	78.3% (72.7-83.8)	73.4% (67.4-79.5)	73.0% (65.4-80.5)
	Women	21.7%* (17.9-25.5)	26.8%* (21.5-32.1)	55.3%* (51.8-58.8)	60.5% (55.8-65.2)	76.4% (73.8-78.9)	79.1% (76.1-82.1)	78.6% (75.3-82.0)	88.5%* (85.5-91.4)
Obesity (BMI ≥30)	Men	11.4% (7.4-15.4)	18.3% (11.9-24.6)	26.0% (21.5-30.5)	29.1% (23.1-35.1)	30.4% (26.3-34.4)	38.7% (33.0-44.4)	26.5% (20.7-32.3)	37.2% (28.7-45.6)
	Women	6.1%* (3.8-8.4)	9.2%* (5.2-13.1)	27.0% (24.2-29.8)	28.0% (24.0-31.9)	46.9%* (43.7-50.1)	50.0%* (46.3-53.8)	42.7%* (38.4-47.0)	57.7%* (53.4-62.0)
Raised blood pressure (or on medication)	Men	18.5% (13.9-23.2)	16.7% (10.3-23.1)	37.6% (32.2-43.0)	32.7% (26.4-39.1)	53.7% (48.6-58.8)	48.3% (43.1-53.4)	70.1% (63.7-76.5)	71.2% (64.0-78.3)
	Women	6.5%* (4.5-8.6)	7.0%* (4.3-9.7)	20.4%* (17.7-23.1)	19.6%* (16.3-22.8)	51.8% (48.6-55.0)	54.4%* (50.8-57.9)	74.4% (70.7-78.2)	74.5% (70.8-78.2)
Raised blood pressure NOT on medication	Men	17.4% (12.7-22.1)	15.4% (9.2-21.6)	33% (27.5-38.5)	26.6% (20.6-32.6)	42.9% (37.5-48.4)	35.7% (30.2-41.2)	51.4% (42.6-60.3)	54.6% (44.2-65.0)
	Women	5.1%* (3.2-7.0)	5.8%* (3.5-8.2)	13.0%* (10.5-15.5)	15.3%* (12.1-18.5)	31.4%* (28.0-34.9)	36.3% (32.0-40.5)	47.4% (41.1-53.7)	46.4% (40.4-52.4)

Raised blood glucose (or on medication)	Men	9.5% (6.2-12.8)	0.3% (0.0-0.8)	21.4% (17.0-25.7)	1.9% (0.0-3.9)	28.1% (23.8-32.4)	10.4% (7.0-13.9)	34.9% (28.2-41.5)	7.3% (4.3-10.4)
	Women	5.3% (3.0-7.7)	0.0% (0.0-0.0)	9.5%* (7.3-11.6)	1.6% (0.6-2.6)	19.0%* (16.4-21.5)	6.8%* (4.9-8.7)	33.8% (29.8-37.7)	10.2% (7.4-13.1)
Raised cholesterol (or on medication)	Men	11.3% (6.2-16.5)	8.4% (2.7-14.1)	15.4% (10.2-20.6)	22.9% (16.2-29.5)	17.3% (12.7-21.9)	30.6% (24.8-36.4)	18.6% (11.7-25.4)	26.5% (20.2-32.7)
	Women	11.7% (7.5-15.9)	9.9% (5.8-14.1)	19.2% (15.7-22.8)	23.9% (19.6-28.2)	26.7%* (23.5-30.0)	46.9%* (42.9-50.8)	32.4%* (28.0-36.7)	55.0%* (50.1-59.9)

*significant difference between men and women in the same age group.

Geographic location – urban and rural

The geographic location of the population can be used to examine further the differences in risk factors not only between men and women but within the groups of men and women. Geographic location was collected in the STEPS survey and has been categorized into urban and rural for the purposes of analysis. While the effect of location tends to vary by risk factor for men, the generally higher prevalence is found with women in urban areas.

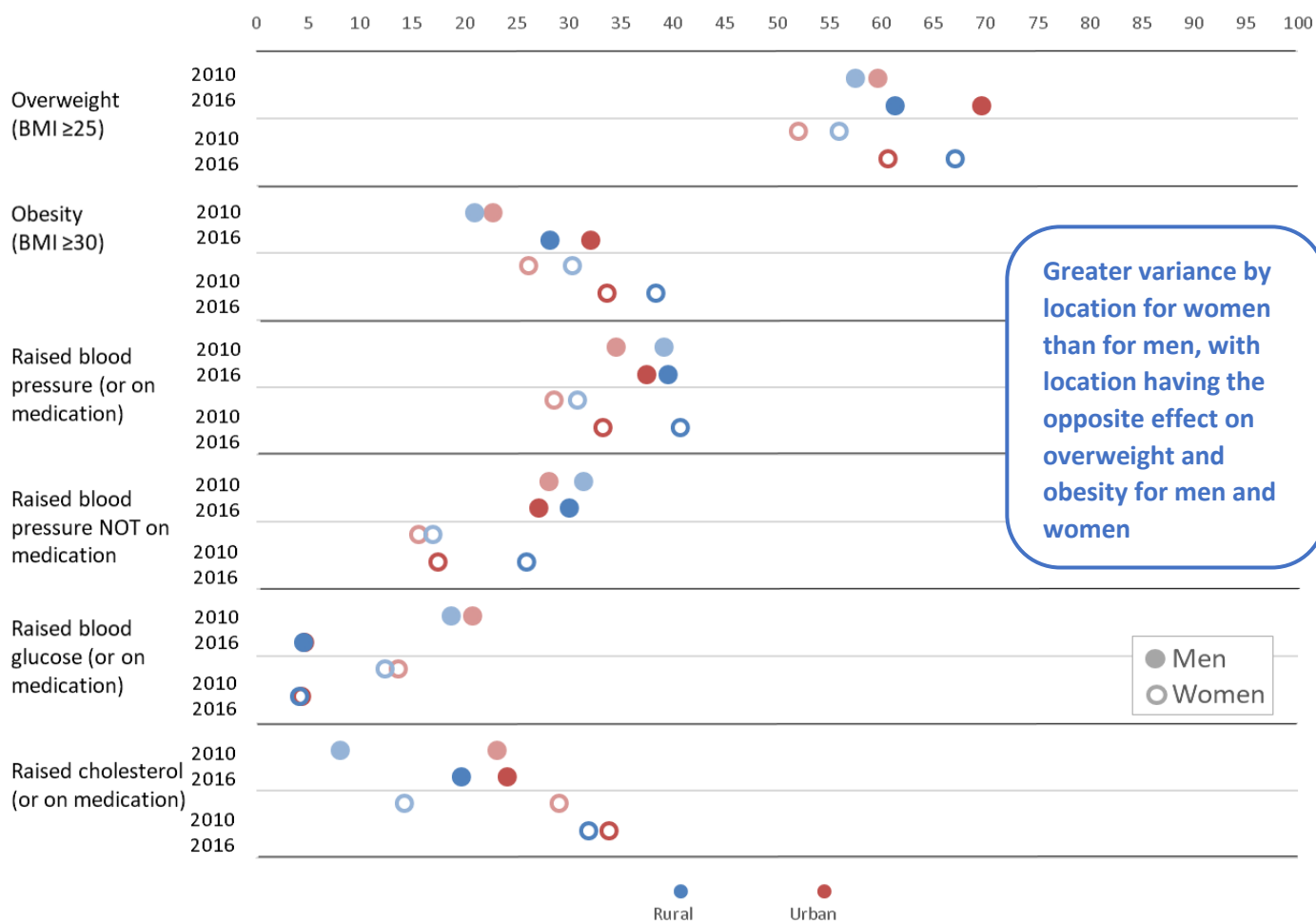


Prevalence of behavioural risk factors for men and women by geographic location					
		Rural		Urban	
		2010	2016	2010	2016
Current tobacco use	Men	53.8% (49.9-57.7)	55.6% (50.2-61.0)	57.7% (53.6-61.7)	58.6% (54.3-62.9)
	Women	1.2%* (0.6-1.9)	3.2%* (2.0-4.4)	8.9%* (6.7-11.0)	10.6%* (8.6-12.7)
Alcohol	Men	58.1% (52.7-63.5)	61.5% (56.2-66.8)	61.0% (55.3-66.8)	56.2% (51.3-61.0)
	Women	22.4%* (18.4-26.3)	18.1%* (15.1-21.2)	24.6%* (20.6-28.6)	23.1%* (20.1-26.1)
Alcohol (heavy episodic)	Men	51.0% (45.5-56.6)	38.5% (32.2-44.8)	49.2% (43.1-55.4)	32.0% (26.8-37.2)
	Women	9.9%* (7.7-12.1)	2.8%* (1.4-4.2)	10.7%* (7.9-13.5)	2.4%* (1.3-3.5)
Unhealthy diet (<5 fruits/vegs per day)	Men	69.3% (64.1-74.5)	58.1% (51.8-64.4)	72.4% (66.5-78.2)	69.7% (64.6-74.7)
	Women	65.2% (60.9-69.5)	58.8% (54.4-63.2)	72.5% (68.6-76.4)	65.7% (61.9-69.4)
Unhealthy diet (add salt)	Men	-% (-)	32.8% (26.2-39.4)	-% (-)	33.9% (29.6-38.3)
	Women	-% (-)	20.9%* (17.8-23.9)	-% (-)	20.4%* (17.8-23.1)
Unhealthy diet (processed foods)	Men	-% (-)	17.1% (11.0-23.3)	-% (-)	20.8% (17.0-24.5)
	Women	-% (-)	9.1%* (7.1-11.1)	-% (-)	11.0%* (9.0-13.0)
Insufficient physical activity	Men	12.9% (9.5-16.4)	11.4% (8.2-14.7)	23.1% (18.5-27.7)	21.4% (17.4-25.4)
	Women	15.5% (12.5-18.5)	14.9% (12.1-17.6)	21.9% (18.2-25.6)	21.5% (18.7-24.4)

*significant difference between men and women in the same age group.

With biological factors, prevalence tends to vary more for women by location than for men. With the overweight risk factor, location has the opposite effect for men and women.

Prevalence of biological risk factors for men and women by geographic location



Prevalence of biological risk factors for men and women by geographic location					
		Rural		Urban	
		2010	2016	2010	2016
Overweight (BMI ≥25)	Men	57.6% (53.4-61.8)	61.4% (54.9-68.0)	59.7% (55.0-64.4)	69.7% (65.2-74.2)
	Women	56.0% (53.0-59.0)	67.1% (63.6-70.6)	52.1%* (48.9-55.3)	60.7%* (57.4-64.1)
Obesity (BMI ≥30)	Men	21.0% (17.4-24.6)	28.3% (23.2-33.5)	22.8% (19.4-26.1)	32.2% (28.1-36.3)
	Women	30.4%* (27.7-33.1)	38.4%* (35.0-41.8)	26.2% (23.8-28.7)	33.7% (30.8-36.7)
Raised blood pressure (or on medication)	Men	39.2% (34.6-43.8)	39.6% (34.5-44.7)	34.6% (30.4-38.8)	37.6% (32.7-42.5)
	Women	30.9%* (28.0-33.7)	40.8% (37.5-44.1)	28.6% (26.0-31.2)	33.3% (30.3-36.4)
Raised blood pressure NOT on medication	Men	31.5% (26.7-36.2)	30.2% (25.3-35.2)	28.2% (23.7-32.6)	27.2% (22.2-32.1)
	Women	17.0%* (14.6-19.4)	26.0% (22.8-29.3)	15.7%* (13.4-18.0)	17.5%* (14.7-20.4)
Raised blood glucose (or on medication)	Men	18.8% (15.8-21.9)	4.7% (3.1-6.4)	20.8% (17.1-24.5)	4.8% (2.7-6.9)
	Women	12.4%* (10.3-14.5)	4.2% (2.9-5.5)	13.7%* (11.6-15.7)	4.4% (3.2-5.6)
Raised cholesterol (or on medication)	Men	8.1% (5.5-10.6)	19.8% (15.0-24.6)	23.2% (18.1-28.4)	24.2% (19.3-29.2)
	Women	14.3%* (11.6-17.0)	32.0%* (28.0-36.1)	29.1% (25.0-33.1)	33.9%* (30.5-37.4)

*significant difference between men and women in the same age group.

Education level

The education level of the population can be used to examine further the differences in risk factors not only between men and women but within the groups of men and women. Education level, determined by the highest level of education completed, was collected in the STEPS survey using country-specific categories. These categories have been matched to the levels of the International Standard Classification of Education (ISCED)⁶ as follows.

STEPS survey categories	ISCED levels
1 = No formal schooling (not completed primary school)	ISCED 0 = Early childhood education
2 = Primary school completed	ISCED 1 = Primary education
3 = Main secondary school completed	ISCED 2 = Lower secondary education
4 = Secondary school completed	ISCED 3 = Upper secondary education
5 = Professional education completed	ISCED 4 = Post-secondary non-tertiary education ISCED 5 = Short-cycle tertiary education
6 = University completed	ISCED 6 = Bachelors degree or equivalent tertiary education level
7 = Post graduate degree	ISCED 7 = Masters degree or equivalent tertiary education level ISCED 8 = Doctoral degree or equivalent tertiary education level

These education categories have been condensed for the analysis to low, medium, and high levels as follows.

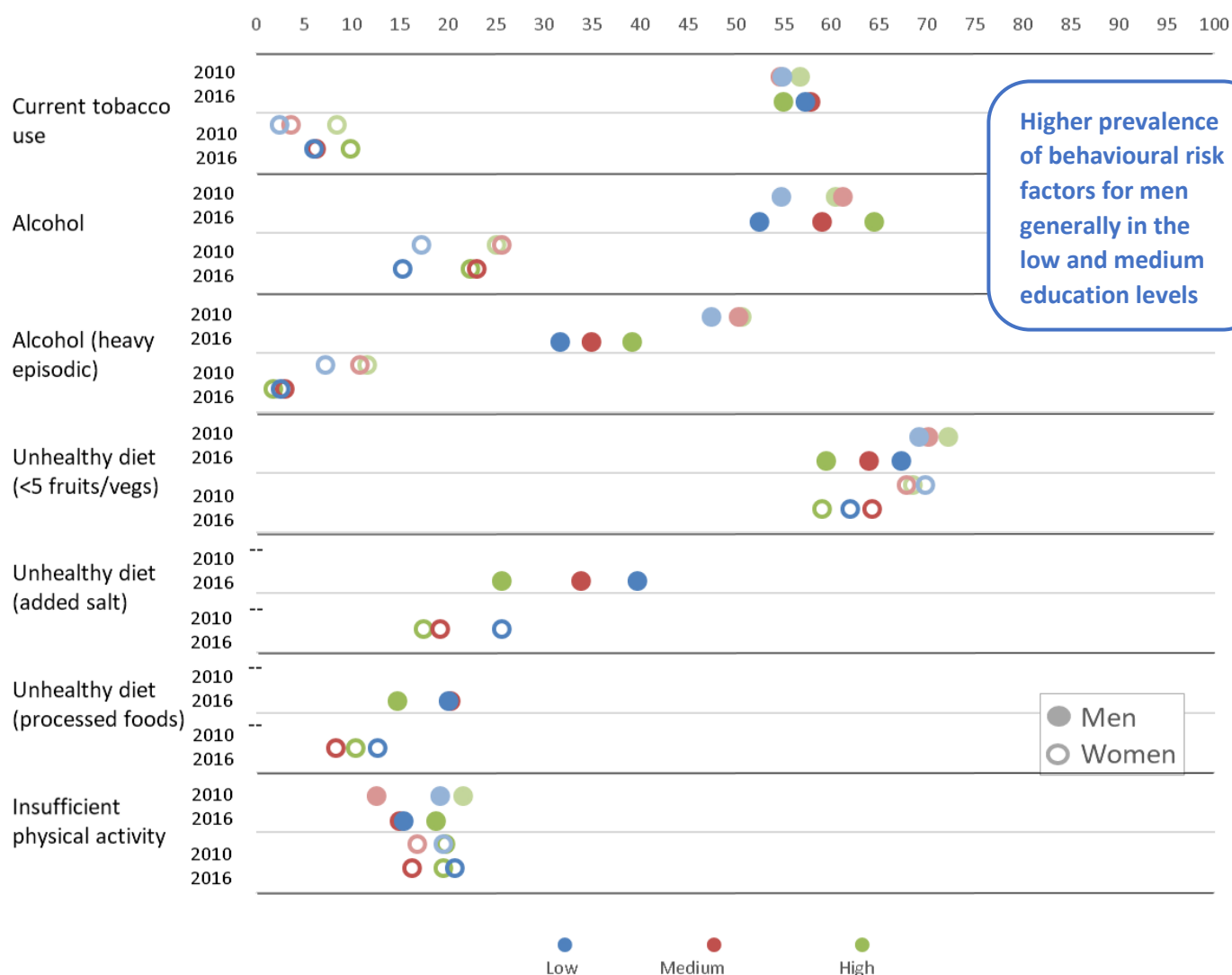
Education level for analysis	STEPS survey categories	ISCED levels
Low level of education	1 = No formal schooling; 2 = Primary school completed; 3 = Main secondary school completed	ISCED 0-2
Medium level of education	4 = Secondary school completed; 5 = Professional education completed	ISCED 3-5
High level of education	6 = University completed; 7 = Post graduate degree	ISCED 6-8

Differences in educational attainment between men and women in Georgia only become significant in the tertiary, or high level of education.⁷

Educational attainment between men and women				
		Enrolment in:		
	Literacy rate	Primary	Secondary	Tertiary
Men	99.8%	97.6%	95.2%	57.3%
Women	99.3%	98.2%	96.8%	63.7%

The education levels of low, medium, and high have been used to examine behavioural and biological differences in risk factors between men and women.

Prevalence of behavioural risk factors for men and women by education level



Prevalence of behavioural risk factors for men and women by education level							
		Low		Medium		High	
		2010	2016	2010	2016	2010	2016
Current tobacco use	Men	55.0% (48.5-61.6)	57.4% (50.8-63.9)	54.7% (50.2-59.3)	57.9% (53.1-62.7)	56.8% (51.8-61.8)	55.1% (49.1-61.2)
	Women	2.5%* (1.4-3.6)	6.1%* (4.0-8.2)	3.7%* (2.4-4.9)	6.3%* (4.6-8.1)	8.5%* (5.9-11.1)	9.9%* (7.4-12.4)
Alcohol	Men	54.8% (47.0-62.6)	52.6% (45.0-60.2)	61.3% (55.9-66.8)	59.1% (54.2-64.1)	60.5% (54.6-66.4)	64.6% (58.5-70.8)
	Women	17.3%* (13.6-21.0)	15.4%* (12.2-18.5)	25.7%* (21.8-29.6)	23.1%* (19.8-26.5)	25.1%* (21.4-28.8)	22.4%* (18.7-26.1)

Alcohol (heavy episodic)	Men	47.5% (39.8-55.2)	31.8% (24.2-39.4)	50.4% (44.7-56.1)	35.1% (29.8-40.3)	50.7% (45.0-56.4)	39.3% (32.5-46.2)
	Women	7.3%* (4.8-9.8)	2.6%* (1.0-4.3)	10.9%* (8.6-13.3)	3.0%* (1.5-4.4)	11.7%* (9.0-14.4)	1.9%* (0.5-3.3)
Unhealthy diet (<5 fruits/vegs per day)	Men	69.2% (63.4-75.0)	67.4% (60.1-74.7)	70.2% (64.6-75.9)	64.0% (58.4-69.6)	72.2% (66.6-77.8)	59.6% (53.1-66.2)
	Women	69.9% (65.6-74.1)	62.0% (57.2-66.8)	67.9% (64.2-71.6)	64.3% (60.4-68.2)	68.6% (64.3-72.9)	59.1% (54.1-64.1)
Unhealthy diet (add salt)	Men	-% (-)	39.9% (33.3-46.5)	-% (-)	34.0% (28.8-39.3)	-% (-)	25.7% (20.3-31.2)
	Women	-% (-)	25.7%* (21.9-29.5)	-% (-)	19.3%* (16.4-22.2)	-% (-)	17.5%* (13.9-21.0)
Unhealthy diet (processed foods)	Men	-% (-)	20.2% (14.1-26.3)	-% (-)	20.4% (15.1-25.7)	-% (-)	14.9% (10.3-19.5)
	Women	-% (-)	12.7%* (9.7-15.7)	-% (-)	8.4%* (6.3-10.4)	-% (-)	10.4% (7.7-13.1)
Insufficient physical activity	Men	19.3% (14.2-24.4)	15.5% (10.0-21.1)	12.6% (8.8-16.4)	15.1% (11.2-19.0)	21.7% (16.7-26.7)	18.9% (13.7-24.2)
	Women	19.6% (15.7-23.5)	20.8% (17.3-24.4)	16.9% (14.1-19.7)	16.3% (13.3-19.2)	19.8% (16.2-23.5)	19.6% (15.5-23.7)

By education level, the variance depends on the behavioural risk factor and on sex. The trend for men is that higher prevalence is found in the low or medium education levels with the exception of those related to alcohol. For women, the low education level is not necessarily higher in prevalence than the others overall.

With biological factors, there are some differences in education levels between men and women. Lower prevalence tends to be found in the high education level, especially for women, but more importantly the low education level for women is generally higher than both the other education levels for women and the education levels for men. There is little variance for men, but with overweight and obesity the high education level is highest for men whereas women in the high education level are lowest among women.

Prevalence of biological risk factors for men and women by education level



Prevalence of biological risk factors for men and women by education level							
		Low		Medium		High	
		2010	2016	2010	2016	2010	2016
Overweight (BMI ≥25)	Men	64.4% (58.8-69.9)	63.2% (56.5-69.8)	48.3% (43.5-53.0)	61.8% (55.9-67.7)	66.0% (60.7-71.3)	74.7% (68.8-80.6)
	Women	64.8% (60.9-68.6)	72.3%* (68.5-76.2)	51.2% (47.9-54.4)	62.3% (58.6-66.0)	49.7%* (45.7-53.7)	57.0%* (51.9-62.1)
Obesity (BMI ≥30)	Men	25.0% (20.3-29.7)	24.2% (19.0-29.4)	18.3% (14.7-22.0)	27.7% (22.8-32.7)	23.4% (19.5-27.3)	41.0% (34.8-47.1)
	Women	37.4%* (33.4-41.4)	45.5%* (41.6-49.5)	27.5%* (25.0-30.0)	35.6%* (32.0-39.1)	22.1% (19.0-25.3)	25.8%* (22.0-29.5)
Raised blood pressure (or on medication)	Men	36.2% (30.6-41.9)	38.5% (32.1-45.0)	36.4% (31.7-41.0)	38.0% (32.7-43.2)	38.6% (33.5-43.7)	39.9% (33.0-46.9)
	Women	37.4% (33.3-41.4)	48.1%* (44.2-52.0)	28.5%* (25.5-31.5)	33.3% (30.1-36.5)	25.2%* (22.3-28.0)	30.8%* (26.8-34.8)
Raised blood pressure NOT on medication	Men	28.8% (23.2-34.4)	29.3% (22.8-35.7)	30.9% (26.2-35.7)	28.3% (23.0-33.6)	29.7% (24.5-34.9)	29.0% (22.3-35.8)
	Women	21.5% (17.8-25.1)	27.9% (23.4-32.4)	15.3%* (12.7-17.9)	19.9%* (16.9-22.9)	14.0%* (11.7-16.2)	18.4%* (14.6-22.2)
Raised blood glucose (or on medication)	Men	24.3% (19.6-29.0)	4.1% (2.0-6.3)	16.5% (13.1-19.9)	4.3% (2.4-6.2)	20.0% (16.3-23.6)	6.2% (3.0-9.3)
	Women	16.5%* (13.6-19.4)	6.5% (4.4-8.5)	11.8%* (9.7-13.8)	3.6% (2.5-4.8)	11.7%* (9.7-13.8)	3.0% (1.6-4.4)

Raised cholesterol (or on medication)	Men	11.4% (6.5-16.3)	17.7% (12.3-23.1)	14.1% (9.5-18.7)	22% (17.1-26.9)	18% (13.0-22.9)	26.0% (19.4-32.6)
	Women	17.4% (14.1-20.8)	34.1%* (29.8-38.4)	18.8% (16.0-21.6)	32.1%* (28.5-35.8)	27.3%* (22.6-32.0)	33.1% (28.0-38.2)

Employment status

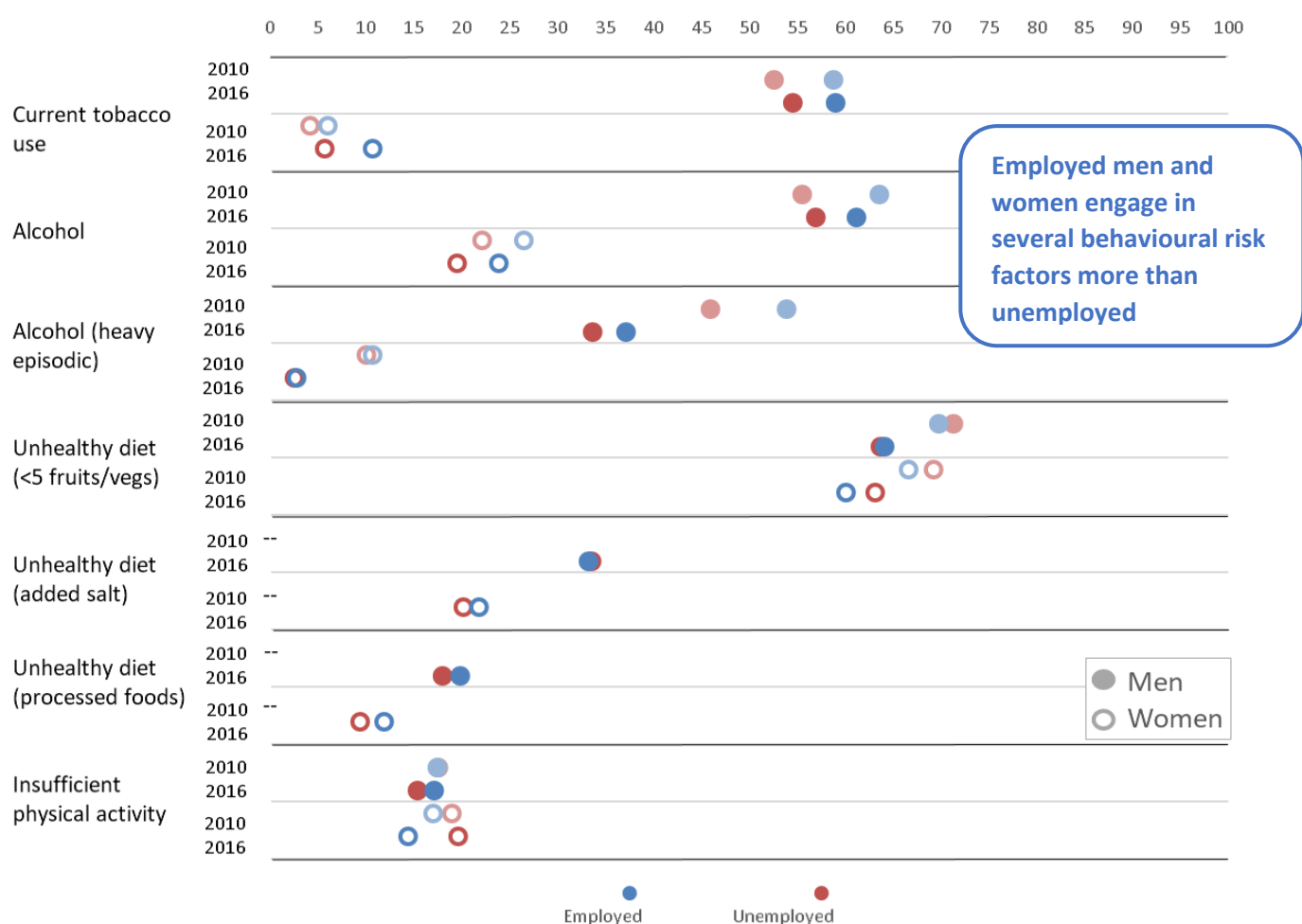
The examination of differences among men and women by employment status can provide further insight into variances in groups and risk factors. Employment status was collected in the STEPS survey, and the categories have been condensed for analysis as follows.

STEPS survey categories	Employment status for analysis
1=Government employee	1 = Employed (government employee, non-government employee, self-employed)
2=Non-government employee	
3=Self-employed	
4=Non-paid	2 = Unemployed (Non-paid, student, homemaker, retired, unemployed (able to work), unemployed (unable to work))
5=Student	
6=Homemaker	
7=Retired	
8=Unemployed (able to work)	
9=Unemployed (unable to work)	

In Georgia, the estimated average annual earned income per capita for women is approximately 49% of what it is for men (6.5 for women and 13.2 for men, in 1000 USD). While 83.2% of men participate in the labour force, only 63.4% of women do. Unemployment for men is 14.91% and 12.76% for women, and a higher percentage of women are part-time workers (43.61%) than men (29.01%).⁸

Regarding behavioural risk factors and employment status, differences are found beyond those already noted between men and women in addition to trends that appear across risk factors.

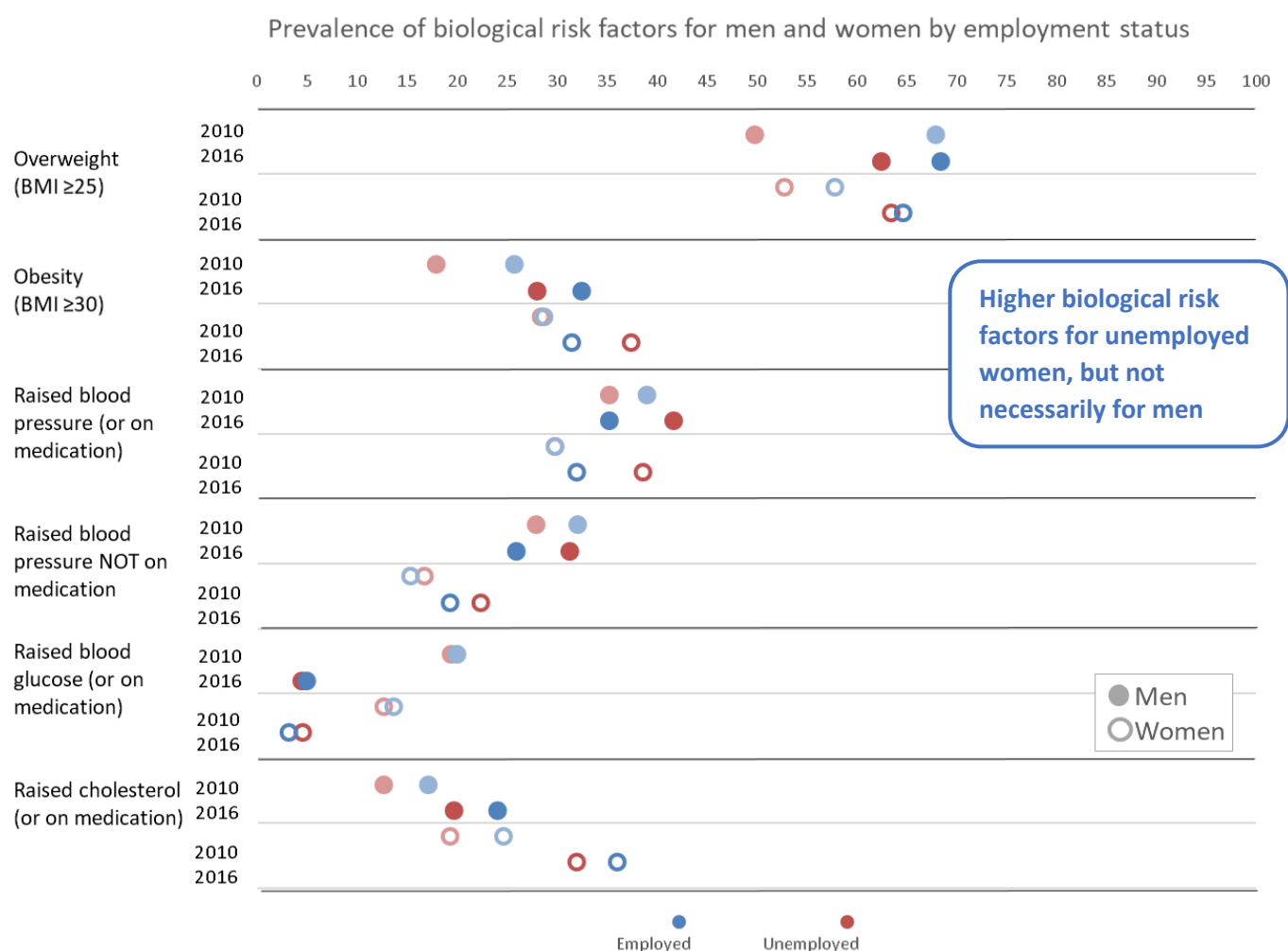
Prevalence of behavioural risk factors for men and women by employment status



Prevalence of behavioural risk factors for men and women by employment status					
		Employed		Unemployed	
		2010	2016	2010	2016
Current tobacco use	Men	58.8% (54.6-63.0)	59.1% (54.2-63.9)	52.6% (48.1-57.1)	54.7% (50.4-59.1)
	Women	6.1%* (4.1-8.1)	10.8%* (7.9-13.7)	4.2%* (3.1-5.4)	5.7%* (4.4-7.0)
Alcohol	Men	63.6% (58.4-68.7)	61.3% (56.5-66.0)	55.6% (50.9-60.4)	57.0% (52.0-62.0)
	Women	26.5%* (22.8-30.2)	23.9%* (20.2-27.7)	22.2%* (19.1-25.3)	19.6%* (17.2-22.0)
Alcohol (heavy episodic)	Men	53.9% (48.8-59.1)	37.2% (32.3-42.1)	46.0% (41.0-51.0)	33.8% (28.6-39.0)
	Women	10.8%* (8.0-13.5)	2.8%* (1.2-4.3)	10.1%* (8.1-12.0)	2.6%* (1.4-3.7)
Unhealthy diet (<5 fruits/vegs per day)	Men	69.8% (65.0-74.7)	64.2% (58.9-69.5)	71.4% (66.7-76.2)	63.8% (58.7-68.9)
	Women	66.7% (62.9-70.6)	60.1% (55.6-64.7)	69.3% (66.0-72.6)	63.2% (60.0-66.4)
Unhealthy diet (add salt)	Men	-% (-)	33.3% (28.2-38.3)	-% (-)	33.7% (28.5-38.9)
	Women	-% (-)	21.8%* (18.4-25.3)	-% (-)	20.2%* (17.8-22.6)
Unhealthy diet (processed foods)	Men	-% (-)	19.9% (15.8-24.0)	-% (-)	18.1% (13.0-23.2)
	Women	-% (-)	11.9%* (9.2-14.7)	-% (-)	9.4%* (7.8-11.1)
Insufficient physical activity	Men	17.5% (13.6-21.4)	17.2% (13.4-21.0)	17.6% (14.1-21.1)	15.5% (12.0-19.0)
	Women	17.1% (13.6-20.5)	14.4% (11.2-17.6)	19.0% (16.4-21.5)	19.7% (17.3-22.1)

While there is little variance in the prevalence of behavioural risk factors by employment status, a trend of those risk factors that do reveal differences indicates that employed men and women appear to engage in behavioural risk factors more than unemployed.

With biological risk factors, prevalence is higher for unemployed women than for employed women, but the prevalence of risk factors for unemployed men is not higher overall than for employed men.

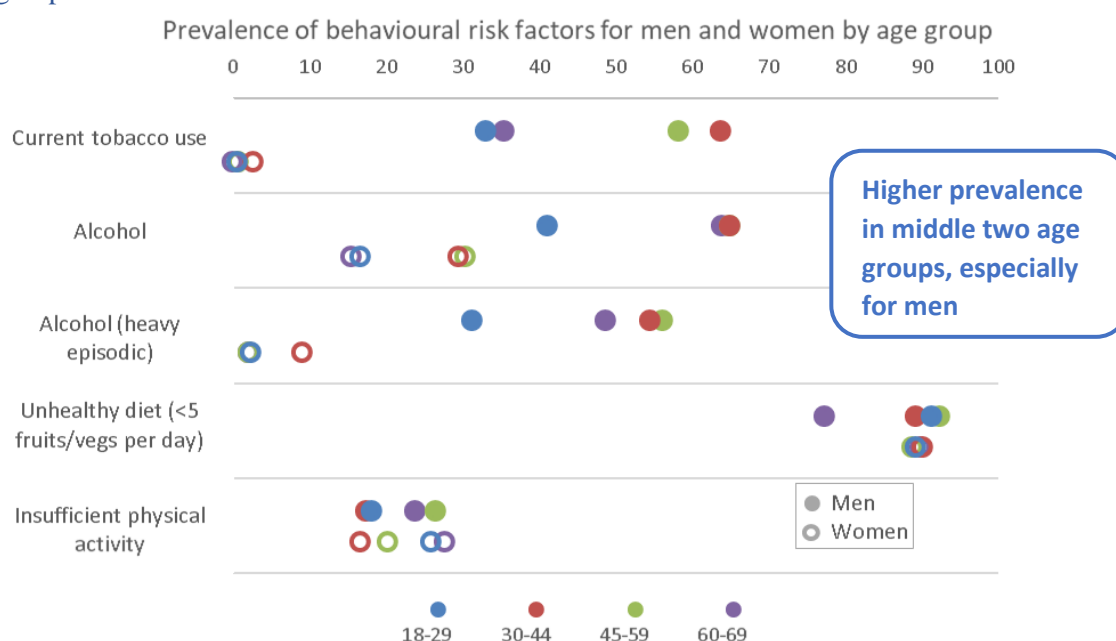


Prevalence of biological risk factors for men and women by employment status					
		Employed		Unemployed	
		2010	2016	2010	2016
Overweight (BMI ≥ 25)	Men	67.9% (63.9-72.0)	68.5% (62.8-74.2)	49.8% (45.3-54.2)	62.5% (57.5-67.6)
	Women	57.8%* (54.0-61.5)	64.7% (60.3-69.1)	52.8% (50.2-55.3)	63.5% (60.7-66.3)
Obesity (BMI ≥ 30)	Men	25.8% (21.9-29.6)	32.6% (28.1-37.1)	18.0% (14.9-21.0)	28.1% (23.6-32.5)
	Women	28.7% (25.5-31.9)	31.5% (27.5-35.6)	28.4%* (26.3-30.4)	37.5%* (34.8-40.1)
Raised blood pressure (or on medication)	Men	39.0% (34.8-43.1)	35.3% (30.5-40.0)	35.3% (31.2-39.4)	41.8% (37.0-46.6)
	Women	29.8%* (26.7-33.0)	32.0% (28.1-36.0)	29.8% (27.5-32.2)	38.6% (36.0-41.1)
Raised blood pressure NOT on medication	Men	32.1% (27.9-36.2)	26% (21.2-30.7)	28.0% (23.7-32.3)	31.4% (26.5-36.3)
	Women	15.4%* (12.8-18.1)	19.3% (15.7-23.0)	16.8%* (14.8-18.8)	22.4%* (19.8-25.0)
Raised blood glucose (or on medication)	Men	20.0% (16.6-23.3)	5.0% (2.9-7.2)	19.4% (15.8-23.0)	4.5% (2.8-6.1)
	Women	13.7%* (11.0-16.5)	3.2% (1.5-4.8)	12.7%* (11.0-14.3)	4.6% (3.6-5.6)
Raised cholesterol (or on medication)	Men	17.2% (13.3-21.1)	24.1% (18.7-29.5)	12.7% (9.2-16.2)	19.8% (15.9-23.8)
	Women	24.7% (20.1-29.3)	36.1%* (31.4-40.9)	19.3%* (16.7-21.9)	32.0%* (29.1-34.8)

Migrant health and risk factors

Using the STEPS survey and other instruments, a project on migrant health in Georgia was carried out by IOM and NCDC of Georgia in 2012. An analysis of gender variables has been used on this additional data set to examine the trends between and among men and women in the migrant population, specifically by age group, education level, and employment status.

Age group

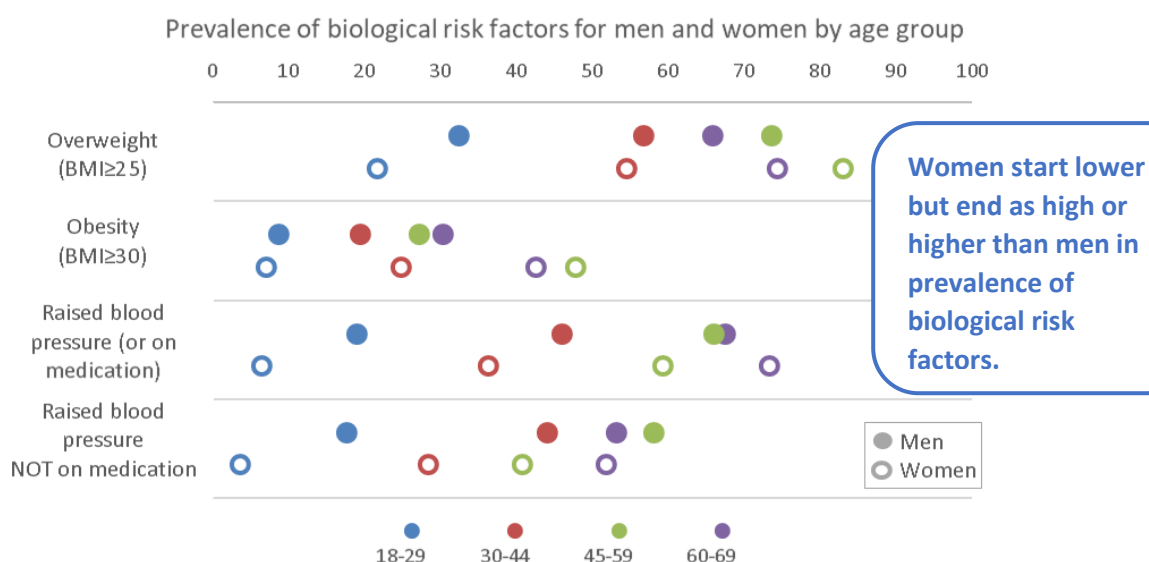


Prevalence of behavioural risk factors		Age 18-29	Age 30-44	Age 45-59	Age 60-69
Current tobacco use	Men	33.1% (6.1-60.1)	63.8% (54.0-73.5)	58.3% (47.6-69.1)	35.5% (12.4-58.7)
	Women	0.6%* (0.0-1.8)	2.6%* (0.1-5.1)	0.7%* (0.1-1.3)	0.0%* (0.0-0.0)
Alcohol (current drinker)	Men	41.1% (19.0-63.2)	65.0% (40.2-89.9)	64.9% (54.4-75.4)	63.9% (43.3-84.5)
	Women	16.6%* (3.1-30.1)	29.4%* (13.8-45.0)	30.3%* (21.9-38.8)	15.5%* (7.5-23.5)
Alcohol (heavy episodic) †	Men	31.3% (3.6-59.1)	54.5% (33.7-75.4)	56.1% (47.9-64.3)	48.7% (30.1-67.2)
	Women	2.4%* (0.0-5.9)	9.0%* (0.2-17.7)	2.1%* (0.5-3.8)	2.1%* (0.0-4.6)
Unhealthy diet (<5 fruits/vegs)	Men	91.3% (86.0-96.6)	89.3% (83.1-95.5)	92.4% (87.5-97.3)	77.3% (56.0-98.5)
	Women	89.2% (84.9-93.6)	90.0% (85.8-94.2)	88.7% (85.9-91.5)	89.8% (82.9-96.7)
Insufficient physical activity	Men	18.2% (0.7-35.7)	17.5% (5.0-30.0)	26.6% (15.9-37.3)	23.9% (6.0-41.9)
	Women	25.9% (14.0-37.8)	16.6% (3.2-30.0)	20.2% (10.2-30.1)	27.6% (7.0-48.1)

† The Migrant Health Survey measured for men as 5+ drinks, for women as 4+ drinks, same as the STEPS 2010

Similar differences between men and women in behavioural risk factors overall are found in the migrant population as with the larger population. By age group, the highest prevalence is found in age groups 30-44 and 45-49, especially for men, and the 18-29 age group is often much lower which is different than the larger population.

For biological factors, a trend similar to the larger population is found among the migrant population. While prevalence for women is lower than for men in the 18-29 age group, it is as high or higher than for men in the 60-69 age group.



Prevalence of biological risk factors		Age 18-29	Age 30-44	Age 45-59	Age 60-69
Overweight (BMI ≥ 25)	Men	32.6% (25.1-40.1)	56.9% (43.8-70.0)	73.8% (61.8-85.8)	66.0% (59.8-72.2)
	Women	21.8%* (18.5-25.1)	54.5% (50.2-58.7)	83.1%* (80.1-86.1)	74.4% (66.1-82.8)
Obesity (BMI ≥ 30)	Men	8.8% (3.9-13.7)	19.5% (8.1-30.9)	27.3% (18.5-36.1)	30.5% (17.2-43.7)
	Women	7.1% (4.5-9.6)	24.9% (16.7-33.2)	47.8%* (32.8-62.8)	42.7%* (27.2-58.2)
Raised blood pressure (or on medication)	Men	19.1% (10.5-27.8)	46.1% (26.8-65.3)	66.1% (48.9-83.2)	67.6% (45.0-90.1)
	Women	6.5%* (1.3-11.8)	36.4% (27.0-45.8)	59.3% (51.1-67.4)	73.4% (64.0-82.8)
Raised blood pressure NOT on medication	Men	17.8% (9.3-26.3)	44.2% (23.4-65.0)	58.3% (36.9-79.7)	53.3% (26.9-79.8)
	Women	3.7%* (0.4-7.0)	28.5%* (19.0-38.0)	40.9%* (27.7-54.2)	51.9% (41.4-62.3)

Education level

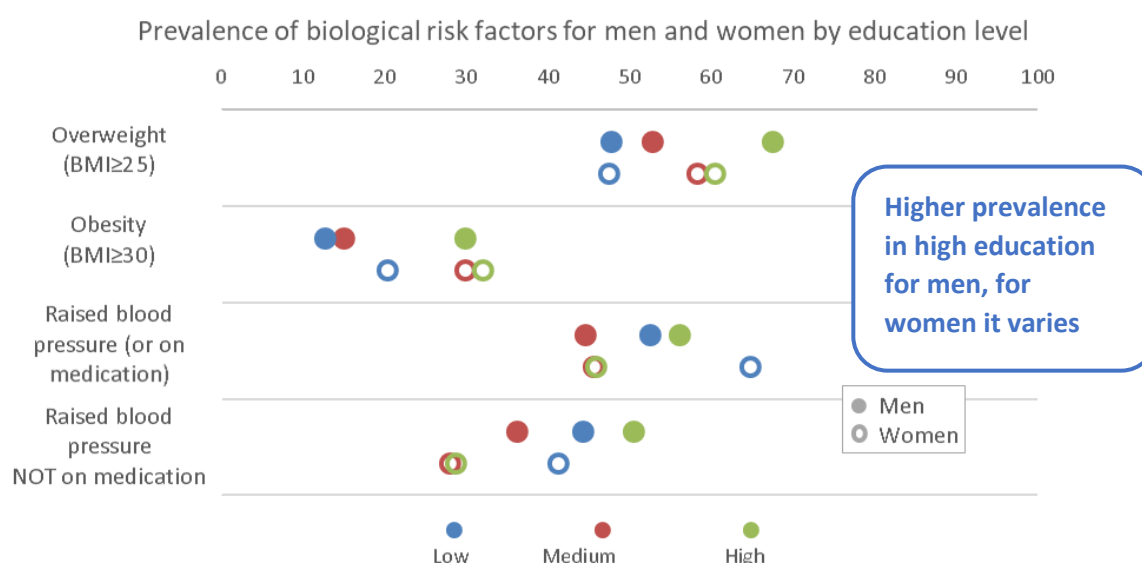
With regards to education level and behavioural risk factors, there is more variance by level for men in tobacco and alcohol than for women. However, the effect varies between tobacco and alcohol, with higher prevalence of tobacco use in the low and medium education levels and higher prevalence of alcohol among the high education level. This is different than the larger population as there was little variance for men and these risk factors by education level.



Prevalence of behavioural risk factors by education level				
		Low	Medium	High
Current tobacco use	Men	47.4% (39.1-55.8)	42.4% (23.9-61.0)	8.3% (0.0-28.2)
	Women	0.3%* (0.0-0.6)	1.6%* (0.0-3.1)	16.7%* (16.7-16.7)
Alcohol (current drinker)	Men	36.5% (22.7-50.2)	56.6% (41.5-71.8)	64.1% (45.9-82.3)
	Women	18.1%* (11.2-25.0)	21.6%* (14.1-29.2)	24.4%* (8.0-40.7)
Alcohol (heavy episodic)	Men	18.0% (6.7-29.4)	45.7% (28.1-63.3)	54.6% (42.0-67.2)
	Women	2.9%* (0.0-6.9)	3.5%* (1.9-5.2)	3.9%* (0.7-7.1)
Unhealthy diet (<5 fruits/vegs)	Men	95.6% (89.4-100.0)	89.2% (84.5-94.0)	83.3% (71.9-94.7)
	Women	97.1% (94.5-99.8)	92.2% (89.5-94.9)	83.0% (76.3-89.7)
Insufficient physical activity	Men	41.1% (30.1-52.1)	22% (11.7-32.3)	21.6% (10.7-32.6)
	Women	41.0% (16.2-65.8)	27.5% (15.8-39.3)	22.5% (11.2-33.8)

With regards to biological risk factors, higher prevalence is found among men in the high education level across all risk factors. This is in contrast to the behavioural risk factors in which higher prevalence was not always found in the high education level for men. This is similar, however, to the trend seen for biological risk factors for men by education level in the larger population.

For women, however, the trend is different among the migrant population. In the larger population, it was generally women in the low education level that had the highest prevalence of biological risk factors. With the migrant population, the highest prevalence of overweight and obesity for women is found in the high and medium education levels. Higher prevalence is found in the low education level for women in raised blood pressure.



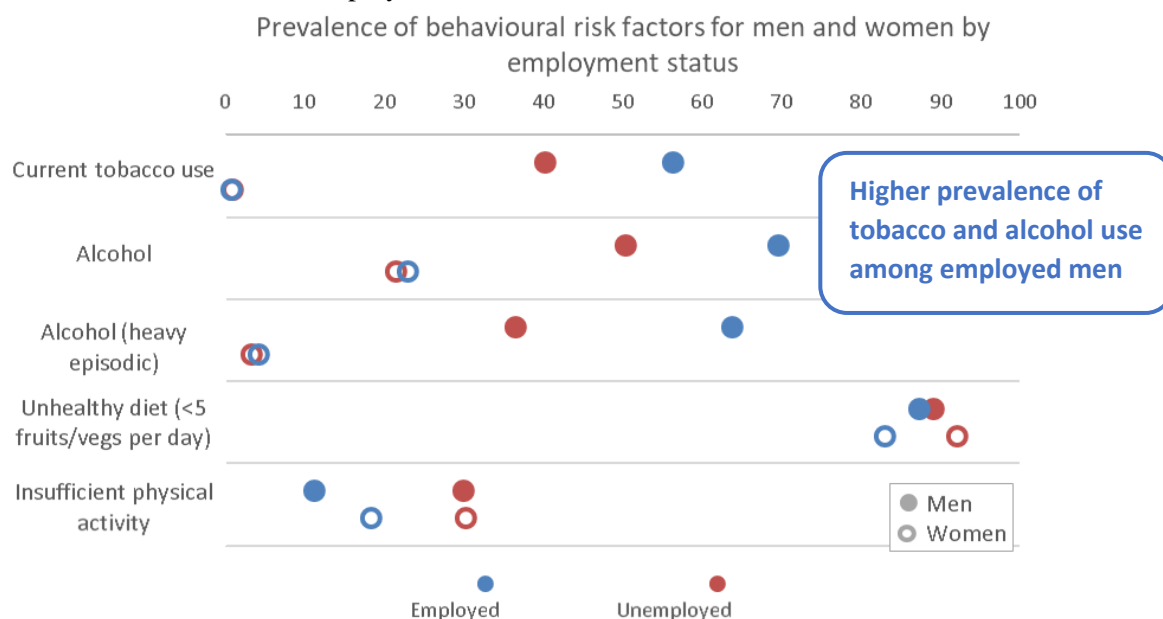
Prevalence of biological risk factors by education level				
		Low	Medium	High
Overweight (BMI ≥ 25)	Men	47.9% (35.6-60.1)	53.0% (40.6-65.3)	67.6% (60.7-74.4)
	Women	47.6% (37.1-58.1)	58.3% (44.3-72.2)	60.5% (55.0-65.9)
Obesity (BMI ≥ 30)	Men	12.9% (3.0-22.7)	15.2% (8.8-21.6)	30.0% (23.9-36.0)
	Women	20.4% (13.1-27.7)	29.9%* (20.0-39.9)	32.1%* (26.1-38.2)
Raised blood pressure (or on medication)	Men	52.6% (40.8-64.5)	44.7% (27.9-61.5)	56.3% (42.6-70.1)
	Women	64.8% (50.4-79.1)	45.6% (30.2-61.0)	45.9% (36.3-55.5)
Raised blood pressure NOT on medication	Men	44.5% (31.3-57.7)	36.4% (20.0-52.8)	50.7% (35.4-65.9)
	Women	41.3% (24.3-58.2)	28.0% (15.2-40.7)	28.8%* (20.0-37.7)
Raised blood glucose (or on medication)	Men	47.9% (35.6-60.1)	53.0% (40.6-65.3)	67.6% (60.7-74.4)
	Women	47.6% (37.1-58.1)	58.3% (44.3-72.2)	60.5% (55.0-65.9)

Raised cholesterol (or on medication)	Men	12.9% (3.0-22.7)	15.2% (8.8-21.6)	30% (23.9-36.0)
	Women	20.4% (13.1-27.7)	29.9%* (20.0-39.9)	32.1% (26.1-38.2)

Employment status

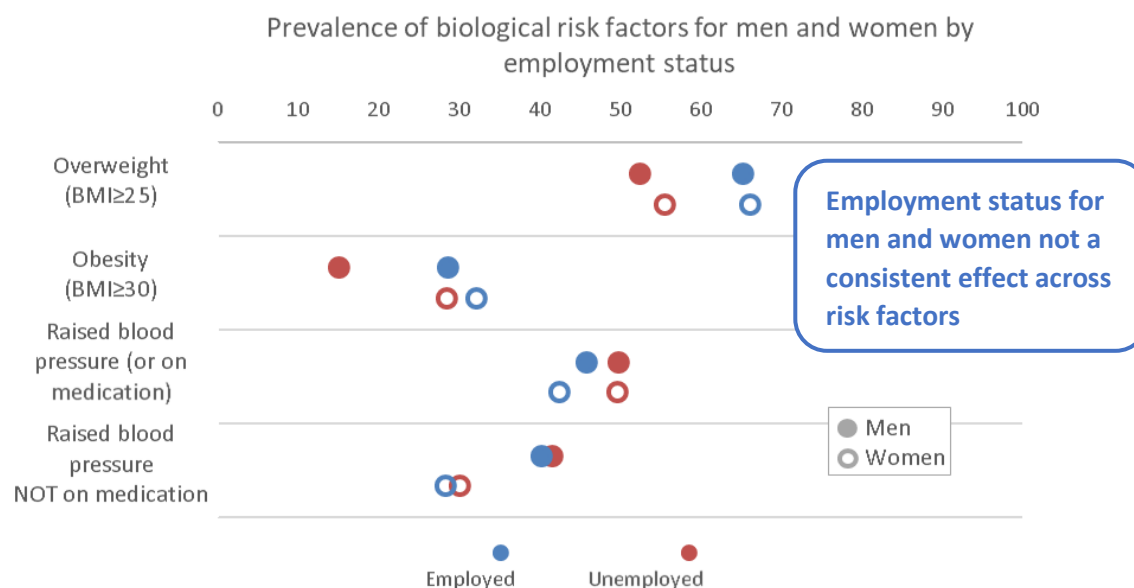
By employment status, it can be seen that there is more variance among men and behavioural risk factors than among women. In particular, tobacco and alcohol use are higher for employed men than unemployed. For women there is less variance which indicates that employment status may not have a strong effect on behavioural risk factors for women.

This is similar to the trend observed in the larger population; however, with the migrant population there is less of a difference in employment status for women.



Prevalence of behavioural risk factors by employment status			
		Employed	Unemployed
Current tobacco use	Men	56.5% (50.3-62.7)	40.4% (26.6-54.3)
	Women	0.8%* (0.4-1.3)	1.0%* (0.2-1.8)
Alcohol (current drinker)	Men	69.7% (57.4-82.1)	50.5% (35.7-65.2)
	Women	23.1%* (14.6-31.6)	21.5%* (13.5-29.6)
Alcohol (heavy episodic)	Men	63.9% (52.6-75.1)	36.7% (22.6-50.9)
	Women	4.3%* (0.0-10.2)	3.4%* (1.3-5.4)
Unhealthy diet (<5 fruits/vegs)	Men	87.5% (79.5-95.6)	89.3% (83.6-95.0)
	Women	83.0% (77.4-88.7)	92.1% (89.6-94.5)
Insufficient physical activity	Men	11.3% (3.8-18.8)	30.1% (21.6-38.6)
	Women	18.4% (11.7-25.1)	30.3% (15.8-44.8)

For biological risk factors, however, employment status does not create a clear trend across risk factors for men or women.



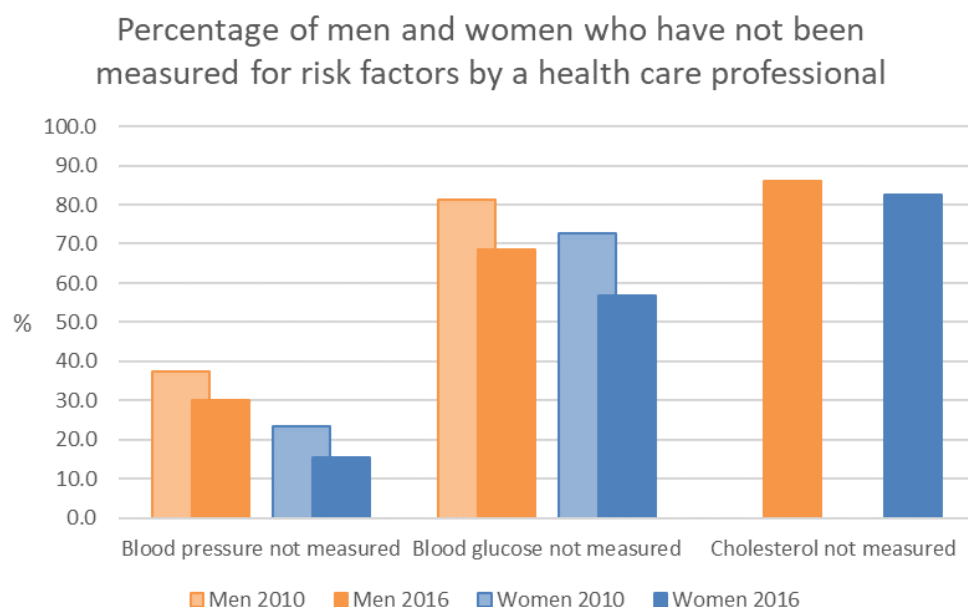
Prevalence of biological risk factors by employment status			
		Employed	Unemployed
Overweight (BMI ≥ 25)	Men	65.4% (55.5-75.2)	52.6% (42.5-62.6)
	Women	66.1% (62.5-69.7)	55.5% (46.1-64.9)
Obesity (BMI ≥ 30)	Men	28.7% (20.6-36.7)	15.1% (9.6-20.7)
	Women	32.2% (28.6-35.7)	28.5%* (20.4-36.5)
Raised blood pressure (or on medication)	Men	45.9% (31.1-60.6)	49.9% (32.5-67.2)
	Women	42.4% (36.3-48.5)	49.7% (35.7-63.7)
Raised blood pressure NOT on medication	Men	40.3% (24.2-56.3)	41.6% (25.0-58.3)
	Women	28.4% (24.7-32.2)	30.1% (17.8-42.4)

Key messages for risk factors

1. While significantly lower percentages of women engage in most behavioural risk factors than men in most age groups, significantly higher percentages of women than men are found with most of the biological risk factors in the older age group.
2. Although high prevalence of behavioural and biological risk factors for both men and women is concerning, the greater prevalence for women in the older age groups despite lower prevalence in behavioural risk factors demands attention.
3. This showcases that men and women not only engage differently in behavioural risk factors but also have different risk factor trajectories over the life-course.
4. Higher levels of male premature mortality could also contribute to lower prevalence of risk factors among male survivors at older ages.
5. The additional demographic variables of geographic location, education level, and employment status further showcase the differences not only between but among men and women as well as the changes from 2010 to 2016.
6. Most importantly, prevalence of both behavioural and biological risk factors can vary in these subgroups of men and women, and these subgroups are not equal in their relation to the risk factors.
7. Therefore, identifying groups most at risk necessarily requires disaggregation of data and a gender analysis of not only sex but age and other relevant demographic variables.
8. While similar trends in the differences between men and women exist in the migrant population, there are important differences, including higher prevalence with some risk factors for both men and women, that require attention.

Differences in the way men and women access services

There are significant differences between men and women in accessing services. A higher percentage of men reported never having had their blood pressure and blood glucose measured by a health care professional. Comparing the 2016 STEPS survey to 2010, the percentages of both men and women not having been measured decreased for blood pressure and blood glucose. Data on cholesterol measuring was not available from the 2010 survey.

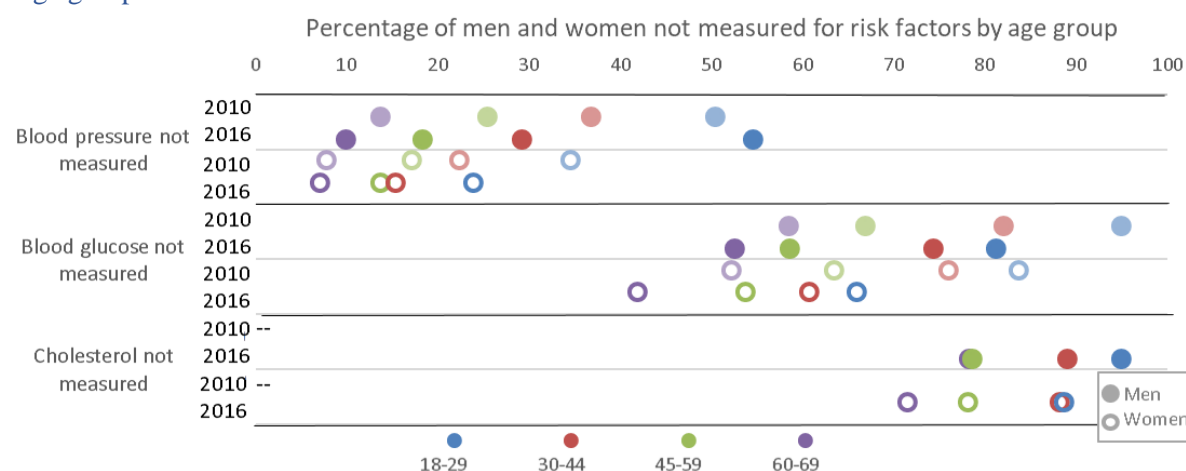


Percentage not measured for risk factors by a health care professional				
	Men		Women	
	2010	2016	2010	2016
Blood pressure not measured	37.4% (32.8-41.9)	30.1% (26.9-33.3)	23.3%* (20.4-26.3)	15.4%* (13.6-17.3)
Blood glucose not measured	81.3% (78.7-84.0)	68.7% (65.6-71.7)	72.8%* (70.8-74.7)	56.7%* (54.2-59.1)
Cholesterol not measured	-% (-)	86.2% (84.0-88.3)	-% (-)	82.5% (80.6-84.3)

Differences in men and women not measured for risk factors

An obvious improvement is visible for both men and women being measured for blood pressure and blood glucose between 2010 and 2016. To better understand who is not accessing services, these groups can be examined further to identify target populations that may be facing barriers in accessing services.

Age group

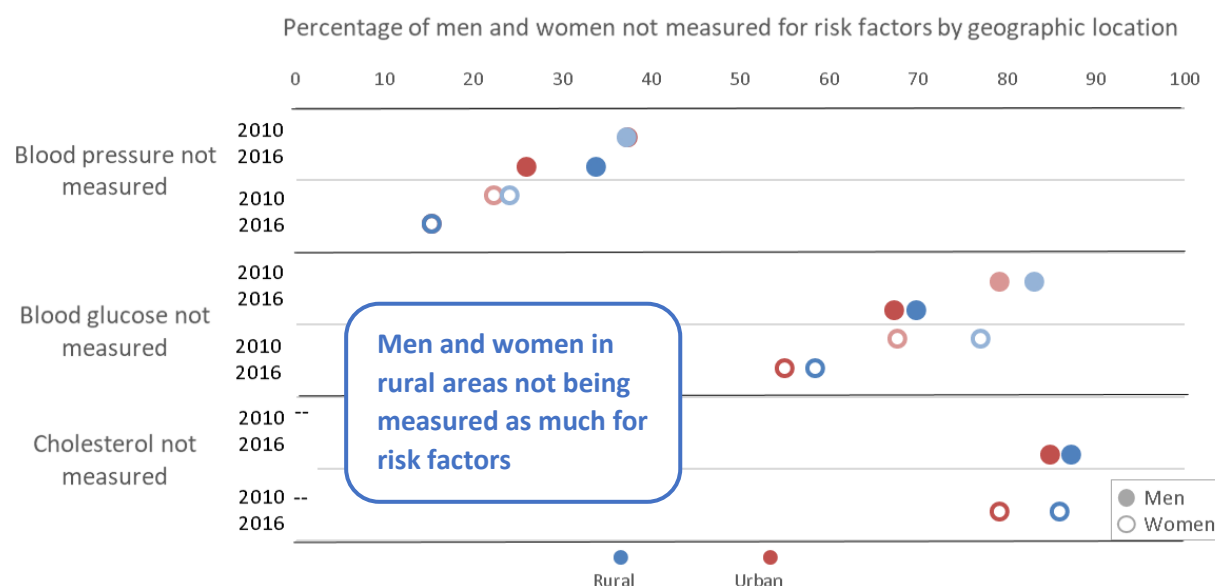


Percentage not measured for risk factors by age group									
		Age 18-29		Age 30-44		Age 45-59		Age 60-69	
		2010	2016	2010	2016	2010	2016	2010	2016
Blood pressure not measured	Men	50.5% (43.5-57.4)	54.7% (47.0-62.3)	36.9% (30.4-43.4)	29.3% (23.0-35.6)	25.5% (20.6-30.5)	18.4% (13.5-23.3)	13.7% (8.7-18.6)	10.0% (6.1-13.8)
	Women	34.6%* (28.4-40.9)	23.9%* (18.5-29.2)	22.4%* (18.8-26.0)	15.4%* (12.4-18.4)	17.2%* (14.4-20.1)	13.7%* (11.2-16.3)	7.8% (5.5-10.1)	7.1% (5.0-9.2)
Blood glucose not measured	Men	95.0% (92.7-97.3)	81.3% (75.2-87.3)	82.1% (77.6-86.7)	74.5% (69.1-80.0)	66.9% (62.3-71.5)	58.7% (53.6-63.8)	58.5% (51.6-65.5)	52.7% (45.7-59.6)
	Women	83.7%* (79.8-87.7)	66.0%* (60.7-71.4)	76.1% (73.3-78.9)	60.8%* (56.5-65.2)	63.5% (60.4-66.6)	53.8% (49.9-57.6)	52.2% (47.9-56.5)	41.9%* (37.8-45.9)
Cholesterol not measured	Men	-% (-)	95.1% (92.4-97.8)	-% (-)	89.1% (85.3-92.9)	-% (-)	78.7% (74.5-83.0)	-% (-)	78.4% (72.0-84.8)
	Women	-% (-)	88.7%* (85.2-92.3)	-% (-)	88.2% (85.6-90.8)	-% (-)	78.2% (75.1-81.3)	-% (-)	71.6% (67.2-76.0)

It is not surprising that the percentages of both men and women who have not been measured for these risk factors decreases with each age group. However, the benefit of this analysis is to see the significant differences between men and women at each age group as well as which age groups are significantly different from one another for both men and women. This reveals that the trends in accessing services are different between men and women across the life-course. Additionally, it can be seen that the improvement in measuring men and women is with nearly every age group across all risk factors.

Geographic location – urban and rural

Further differences can be seen when those not being measured for risk factors are examined by geographic location.



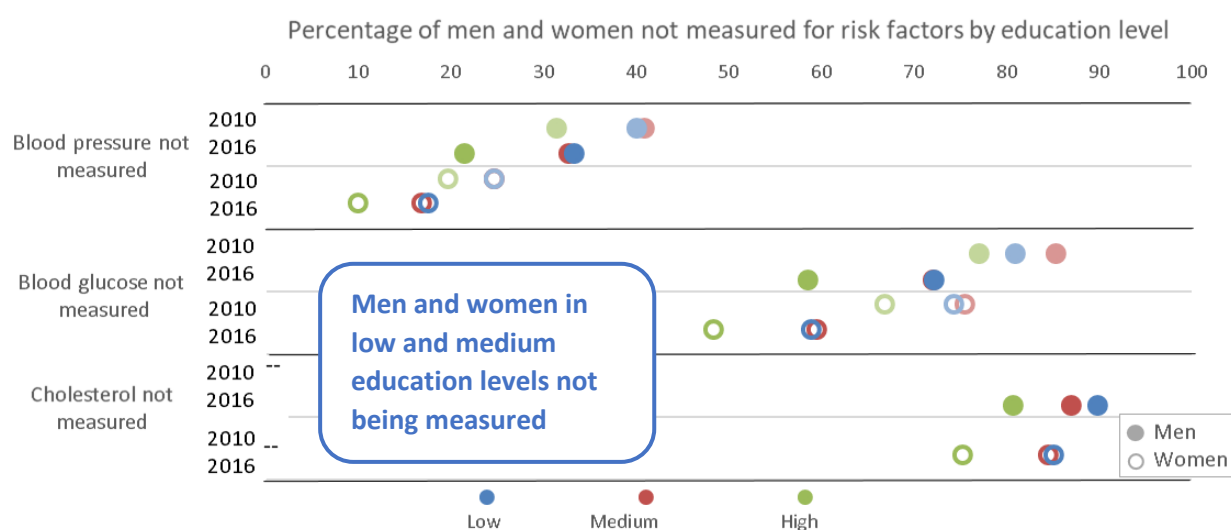
Percentage not measured for risk factors by geographic location					
		Rural		Urban	
		2010	2016	2010	2016
Blood pressure not measured	Men	37.3% (30.2-44.4)	33.9% (28.8-38.9)	37.5% (32.2-42.7)	26.1% (22.0-30.2)
	Women	24.1%* (20.2-28.0)	15.4%* (12.7-18.2)	22.4%* (17.9-26.9)	15.4%* (13.0-17.9)
Blood glucose not measured	Men	83.1% (79.3-86.9)	69.9% (65.6-74.2)	79.2% (75.5-82.9)	67.4% (63.2-71.7)
	Women	77.1%* (74.8-79.5)	58.5%* (54.9-62.1)	67.7%* (64.5-70.8)	55.0%* (51.6-58.4)

Cholesterol not measured	Men	-% (-)	87.3% (84.3-90.3)	-% (-)	85.0% (81.9-88.0)
	Women	-% (-)	86.0% (83.5-88.6)	-% (-)	79.2%* (76.8-81.6)

Not only are there differences between men and women in accessing services but adding geographic location reveals the trend that men and women in rural areas are generally not being measured at a higher percentage than in urban areas. In both rural and urban areas, improvement can be seen between 2010 and 2016 for both men and women.

Education level

Examining differences in those not being measured for risk factors by education level can further add to an understanding of who is not accessing services.

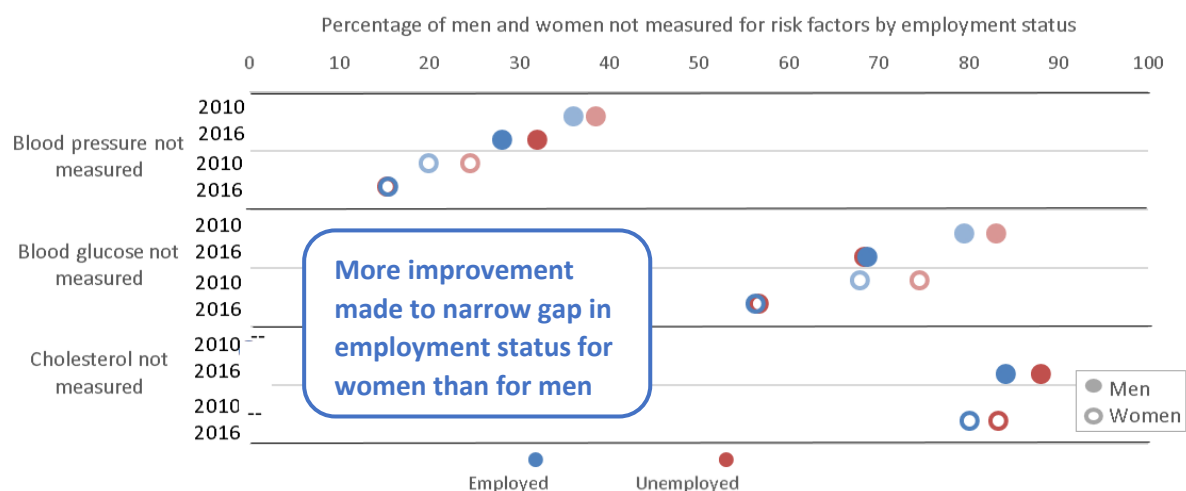


Percentage not measure for risk factors by education level							
		Low		Medium		High	
		2010	2016	2010	2016	2010	2016
Blood pressure not measured	Men	40.1% (33.5-46.7)	33.4% (26.5-40.3)	41% (34.9-47.1)	32.8% (27.8-37.9)	31.5% (25.5-37.6)	21.6% (15.9-27.4)
	Women	24.7%* (19.9-29.6)	17.6%* (14.3-20.9)	24.7%* (21.1-28.3)	16.9%* (14.1-19.8)	19.8%* (15.8-23.9)	10.1%* (7.3-12.9)
Blood glucose not measured	Men	81.0% (76.1-85.9)	72.3% (66.7-77.8)	85.4% (82.0-88.7)	72.1% (67.6-76.7)	77.1% (73.2-81.1)	58.7% (52.5-64.9)
	Women	74.4% (71.5-77.3)	58.9%* (54.2-63.6)	75.5%* (72.7-78.3)	59.6%* (56.3-62.8)	66.9%* (63.4-70.4)	48.4%* (43.8-53.0)
Cholesterol not measured	Men	-% (-)	89.9% (86.6-93.3)	-% (-)	87.1% (84.1-90.0)	-% (-)	80.8% (76.2-85.4)
	Women	-% (-)	85.1% (82.0-88.2)	-% (-)	84.5% (82.1-87.0)	-% (-)	75.3% (71.6-79.0)

Education level has a consistent effect on both men and women in being measured for risk factors by a health care professional. Higher percentages of both men and women in the low and medium education levels have not been measured across the different risk factors. Again, improvement from 2010 to 2016 can be seen at all education levels, but the improvement appears to be greater for those in the high education level.

Employment status

In addition to education level, employment status may also identify barriers to accessing services, and it may be different for men and women.



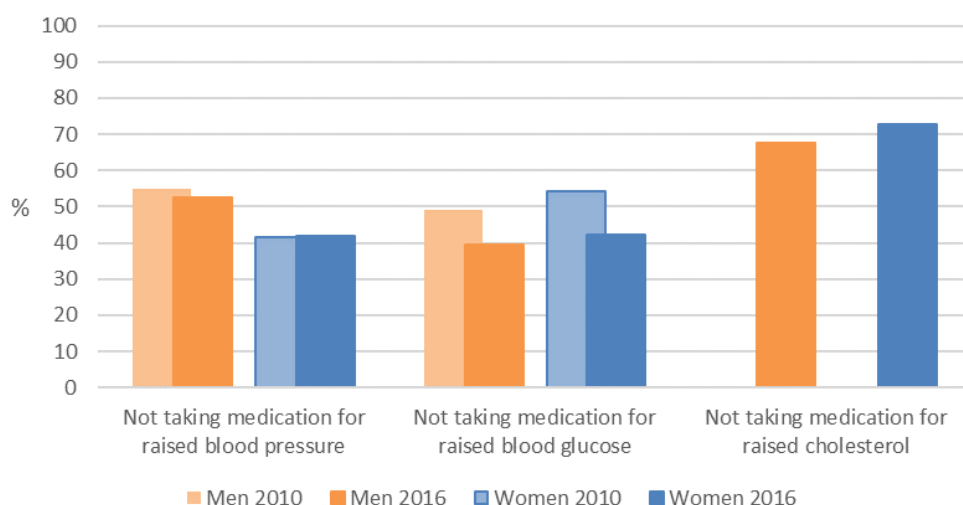
Percentage not measured for risk factors by employment status					
		Employed		Unemployed	
		2010	2016	2010	2016
Blood pressure not measured	Men	36.1% (30.6-41.6)	28.2% (23.6-32.9)	38.6% (33.2-44.1)	32.1% (27.2-37.1)
	Women	20.0%* (16.0-24.0)	15.5%* (11.8-19.1)	24.6%* (21.3-27.9)	15.4%* (13.3-17.5)
Blood glucose not measured	Men	79.5% (75.7-83.3)	68.8% (64.2-73.5)	83.1% (80.1-86.0)	68.5% (64.2-72.8)
	Women	68.0%* (64.3-71.6)	56.4%* (52.2-60.7)	74.6%* (72.4-76.8)	56.7%* (53.9-59.6)
Cholesterol not measured	Men	-% (-)	84.2% (80.9-87.5)	-% (-)	88.2% (85.2-91.1)
	Women	-% (-)	80.1% (77.1-83.1)	-% (-)	83.3% (81.1-85.5)

While overall the trend for men is that higher percentages of those not being measured are in the unemployed group, the differences are small, and improvements can be seen from 2010 to 2016 in both the employed and unemployed groups. For women there is no difference across risk factors. Employment status may not have an effect on men and women being measured for risk factors. What can be seen is more of an improvement on narrowing the difference between employed and unemployed being measured from 2010 to 2016 for women than for men.

Differences in receiving treatment

In addition to identifying groups not accessing services, identifying those who have been measured and even diagnosed with these risk factors but are not currently receiving treatment are also of concern.

Percentage of men and women not taking medication for diagnosed risk factors

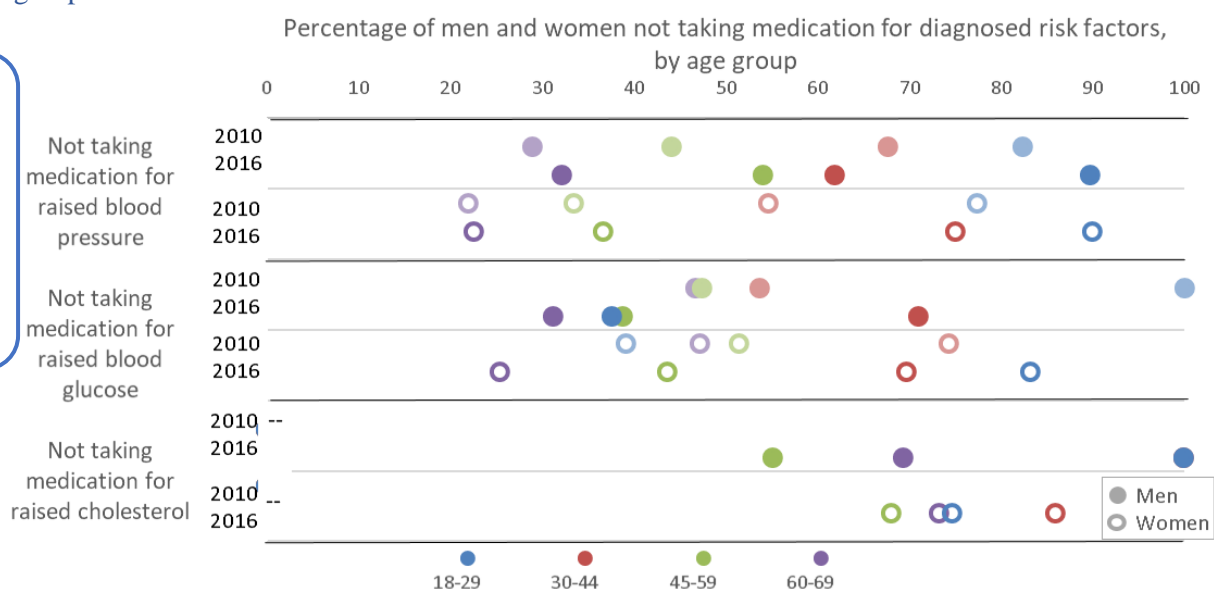


Percentage of men and women not taking medication for diagnosed risk factors				
Not taking medication for:	Men		Women	
	2010	2016	2010	2016
Raised blood pressure	55.1% (49.5-60.8)	52.5% (46.4-58.7)	41.4%* (37.9-45.0)	41.9%* (38.2-45.6)
Raised blood glucose	49.0% (38.2-59.8)	39.6% (26.2-53.0)	54.2% (46.1-62.3)	42.1% (33.4-50.7)
Raised cholesterol	-% (-)	67.7% (55.7-79.6)	-% (-)	72.9% (66.2-79.7)

The smaller sample sizes of those who have been diagnosed with these risk factors but are not receiving treatment makes it difficult to see significant differences. It is important, therefore, to identify trends that emerge when these are examined with the same demographic groupings.

Age group

Younger age groups not taking medication even more than older groups

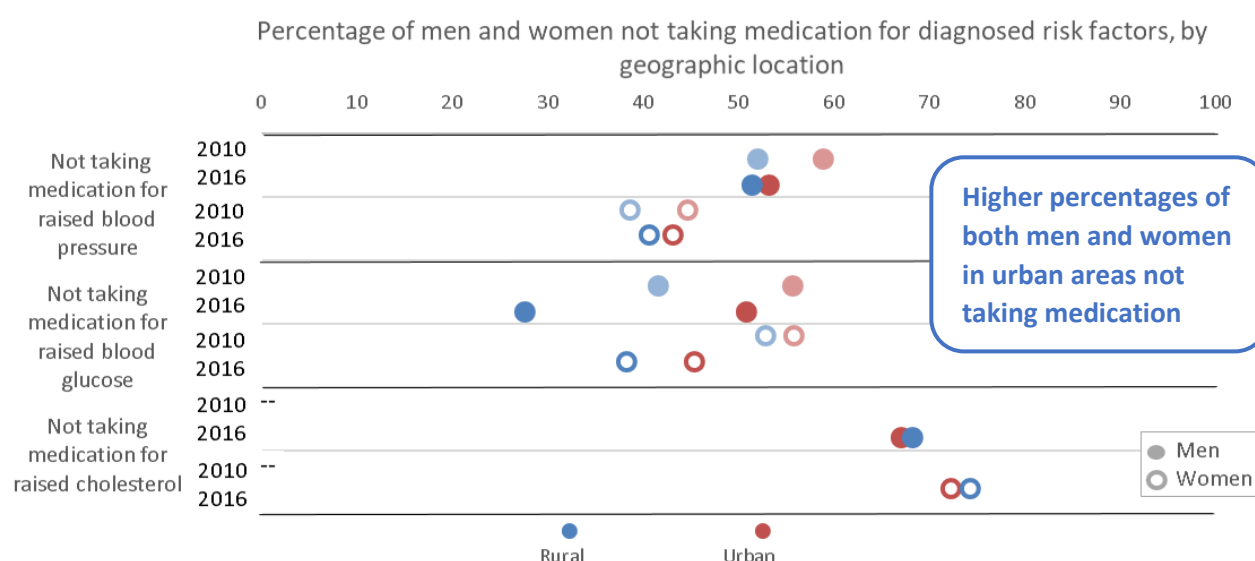


Percentage not taking medication for diagnosed risk factors by age						
			Age 18-29	Age 30-44	Age 45-59	Age 60-69
Not taking medication for raised blood pressure	Men	2010	82.4% (69.3-95.4)	67.7% (58.6-76.9)	44.1% (37.0-51.2)	29% (20.3-37.7)
		2016	89.8% (76.8-100.0)	61.9% (47.0-76.8)	54.1% (45.2-63.0)	32.2% (22.9-41.4)
	Women	2010	77.4% (67.9-86.8)	54.7%* (47.3-62.1)	33.5%* (29.0-38.0)	22.0% (17.8-26.2)
		2016	89.9% (80.9-98.9)	75.0%* (66.5-83.5)	36.6%* (31.2-41.9)	22.6%* (18.4-26.9)
Not taking medication for raised blood glucose	Men	2010	100% (100.0-100.0)	53.7% (24.7-82.8)	47.4% (33.9-60.8)	46.7% (29.6-63.9)
		2016	37.7% (0.0-95.1)	71.1% (31.4-100.0)	38.9% (20.5-57.2)	31.3% (14.3-48.3)
	Women	2010	39.1%* (0.0-93.4)	74.3% (54.0-94.6)	51.5% (41.4-61.7)	47.2% (36.8-57.6)
		2016	83.2%* (51.4-100.0)	69.7% (45.8-93.7)	43.7% (31.1-56.2)	25.4% (15.2-35.6)
Not taking medication for raised cholesterol	Men	2010	-% (-)	-% (-)	-% (-)	-% (-)
		2016	100% (100.0-100.0)	100% (100.0-100.0)	55.2% (38.1-72.2)	69.4% (46.6-92.1)
	Women	2010	-% (-)	-% (-)	-% (-)	-% (-)
		2016	74.7%* (28.9-100.0)	85.9%* (71.8-100.0)	68.0% (56.3-79.7)	73.3% (64.1-82.4)

The trends apparent in this analysis are that higher percentages of both men and women in the younger age groups are not taking medication for diagnosed risk factors, and higher percentages of older men than older women are not taking medication. These trends vary, once again, by risk factor.

Geographic location – urban and rural

By geographic location, further differences can be observed in those not receiving treatment.

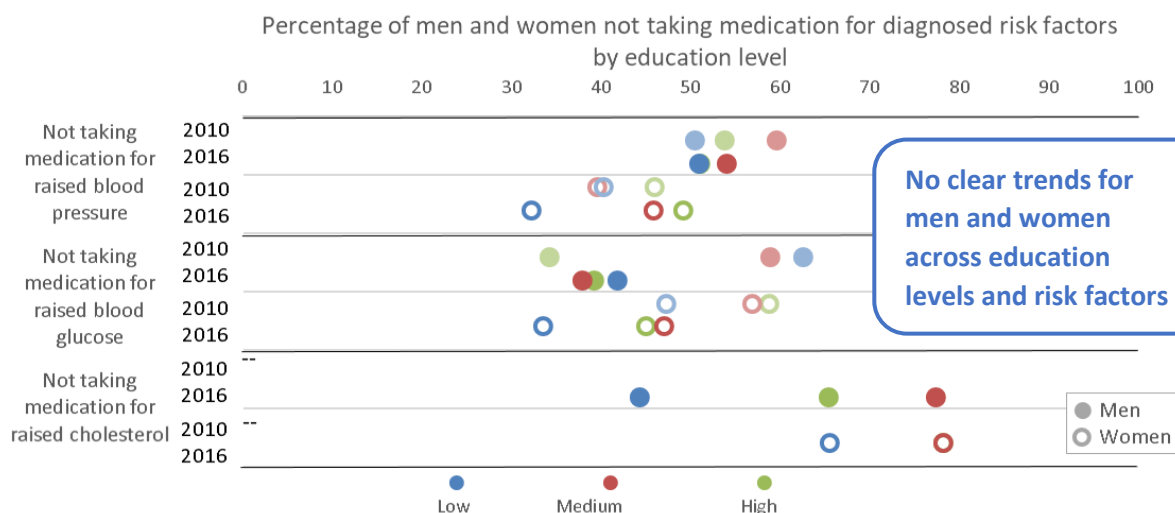


Percentage not taking medication for diagnosed risk factors by geographic location					
		Rural		Urban	
		2010	2016	2010	2016
Not taking medication for raised blood pressure	Men	52.1% (44.3-59.9)	51.6% (43.0-60.2)	59% (50.9-67.1)	53.3% (44.9-61.7)
	Women	38.7% (33.9-43.5)	40.7% (35.5-45.9)	44.8% (39.4-50.1)	43.2% (37.8-48.5)
Not taking medication for raised blood glucose	Men	41.7% (25.9-57.4)	27.7% (8.8-46.6)	55.7% (41.1-70.2)	50.9% (32.2-69.5)
	Women	52.9% (40.6-65.3)	38.3% (23.4-53.1)	55.9% (46.5-65.3)	45.5% (35.4-55.5)
Not taking medication for raised cholesterol	Men	-% (-)	68.4% (50.9-85.8)	-% (-)	67.2% (51.1-83.3)
	Women	-% (-)	74.3% (63.9-84.6)	-% (-)	72.3% (63.7-80.8)

By geographic location, higher percentages of both men and women not taking medication for diagnosed risk factors are found in urban areas for blood pressure and blood glucose.

Education level

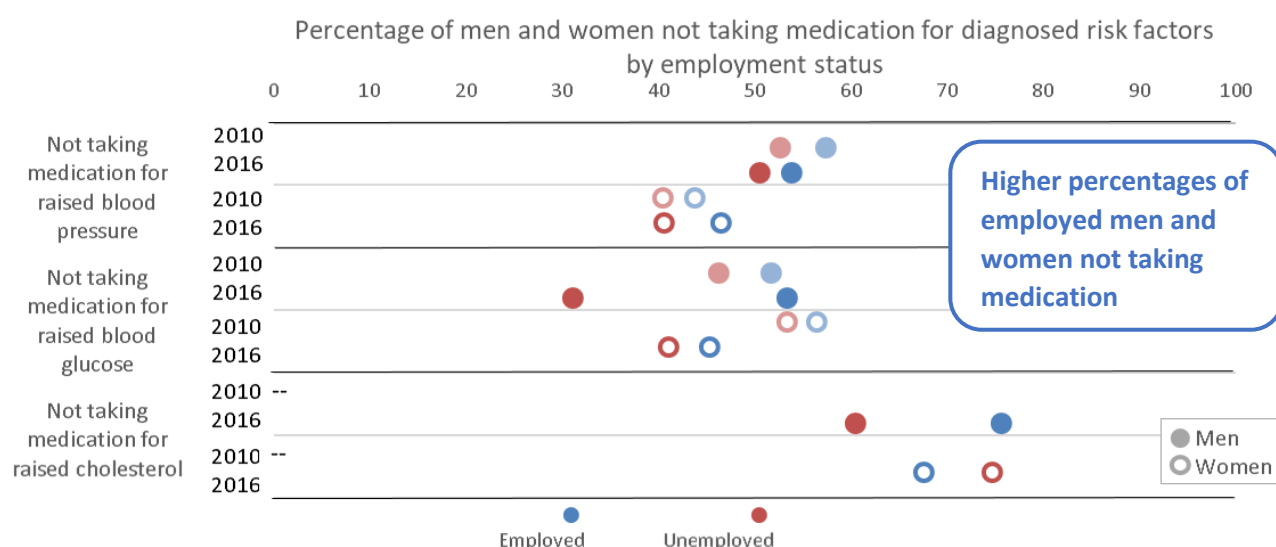
While the low and medium education levels for both men and women generally had higher percentages of those never having been measured for risk factors, the higher percentages of those not taking medication are found more in the high and medium levels for men and women. Therefore, a lower education level may be more of a barrier to accessing services than a barrier to taking medication once diagnosed.



Percentage not taking medication for diagnosed risk factors by education level							
		Low		Medium		High	
		2010	2016	2010	2016	2010	2016
Not taking medication for raised blood pressure	Men	40.1% (33.5-46.7)	33.4% (26.5-40.3)	41.0% (34.9-47.1)	32.8% (27.8-37.9)	31.5% (25.5-37.6)	21.6% (15.9-27.4)
	Women	24.7%* (19.9-29.6)	17.6%* (14.3-20.9)	24.7%* (21.1-28.3)	16.9%* (14.1-19.8)	19.8%* (15.8-23.9)	10.1%* (7.3-12.9)
Not taking medication for raised blood glucose	Men	81.0% (76.1-85.9)	72.3% (66.7-77.8)	85.4% (82.0-88.7)	72.1% (67.6-76.7)	77.1% (73.2-81.1)	58.7% (52.5-64.9)
	Women	74.4% (71.5-77.3)	58.9%* (54.2-63.6)	75.5%* (72.7-78.3)	59.6%* (56.3-62.8)	66.9%* (63.4-70.4)	48.4%* (43.8-53.0)
Not taking medication for raised cholesterol	Men	-% (-)	89.9% (86.6-93.3)	-% (-)	87.1% (84.1-90.0)	-% (-)	80.8% (76.2-85.4)
	Women	-% (-)	85.1% (82.0-88.2)	-% (-)	84.5% (82.1-87.0)	-% (-)	75.3% (71.6-79.0)

Employment status

By employment status, some additional differences between men and women and among men and women were found.



Percentage not taking medication for diagnosed risk factors by employment status					
		Employed		Unemployed	
		2010	2016	2010	2016
Not taking medication for raised blood pressure	Men	36.1% (30.6-41.6)	28.2% (23.6-32.9)	38.6% (33.2-44.1)	32.1% (27.2-37.1)
	Women	20.0%* (16.0-24.0)	15.5%* (11.8-19.1)	24.6%* (21.3-27.9)	15.4%* (13.3-17.5)
Not taking medication for raised blood glucose	Men	79.5% (75.7-83.3)	68.8% (64.2-73.5)	83.1% (80.1-86.0)	68.5% (64.2-72.8)
	Women	68.0%* (64.3-71.6)	56.4%* (52.2-60.7)	74.6%* (72.4-76.8)	56.7%* (53.9-59.6)
Not taking medication for raised cholesterol	Men	-% (-)	84.2% (80.9-87.5)	-% (-)	88.2% (85.2-91.1)
	Women	-% (-)	80.1% (77.1-83.1)	-% (-)	83.3%* (81.1-85.5)

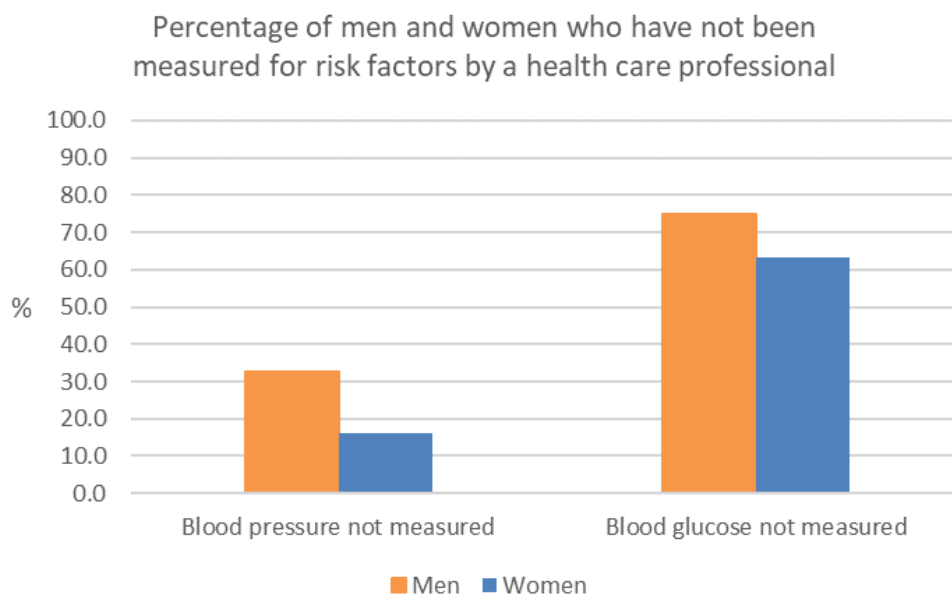
Across risk factors, a trend of higher percentages of men and women not taking medication are among the employed group rather than the unemployed group. Employment status also appears to have more of an influence on men and women not taking medication for raised blood glucose and cholesterol than for raised blood pressure.

Migrant access to health services

An examination of migrant access to health services in a similar analysis allows for not only a comparison among gender variables in the migrant population but also a comparison to the larger population of Georgia. Migrants typically have poorer access to health services which affects health outcomes, and this includes NCDs.⁹

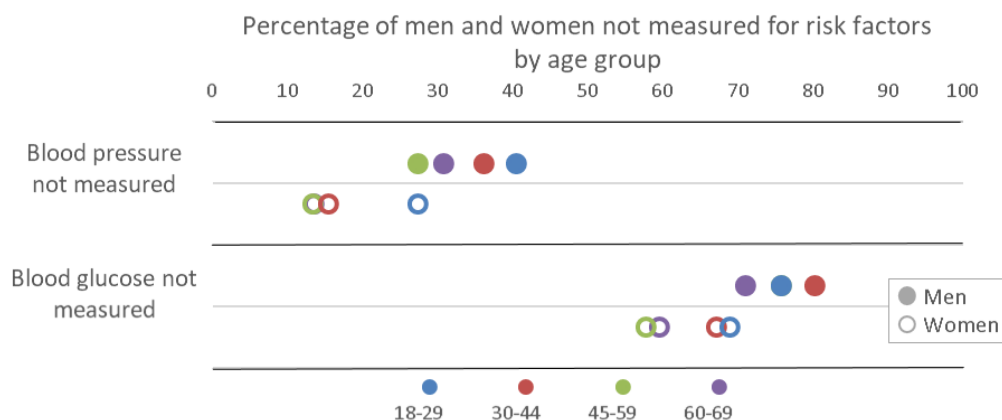
Differences in being measured for risk factors

A higher percentage of men have not been measured for these risk factors than women in the migrant population, and the percentages for men and women not measured for blood pressure are similar to the percentages found in the larger population while the migrant men and women are higher for blood glucose not measured.



Percentage not measured for risk factors by a health care professional	Men	Women
Blood pressure not measured	32.7% (25.2-40.2)	16.2%* (12.5-20.0)
Blood glucose not measured	75.0% (70.3-79.7)	63.4%* (58.9-67.9)

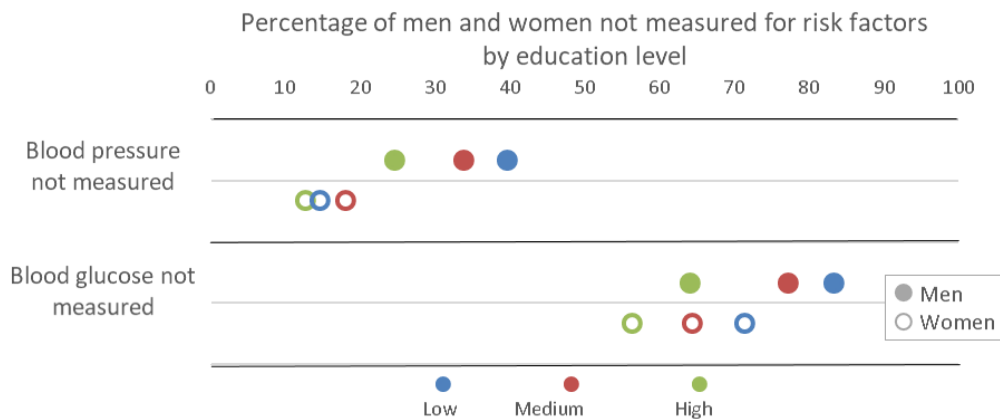
Further examination by age group, education level, and employment status reveal more about who is not accessing services.



Percentage not measured for risk factors by age		18-29	30-44	45-59	60-69
Blood pressure not measured	Men	40.6% (27.6-53.7)	36.3% (27.2-45.4)	27.5% (19.7-35.3)	30.9% (8.5-53.3)
	Women	27.5% (23.1-32.0)	15.5%* (12.6-18.5)	13.5%* (11.5-15.6)	13.6% (4.6-22.5)
Blood glucose not measured	Men	76.0% (71.2-80.8)	80.4% (68.0-92.8)	75.9% (72.4-79.4)	71.1% (54.4-87.8)
	Women	69.0% (61.0-77.1)	67.3%* (65.2-69.4)	57.8%* (48.1-67.4)	59.6% (45.1-74.0)

While the percentages overall of men and women not measured in the migrant population are not very different from the larger population, by age it can be seen that there is less variance between age groups. In this case, it reveals that access is not improving across age groups to the extent that the larger population is.

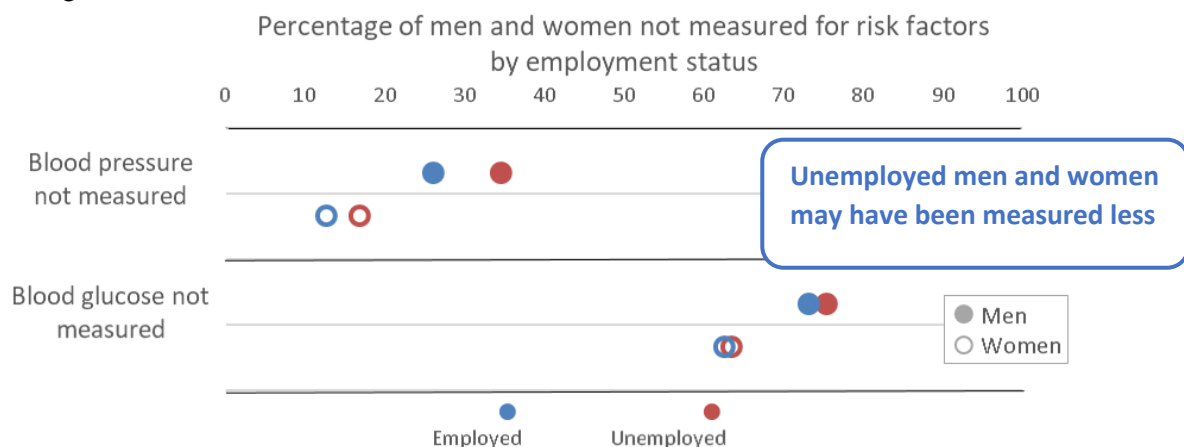
By education level, a trend similar to the larger population can be seen among the migrant population. The highest percentage of men and women not being measured for risk factors in the migrant population are found in the low education level.



Men and women in the low education level being measured for risk factors least

Percentage not measured for risk factors by education level				
		Low	Medium	High
Blood pressure not measured	Men	39.8% (10.8-68.7)	34% (26.9-41.0)	24.7% (18.3-31.0)
	Women	14.7%* (4.7-24.7)	18.1%* (12.2-24.0)	12.7%* (9.8-15.6)
Blood glucose not measured	Men	83.5% (78.3-88.8)	77.3% (71.2-83.4)	64.2% (54.6-73.8)
	Women	71.4%* (65.2-77.7)	64.5%* (59.3-69.7)	56.4% (51.0-61.7)

A clearer trend of unemployed men and women not being measured for risk factors appears among the migrant population; however, the differences are not statistically significant and do not create a strong trend.



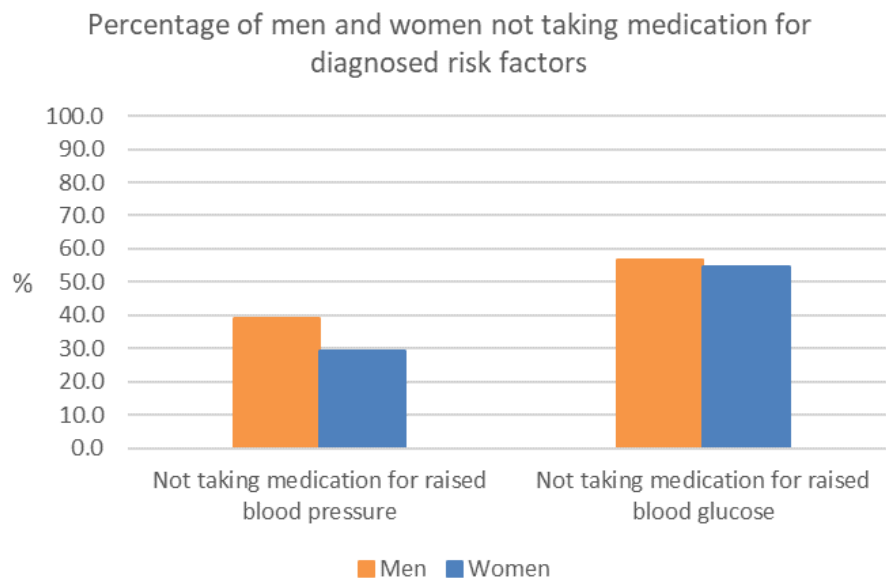
Unemployed men and women may have been measured less

Percentage not measured for risk factors by employment status			
		Employed	Unemployed
Blood pressure not measured	Men	26.3% (16.3-36.2)	34.7% (23.5-46.0)
	Women	12.7%* (6.8-18.6)	16.9%* (12.8-21.0)
Blood glucose not measured	Men	73.3% (60.3-86.3)	75.6% (69.0-82.2)
	Women	62.7% (54.0-71.5)	63.6%* (57.3-69.9)

Differences in receiving treatment

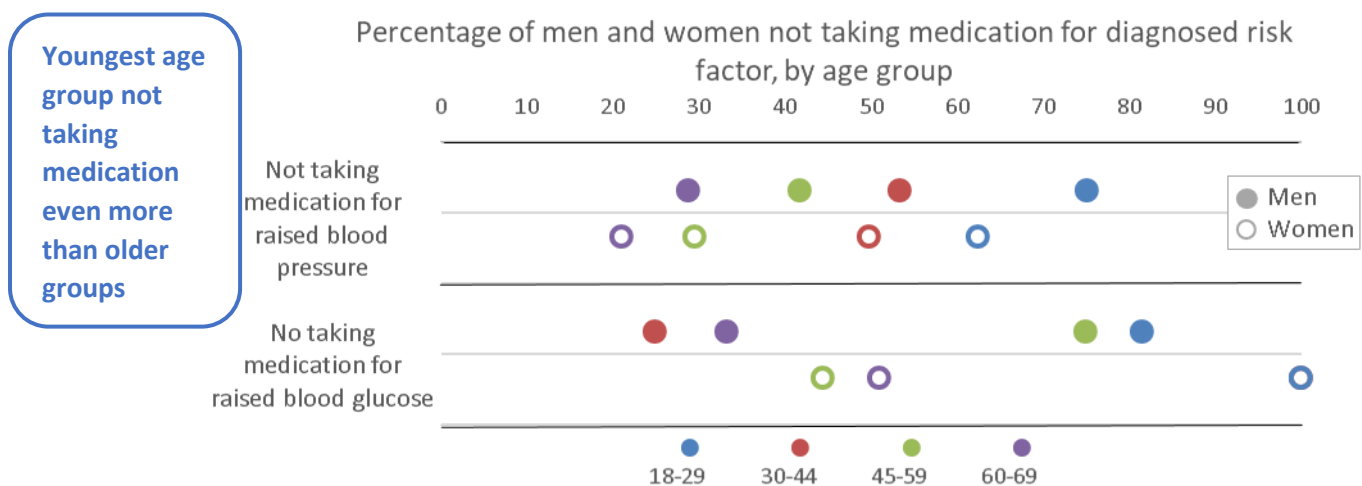
The smaller sample sizes of those who have been diagnosed with these risk factors but are not receiving treatment again makes it difficult to determine statistically significant differences. It is

important, therefore, to identify trends that emerge when these are examined with the same demographic groupings of age, education level, and employment status.



Percentage of men and women not taking medication for diagnosed risk factors	Men	Women
Not taking medication for raised blood pressure	39.3% (29.3-49.3)	29.3% (24.1-34.6)
Not taking medication for raised blood glucose	56.7% (30.2-83.1)	54.7% (39.2-70.2)

While a higher percentage of men are not taking medication for raised blood pressure, as is found in the larger population, a higher percentage of men is also not taking medication for raised blood glucose which is different than the larger population. A closer look at groups within men and women can further add an understanding to those who are not currently taking medication.

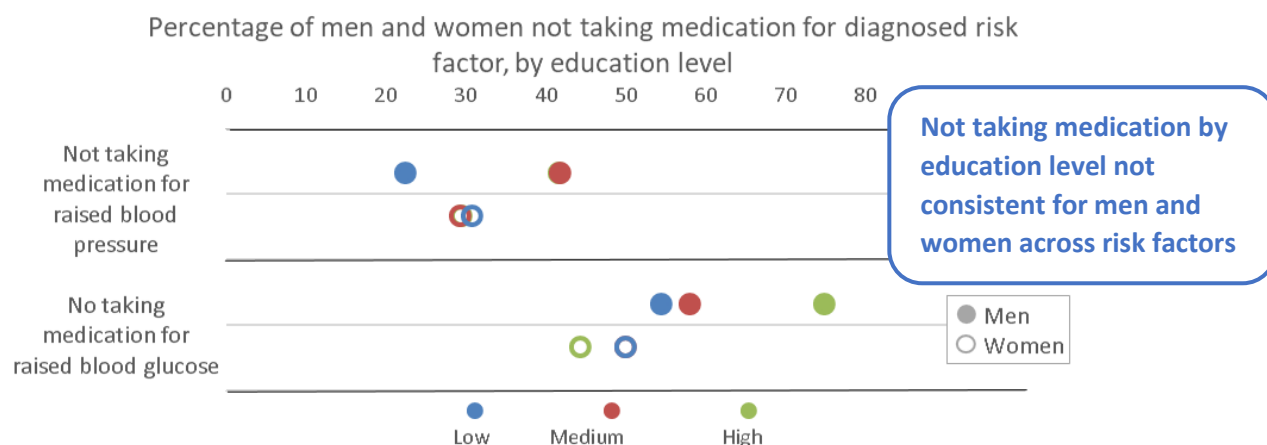


Percentage of men and women not taking medication for diagnosed risk factors, by age		18-29	30-44	45-59	60-69
Not taking medication for diagnosed raised blood pressure	Men	75.2% (49.9-100.0)	53.4% (38.1-68.8)	41.8% (26.6-57.1)	28.9% (16.8-40.9)
	Women	62.5% (47.4-77.6)	49.8% (43.5-56.1)	29.5% (22.5-36.5)	21.0% (8.7-33.3)

Not taking medication for diagnosed raised blood glucose	Men	81.5% (27.0-100.0)	25% (0.1-49.9)	75% (53.4-96.6)	33.3% (33.3-33.3)
	Women	100% (100.0-100.0)	100% (100.0-100.0)	44.4% (19.9-69.0)	51% (23.0-79.1)

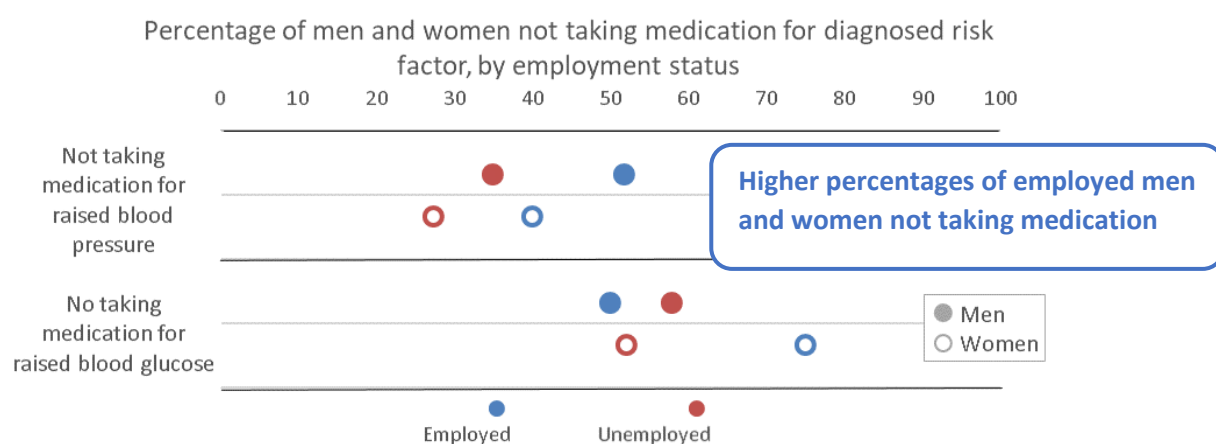
For both men and women, the highest percentage of those not taking medications for diagnosed for risk factors is in the 18-29 age group. After that, differences are dependent on the risk factor, age group, and sex.

By education level, the lowest percentage is found in the low education level for men, but the same is not found for women. Overall, not taking medication varies more by education level for men than for women.



Percentage of men and women not taking medication for diagnosed risk factors, by education level				
		Low	Medium	High
Not taking medication for diagnosed raised blood pressure	Men	22.6% (0.0-45.8)	41.9% (30.1-53.6)	41.9% (29.2-54.6)
	Women	30.8% (15.2-46.4)	29.3% (21.3-37.4)	28.1% (16.7-39.5)
Not taking medication for diagnosed raised blood glucose	Men	54.6% (34.7-74.5)	58.2% (15.4-100.0)	56.6% (30.2-83.1)
	Women	50.0% (0.0-100.0)	50.0% (25.7-74.3)	61.2% (38.5-83.8)

Similar to the larger population, in the migrant population the higher percentages of men and women not taking medication is found among the employed group. The exception is with men not taking medication for raised blood glucose.



Percentage of men and women not taking medication for diagnosed risk factors, by employment status			
		Employed	Unemployed
Not taking medication for diagnosed raised blood pressure	Men	51.8% (34.3-69.4)	35.0% (26.3-43.8)
	Women	40.0% (35.1-44.9)	27.4% (20.8-34.1)
Not taking medication for diagnosed raised blood glucose	Men	50.0% (0.2-99.8)	57.9% (27.0-88.7)
	Women	75.0% (36.3-100.0)	52.1% (34.0-70.1)

Lifestyle advice given by a health care professional

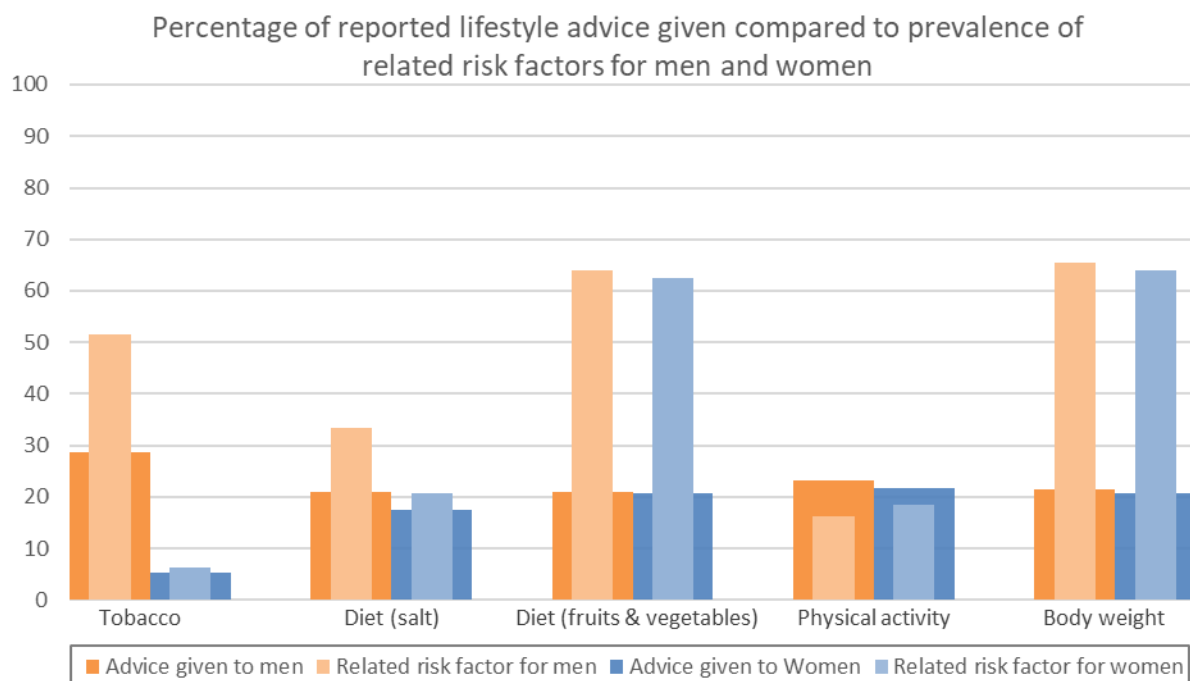
Of the six topics covered in the survey in lifestyle advice, a significantly higher percentage of men report being given advice on two of the topics (tobacco and reducing salt). On the remaining topics, there is no significant difference between men and women and lifestyle advice given.

These topics in lifestyle advice can be compared with the prevalence of the related risk factors (as explained in the table below) to examine more differences between men and women.

Lifestyle advice topic	Related risk factor
Quit using tobacco or don't start	Current tobacco use
Reduce salt in your diet	Unhealthy diet (added salt)
Eat at least five servings of fruit and/or vegetables each day	Unhealthy diet (<5 fruits/vegs)
Start or do more physical activity	Insufficient physical activity
Maintain a healthy body weight or lose weight	Overweight (BMI \geq 25)

In two of these risk factors associated with the lifestyle advice topics, the prevalence with men is significantly higher than women and the remaining are not significantly different. On tobacco, a significantly higher percentage of men report being counselled (28.8%) than women (5.4%), but that percentage is still virtually half the prevalence of men who use tobacco (57.0%) whereas women report being counselled at nearly the same percentage as their prevalence with the risk factor (7.0%). A significantly higher percentage of men reportedly add salt to their food (33.4%) than women (20.6%) and a significantly higher percentage are given advice on it than women; however, a significantly lower percentage of men are given advice compared to the prevalence of the risk factor. With regards to the other lifestyle advice topics and risk factors, there are no significant differences between men and women. For both the risk factors of not eating enough fruits and vegetables and overweight/obese, the prevalence is three times as much for both men and women as the percentage of men and women receiving advice on these topics.

The percentages of those receiving lifestyle advice is at the level of prevalence of the corresponding risk factors for some topics, but in other cases it is much lower. The differences in lifestyle advice given to men and women, and the corresponding prevalence of the related risk factors, could present implicit bias in provider counselling as well as the sex of the health care professional and social norms regarding social interactions between men and women.



Percent of lifestyle advice compared to related risk factor for the past three years			
		Advice given	Related risk factor
Tobacco	Men	28.8% (25.6-32.0)	57.0% (53.6-60.3)
	Women	5.4%* (4.0-6.8)	7.0%* (5.8-8.2)
Diet – added salt	Men	20.9% (18.2-23.5)	33.4% (29.4-37.3)
	Women	17.4%* (15.5-19.3)	20.6%* (18.6-22.7)
Diet – fruits and vegetables	Men	21.0% (18.2-23.8)	63.8% (59.6-67.9)
	Women	20.6% (18.3-22.9)	62.4% (59.5-65.3)
Physical activity	Men	23.1% (20.1-26.1)	16.2% (13.6-18.9)
	Women	21.8% (19.6-24.0)	18.4% (16.3-20.4)
Body weight	Men	21.4% (18.6-24.3)	65.5% (61.4-69.7)
	Women	20.8% (18.7-22.9)	63.8% (61.4-66.3)

*significant difference between men and women in the same category.

Most primary health care protocols and guidelines are for both men and women, and this could in part explain the lack of difference between men and women receiving lifestyle advice, apart from tobacco use. In general, lifestyle advice received is reportedly low for both men and women. This could be explained with further investigations into health care professional practices could include differences between private and public doctor-patient communication, how time limits for doctor visits affect patient education and engagement, how health teams (including strengthening the role of nurses) can improve patient counselling on lifestyle and NCD risk factors, and the extent of adherence to primary health care guidelines.

Key messages for accessing services

1. A significantly higher percentage of women are being measured for biological risk factors and are being given lifestyle advice on most behavioural risk factors compared to men.
2. However, prevalence of biological risk factors as measured during the STEPs survey is still higher for women than men or they are not significantly different.
3. Significantly higher percentages of lifestyle advice given to women could be influenced by numerous factors, including higher frequency of interaction of women with health care

Key messages continued

services, higher proportion of women with biological risk factors, especially in the older age groups, and cultural and gender norms, among others.

4. However, lower percentages of women engage in behavioural risk factors than men, once again indicating different trajectories of NCD risk factors for women and men across the life-course.
5. To improve prevention and management of NCDs for men and women, identifying gender specific barriers to access and lifestyle change is needed, as well as providing gender sensitive and culturally appropriate interventions.
6. As can be seen in this analysis of accessing services, barriers are gender specific and disease specific in that men and women experience barriers differently depending on the risk factor and other sociodemographic groups.
7. There are similar differences between men and women in the migrant population as in the larger population. For both men and women in the migrant population, accessing services and taking medication are worse for blood glucose than for blood pressure compared to the larger population.

References

- ¹ World Health Organization (2018). World Health Organization – Noncommunicable Diseases (NCD) Country Profiles, 2018. https://www.who.int/nmh/countries/geo_en.pdf
- ² World Health Organization European Centre for Primary Health Care (2018). Quality of primary health care in Georgia. <http://www.euro.who.int/en/countries/georgia/publications/quality-of-primary-health-care-in-georgia-2018>.
- ³ World Health Organization (2018).
- ⁴ World Health Organization European Centre for Primary Health Care (2018).
- ⁵ World Health Organization Mortality Database (2015). Georgia. <http://apps.who.int/healthinfo/statistics/mortality/whodpms/>
- ⁶ <http://uis.unesco.org/en/topic/international-standard-classification-education-isc-ed>
- ⁷ World Economic Forum (2020). Global Gender Gap Report 2020. http://www3.weforum.org/docs/WEF_GGGR_2020.pdf
- ⁸ World Economic Forum (2020).
- ⁹ Sturua, L. and Shushania, N. (2012). Migrant Health Survey. International Organization for Migration.