World Health Organization
REGIONAL OFFICE FOR Europe

GENDER AND NONCOMMUNICABLE DISEASES IN EUROPE

Analysis of STEPS data

World Health Organization
REGIONAL OFFICE FOR Europe

GENDER AND NONCOMMUNICABLE DISEASES IN EUROPE

Analysis of STEPS data

ABSTRACT

This synthesis report is part of the gender and noncommunicable diseases (NCDs) initiative launched by the WHO Regional Office for Europe, which aims to strengthen the response to NCDs through a gender approach. It is part of a series that includes country profiles with a gender analysis of the WHO STEPwise Survey (STEPS) data for each country. This report presents an analysis of the first eight country profiles to support international commitments to reducing the burden of NCDs with evidence and knowledge exchange. A gender analysis of STEPS NCD risk-factor survey data describes how risk factors for chronic diseases differ between and among men and women by exploring and tracking the direction and magnitude of trends and exposure to risk factors and accessing services by sociodemographic variables. Important differences hide even in sex-disaggregated data that need to be unpacked through sociodemographic characteristics, because men and women are not homogenous groups. The report also recognizes gaps in evidence and calls for further analysis of the impact of gender-based inequalities.

KEYWORDS
NONCOMMUNICABLE DISEASES
GENDER
SOCIOECONOMIC FACTORS
RISK FACTORS
HEALTHY DIET
ALCOHOL
TOBACCO USE
OBESITY
BLOOD PRESSURE
EUROPE

WHO/EURO:2020-1664-41415-56457

Suggested citation. Gender and noncommunicable diseases in Europe. Analysis of STEPS data. Copenhagen: WHO Regional Office for Europe; 2020. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

CONTENTS

FOREWORD *iv*

ACKNOWLEDGMENTS vi

EXECUTIVE SUMMARY vii

INTRODUCTION **1**

A GENDER ANALYSIS APPROACH 3

IMPORTANT GENDER DIFFERENCES IN NCD BURDEN **5**

NCDs CONSTITUTE THE MAIN BURDEN OF DISEASE FOR BOTH WOMEN AND MEN IN THE WHO EUROPEAN REGION, BUT THERE ARE IMPORTANT DIFFERENCES 6

INFLUENCE OF GENDER AND SOCIAL DETERMINANTS ON NCD RISK FACTORS **13**

RISK FACTORS FOR NCDs ARE STRONGLY INFLUENCED BY GENDER AND THE LINKS WITH OTHER SOCIAL DETERMINANTS OF HEALTH 14

IMPACT OF GENDER ON HEALTH SYSTEM USE AND RESPONSE **27**

GENDER IMPACTS THE WAY MEN AND WOMEN USE SERVICES AND THE RESPONSES THEY RECEIVE 28

GENDER INEQUALITY IMPACTS ACCESS TO, AND USE OF, HEALTH RESOURCES 29

GENDER STEREOTYPES MAY BE IGNORED, PERPETUATED OR CHALLENGED BY HEALTH PROMOTION EFFORTS TO PREVENT NCDs 34

CONCLUSIONS **37**

REFERENCES **41**

ANNEX 1. SUPPLEMENTARY TABLES **45**

FOREWORD

Non-communicable diseases (NCDs) represent the main burden of disease in Europe. Access to and use of services, exposure to risk factors, and morbidity and mortality differ based on gender. These differences are also present between groups of men and women depending on where they live, what they do, how old they are and a range of other sociodemographic and cultural factors that influence exposure to risk and access to services.

There is a greater than four-fold difference for men and five-fold for women in premature deaths due to NCDs across countries in our Region. While cancer, cardiovascular diseases, diabetes and other NCDs are the main cause of ill health for both men and women, men are nearly twice as likely to die prematurely from NCDs. Men's higher risk of dying earlier, mostly to cardiovascular disease, should be at the centre of countries' efforts to reduce premature mortality from NCDs. We also cannot disregard the fact that cardiovascular disease remains the main cause of death for women. Research, treatment, and health promotion and prevention efforts often present a gender bias that ignores this reality.

Behaviours are influenced by gender norms, roles and relations that affect exposure to risk factors and health- and help-seeking behaviours. Our interactions with the health system, including treatment adherence and outcomes, also vary based on gender.

If we want to accelerate progress and truly leave no one behind in our efforts to reduce the burden of NCDs, ***we cannot be gender-blind.***

This report is the first gender and NCD analysis using data collected through the STEPwise approach to Surveillance (STEPS) surveys in our Region. Used in over 100 countries worldwide, STEPS surveys provide an important tool for collecting information on behavioural and biological risk factors for NCDs and health system responses. This project highlights the importance of systematic data collection at national level with vital disaggregation by age, sex and variables such as education and place of residence.

This is a decisive piece of work that will inform policy design and gender-responsive action to reduce the burden of NCDs in the WHO European Region. The findings demonstrate concerning differences across the life-course. We cannot ignore that the percentage of men in younger age groups with multiple risk factors is double that of females. The increase of risk, however, is much faster for women in older age groups, who have 3–11 times higher multiple risk factors.

The report reveals important challenges that need to be addressed. Although great progress has been made, we must acknowledge the impact of widespread inequalities and group-specific risks, shortfalls and gender biases if we are to strengthen prevention and management of NCDs. Gender-responsive actions are needed urgently if we are adequately to prevent, detect, manage and control NCDs now and for future generations.

This necessary gender-responsive approach is operationalized in the WHO European Programme of Work, our agenda for health 2020–2025, United action for better health. *The agenda mobilizes action to leave no one behind, including by identifying those groups of women and men who are more difficult to reach through effective policies and interventions. I am convinced that the enhanced country focus within the Programme of Work will mean these findings will be used to accelerate the NCD response, from prevention to care, and support gender-responsive health systems across our Region. The WHO Regional Office for Europe stands ready to support.*

Hans Henri P. Kluge
WHO Regional Director for Europe

ACKNOWLEDGEMENTS

This report is part of a series developed by the WHO Regional Office for Europe within a collaboration between the Gender and Human Rights programme and the WHO European Office for the Prevention and Control of Noncommunicable Diseases to accelerate progress towards reducing the burden of noncommunicable diseases using a gender approach.

The editors of the series and of this report are Isabel Yordi Aguirre and Ivo Rakovac from the WHO Regional Office for Europe. They conceptualized the series' publications, defined content, provided overall input, and reviewed and amended the content of the report to ensure alignment with overall WHO policy and guidance documents. The author of the report is Brett J. Craig from the WHO Regional Office for Europe. Overall support and leadership for this initiative was provided by João Breda, Head of the WHO European Office for Prevention and Control of Noncommunicable Diseases, Nino Berdzuli, Director, Division of Country Health Programmes, and Natasha Azzopardi-Muscat, Director of the Division of Country Health Policies and Systems, WHO Regional Office for Europe.

The gender and noncommunicable diseases profiles were discussed extensively in two consultations with counties in November 2019 and January 2020. Contributions from country participants (Diana Andreasyan, Vital Pisaryk, Irina Novik, Lela Sturua, Marina Shakhnazarova, Ainura Akmatova, Galina Obreja, Abdullah Akünal, Banu Ekinci, Vladyslav Zbanatskyi, Tetyana Skapa, Shukhrat Shukurov and Barno Odilova) have strengthened the methods and results of this assessment. The work of the WHO STEPwise approach to Surveillance (STEPS) teams in Armenia, Belarus, Georgia, Kyrgyzstan, the Republic of Moldova, Turkey, Ukraine and Uzbekistan are acknowledged with gratitude.

Input was provided by: Rosemary Morgan, Johns Hopkins Bloomberg School of Public Health, United States of America; and Åsa Nihlén, Jill Farrington, Juan Tello, Maria Neufeld, Carina Ferreira-Borges and Enrique Loyola from the WHO Regional Office for Europe.

This synthesis report was produced with financial assistance of the governments of the Russian Federation and Germany.

EXECUTIVE SUMMARY

This report presents an analysis of sex-disaggregated data gathered through the WHO STEPwise (STEPS) survey in the first eight countries of a series developed by the WHO Regional Office for Europe as part of an interprogrammatic initiative on gender and noncommunicable diseases (NCDs) to improve the response to NCDs in the WHO European Region. The report is a synthesis of the analysis of data in Armenia, Belarus, Georgia, Kyrgyzstan, the Republic of Moldova, Turkey, Ukraine and Uzbekistan. The findings make an important contribution to, and serve as an evidence base for, international commitments on NCDs in accelerating action towards reducing the NCD burden and ensuring universal health coverage. They also contribute to raising awareness and building capacity among country-based researchers and policy-makers on the rationale for applying a gender analysis to health data.

A gender analysis of STEPS NCD risk-factor survey data describes how risk factors for chronic diseases differ between and among men and women by exploring and tracking the direction and magnitude of trends in exposure to risk factors and accessing services. This analysis enables better planning and/or evaluation of gender-responsive health promotion or preventive campaigns and gender-responsive interventions.

As sex-disaggregated data can hide important differences among men or women, the analysis also explores within-group differences by including sociodemographic characteristics such as age group, geographic location, education, employment and income level across countries.

Findings represent observed common trends and differences, while data presented in the report also show variance by country. Key findings across countries include the following.

- Significantly higher percentages of men than women in most age groups engage in behavioural risk factors for NCDs (like tobacco-smoking, alcohol consumption, insufficient levels of physical activity, insufficient intake of fruit and vegetables, adding salt and frequent consumption of processed foods).
- Significantly higher percentages of women than men in the older age groups are found with most of the biological risk factors (overweight and obesity, and raised blood pressure, glucose and cholesterol levels), while the rate is often lower among women than men in the younger age groups.
- While the percentage of men with multiple risk factors typically doubles from the youngest to the oldest age group, the percentage of women with multiple risk factors is more often between three to 11 times greater in the oldest than the youngest age group.
- An analysis of behavioural and biological risk factors by geographic location further shows risk factors for men and women are not the same within urban and rural settings.
- Prevalence of behavioural risk factors are more often higher for urban women, and prevalence of biological risk factors are more often higher for women in rural areas. Differences are observed for men, but it varies by country, with no clear trend across countries.
- Prevalence of behavioural risk factors for men and women varies by education level, with the prevalence of risk factors higher among low-education groups and lower among high-

education groups. The trend for biological risk factors is more consistent, with prevalence typically higher for high-education men and low-education women than for other levels, but it varies by country. The differences in prevalence between education levels tends to be greater for women than men.

- More high-income and employed men and women engage in behavioural risk factors, while low incomes and unemployment are linked with higher prevalence of biological risk factors for men and (especially) women.
- The importance of further examining risk factors within groups of men and women is exemplified by country examples of migrant men and women having higher prevalence of multiple NCD risk factors than the greater population, higher prevalence of biological factors for men and women currently living with a partner than those living without, and specific behavioural risk factors being higher or lower in prevalence among ethnic minority men and women than the majority, depending on the context.
- In some areas, there are gaps between exposure to risk and response from health services. For example, in most countries higher percentages of men than women have not been measured for biological risk factors and lower percentages of men than women have been given lifestyle advice by a health-care professional on most behavioural risk factors.
- Compared to urban areas, more men and women in rural areas have not been measured for risk factors, with rural women often being tested more than men in rural and urban areas.
- Women and men in the low education level groups are being measured for risk factors less than those in the high education level groups.
- More men and women in the low-income and unemployed groups or who are not in the labour force have not been measured for risk factors compared to employed and high-income groups.
- Improving access to services for women and men may require that additional attention is paid to specific groups, including the following: men and women in rural areas, men and women in the low education level, low-income and unemployed groups or those not in the labour force, migrant men and women, and some ethnic minority groups.

Globally, more than 100 countries have collected data through the STEPS surveys, but this series is the first time a more in-depth analysis from a gender perspective has been conducted. The results of this analysis can be used as evidence for addressing needs among specific populations and informing policies in countries in the Region. It can also serve as an analysis model for countries using the WHO STEPwise Survey in other regions.

Studies that specifically examine gender and social norms and gender inequality in these contexts can be used to complement this analysis by identifying driving and constraining factors for men and women in exposure to risk, access to services and interactions with health-care and other professionals in services.

In addressing the areas identified in this report, cost-effective interventions like best-buy and other interventions recommended by WHO should be prioritized and tailored to the country-specific context to ensure uptake and efficiency. This would greatly contribute to the implementation of the WHO European Programme of Work and achievement of universal health coverage and the health-related Sustainable Development Goals.

INTRODUCTION

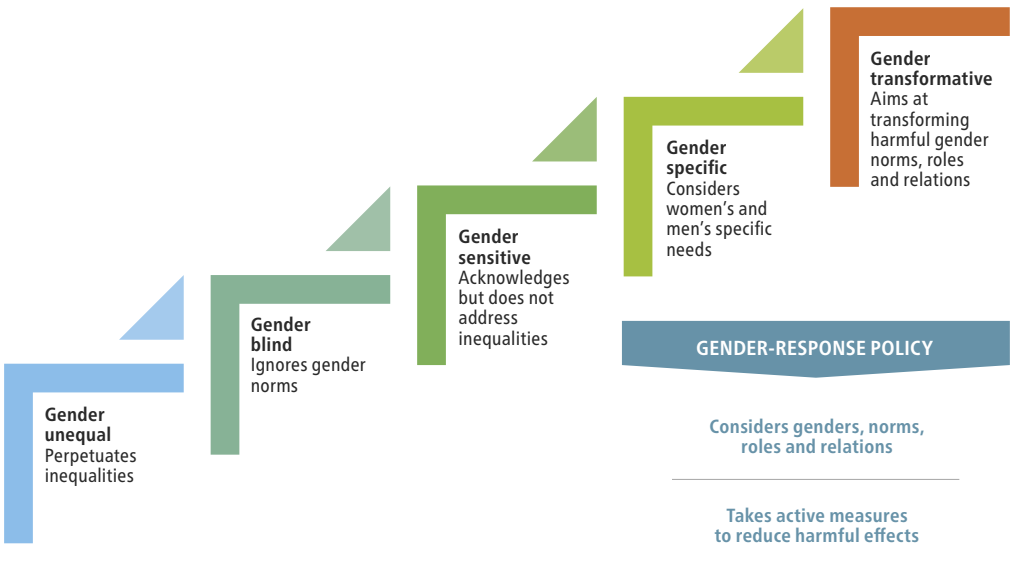
The WHO Regional Office for Europe launched a gender and noncommunicable diseases (NCDs) initiative in 2019 to improve the response to NCDs in the WHO European Region through a gender approach. Gender and rights-based approaches are imperative to accelerate transformative and sustainable progress towards achievement of the United Nations Sustainable Development Goals (SDGs). The strategies on women's health and well-being *(1)* and the health and well-being of men in the WHO European Region *(2)* strengthen the links between SDGs 3 and 5 in the Region while providing a comprehensive working framework for improving health and well-being in Europe through gender-responsive approaches.

Commitments by Member States of the WHO European Region to accelerate actions towards reducing NCDs build on the Action Plan for the Prevention and Control of Noncommunicable Diseases in the WHO European Region 2016–2025 *(3)* and high-level meetings, in particular Health Systems Respond to NCDs: Experience in the European Region (Sitges, Spain, 16–18 April 2018) *(4)* and the WHO European High-level Conference on Noncommunicable Diseases: Time to Deliver – Meeting Noncommunicable Disease Targets to Achieve the Sustainable Development Goals in Europe (Ashgabat, Turkmenistan, 9 April 2019) *(5)*.

To support these commitments with evidence and knowledge exchange, this synthesis report and country profiles of Armenia, Belarus, Georgia, Kyrgyzstan, the Republic of Moldova, Turkey, Ukraine and Uzbekistan have so far been created using a gender analysis of data gathered through the WHO STEPwise approach to Surveillance (STEPS) NCD risk-factor survey.

This synthesis report presents a combined analysis of sex-disaggregated data linked with other variables, such as geographic location, education, income and employment. The analysis allows identification of main gender-based differences and highlights some of the areas that need further gender analysis. Evidence generated within the synthesis report and country profiles in the series is intended to provide an evidence base and rationale for countries to strengthen health systems and whole-of-government responses to prevent, detect, manage and control NCDs, particularly at primary-care levels, through gender-responsive actions (Fig. 1).

Fig. 1. WHO gender-response assessment scale



Source: WHO *(6)*.

A gender analysis approach

A gender analysis considers socially constructed norms, roles, behaviours and attributes that a given society considers appropriate for women and men and how this implies differential degrees of power between and among women and men. It 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, while also considering how gender intersects with other factors behind social inequalities, such as age, employment, education, ethnicity or place of residence.

The STEPS surveys *(7)* gather information on NCD risk factors to help plan and evaluate programmes and interventions by collecting standardized, high-quality risk-factor data to enable comparisons while allowing flexibility. The STEPS surveys consist of interviews (STEP 1), physical measurements such as blood pressure, weight and height (STEP 2) and biochemical measurements like blood glucose and cholesterol (STEP 3). An integrated approach is used, allowing an analysis of multiple risk factors simultaneously in a cost-efficient manner. WHO provides countries with a reference methodology for NCD surveillance and technical support for implementation.

The surveys in this analysis were carried out in participating countries from 2013 to 2019 (Table 1). A cluster sample design was used to produce nationally representative data for each of the countries. The data were weighted for complex survey design, non-response rate and population distribution by age and sex.

Table 1. STEPS surveys by country

Country	Year	Age range	Response rate (%)	Participants
Armenia	2016	18–69	42.0	2 349
Belarus	2017	18–69	87.0	5 010
Georgia[a]	2016	18–69	75.7	5 554
Kyrgyzstan	2013	25–64	100.0	2 623
Republic of Moldova	2013	18–69	83.5	4 807
Turkey	2017	15–70+	70.0	6 053
Ukraine	2019	18–69	57.0	4 409
Uzbekistan[a]	2019	18–69	88.3	4 320

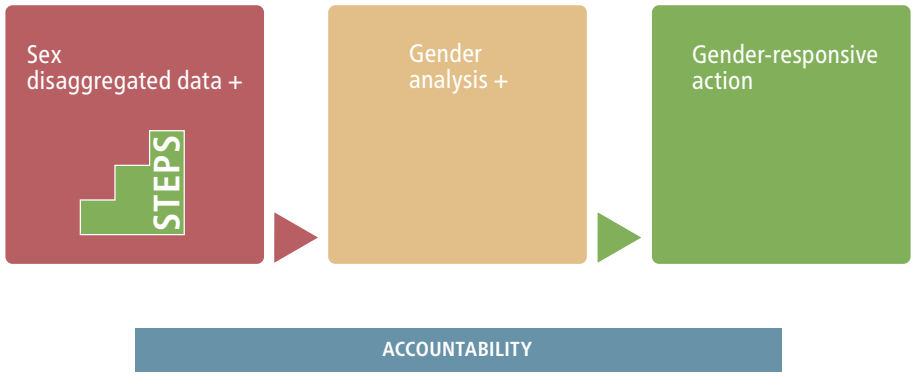
[a] STEPS surveys have been conducted on two occasions in Georgia (2010 and 2016) and Uzbekistan (2014 and 2019). The most recent surveys were used in this report for comparison with other countries.

STEPs data reveal a vast amount of information that it is not always presented disaggregated by sex and may therefore mask important differences between men and women. Without intending to compare countries, this report aims to present key gender-based considerations across countries that can help to improve planning and/or evaluation of gender-responsive health promotion or preventive campaigns and gender-responsive interventions.

It is important to highlight that men and women are not homogenous groups and important gender issues need to be unpacked within these groups across the life-course by including sociodemographic characteristics. Not all countries emphasize the same variables, however, and this only reinforces the richness and importance of a context-driven analysis.

The analys of disaggregated data is the first step in mainstreaming gender in any health issue *(6)* (Fig. 2). Country analyses did not go into identifying the impact of gender inequalities and gender norms, roles and relations on different exposure to risk and access to services. This would require a more qualitative approach to the research.

Fig. 2. Gender mainstreaming steps



Source: WHO *(6)*.

The synthesis report is organized around the key elements identified by the WHO Regional Office for Europe under the Gender and Noncommunicable Diseases initiative and the WHO report *Why using a gender approach can accelerate noncommunicable disease prevention and control in the WHO European Region (8)*:

1. NCDs constitute the main burden of disease for both women and men in the WHO European Region, but there are important differences;
2. risk factors for NCDs are strongly influenced by gender and the links with other social determinants of health;
3. gender impacts the way men and women use services and the responses they receive;
4. gender inequality impacts access and use of health resources; and
5. gender stereotypes may be ignored, perpetuated or challenged by health promotion efforts to prevent NCDs.

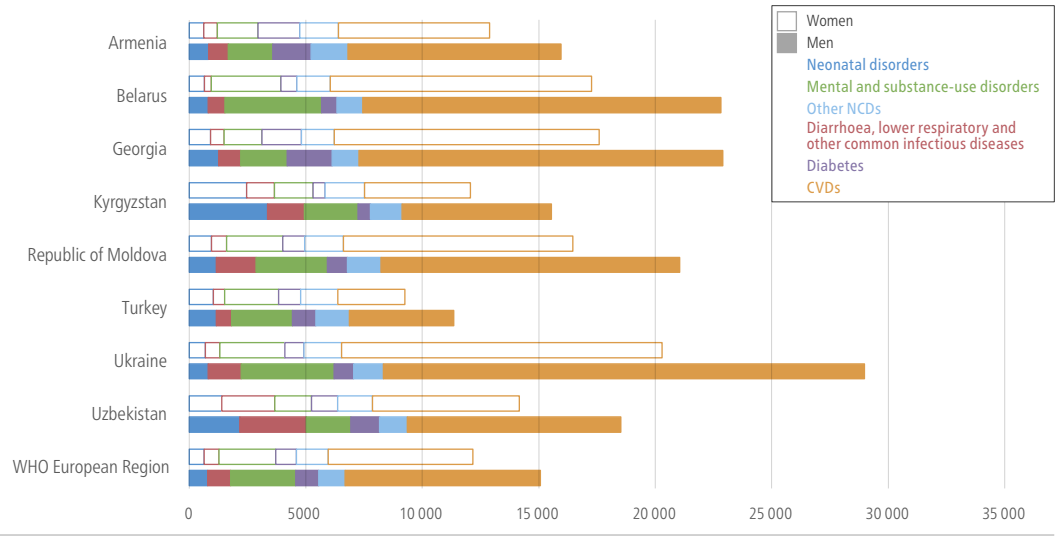
IMPORTANT GENDER DIFFERENCES IN NCD BURDEN

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

NCDs are the leading cause of mortality in the world and a large part of the disease burden in the WHO European Region, the region of the world most affected by NCDs. The five major NCDs (diabetes, cardiovascular diseases (CVDs), cancer, chronic respiratory diseases and mental disorders) account for an estimated 89% of all deaths and 84% of disability in the Region *(9)*.

While a decrease in mortality from CVDs has occurred for both men and women and has contributed to an increase in life expectancy, CVDs are still the main contributor to the burden of disease for both men and women (Fig. 3 and Annex 1, Table A1.1). Though the burden of CVDs is less for women than it is for men, it still makes up the largest burden of disease for women by far. It is still perceived, however, as a men's health issue *(10)*. Important differences in the burden of disease are better understood through an examination of mortality rates and risk factors.

Fig. 3. Burden of disease for men and women, expressed through DALYs, 2017



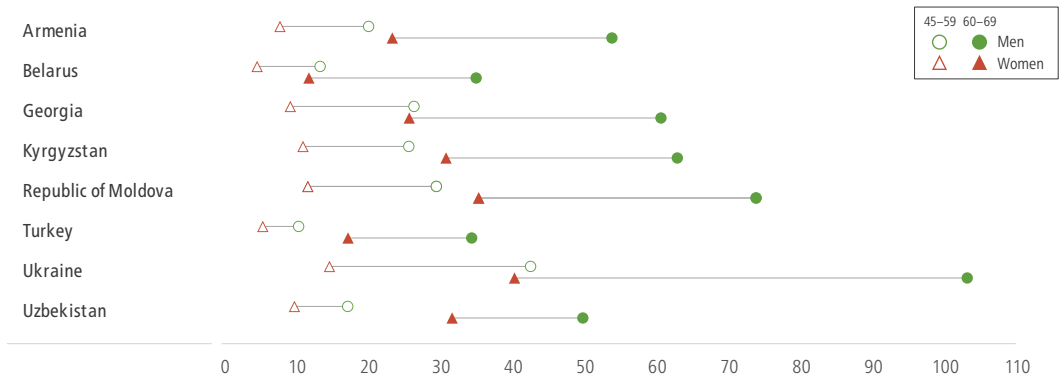
Source: Institute for Health Metrics and Evaluation *(11)*.

DIFFERENCES IN MORTALITY RATES

The mortality rate for men is significantly higher than for women overall, and a higher increase is also observed from the 45–59 age group to the 60–69 age group in each of the countries. The mortality rates for men in the 45–59 and 60–69 age groups are two to three times the rates for women. The observable difference in total mortality between men and women in the 45–59 age group is even greater in the 60–69 group (Fig. 4 and Annex 1, Table A1.2) *(12)*. Though difficult to calculate, this difference in mortality rates between men and women is probably an influence on prevalence of NCD risk factors in the population when examining differences between men and women through the life-course.

While NCDs affect all countries, those in the low- and middle-income categories, like the ones included in this analysis, feel the burden of NCDs more due to fewer resources in prevention, promotion and provision of care *(13)*. The prevalence of risk factors that account for NCDs are different between and among men

Fig. 4. Mortality per 1000 by age group



and women, however, and data show important differences in the ways men and women access health services that may be associated with the prevalence of NCDs.

The STEPs survey gathers data on behavioural risk factors for NCDs that are related to health behaviours, 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, and on biological risk factors that are physically or biologically measureable, specifically overweight/obesity, raised blood pressure, raised blood glucose and raised cholesterol. Highlighting where the differences exist between men and women helps to uncover where inequitable gender norms, roles, behaviours and attributes are likely to influence risk factors.

DIFFERENCES IN BEHAVIOURAL AND BIOLOGICAL RISK FACTORS FOR MEN AND WOMEN

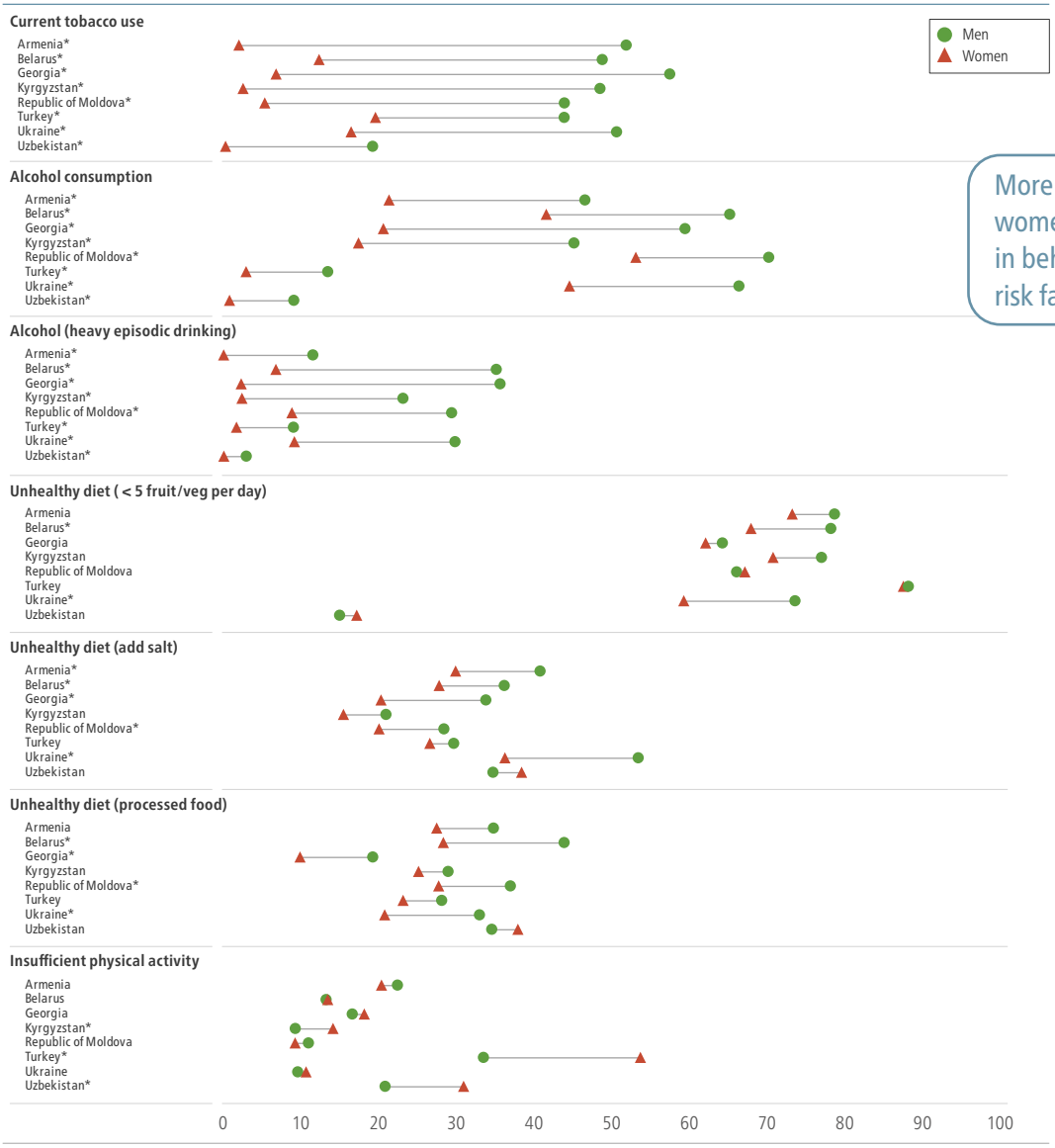
The largest differences between men and women commonly are found in tobacco and alcohol use across countries, with smaller differences in the risk factors of unhealthy diet and physical activity. In relation to added salt and eating processed foods, a trend of higher prevalence among men is observed. Prevalence of insufficient physical activity is significantly higher for women in Kyrgyzstan, Turkey and Uzbekistan, with no differences in the remaining countries. More men than women engage in most of the behavioural risk factors, but it varies by country and risk factor (Fig. 5 and Annex 1, Table A1.3).

This trend of higher prevalence among men in behavioural risk factors, with some instances of higher prevalence among women in insufficient physical activity, warrants further investigation into how gender and social norms, policies and environments may be influencing these differences in exposure and also in disclosure. For example, gender norms about alcohol and tobacco consumption among women may present response bias, as shown in differences between self-reported smoking and objectively tested cotinine *(14).*

The picture is different with biological risk factors, as prevalence is significantly higher for women most often in obesity and raised cholesterol, with some differences (although less consistently) in overweight and raised blood pressure.

Prevalence of raised glucose shows no significant differences between men and women in these countries. The prevalence of raised blood pressure without medication, however, is the only biological risk factor where prevalence among men is significantly higher than among women in some countries, which may

Fig. 5. Prevalence of risk factors with differences between men and women (%)



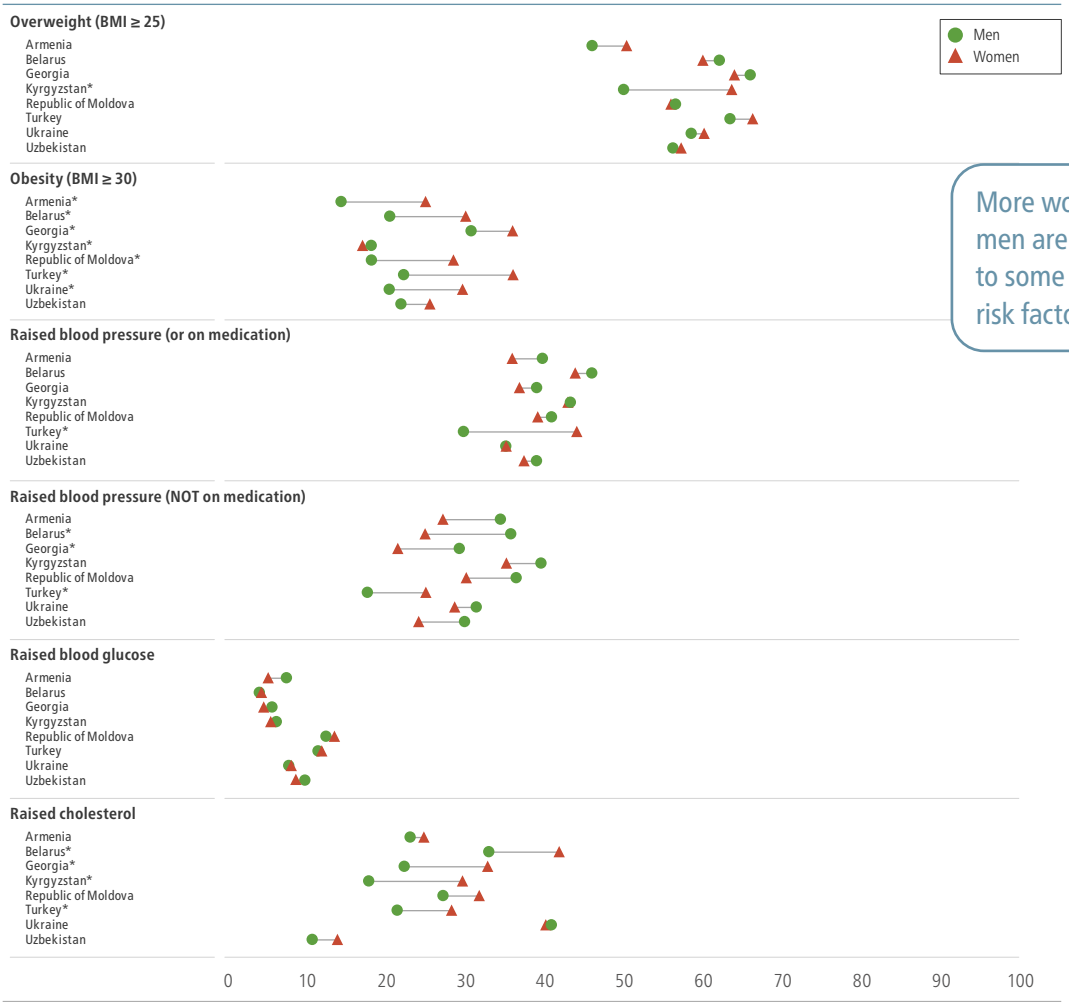
More men than women engage in behavioural risk factors

* Statistically significant difference.

reflect gender-based barriers such as norms around traditional masculinities in the uptake of services (Fig. 6 and Annex 1, Table A1.4).

In summary, men and women are exposed to NCD risk factors differently and also are exposed to groups of risk factors, in this case behavioural and biological, differently. Overall across countries, men appear to be more exposed to behavioural risk factors, while women appear to be more exposed to biological risk, though differences tend to be less pronounced than some of those observed in the behavioural risk factors of alcohol and tobacco. These differences warrant further study of why these differences exist and how they can be addressed.

Fig. 6. Prevalence of biological risk factors with differences between men and women (%)



More women than men are exposed to some biological risk factors

BMI: body mass index. * Statistically significant difference.

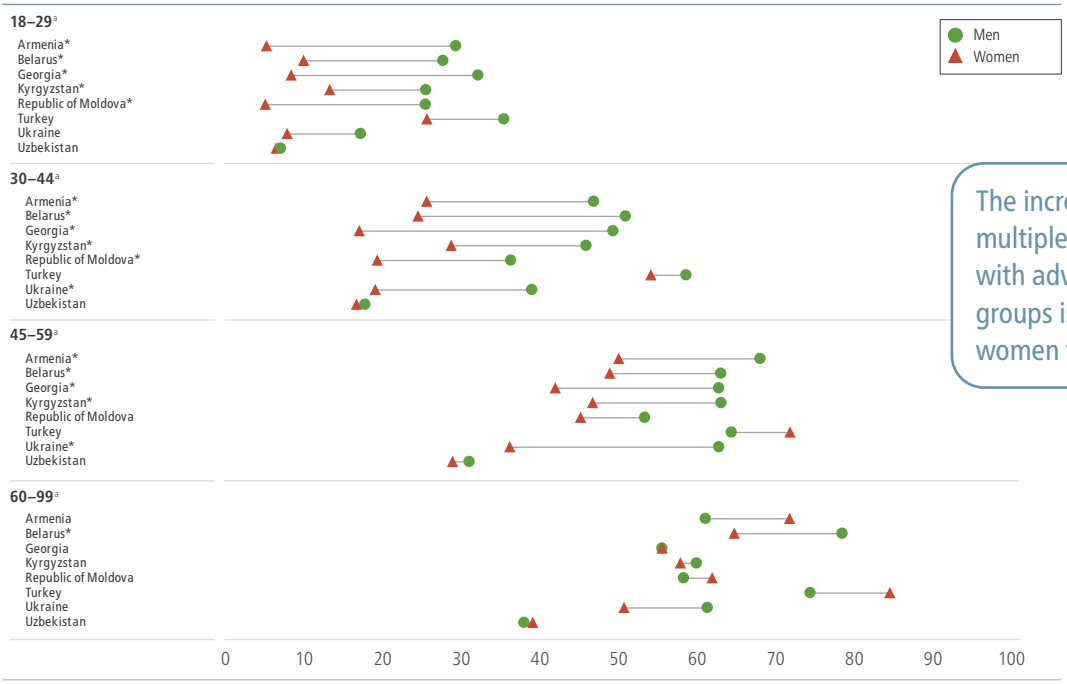
DIFFERENCES ACROSS THE LIFE-COURSE

Differences between men and women are also found in simultaneous prevalence of multiple risk factors. In accordance with the STEPS methodology, 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;
- fewer than five servings of fruit and vegetables per day;
- insufficient physical activity (< 150 minutes of moderate-intensity activity per week, or equivalent);
- overweight (body mass index (BMI) ≥ 25 kg/m^2); and
- raised blood pressure (BP) (systolic BP ≥ 140 and/or diastolic BP ≥ 90 mmHg or currently on medication).

The accumulation of multiple NCD risk factors increases by age group for both men and women. While more men in the younger age groups have multiple risk factors than women, however, the increase in multiple risk factors for women is more drastic, which leads to a lessening of the difference in percentages of men and women with each ascending age group. The increase for women with multiple risk factors between age groups therefore is greater than for men, often starting with the 45–59 age group (Fig. 7 and Annex 1, Table A1.5).

Fig. 7. Prevalence of men and women with three or more risk factors by age group (%)



The increase in multiple risk factors with advancing age groups is greater for women than men

Note: age groups collected in STEPS for Kyrgyzstan are 24–34, 35–44, 45–54, 55–64 years. * Statistically significant difference.

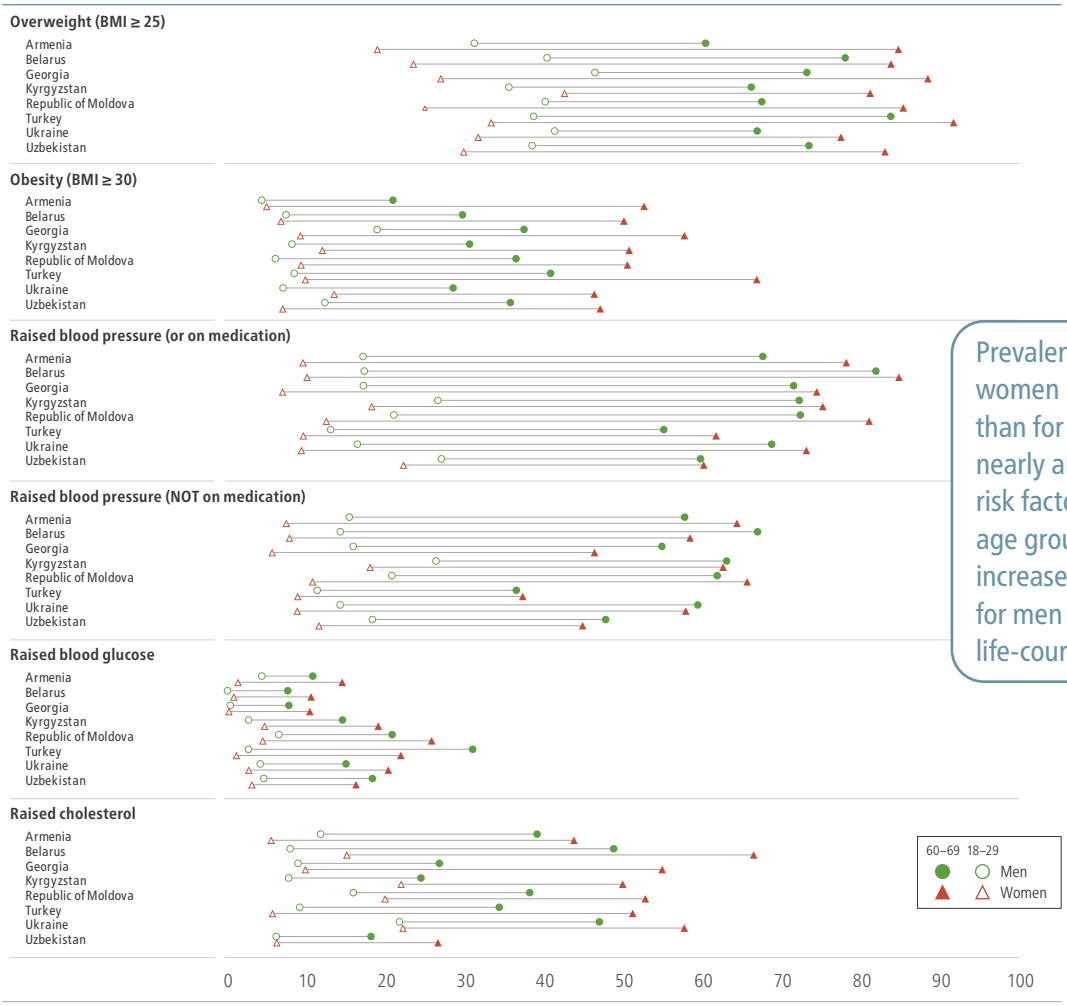
These combined risk factors, however, do not include all risk factors, such as alcohol consumption or raised cholesterol. Additionally, risk factors have different impacts on NCD morbidity and mortality. For example, the risk associated with smoking is higher at individual level than the risk associated with eating fewer than five servings of fruit and vegetables *(15)*: further analysis is therefore warranted to examine differences in these risk factors **between** men and women as well as **among** men and women.

A greater increase for women over the life-course is also observed in the analysis of specific biological risk factors, but not necessarily in behavioural risk factors. It is important to note that the higher mortality of middle-aged men in these countries, as mentioned in the previous section, may influence the fact that those men living to the older age groups may be living with fewer risk factors, causing less of an increase in prevalence of multiple risk factors for men than for women.

Important differences are hidden in prevalence of biological risk factors for men and women. In risk factors where prevalences for men and women are not significantly different overall, prevalence for men in the youngest age group is often higher than prevalence for women in the same age group. Prevalence for

women is higher than for men, however, in nearly all risk factors across countries in the oldest age group (Fig. 8 and Annex 1, Table A1.6). The difference in prevalence between the youngest and oldest age groups for women is greater than it is for men, again showing a more drastic increase in risk factors over the life-course not only in multiple risk factors, but also in individual risk factors.

Fig. 8. Prevalence of biological risk factors with differences between the 18–29[a] and 60–69[b] age groups (%)



Prevalence for women is higher than for men in nearly all biological risk factors in older age groups and increases more than for men over the life-course

[a] Comparable to 18–29 age group for Kyrgyzstan is 25–34 and for Turkey is 15–29. [b] Comparable to 60–69 age group for Kyrgyzstan is 55–64 and for Uzbekistan is 45–69.

INFLUENCE OF GENDER AND SOCIAL DETERMINANTS ON NCD RISK FACTORS

Risk factors for NCDs are strongly influenced by gender and the links with other social determinants of health

An analysis of behavioural and biological risk factors by sociodemographic variables further reveals important differences not only between, but also among, men and women. Men and women are exposed to behavioural and biological risk factors differently across the sociodemographic categories of geographic location (urban and rural), education level, employment status and income level. Exposure to behavioural and biological risk factors leading to ill health can differ by socioeconomic status among men and women, leading to preventable health inequities linked to the social determinants of health.

Social determinants of health refer to the conditions in which people are born, live and work that are influenced by factors such as their physical environment, employment status, income level, geographic location, access to health care, access to social networks and education *(16).* Stratifications often occur due to the interaction of a person's social identities, including gender, age, race, ethnicity and migrant status, and lower socioeconomic status is often linked to more marginalized identities and their intersection, such as being a woman, migrant, or coming from a racial or ethnic minority community. Gender norms, roles and relations operate within the context of other social determinants of health to influence women's and men's access to resources (including education, financial resources and time), roles and behaviour, norms and values, and decision-making power and autonomy, which impact on their overall health and well-being *(17,18).*

GENDER AND PLACE OF RESIDENCE

Place of residence can be used to further examine the differences in risk factors not only between, but also among, men and women. Data collected during the STEPS survey were designated by location and then categorized into urban and rural areas by country focal points (analysis by place was not included in the country profile for Armenia). Rural environments can affect access to health care as well as education and economic opportunities, especially for women. Women in rural areas are often more exposed to traditional stereotypes around their roles which, among other things, limits their decision-making and access to resources *(19–21).*

Prevalence of behavioural risk factors is often higher for women in urban areas than rural, especially with tobacco use, alcohol consumption and insufficient physical activity. For men, no clear trend is observed across countries, as higher prevalence varies by country and risk factor. Prevalence of insufficient physical activity for men is higher in urban areas than in rural (Fig. 9 and Annex 1, Table A1.7). Prevalence of risk factors related to diet among men and women varies by country and geographic location, with few significant differences. Factors influencing the differences between urban and rural living may be similar for men and women in relation to their physical activity, but variance by country indicates other factors related to gender are likely to be present.

Prevalence of biological risk factors for men and women in rural areas generally is higher than in urban, but differences between urban and rural women are often greater than they are for men. This trend is most prominent with risk factors related to weight and raised blood pressure.

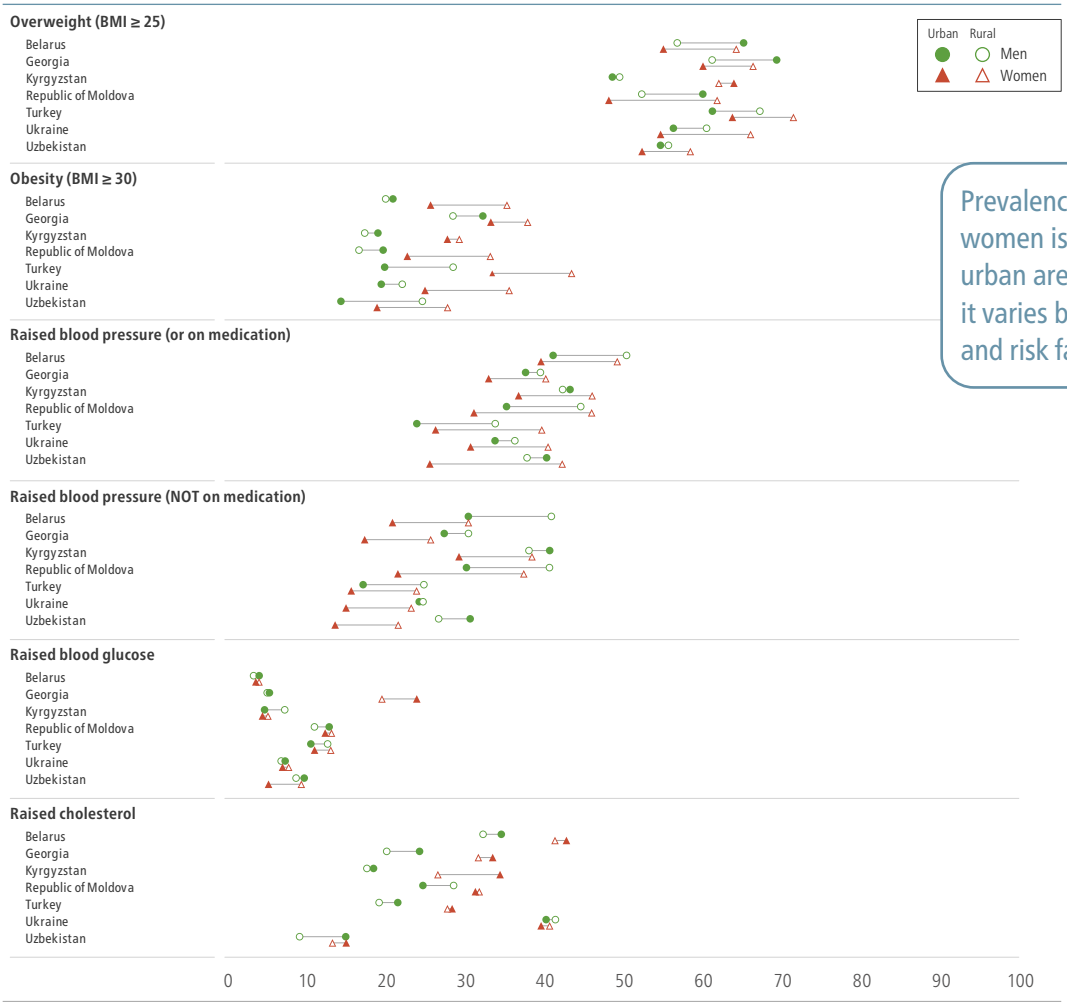
Fig. 9. Prevalence of behavioural risk factors with differences between rural and urban areas (%)

Prevalence for women is higher in urban areas; for men, it varies by country and risk factor

These sociodemographic factors can also have different associations for men and women in biological risk factors. The analysis showed that with overweight and obesity, for example, the association can be the opposite for men and women in Belarus, Georgia and the Republic of Moldova. This difference by geographic location is hidden in the prevalence of overall overweight and obesity for men and women. In most of these countries, there are no significant differences in prevalence of overweight overall between men and women (Fig. 10 and Annex 1, Table A1.8).

Examining prevalence among men and among women also reveals similarities across subgroups. For example, while prevalence of raised blood pressure (not on medication) is significantly higher among men

Fig. 10. Prevalence of biological risk factors with differences between rural and urban areas (%)



Prevalence for women is higher in urban areas; for men, it varies by country and risk factor

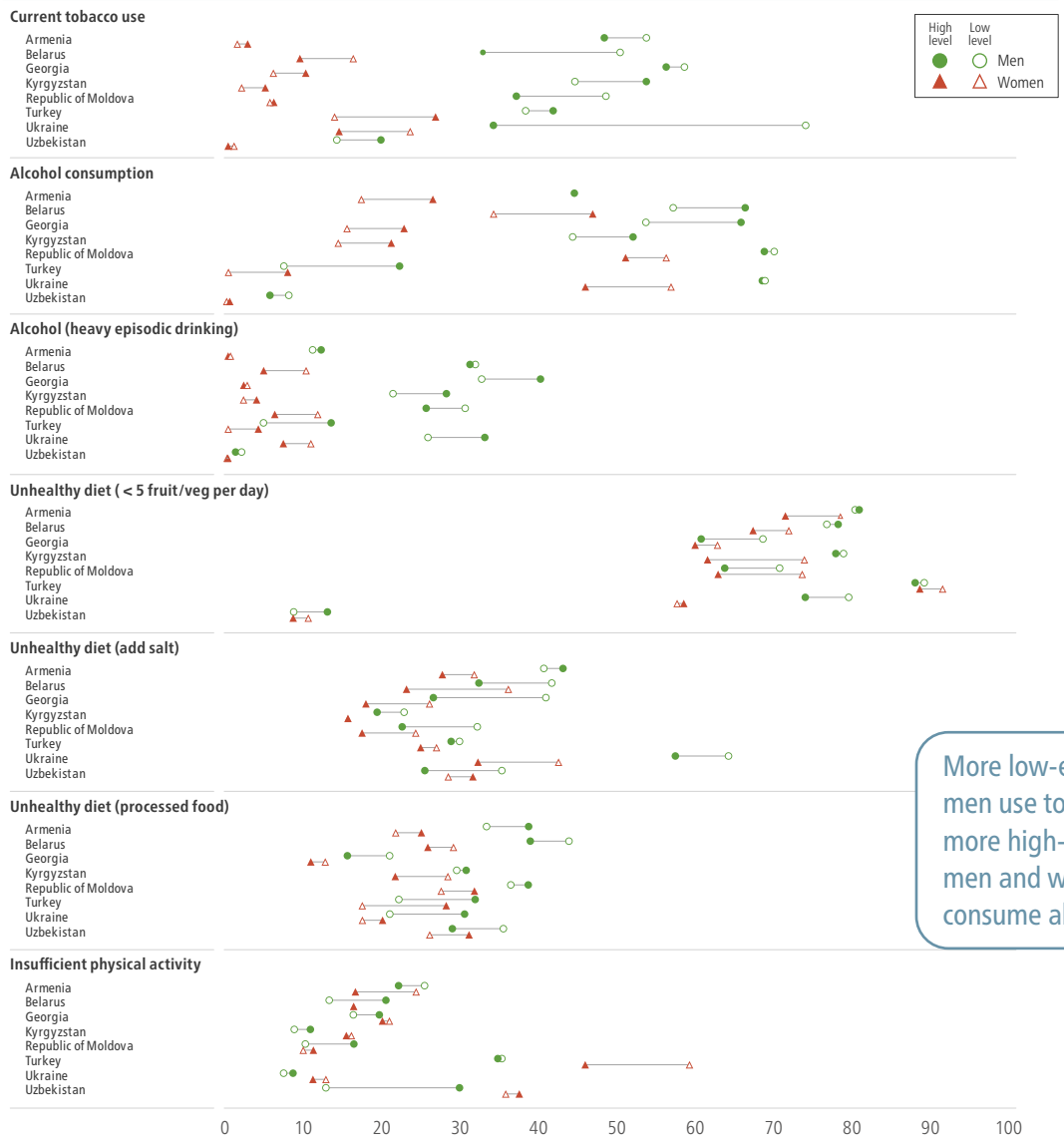
than women overall in countries such as Belarus and Georgia, by geographic location it can be seen that prevalences for urban men and rural women are not different. As disaggregation by sociodemographic variables shows, important differences between men and women are hiding in the aggregated percentages of risk factors.

GENDER AND EDUCATION

All eight countries have extremely high literacy rates for both men and women, and enrolment in primary and secondary education is also high. A significant difference occurs at tertiary level, with the percentage of women enrolled on average 26% higher than that for men *(22)*. Data on education level, determined by the highest level of education completed, were collected in the STEPS survey using country-specific categories. These categories were matched to the levels of the International Standard Classification of Education (ISCED) *(23)* for each country and then condensed to reflect the three levels of low, medium and high in the country profiles (Annex 1, Table A1.9). To identify trends across countries, an analysis of the levels of high and low was conducted for this report.

An examination of exposure to risk factors for men and women by education levels highlighted differences among men and among women, but it also revealed how these differences vary across risk factors. For example, prevalence of tobacco use by education level follows a different pattern than prevalence of alcohol consumption. Prevalence of tobacco is higher in most countries among low-education men, but for women, it varies. Differences between high- and low-education men vary by country, with Ukraine having a high percentage difference and Georgia showing very little difference. With alcohol consumption, however, prevalence is more often higher for high-education men and women, but it again varies by country (Fig. 11 and Annex 1, Table A1.10). Low-education men and women tend to add salt to their diet more often, but the differences are less pronounced with the other risk factors related to unhealthy diet and are not as consistent across countries. Prevalence of risk factors among women tends to decrease with higher education, while there is no difference for men.

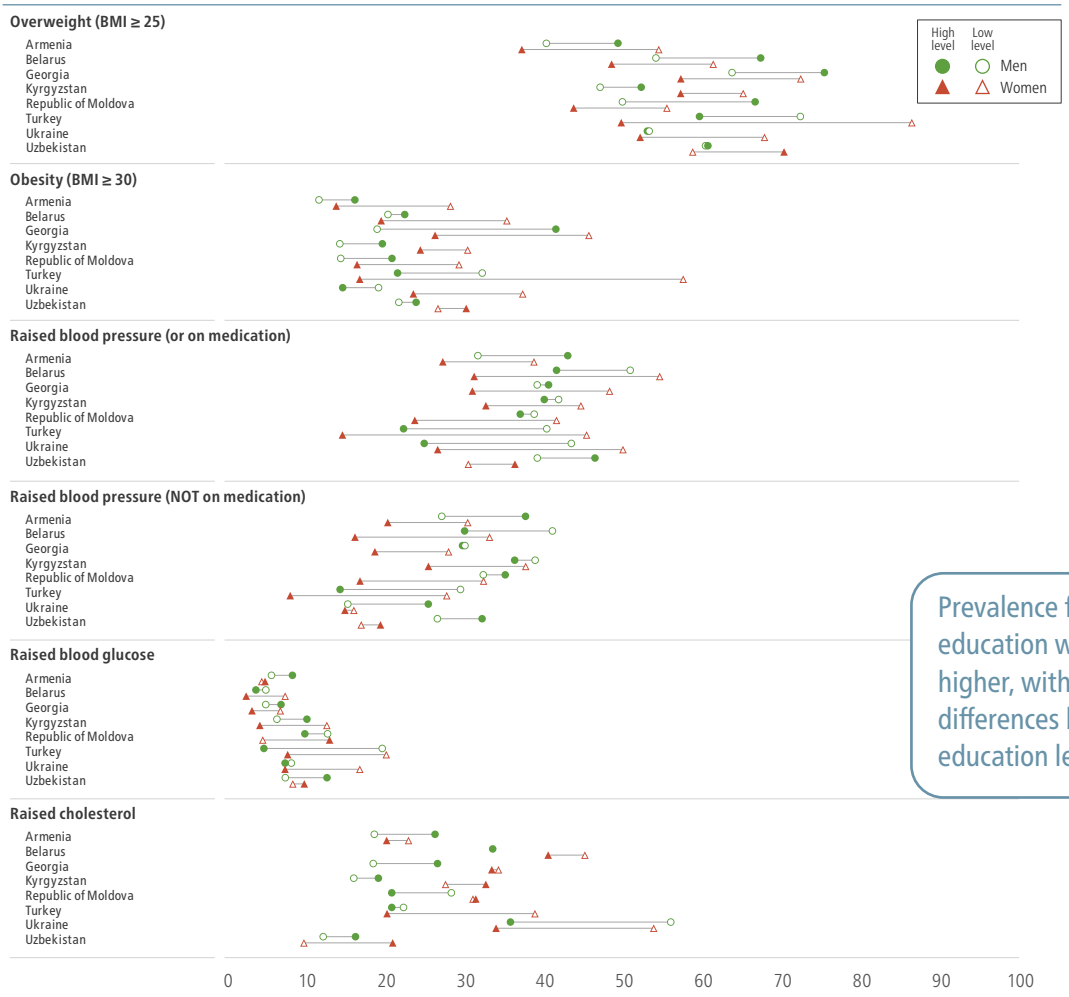
Fig. 11. Prevalence of behavioural risk factors with differences between high and low education levels (%)



More low-education men use tobacco, but more high-education men and women consume alcohol

Men and women in different education levels are also exposed to biological risk factors differently. While prevalence tends to be higher for women in the low education level, prevalence is often higher for men in the high education level. The differences are greater, however, between women in the high and low education groups than between high- and low-education men, especially with risk factors related to weight and blood pressure (Fig. 12 and Annex 1, Table A1.11).

Fig. 12. Prevalence of biological risk factors with differences between high and low education levels (%)



Prevalence for low-education women is higher, with greater differences between education levels

Additional differences in biological risk factors are observed when comparing education levels between men and women. While there are no significant differences overall between men and women in the overweight category for most countries, an analysis by education level shows prevalence among low-education women is not only significantly higher than for high-education women, but in many cases is also higher than for low-education men (with the exception of Uzbekistan). With obesity and raised blood pressure, the differences between low- and high-education women more often are greater than they are for low- and high-education men, with higher prevalence for low-education women than for high-education women and men of any education level. The association between gender and education level in relation to biological risk factors is different for women and men.

GENDER AND EMPLOYMENT/INCOME

The employment challenges men and women face, particularly in rural areas, can lead to labour migration, predominantly of men. This also affects women, who are left with more economic distress and limited resources *(24).* Women's participation in the labour force across the countries ranges from slightly less than men in Belarus (80.4% of men, 74.7% of women) to less than half that of men in Turkey (78.1% of men, 37.5% of women). The estimated average annual earned income per capita for women across countries is approximately 55.6% of that for men. On average, approximately twice as many women than men are part-time workers, but the amount of hours women spend in unpaid work per day is on average from two to five times that of men *(22).*

Both employment and income data were collected in the STEPS survey, and preference of which variable was to be included in the analysis of their country profile was chosen by STEPS country focal points. Armenia, Kyrgyzstan and Turkey included analysis by income level only, while Belarus and Georgia chose only employment status, given the low response rate for income in their data. The Republic of Moldova and Ukraine chose to include both employment status and income level in the analysis of their STEPS data.

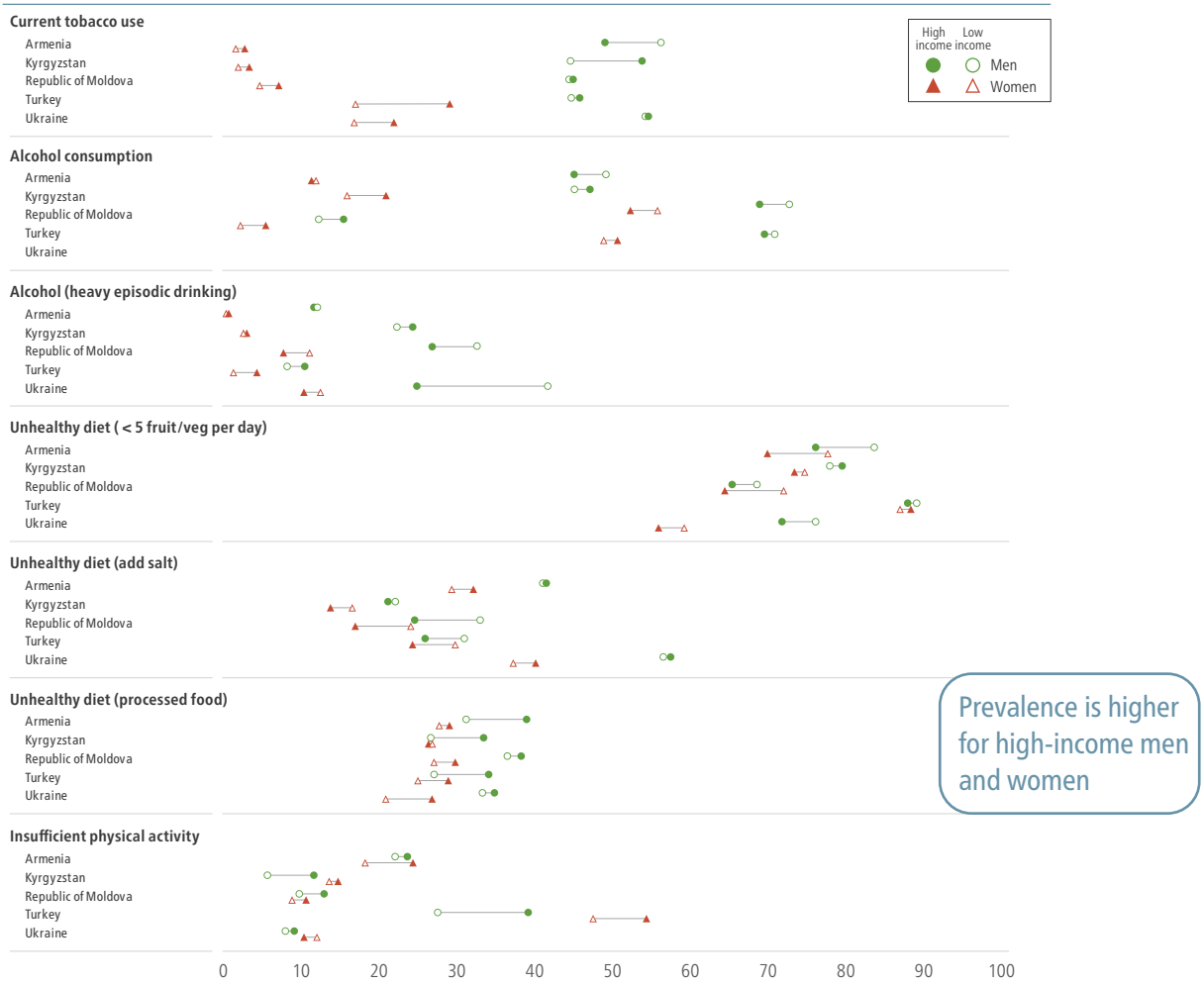
Five income quintiles were used in the STEPS survey and, based on average income levels and adjusting for household size, categories of high and low income were created. The employment status categories were also condensed for analysis into employed (government employee, nongovernment employee, self-employed) and unemployed or not in the labour force (unemployed (able or unable to work), student, retired).

Prevalence of tobacco use, eating processed foods and taking part in insufficient physical activity more often is higher among high-income men and women than low-income, but the association varies by country and is not the same for men and women. Prevalence varies by income level in each of the other behavioural risk factors. For example, prevalence of heavy episodic drinking is not significantly different for men and women by income level, except for men in Ukraine, where prevalence among low-income men is significantly higher than among high-income men (Fig. 13 and Annex 1, Table A1.12).

More employed men and women are observed to engage in most behavioural risk factors than those who are unemployed or not in the labour force, and more significant differences are observed by employment status than by income level. The association again varies by country and is not the same for men and women (Fig. 14 and Annex 1, Table A1.13).

Where variance between income level and employment status occurs, a closer look at the risk factor and country is necessary. For example, alcohol consumption shows little variance in the countries analysed by income level, but significant differences are shown in the countries analysed by employment status. Given that more variance is observed in countries analysed by employment status rather than income level, an analysis by employment status may be more informative moving forward. The measurement of income level could also be strengthened to perhaps reveal further differences. Lower response rates for income are common across the countries, and income may be more influenced by a response bias than employment. Variance of the prevalence of risk factors seen by age group may also contribute to differences in variance between income level and employement status, such as retired people being in the unemployed or not in the labour force category.

Fig. 13. Prevalence of behavioural risk factors with differences between low and high income (%)

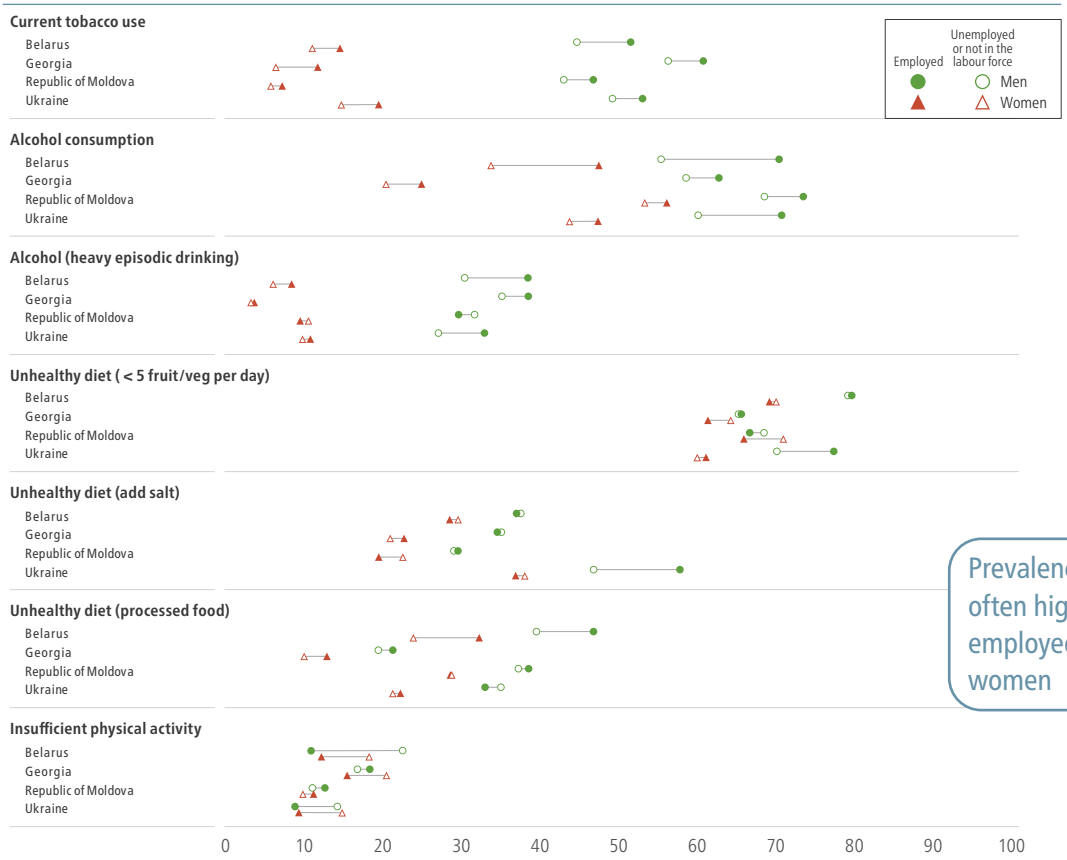


Prevalences of most biological factors are higher for low-income women, but they vary for men. The differences between high and low income more often are greater for women than for men (Fig. 15 and Annex 1, Table A1.14). For example, prevalence of raised blood pressure is higher for low-income women across the countries, but for men, it varies.

With income level, it can be seen that the association between sex and a sociodemographic variable can sometimes be the opposite for men and women. In this case, prevalence is more often higher for low-income women and high-income men in Ukraine. Sociodemographic factors can be associated with risk factors in different ways for men and women.

Prevalence of biological factors tends to be higher for women in the unemployed or not in the labour force category, but again it is not as consistent across risk factors for men. The differences between employment status more often are greater for women than for men (Fig. 16 and Annex 1, Table A1.15). While variance

Fig. 14. Prevalence of behavioural risk factors with differences by employment status (%)

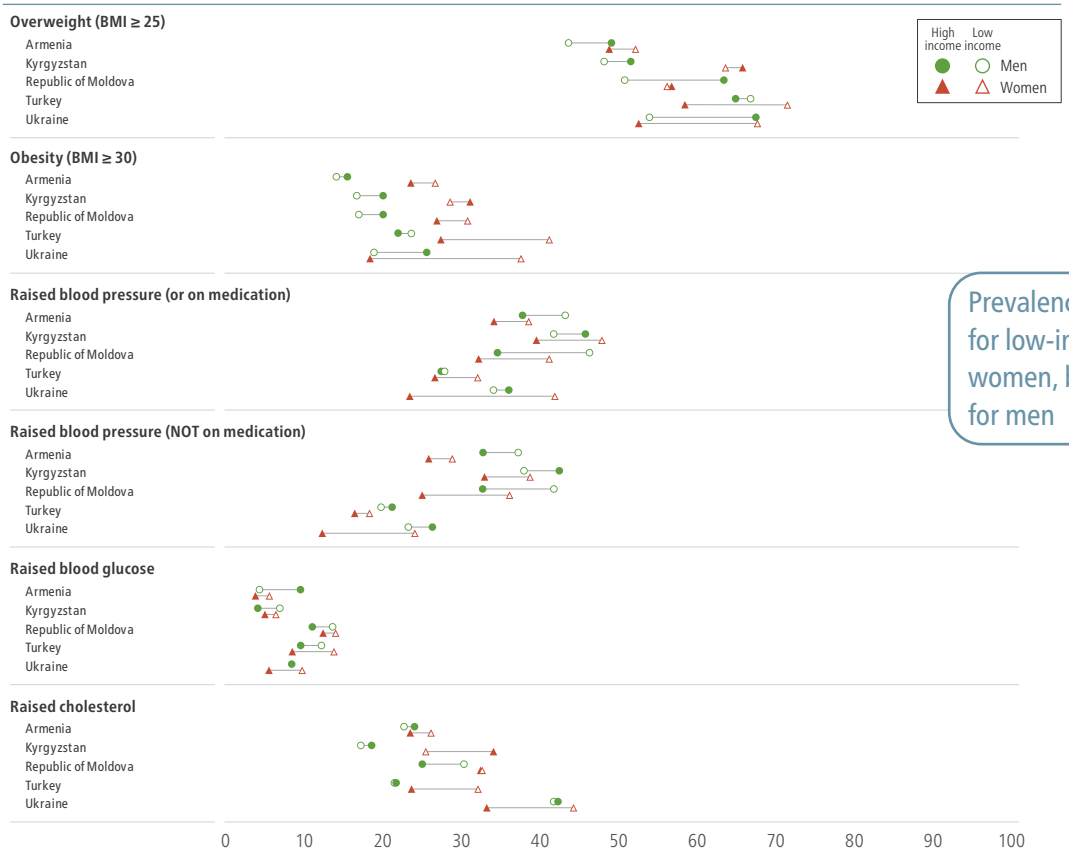


Prevalence is more often higher for employed men and women

occurs between men and women by risk factor and country, prevalence of raised blood pressure (including both those on medication and those not on medication) consistently is higher for men and women who are unemployed or not in the labour force. Being unemployed or not in the labour force may present similar exposure to raised blood pressure for both men and women in the countries, while other risk factors, such as obesity, have a stronger association for women and employment status than for men.

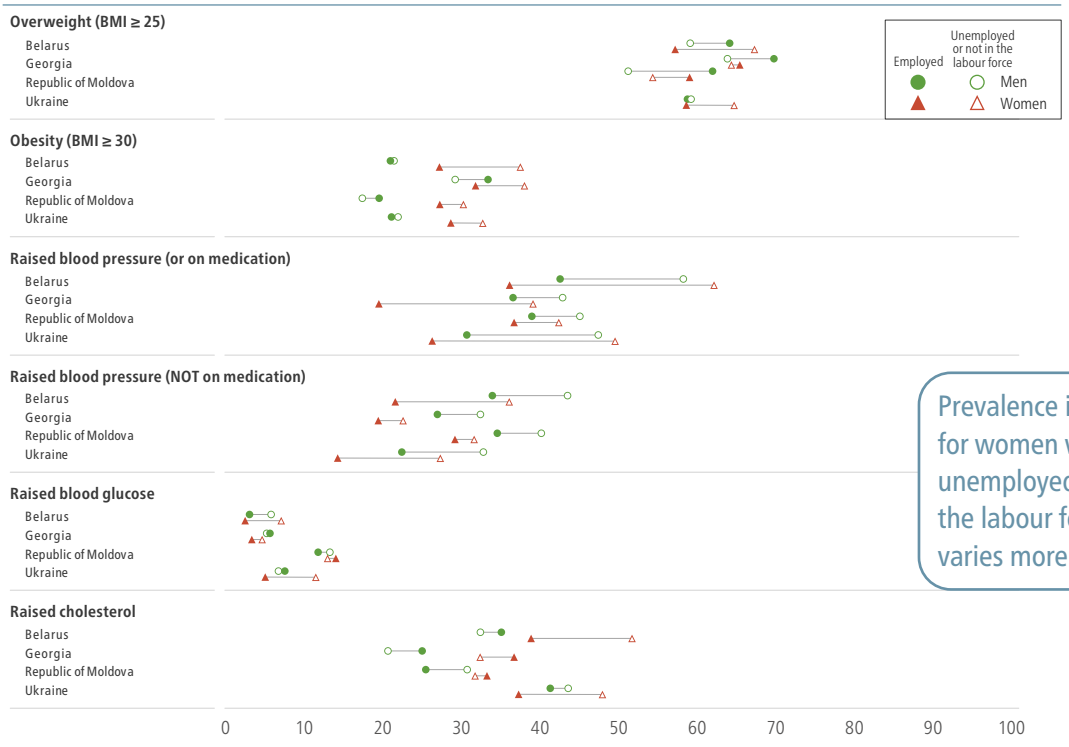
Once again, variance occurs by risk factor and country across these two variables. While raised blood pressure shows little variance in the countries analysed by income level, more significant differences are shown in the countries analysed by employment status. Overall, the differences are often more pronounced by employment status than income level, especially among women. This may be due to sociodemographic variables and/or the country analysed.

Fig. 15. Prevalence of biological risk factors with differences between low and high income (%)



Prevalence is higher for low-income women, but it varies for men

Fig. 16. Prevalence of biological risk factors with differences by employment status (%)



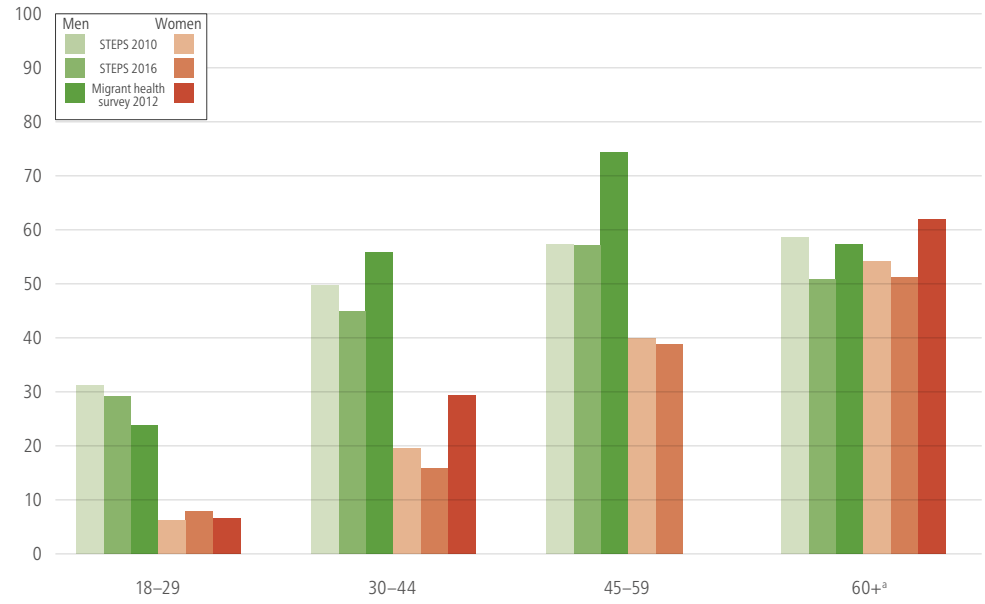
Prevalence is higher for women who are unemployed or not in the labour force, but it varies more for men

GENDER AND OTHER DETERMINANTS: MIGRATION, MARITAL STATUS AND ETHNICITY

Other sociodemographic variables chosen by some countries for analysis provide further evidence of the importance of disaggregating data and comparing differences among subgroups of men and women. A health survey for migrants in Georgia, carried out in 2012 by the International Organization for Migration and the National Centre for Disease Control and Public Health of Georgia, used the STEPS questionnaire and other instruments and provides a comparison with a vulnerable subgroup. Knowledge and awareness of major NCDs and their risk factors was quite low among the migrant population, who often face even higher barriers in accessing services than the greater population *(25).*

Illnesses migrants and ethnic minorities experience generally are the same as those found in the greater population, but prevalence rates can be higher, especially with CVDs. In the case of Georgia, an analysis of the prevalence of three or more NCD risk factors by age among subgroups reveals important differences. From the STEPS surveys of 2010 and 2016, the percentages of men and women with three or more risk factors generally decrease in each age group in the overall population, but among the migrant population, the percentages of both men and women with multiple risk factors are lower than for the greater population in the 18–29 age group and higher in all other age groups. The increase is especially drastic from the 18–29 to the 30–44 age groups for men and (especially) women, revealing that not only are the percentages higher among the migrant population, but also that the accumulation of risk factors by age group is different to that of the greater population (Fig. 17 and Annex 1, Table A1.16).

Fig. 17. Percentage with three or more risk factors by age group in Georgia, STEPS 2010, 2016 and migrant health survey (2012)



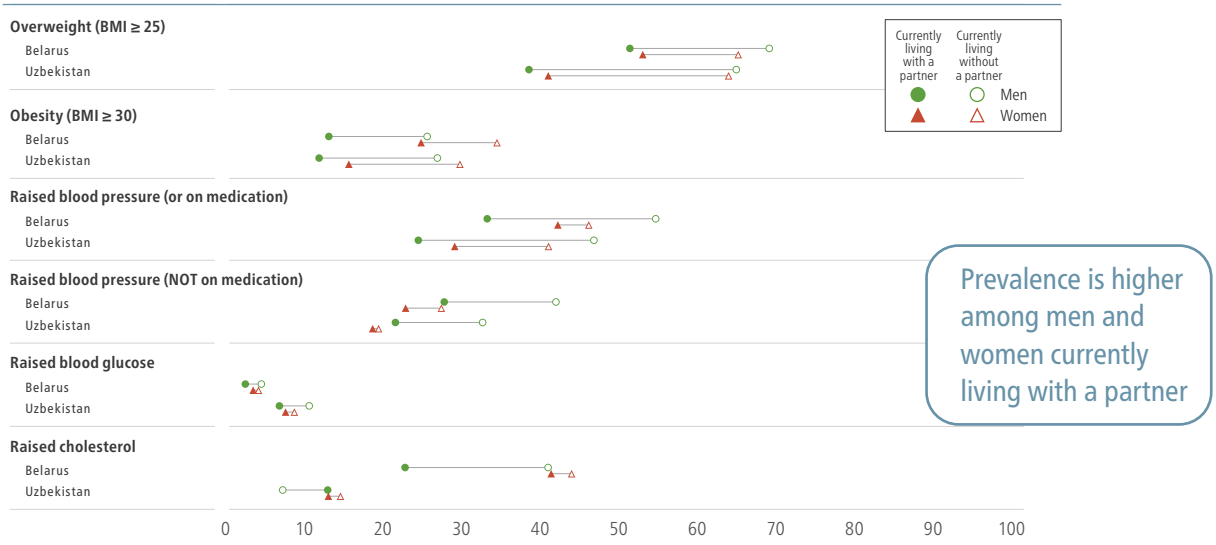
[a] 60–64 (2010 migrant survey); 60–69 (STEPS 2016).

Differences in prevalence of behavioural risk factors among migrant men and women in Georgia are similar to those in the greater population, but prevalence of biological risk factors more often is higher. Other differences are also observed, such as an opposite association between overweight and obesity

and eduation level among migrant women than among women in the greater population. Important differences are hiding in the data between not only men and women, but also among subgroups of men and women, because gender and sociodemographic differences are associated with differences in exposure to risk factors.

Marital status was chosen as a sociodemographic variable to be included in the analysis by Belarus and Uzbekistan, highlighting another disaggregation for comparison. Prevalence of behavioural risk factors for men and women by marital status in these two countries reveals few significant differences, primarily among men, and no consistent trends across risk factors and countries. Prevalence among biological risk factors, however, more often is higher among men and women who currently are living with a partner (currently married or cohabitating) than those living without. The association is not always similar for men and women, however. While differences by marital status are similar for men and women in prevalence of overweight and obesity, for example, the differences in prevalence of raised blood pressure and raised cholesterol are greater for men than women (Fig. 18 and Annex 1, Table A1.17).

Fig. 18. Prevalence of biological risk factors with differences by marital status (%)

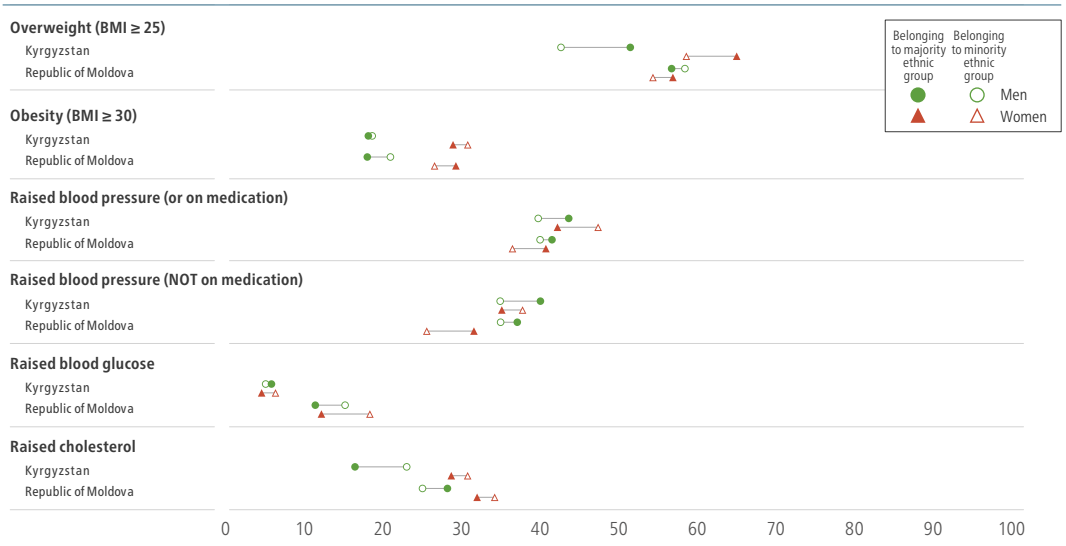


An analysis by ethnicity was also used in two country profiles to examine additional differences due to the social influence of ethnicity on health behaviours and how gender roles may vary across ethnic groups. Ethnicity data were collected during the STEPS survey included in the country profiles of Kyrgyzstan and the Republic of Moldova.

Some significant differences in behavioural risk factors among men and women by ethnicity are observed in Kyrgyzstan. Ethnic Russian men and women tend to have a higher prevalence of behavioural risk factors than other ethnic groups, and significant differences between men and women in each ethnic group are also prevalent. The overall trend of biological risk factors is that prevalence is higher for Kyrgyz and ethnic Uzbek men, but prevalence is higher for ethnic Russian women (Fig. 19 and Annex 1, Table A1.18).

While differences between men and women are observed among all three ethnic groups, they are more pronounced between ethnic Russian men and women.

Fig. 19. Prevalence of biological risk factors with differences by ethnicity (%)



Some significant differences are also observed in behavioural and biological risk factors by ethnicity in the Republic of Moldova, but they vary by risk factor and ethnic group. For example, ethnic Ukrainian men and women are lower than other ethnic groups in several behavioural risk factors, but prevalence for them tends to be higher across biological risk factors. Additionally, prevalence for Moldovan/Romanian men and women tends to be higher across biological risk factors compared to other ethnic groups. This again demonstrates the need for disaggregated data in each country as differences are found even among the same ethnic group (Russian men and women) across countries.

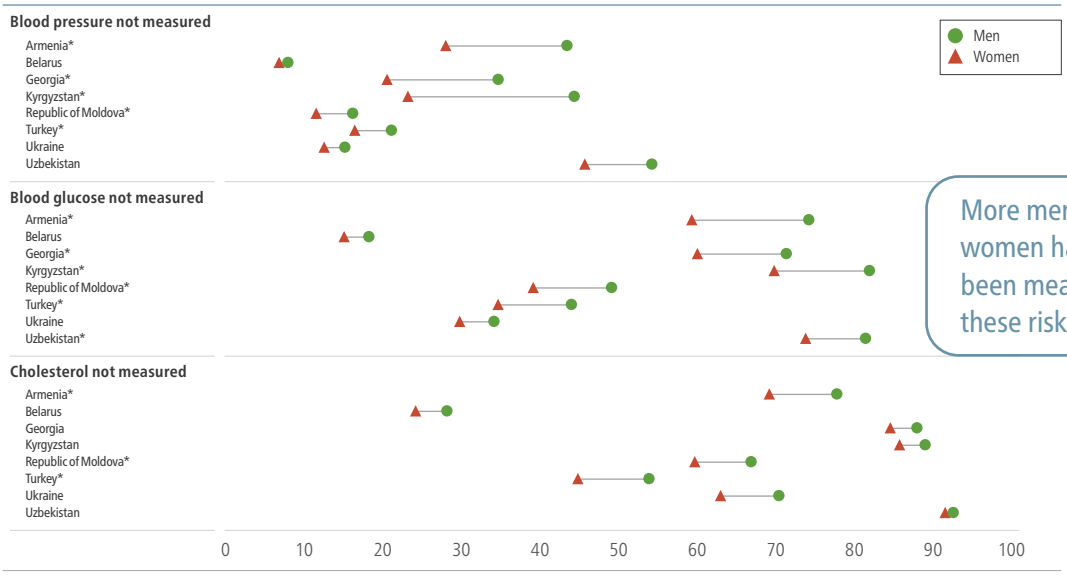
IMPACT OF GENDER ON HEALTH SYSTEM USE AND RESPONSE

Gender impacts the way men and women use services and the responses they receive

Gender norms, roles and relations impact the way men and women use services and the responses they receive from health providers *(6,18).* Health-seeking behaviour is affected by gender norms around what it means to be a man or woman, with traditional masculinities often acting as a barrier to men seeking health care, preventive behaviours and managing self-care, while women's health is often delegated to sexual, reproductive and maternal health. This has implications for the services men and women access and how they are perceived when they access those services. Men's limited health-seeking can affect the identification and management of biological risk factors. Gender biases can also impact the provision and quality of services received *(26).* For example, when women raise concerns that are unrelated to sexual, reproductive or maternal health, they may not be believed by health workers *(27).* Health workers' lack of understanding of the gendered nature of service utilization compounds these issues. Current commitments towards universal health coverage require a holistic approach to men's and women's health, one that considers how gender norms, roles and relations affect access to and use of services, as well as the responses received.

In addition to the differences observed between and among men and women in NCD risk factors, significant differences are found between men and women in accessing services for NCDs. Though the percentages of men and women not measured for these risk factors vary considerably by country, the trend across countries is that more men than women have not had their blood pressure, blood glucose or cholesterol measured by a health professional (Fig. 20 and Annex 1, Table A1.19).

Fig. 20. Percentages not measured for risk factors by a health-care professional



* Statistically significant difference.

Differences in access between men and women varies not only by country, but also by risk factor. A significantly higher percentage of men than women in Georgia and Kyrgyzstan have not had their blood pressure and blood glucose measured by a health-care professional, but the higher percentage of men

who did not have their cholesterol measured in these countries is not significant. Other countries, such as Belarus and Ukraine, followed the trend of higher percentages of men not having been measured, but the differences are not statistically significant.

An analysis of accessing services by age groups reveals that the differences between men and women typically become significant in older age groups. As is to be expected, fewer men and women in the younger age groups have been measured for these risk factors than those in the older age groups. However, whereas significantly more women in the older age groups are accessing services (when they are more at risk), the same increase in access is not seen among men in the older age groups. This significant difference in access between men and women typically first appears in the 45–59 age group (Annex 1, Table A1.20).

Gender inequality impacts access to, and use of, health resources

In the 2019 SDG Gender Index (an index that scores the state of gender equality in each country), the countries ranged in rank from 36 (Belarus) to 70 (Turkey) *(28).* Gender norms and roles remain strong and are considered traditional throughout this part of the Region, with women primarily being expected to take responsibility for the household and family while men primarily are expected to be the main income earners *(29–32).* Though it varies among countries, public polling shows that these norms are often supported by a majority of both men and women.

Worldwide, women spend between two and 10 times more time on unpaid care, in addition to their paid activities. Women's increased unpaid care burden impacts their overall health and well-being by affecting their labour-force participation, quality of employment (more part-time and vulnerable employment), wages, free time and mental health *(32).* Men's role as the main income earners can also affect men's mental health and ability to access and use health services.

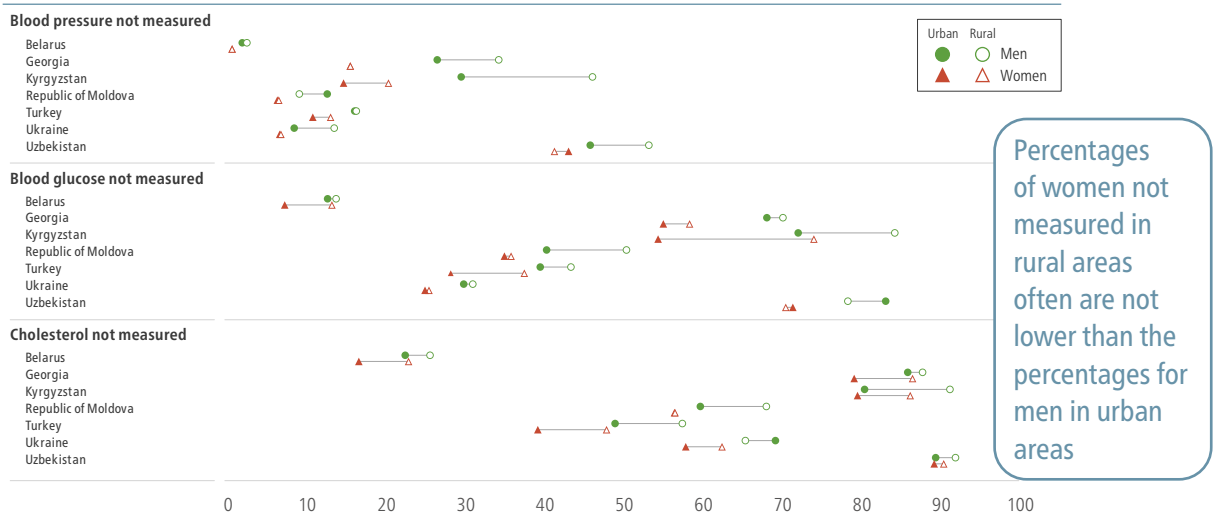
Measures have been taken to address gender inequality in each of these countries. In recent years, legislation and national plans have been adopted specifically to address gender issues, including discrimination based on gender, equality in public services, violence against women, addressing women's unpaid care burden *(33)* and establishing national councils on gender equality *(19,20,29,34–36).* Despite these measures, popular narratives of gender inequality persist.

Examining differences in accessing services not only between, but also among men and among women is necessary to identify inequalities and understand needs and barriers. An analysis of additional differences by sociodemographic groupings reveals more differences between, and variance among, men and women. While differences are observed in the analysis of risk factors, there is often variance by sociodemographic group. Trends observed in the associations between sociodemographic groups and accessing services, however, are more pronounced across countries. In other words, groups within geographic location, education level and employment/income have consistent associations for both men and women across access measurements. More women and men in rural areas, in the low education level, and who are in the low income and unemployed or not in the labour force categories have not been measured for these risk factors.

ACCESS BY GEOGRAPHIC LOCATION

The percentages of men and women not measured for these risk factors are more often higher in rural areas than in urban. This trend is consistent across nearly all countries and risk factors (Fig. 21 and Annex 1, Table A1.21). Additionally, there are important differences among men and among women by geographic location.

Fig. 21. Percentage not measured for risk factors by geographic location



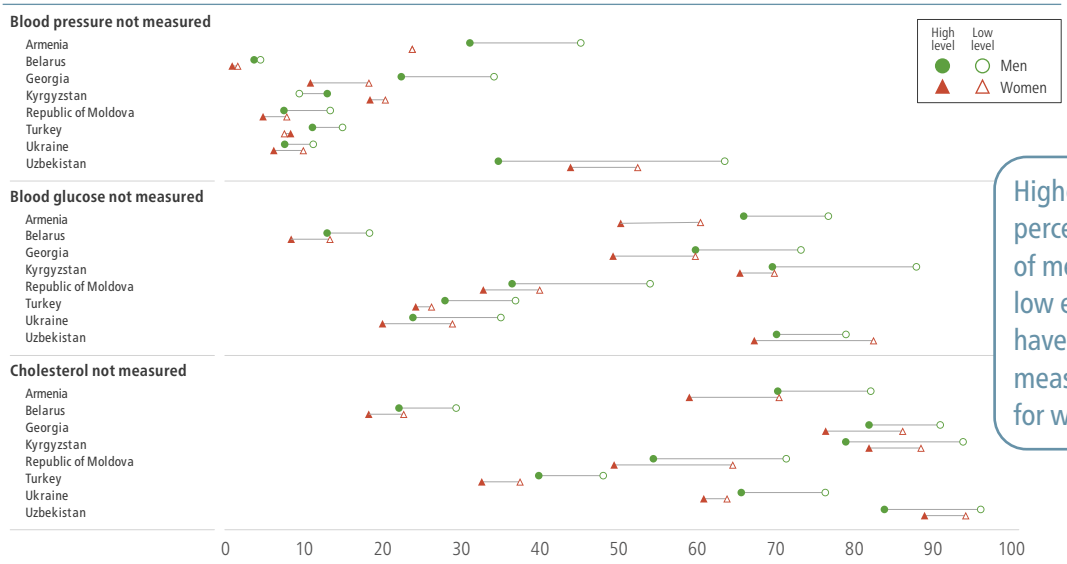
The percentages of rural women not measured often are not significantly different than those of men in urban areas who have not been measured. As prevalence of biological risk factors for men and (especially) women often is higher in rural areas than in urban, identifying not only which groups of men and women experience higher prevalence, but also which are not accessing services, is important in efforts to prevent and manage NCDs. For example, significantly more men than women overall in Kyrgyzstan have not had their blood glucose measured. This analysis by place of residence highlights differences within groups of men and women in being measured, with the percentage of rural women not measured being as high as the percentage for urban men. This illustrates the need to identify which groups are in need of targeted interventions to improve access, in this case not only men, but also rural women. Acting on aggregated data alone may lead to missed opportunities to target groups among men and among women experiencing barriers to accessing services.

ACCESS BY EDUCATION LEVEL

The percentages of those not measured for blood pressure, blood glucose and cholesterol consistently are higher for low-education men and women than those with high education. The differences between low and high education in not being measured, however, are often greater for men than women. The percentages of high-education men who have not been measured are often not significantly higher than for women in the low and even high education level, showing that low-education men are often driving the overall higher percentage of men who have not been measured (Fig. 22 and Annex 1, Table A1.22).

As mentioned in the analysis of risk factors, prevalence of raised blood pressure is observed to be higher for men and women with low education, but it varies by country. As more low-education women and men

Fig. 22. Percentage not measured for risk factors by education level



have not been measured for raised blood pressure, this presents further support for a gender-analysis approach to identify which subgroups within the population are both at greater risk and are underserved. In this case, the percentage of low-education men who have not been measured appears to be driving the difference between men and women overall. An examination of the barriers faced by low-education men in accessing services may be warranted in many of these countries.

ACCESS BY EMPLOYMENT STATUS/INCOME LEVEL

Though not all differences are statistically significant, a general trend that more men and women who are in the low-income category have not been measured for these risk factors is observed (Fig. 23 and Annex 1, Table A1.23). The differences are more pronounced with blood glucose and cholesterol than with blood pressure, and in most cases the difference between high and low income is greater for women than for men. Both men and women may be facing barriers to accessing services that are associated with income level, but the association appears to be different for men and women.

Similarly, the trend with employment status and being measured for risk factors is that more men and women who are in the unemployed or not in the labour force category have not been measured for these risk factors, but there are exceptions (Fig. 24 and Annex 1, Table A1.24). Most differences are not significant, but in the Republic of Moldova, the percentage of women who are unemployed or not in the labour force who have not had their blood glucose or cholesterol measured is significantly higher than for employed women. An exception to the trend is Belarus, where the percentage of employed women whose cholesterol has not been measured is significantly higher than for women who are unemployed or not in the labour force. These significant differences, in addition to the exceptions to trends, provide further evidence for examining groups within a population.

Though more men than women generally have not been measured for risk factors, it is often observed that by income or employment status, fewer women than men in some subgroups have been measured. Efforts to analyse access or identify barriers for men and women therefore should not treat men and women as

Fig. 23. **Percentage not measured for risk factors by income level**

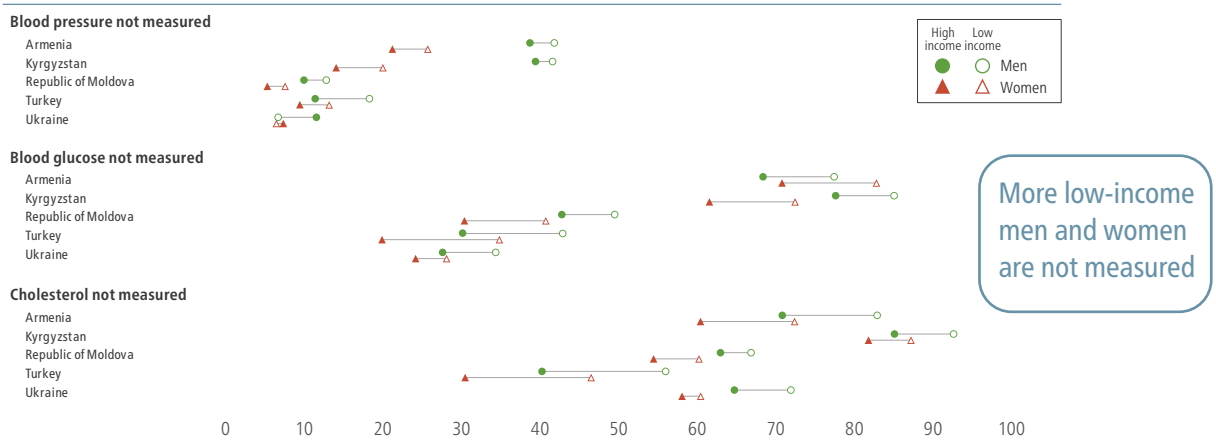
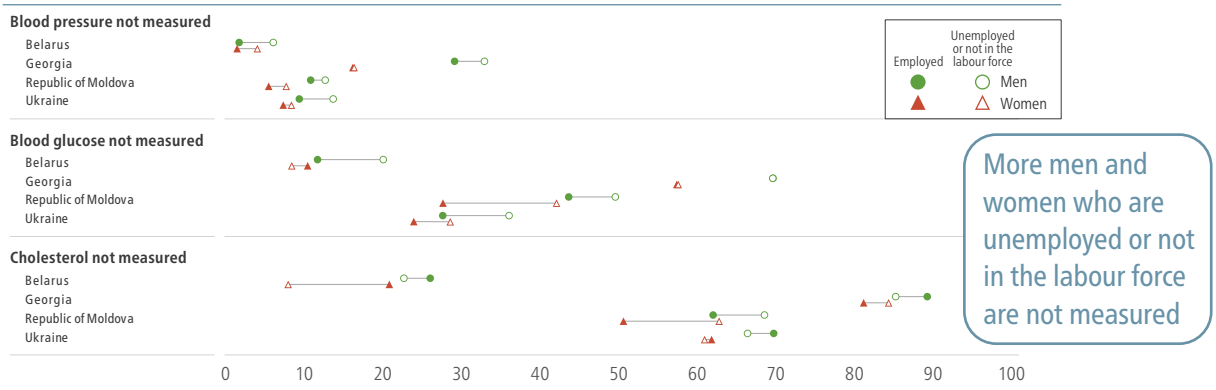


Fig. 24. **Percentage not measured for risk factors by employment status**



homogenous groups. This is especially important because the prevalence of biological risk factors is higher for women in the low-income and unemployed or not in the labour force groups than it is for employed and high-income women, and the differences by employment status/income levels are greater for women than for men.

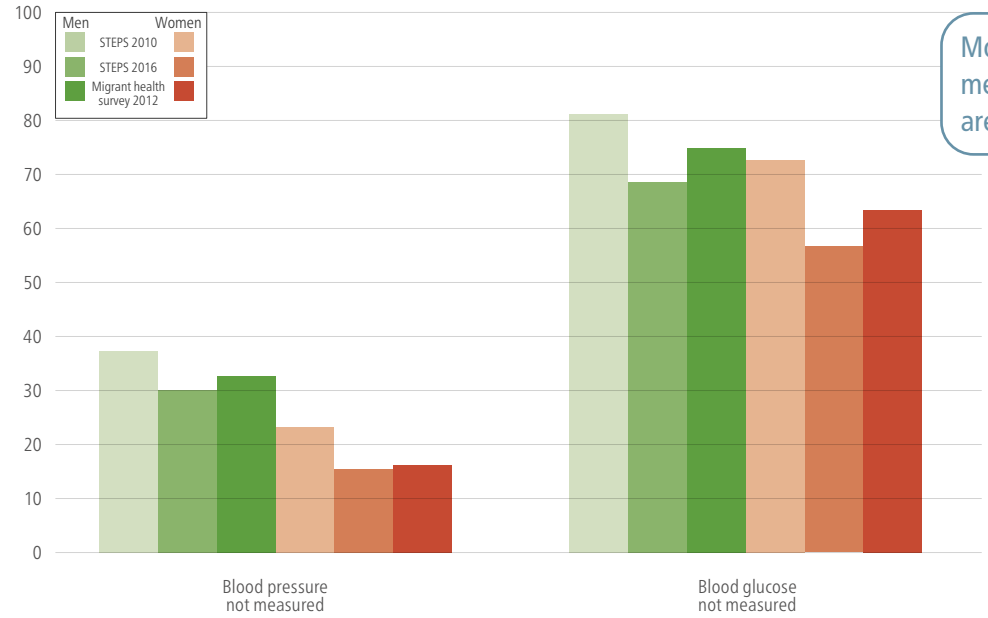
Fewer men overall have been measured for risk factors, but the differences among men and among women are equally important. Men and women in low-education, rural and low-income/unemployed or not in the labour force groups have been measured less. Additionally, the percentages of women not measured in the low-education, rural and low-income/unemployed or not in the labour force groups often are no different than the percentages of high-education, urban and employed/high-income men not measured. The differences hiding even in sex-disaggregated data need to be identified if progress is to be made in preventing and managing NCDs in the population.

ACCESS AND MIGRATION, MARITAL STATUS AND ETHNICITY

Other observable differences in accessing services emerge when the analysis of data includes variables examining subgroups such as migrants and ethnic minorities as well as differences between men and women according to marital status. Migrants often face various barriers to accessing services, even beyond

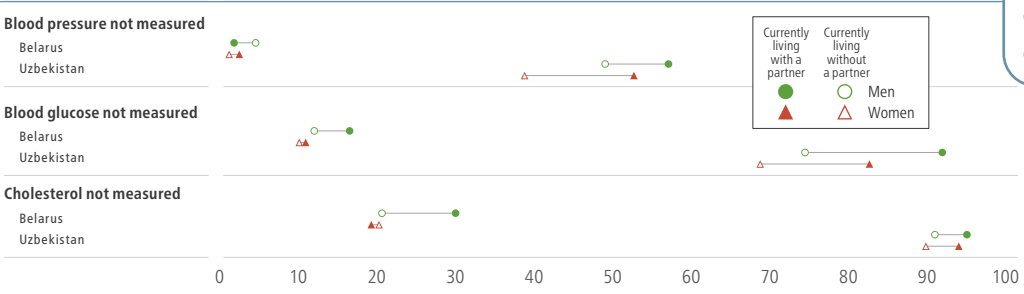
those associated with migrant status. In the case of Georgia, data from the migrant health survey can be used alongside the STEPS data to show how a subgroup compares to the larger population. Access for both men and women in the greater population improved from 2010 to 2016. The snapshot of access for migrant men and women in 2012 shows higher percentages not being measured than in the overall population in 2016, but these are lower than the percentages of the 2010 STEPS survey (Fig. 25 and Annex 1, Table A1.25). An analysis of groups within the migrant population by age, education level and employment status reveals that percentages of those not measured for risk factors generally are higher among migrant men and women.

Fig. 25. Percentage not been measured for risk factors by health-care professional in Georgia



Differences in access by marital status can vary for men and women and by country. While some differences are observed for men in Belarus, virtually no differences are seen for women. In Uzbekistan, however, greater differences are observed for both men and women, and higher percentages of both men and women not being measured are found among those currently living with a partner (Fig. 26 and Annex 1, Table A1.26). Marital status may be associated with accessing services differently for men and women, and it varies by country.

Fig. 26. Percentage not measured for risk factors by marital status



A comparison of men and women belonging to majority and minority ethnic groups in Kyrgyzstan and the Republic of Moldova does not reveal significant differences or trends in accessing services. Members of different minority ethnic groups in these countries may not experience the same barriers to access. An analysis of a majority ethnic group compared with several minority groups, as was performed with Kyrgyzstan, may reveal important differences and similarities between ethnic groups. In this case, more men and women belonging to the majority ethnic group (Kyrgyz) and a minority ethnic group (Uzbek) were not measured for risk factors than another minority ethnic group (Russian) *(37).*

Gender stereotypes may be ignored, perpetuated or challenged by health promotion efforts to prevent NCDs

One way in which gender stereotypes play a role in health promotion is through interactions with health-care professionals. The STEPS survey provides self-reported accounts of participants' interactions with health-care professionals regarding lifestyle advice on NCD-related risk factors. Findings from a recent WHO report can be applied to behavioural risk on how notions of masculinities impact men's access to services and the responses they receive *(38).*

Men and women access services differently, and the responses they receive when they access services can also differ. The STEPS survey gathered information on whether men and women had been given lifestyle advice when they had visited a health-care professional. The topics under lifestyle advice can be compared with the prevalence of related risk factors (Table 2) to examine more differences between sexes.

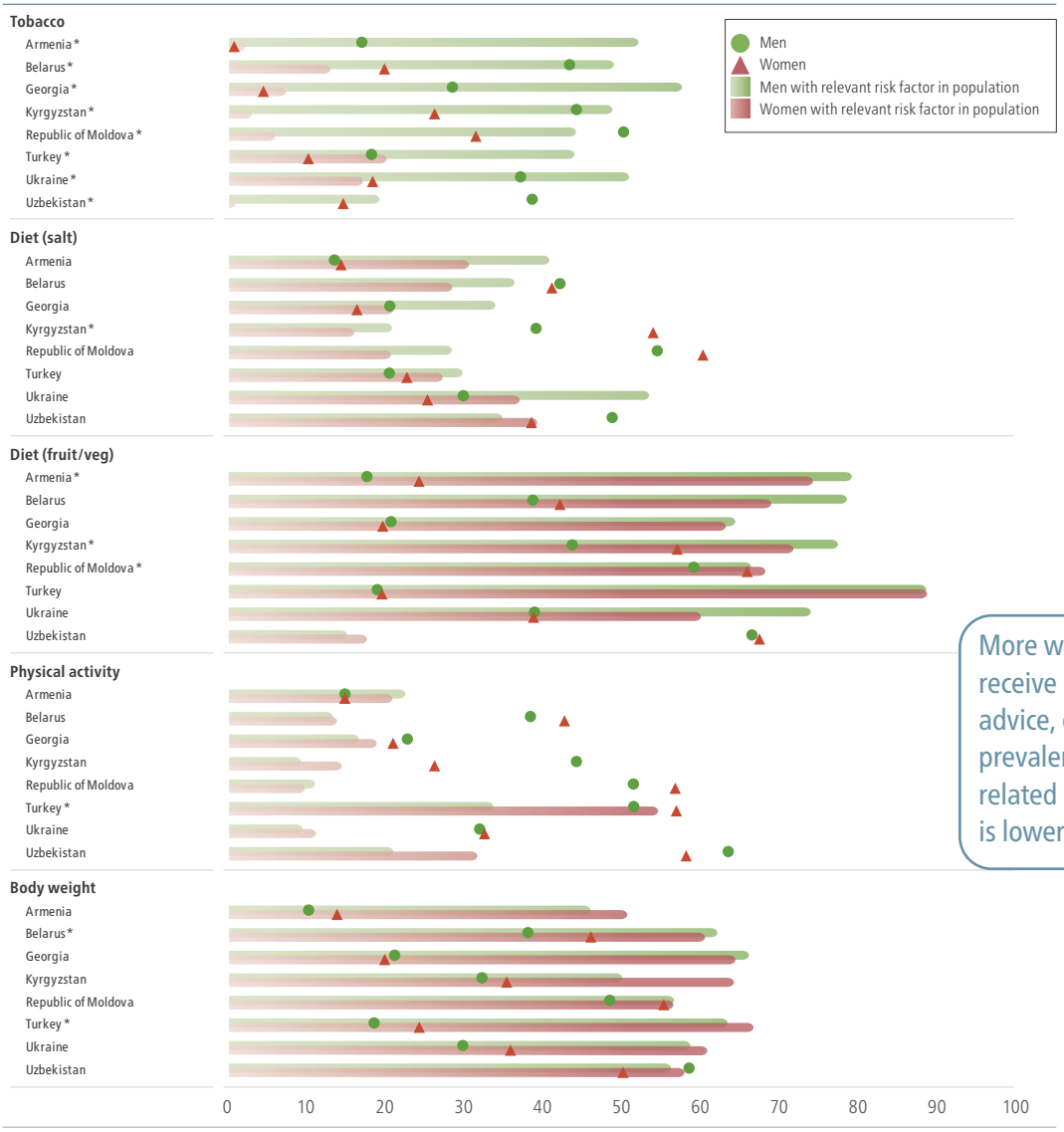
Table 2. Lifestyle advice topics and prevalence of related risk factors

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 fruit/veg)
Start or do more physical activity	Insufficient physical activity
Maintain a healthy body weight or lose weight	Overweight (BMI ≥ 25)

Across countries, a significantly higher percentage of men than women have been given advice on avoiding tobacco use. On the remaining lifestyle advice topics, a higher percentage of women across countries report having been given advice, or there is no significant difference (Fig. 27 and Annex 1, Table A1.27).

The percentages of those receiving lifestyle advice in some cases are lower and in other cases higher than the prevalence of the related risk factors. The difference in lifestyle advice given to men and women, and the corresponding prevalence of the related risk factors, warrants further analysis.

Fig. 27. Percentage of lifestyle advice given for related risk factor



More women receive lifestyle advice, even when prevalence of the related risk factor is lower

* Statistically significant difference.

CONCLUSIONS

This report and the accompanying country profiles are the first gender analyses of NCD risk-factor data for adults in participating counties and make an important contribution to, and serve as an evidence base for, enabling achievement of the WHO European Programme of Work *(39)*, the SDGs, women's and men's health strategies *(1,2)*, the European Action Plan for the Prevention and Control of Noncommunicable Diseases *(3)* and other international commitments on NCDs, and promoting improved use of disaggregated data for better health outcomes, gender equality and human rights. The report and country profiles are also important tools in accelerating action towards reducing the NCD burden and ensuring universal health coverage by unpacking inequalities by sociodemographic determinants in NCD risk factors and health system response, and contribute to raising awareness and building capacity among country-based researchers and policy-makers on the rationale for applying a gender analysis to health data.

Globally, more than 100 countries have collected data through the STEPS surveys, but this series is the first time a more in-depth analysis from a gender perspective has been conducted. The following findings of the gender analysis across the eight countries therefore can be used to address specific needs and policy opportunities for similar countries in the Region. The findings represent observed trends, and data presented in the report are disaggregated to show variance by country.

Men and women not only engage differently in behavioural risk factors, but also have different risk factor trajectories for both behavioural and biological risk factors over the life-course. Significantly higher percentages of men than women in most age groups engage in behavioural risk factors for NCDs. Higher prevalence in biological risk factors is observed among women in the older age groups than in men, while generally there is lower prevalence in younger age groups of women than in men. The percentages of men and women with multiple risk factors increase with each age group, but the increase for women often is more drastic, causing the differences in percentages between men and women to lessen with each ascending age group. While the percentages of men with multiple risk factors typically double from the youngest to the oldest age groups, the increase in the percentages of women is from three to 11 times greater between comparable age groups. The importance of disaggregation by sex and age becomes apparent when significant differences are found to be hiding in the aggregated percentages of risk factors for men and women. Higher levels of male premature mortality could also contribute to lower prevalence of multiple risk factors among male survivors at older ages, but additional causes of difference in risk factors between men and women should also be explored.

The analysis shows that prevalence of both behavioural and biological risk factors can vary in subgroups of men and women and by country, and these subgroups are not equal in their relation to the risk factors. Identifying groups most at risk necessarily requires disaggregation of data and a gender analysis that links sex with age and other relevant sociodemographic variables. The additional analysis by geographic location, education, income and employment status further showcases the differences across behavioural and biological risk factors not only between, but also among, men and women.

Differences were observed for men in the analysis of risk factors by geographic location, but they vary, with no clear trend across countries. Prevalence of behavioural risk factors tends to be higher for urban women, however, and prevalence of biological risk factors generally is higher for women in rural areas. The analysis by education level reveals that prevalence of behavioural risk factors for men and women varies across countries, with low-education categories higher in some risk factors and high-education categories higher

in others. The trend for biological risk factors and education levels is more consistent, with prevalence generally being higher for high-education men and low-education women than other levels; the difference is greater for women, but again varies by country. More high-income and employed men and women engage in behavioural risk factors, while those with low incomes or who are unemployed or not in the labour force are linked with higher prevalence of biological risk factors for men and (especially) women. These differences further emphasize the need for a gender analysis to identify subgroups at risk and inform targeted interventions.

Other social determinants, such as migration, marital status and ethnicity, also provide insights into subgroups among men and among women regarding risk factors. In Georgia, migrant men and women have higher prevalence of multiple NCD risk factors than the overall population. An analysis by marital status in Belarus and Uzbekistan reveals higher prevalence of biological factors for men and women currently living with a partner than those living without, but the association varies between men and women. Prevalence of current tobacco use is higher among ethnic minority men and women in Kyrgyzstan and the Republic of Moldova, prevalence of alcohol consumption is higher among ethnic majority men and women, and the other behavioural risk factors vary by ethnicity. These additional examples of determinants demonstrate the importance of examining risk factors among men and among women by country, as they relate to gender norms and practices among different groups.

Important differences are also observed in accessing services across countries. A higher percentage of men have not been measured for biological risk factors, while a higher percentage of women compared to men are being given lifestyle advice on most behavioural risk factors. Despite accessing services more, the prevalence of biological risk factors as measured during the STEPS survey remains higher for women than men, or are not significantly different. This may in part be due to differences in accessing services for men and women as observed through disaggregation by age, geographic location, education, income and employment status.

While fewer men and women in rural areas than in urban have been measured for risk factors, the percentages of women measured in rural areas are not significantly different than those of men measured in rural and urban areas. Both men and women in the low education level have been measured for risk factors less than those in the high education level. More men and women in the low-income and unemployed or not in the labour force groups have not been measured for risk factors than employed and high-income men and women.

More migrant men and women in Georgia have not been measured for risk factors than those in the greater population, warranting further examination into barriers that may be affecting migrant groups. Access and marital status vary in association between men and women in Belarus and Uzbekistan, with greater differences observed in Uzbekistan. Differences in being measured by ethnic group in Kyrgyzstan reveal the importance of examining minority groups separately compared to the majority group; differences are observed among minority groups, demonstrating that majority–minority status may present different experiences or barriers for different groups.

Improving access to services for women and men may therefore require that additional attention is paid to specific groups, including the following: men and (especially) women in rural areas, men and women in

the low education level, low-income and unemployed or not in the labour force men and women, migrant men and women, and some ethnic minority groups.

The significantly higher percentages of lifestyle advice given to women could be influenced by numerous factors, including women's higher frequency of interaction with health-care services, the greater proportion of women (especially in the older age groups) with biological risk factors, and cultural and gender norms. There is a need to identify gender-specific norms and barriers to access and lifestyle change. Barriers are both gender- and disease-specific, with men and women experiencing them differently depending on the risk factor and sociodemographic characteristics *(40).* These barriers can be identified and explored through studies that engage specific sociodemographic groups through quantitative and qualitative approaches. Such approaches could also explore possible influences such as the presence of implicit bias in provider counselling, the gender of the health-care professional and social norms regarding social interactions between men and women. Gender-sensitive and culturally appropriate responses would then facilitate behavioural change and access to, and use of, services. An analysis of the impact of gender inequalities requires further quantitative and qualitative information that cannot be retrieved from the STEPS data.

Findings presented in this report highlight the importance of an in-depth gender analysis of existing sex-disaggregated data together with other variables in identifying NCD risk-factor differences not only between men and women, but also among men and women. The analysis will further reveal specific needs and opportunities in prevention and management of NCDs among different population groups that can then be addressed through tailored interventions.

Accompanying this synthesis report are eight country profiles, each with key findings and variables specific to country data. The gender analysis is being extended to other available surveys (including the global adult and youth tobacco surveys, the Health Behaviour in School-aged Children study and the WHO European Childhood Obesity Surveillance Initiative) to obtain more compressive insights. Studies that specifically examine gender and social norms in these contexts can be used to complement these surveys by identifying driving and constraining factors for behaviours causing differences between and among men and women. In addressing the areas identified in this report, cost-effective interventions like best-buy and other interventions recommended by WHO *(13)* should be prioritized and tailored to the country-specific context to ensure uptake and efficiency. This would greatly contribute to the achievement of universal health coverage and the health-related SDGs.

REFERENCES[1]

[1] All weblinks accessed 25 November 2020, unless otherwise indicated.

1. Strategy on women's health and well-being in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/en/health-topics/health-determinants/gender/publications/2016/strategy-on-womens-health-and-well-being-in-the-who-european-region-2016).
2. Strategy on the health and well-being of men in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2018 (http://www.euro.who.int/en/health-topics/health-determinants/gender/publications/2018/strategy-on-the-health-and-well-being-of-men-in-the-who-european-region-2018).
3. Action plan for the prevention and control of noncommunicable diseases in the WHO European Region 2016–2025. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/en/health-topics/noncommunicable-diseases/pages/policy/action-plan-for-the-prevention-and-control-of-noncommunicable-diseases-in-the-who-european-region-20162025, accessed 7 April 2018).
4. WHO high-level regional meeting. Health Systems Respond to NCDs: Experience in the European Region, 16–18 April 2018, Sitges, Spain. Copenhagen: WHO Regional Office for Europe; 2018 (http://www.euro.who.int/en/media-centre/events/events/2018/04/high-level-regional-meeting-health-systems-respond-to-ncds-experience-in-the-european-region/documentation).
5. WHO European High-level Conference on Noncommunicable Diseases: Time to Deliver – Meeting Noncommunicable Disease Targets to Achieve the Sustainable Development Goals in Europe (Ashgabat, Turkmenistan, 9 April 2019). Copenhagen: WHO Regional Office for Europe; 2019 (https://www.who.int/news-room/events/detail/2019/04/09/default-calendar/who-european-high-level-conference-on-noncommunicable-diseases).
6. Gender mainstreaming for health managers: a practical approach. Geneva: World Health Organization; 2011 (https://www.who.int/gender-equity-rights/knowledge/health_managers_guide/en/).
7. The WHO STEPwise approach to noncommunicable disease risk factor surveillance. Geneva: World Health Organization; 2017 (https://www.who.int/ncds/surveillance/steps/riskfactor/en/).
8. Why using a gender approach can accelerate noncommunicable disease prevention and control in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2019 (http://www.euro.who.int/en/health-topics/health-determinants/gender/publications/2019/why-using-a-gender-approach-can-accelerate-noncommunicable-disease-prevention-and-control-in-the-who-european-region-2019).
9. Global Health Estimates. In: World Health Organization [website]. Geneva: World Health Organization; 2016 (http://www.who.int/healthinfo/global_burden_disease/en/, accessed 31 July 2017).
10. Women's health and well-being in Europe: beyond the mortality advantage. Copenhagen: WHO Regional Office for Europe; 2016 (https://www.euro.who.int/en/publications/abstracts/womens-health-and-well-being-in-europe-beyond-the-mortality-advantage-2016).
11. Global burden of disease (GBD). In: Institute for Health Metrics and Evaluation [website]. Seattle (WA): Institute for Health Metrics and Evaluation; 2020 (http://www.healthdata.org/gbd, accessed 19 August 2020).
12. European mortality database. In: WHO Regional Office for Europe [website]. Copenhagen: WHO Regional Office for Europe; 2020 (https://gateway.euro.who.int/en/datasets/european-mortality-database/).
13. Tackling NCDs: "best buys" and other recommended interventions for the prevention and control of noncommunicable disease. Geneva: World Health Organization; 2017 (https://www.who.int/publications-detail-redirect/WHO-NMH-NVI-17.9).
14. Williams J, Rakovac I, Elizondo EL, Sturua L, Magladkelidze N, Gamkrelidze A et al. A comparison of self-reported to cotinine-detected smoking status among adults in Georgia. Eur J Public Health 2020;30(5):1037. https://doi.org/10.1093/eurpub/ckaa160.
15. Stanaway JD, Afshin A, Gakidou E, Lim SS, Abate D, Abate KH et al. Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. Lancet 2018;392(10159):1923–94. doi:10.1016/S0140-6736(18)32225-6.
16. Marmot M, Bell R. Social determinants and non-communicable diseases: time for integrated action. BMJ 2019;28:364.
17. Ballantyne PJ. The social determinants of health: a contribution to the analysis of gender differences in health and illness. Scand J Public Health 1999;27(4):290–5.
18. Vlassoff C. Gender differences in determinants and consequences of health and illness. J Health Popul Nutr. 2007;25(1):47.

19. Republic of Moldova. Moldova country gender action plan. Washington (DC): World Bank; 2017 (http://documents.worldbank.org/curated/en/990771505307981800/Republic-of-Moldova-Moldova-country-gender-action-plan).

20. Final report on the Convention on the Elimination of all Forms of Discrimination against Women. Concluding observations of the seventh periodic report of Turkey. New York (NY): United Nations; 2016 (https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=CEDAW/C/TUR/CO/7&Lang=En).

21. Armenia. Demographic and health survey 2015–16. Yerevan: National Statistical Service, Ministry of Health and DHS Program; 2017 (https://dhsprogram.com/pubs/pdf/FR325/FR325.pdf).

22. Global gender gap report 2020. Geneva: World Economic Forum; 2020 (http://www3.weforum.org/docs/WEF_GGGR_2020.pdf).

23. International Standard Classification of Education. ISCED 2012. Paris: United Nations Educational, Scientific and Cultural Organization; 2011 (http://uis.unesco.org/en/topic/international-standard-classification-education-isced).

24. Vaculovschi D. Gender, migration, and development in the Republic of Moldova – a policy paper. New York (NY): UN Women; 2016 (https://www.unwomen.org/en/digital-library/publications/2016/1/gender-migration-development-in-moldova-a-policy-paper).

25. Sturua L, Shushania N. Migrant health survey. Tblisi: National Centre for Disease Control and Public Health of Georgia, International Organization for Migration; 2012 (https://www.ncdc.ge/Pages/User/News.aspx?ID=f48979a4-75a3-4ee6-b8ef-9c7abaa3905b).

26. Morgan R, Ayiasi RM, Barman D, Buzuzi S, Ssemugabo C, Ezumah N et al. Gendered health systems: evidence from low- and middle-income countries. Health Res Policy Syst. 2018;16(1):58.

27. Govender V, Penn-Kekana L. Gender biases and discrimination: a review of health care interpersonal interactions. Glob Public Health 2008;3:90–103.

28. Harnessing the power of data for gender equality: introducing the 2019 EM2030 SDG Gender Index. Woking: Equal Measures 2030; 2019 (https://www.equalmeasures2030.org/wp-content/uploads/2019/07/EM2030_2019_Global_Report_English_WEB.pdf).

29. Armenia: country gender assessment. Manila: Asian Development Bank; 2015 (https://www.adb.org/sites/default/files/institutional-document/162152/arm-country-gender-assessment.pdf).

30. Men and gender relations in Georgia. Tbilisi: United Nations Population Fund Georgia Country Office; 2014 (https://georgia.unfpa.org/sites/default/files/pub-pdf/Men_and_Gender_Relations_in_Georgia_ENG.pdf).

31. Cheianu-Andrei D, Perevoznic I, Zaporojan-Pîrgari A, Grosu E. Men and gender equality in the Republic of Moldova. Chisinau: Women's Law Center; 2015 (http://cdf.md/files/resources/128/IMAGES%20Moldova_English.pdf).

32. Turkey. Demographic and health survey 2013. Ankara: Hacettepe University Institute of Population Studies and DHS Program; 2014 (https://dhsprogram.com/pubs/pdf/FR352/FR352.pdf).

33. Ferrant G, Pesando ML, Nowacka K. Unpaid care work: the missing link in the analysis of gender gaps in labour outcomes. Paris: OECD Development Centre; 2014 (https://www.oecd.org/dev/development-gender/Unpaid_care_work.pdf).

34. National Review of the Implementation of the Beijing Declaration and Platform for Action (1995) on Gender Equality and the Empowerment of Women: Republic of Belarus. Minsk: Ministry of Foreign Affairs of Belarus; 2019 (https://www.unece.org/fileadmin/DAM/RCM_Website/Belarus_English.pdf).

35. Gender equality in Georgia: barriers and recommendations. Volume 1. Tibilisi: UNDP Georgia; 2018 (https://www.ge.undp.org/content/georgia/en/home/library/democratic_governance/gender-equality-in-georgia.html).

36. Turkey country gender assessment 2017. Washington (DC): World Bank; 2017 (http://documents.worldbank.org/curated/en/368631568320928133/pdf/Turkey-Gender-Assessment-2018.pdf).

37. Kyrgyzstan. In: European Health Information Gateway [website]. Copenhagen: WHO Regional Office for Europe; 2020 (https://gateway.euro.who.int/en/country-profiles/kyrgyzstan/).

38. Mental health, men and culture: how do sociocultural constructions of masculinities relate to men's mental health help-seeking behaviour in the WHO European Region? Copenhagen: WHO Regional Office for Europe; 2020 (https://www.euro.who.int/en/publications/abstracts/mental-health,-men-and-culture-how-do-sociocultural-constructions-of-masculinities-relate-to-mens-mental-health-help-seeking-behaviour-in-the-who-european-region-2020).

39. European Programme of Work, 2020–2025 – "United Action for Better Health in Europe". Copemhagen: WHO Regional Office for Europe; 2020 (EUR/RC70/11 Rev.4; https://www.euro.who.int/en/health-topics/health-policy/european-programme-of-work/about-the-european-programme-of-work/european-programme-of-work-20202025-united-action-for-better-health-in-europe).

40. Breaking barriers: towards more gender-responsive and equitable health systems. Geneva: World Health Organization; 2019 (https://www.who.int/gender-equity-rights/knowledge/breaking-barriers-towards-more-gender-responsive-and-equitable-h/en/).

ANNEX 1. SUPPLEMENTARY TABLES

Table A1.1. Burden of disease for men and women, expressed through DALYs[a] per 100 000 population, 2017

Country		Neonatal disorders	Diarrhoea, lower respiratory and other common infectious diseases	Mental and substance-use disorders	Diabetes	Other NCDs	CVDs	All causes
Armenia	Men	823.6	844.0	1 920.6	1 640.7	1 577.7	9 157.0	33 509.2
	Women	622.6	582.6	1 745.1	1 791.5	1 658.7	6 486.7	26 938.5
Belarus	Men	802.1	726.5	4 154.1	651.0	1 110.8	15 378.2	45 354.5
	Women	651.5	294.8	2 986.0	684.7	1 433.4	11 213.7	33 471.1
Georgia	Men	1 267.9	947.3	1 995.4	1 919.4	1 162.2	15 614.4	44 881.7
	Women	914.2	581.8	1 623.5	1 693.2	1 408.9	11 369.1	33 362.4
Kyrgyzstan	Men	3 353.6	1 580.0	2 305.1	530.6	1 369.5	6 404.7	29 934.6
	Women	2 461.4	1 193.8	1 657.3	514.8	1 693.0	4 543.6	23 377.0
Republic of Moldova	Men	1 163.2	1 712.3	3 047.6	858.9	1 437.5	12 826.3	44 961.3
	Women	954.2	648.0	2 409.8	938.9	1 663.3	9 845.6	33 368.1
Turkey	Men	1 164.6	650.4	2 615.2	1 004.9	1 448.4	4 468.1	25 880.1
	Women	1 034.7	483.3	2 315.9	944.8	1 594.1	2 878.1	21 112.3
Ukraine	Men	814.2	1 418.1	3 988.0	834.4	1 285.9	20 639.0	57 985.2
	Women	691.7	621.3	2 787.9	820.3	1 614.0	13 754.7	38 417.3
Uzbekistan	Men	2 164.5	2 859.0	1 913.5	1 229.7	1 190.5	9 155.3	32 568.8
	Women	1 394.4	2 275.3	1 575.6	1 120.7	1 494.7	6 302.2	25 973.5
WHO European Region	Men	800.8	985.6	2 786.6	978.0	1 128.2	8 387.4	34 978.1
	Women	639.5	637.3	2 434.0	887.2	1 363.3	6 208.5	28 690.9

[a] DALYs: disability-adjusted life years. *Source*: Institute for Health Metrics and Evaluation *(1)*.

Table A1.2. Total mortality per 1000

Country	Mortality per 1000 – all causes	Men	Women
Armenia	Age 45–59	19.73	7.15
	Age 60–69	53.51	22.95
Belarus	Age 45–59	12.99	4.02
	Age 60–69	34.55	11.32
Georgia	Age 45–59	26.05	8.70
	Age 60–69	60.32	25.34
Kyrgyzstan	Age 45–59	25.36	10.40
	Age 60–69	62.62	30.39
Republic of Moldova	Age 45–59	29.12	11.00
	Age 60–69	73.54	34.95
Turkey	Age 45–59	9.97	4.79
	Age 60–69	33.99	16.79
Ukraine	Age 45–59	42.02	14.40
	Age 60–69	102.88	39.97
Uzbekistan	Age 45–59	16.74	9.14
	Age 60–69	49.44	31.23

Source: WHO *(2)*.

Table A1.3. Prevalence of behavioural risk factors

Country	Risk factors		Men % (CI 95%)	Women % (CI 95%)
Armenia	Current tobacco use		51.5 (47.4–55.6)	1.8 (1.1–2.5)
	Alcohol consumption	Currently drink	46.1 (40.2–52.0)	21.5 (18.6–24.3)
		Heavy episodic drinking	11.1 (8.1–14.0)	0.1 (0.0–0.3)
	Unhealthy diet	< 5 fruit or vegetables per day	78.4 (74.3–82.4)	73.5 (70.4–76.6)
		Always or often add salt	40.3 (36.1–44.4)	30.1 (27.1–33.1)
		Always or often eat processed foods	34.3 (30.0–38.7)	27.8 (24.8–30.7)
	Insufficient physical activity		22.0 (18.0–26.1)	20.4 (17.3–23.5)
Belarus	Current tobacco use		48.4 (45.5–51.3)	12.6 (11.1–14.0)
	Alcohol consumption	Currently drink	64.9 (61.6–68.3)	41.8 (38.6–44.9)
		Heavy episodic drinking	35.0 (31.8–38.1)	6.9 (5.6–8.2)
	Unhealthy diet	< 5 fruit or vegetables per day	77.9 (74.3–81.5)	68.4 (64.7–72.0)
		Always or often add salt	35.8 (31.9–39.7)	28.0 (24.5–31.4)
		Always or often eat processed foods	43.6 (40.4–46.8)	28.5 (25.9–31.1)
	Insufficient physical activity		12.8 (10.7–14.9)	13.5 (11.5–15.5)
Georgia	Current tobacco use		57.0 (53.6–60.3)	7.0 (5.8–8.2)
	Alcohol consumption	Currently drink	58.9 (55.2–62.5)	20.7 (18.6–22.9)
		Heavy episodic drinking	35.3 (31.2–39.4)	2.6 (1.7–3.5)
	Unhealthy diet	< 5 fruit or vegetables per day	63.8 (59.6–67.9)	62.4 (59.5–65.3)
		Always or often add salt	33.4 (29.4–37.3)	20.6 (18.6–22.7)
		Always or often eat processed foods	18.9 (15.3–22.5)	10.1 (8.7–11.5)
	Insufficient physical activity		16.2 (13.6–18.9)	18.4 (16.3–20.4)
Kyrgyzstan	Current tobacco use		48.2 (43.6–52.8)	2.7 (1.7–3.7)
	Alcohol consumption	Currently drink	44.8 (37.1–52.4)	17.7 (14.3–21.2)
		Heavy episodic drinking	22.8 (17.9–27.7)	2.7 (1.7–3.8)
	Unhealthy diet	< 5 fruit or vegetables per day	76.7 (71.3–82.2)	71.1 (65.6–76.7)
		Always or often add salt	20.4 (14.7–26.1)	15.6 (11.9–19.4)
		Always or often eat processed foods	28.5 (23.1–33.8)	25.3 (21.7–28.9)
	Insufficient physical activity		8.9 (6.4–11.3)	14.1 (11.7–16.5)
Republic of Moldova	Current tobacco use		43.6 (40.6–46.7)	5.6 (4.5–6.7)
	Alcohol consumption	Currently drink	69.8 (66.3–73.2)	53.5 (50.5–56.4)
		Heavy episodic drinking	29.0 (25.4–32.6)	9.2 (7.6–10.9)
	Unhealthy diet	< 5 fruit or vegetables per day	65.8 (62.1–69.5)	67.5 (64.5–70.6)
		Always or often add salt	28.0 (24.7–31.3)	20.3 (18.1–22.5)
		Always or often eat processed foods	36.5 (33.2–39.8)	28.1 (25.4–30.7)
	Insufficient physical activity		10.7 (8.5–12.9)	9.4 (7.7–11.1)
Turkey	Current tobacco use		43.4 (40.8–46.0)	19.7 (17.6–21.8)
	Alcohol consumption	Currently drink	13.1 (11.2–15.0)	3.0 (2.1–4.0)
		Heavy episodic drinking	8.7 (7.0–10.3)	1.8 (1.0–2.6)
	Unhealthy diet	< 5 fruit or vegetables per day	87.8 (85.8–89.8)	87.9 (86.3–89.5)
		Always or often add salt	29.3 (26.7–31.9)	26.8 (24.6–29.0)
		Always or often eat processed foods	27.8 (25.3–30.3)	23.3 (21.0–25.6)
	Insufficient physical activity		33.1 (30.5–35.6)	53.9 (51.6–56.3)

Table A1.3 contd

Country	Risk factors		Men % (CI 95%)	Women % (CI 95%)
Ukraine	Current tobacco use		50.3 (43.6–57.1)	16.7 (14.3–19.1)
	Alcohol consumption	Currently drink	66.1 (60.9–71.4)	44.6 (41.1–48.1)
		Heavy episodic drinking	29.5 (20.7–38.4)	9.4 (7.2–11.6)
	Unhealthy diet	< 5 fruit or vegetables per day	73.2 (67.9–78.6)	59.4 (55.3–63.6)
		Always or often add salt	53.0 (46.3–59.7)	36.5 (32.5–40.4)
		Always or often eat processed foods	32.5 (27.0–38.0)	21.1 (18.2–24.1)
	Insufficient physical activity		9.1 (6.6–11.7)	10.8 (8.3–13.3)
Uzbekistan	Current tobacco use		18.8 (15.3–22.2)	0.5 (0.2–0.9)
	Alcohol consumption	Currently drink	8.7 (6.1–11.3)	0.8 (0.3–1.4)
		Heavy episodic drinking	2.7 (1.6–3.8)	0.2 (0.0–0.5)
	Unhealthy diet	< 5 fruit or vegetables per day	14.7 (11.4–18.1)	17.2 (14.3–20.1)
		Always or often add salt	34.4 (29.2–39.6)	38.7 (34.6–42.7)
		Always or often eat processed foods	34.0 (28.1–40.0)	38.3 (34.4–42.1)
	Insufficient physical activity		20.5 (16.7–24.4)	31.2 (27.2–35.3)

CI: confidence interval.

Table A1.4. Prevalence of biological risk factors

Country	Risk factors		Men % (CI 95%)	Women % (CI 95%)
Armenia	Overweight (BMI ≥ 25 kg/m^2)		45.4 (40.6–50.2)	50.1 (46.7–53.5)
	Obesity (BMI ≥ 30 kg/m^2)		14.0 (10.9–17.0)	25.0 (22.4–27.7)
	Raised blood pressure (BP)	Raised BP (or on medication for raised BP)	39.3 (34.3–44.2)	36.3 (32.9–39.7)
		Raised BP (NOT on medication)	33.9 (28.8–38.9)	27.2 (24.0–30.4)
	Raised blood glucose (or on medication)		6.5 (3.9–9.2)	4.6 (3.4–5.8)
	Raised cholesterol (or on medication)		22.6 (17.9–27.3)	24.8 (22.0–27.6)
Belarus	Overweight (BMI ≥ 25 kg/m^2)		61.5 (58.7–64.2)	60.0 (57.3–62.4)
	Obesity (BMI ≥ 30 kg/m^2)		20.2 (17.9–22.4)	30.2 (27.9–32.5)
	Raised blood pressure (BP)	Raised BP (or on medication for raised BP)	45.6 (42.7–48.6)	44.2 (41.9–46.5)
		Raised BP (NOT on medication)	35.3 (32.1–38.4)	25.2 (22.9–27.6)
	Raised blood glucose (or on medication)		3.2 (2.3–4.1)	3.9 (2.9–5.0)
	Raised cholesterol (or on medication)		33.4 (30.6–36.2)	42.6 (40.0–45.2)
Georgia	Overweight (BMI ≥ 25 kg/m^2)		65.5 (61.4–69.7)	63.8 (61.4–66.3)
	Obesity (BMI ≥ 30 kg/m^2)		30.2 (26.9–33.6)	36.0 (33.7–38.2)
	Raised blood pressure (BP)	Raised BP (or on medication for raised BP)	38.6 (35.1–42.2)	36.9 (34.7–39.1)
		Raised BP (NOT on medication)	28.7 (25.2–32.3)	21.6 (19.4–23.8)
	Raised blood glucose (or on medication)		4.7 (3.5–6.0)	4.3 (3.4–5.2)
	Raised cholesterol (or on medication)		21.9 (18.6–25.2)	33.0 (30.4–35.6)
Kyrgyzstan	Overweight (BMI ≥ 25 kg/m^2)		49.4 (42.4–56.5)	63.5 (60.2–66.8)
	Obesity (BMI ≥ 30 kg/m^2)		17.6 (14.4–20.8)	29.0 (26.2–31.8)
	Raised blood pressure (BP)	Raised BP (or on medication for raised BP)	42.7 (38.0–47.4)	43.0 (39.7–46.4)
		Raised BP (NOT on medication)	38.9 (34.3–43.6)	35.4 (32.1–38.7)
	Raised blood glucose (or on medication)		5.1 (3.7–6.6)	5.1 (3.6–6.5)
	Raised cholesterol (or on medication)		17.5 (14.6–20.4)	29.9 (25.4–34.3)
Republic of Moldova	Overweight (BMI ≥ 25 kg/m^2)		56.0 (52.7–59.4)	55.9 (53.1–58.7)
	Obesity (BMI ≥ 30 kg/m^2)		17.8 (15.6–20.0)	28.5 (26.3–30.7)
	Raised blood pressure (BP)	Raised BP (or on medication for raised BP)	40.3 (37.0–43.7)	39.3 (36.6–42.1)
		Raised BP (NOT on medication)	35.9 (32.4–39.3)	30.1 (27.3–32.9)
	Raised blood glucose (or on medication)		11.5 (9.5–13.5)	13.0 (11.4–14.6)
	Raised cholesterol (or on medication)		26.7 (23.5–29.9)	32.0 (29.3–34.8)

Table A1.4 contd

Country	Risk factors		Men % (CI 95%)	Women % (CI 95%)
Turkey	Overweight (BMI ≥ 25 kg/m²)		62.8 (60.2–65.4)	66.0 (63.7–68.4)
	Obesity (BMI ≥ 30 kg/m²)		21.6 (19.5–23.8)	35.9 (33.8–38.0)
	Raised blood pressure (BP)	Raised BP (or on medication for raised BP)	29.3 (27.2–31.5)	44.2 (41.9–46.5)
		Raised BP (NOT on medication)	17.3 (15.4–19.3)	25.2 (22.9–27.6)
	Raised blood glucose (or on medication)		10.6 (8.3–13.0)	11.5 (9.1–13.9)
	Raised cholesterol (or on medication)		20.9 (17.6–24.1)	28.5 (25.0–31.9)
Ukraine	Overweight (BMI ≥ 25 kg/m²)		58.0 (50.4–65.5)	60.2 (57.0–63.4)
	Obesity (BMI ≥ 30 kg/m²)		20.1 (15.5–24.8)	29.8 (26.5–33.1)
	Raised blood pressure (BP)	Raised BP (or on medication for raised BP)	34.5 (28.7–40.3)	35.0 (31.7–38.4)
		Raised BP (NOT on medication)	30.8 (25.2–36.4)	28.7 (25.4–32.1)
	Raised blood glucose (or on medication)		6.7 (4.7–8.7)	7.4 (5.8–9.0)
	Raised cholesterol (or on medication)		40.5 (34.9–46.0)	40.5 (36.4–44.7)
Uzbekistan	Overweight (BMI ≥ 25 kg/m²)		55.6 (50.8–60.4)	57.3 (53.8–60.8)
	Obesity (BMI ≥ 30 kg/m²)		21.5 (17.8–25.3)	25.5 (22.9–28.2)
	Raised blood pressure (BP)	Raised BP (or on medication for raised BP)	38.5 (33.4–43.6)	37.4 (33.3–41.5)
		Raised BP (NOT on medication)	29.6 (25.4–33.8)	24.1 (21.2–27.1)
	Raised blood glucose (or on medication)		8.6 (6.8–10.4)	8.2 (6.7–9.6)
	Raised cholesterol (or on medication)		10.3 (7.9–12.8)	13.9 (12.0–15.9)

CI: confidence interval.

Table A1.5. Prevalence of three or more risk factors

Country	Age group	Men % (CI 95%)	Women % (CI 95%)
Armenia	18–29	26.6 (19.3–34.0)	5.0 (2.1–7.9)
	30–44	42.7 (32.9–52.5)	23.6 (18.9–28.4)
	45–59	62.1 (53.1–71.1)	46.2 (40.7–51.8)
	60–69	55.7 (45.1–66.3)	66.3 (59.4–73.2)
Belarus	18–29	25.1 (20.2–30.0)	9.4 (5.5–13.2)
	30–44	46.4 (41.6–51.3)	22.8 (19.5–26.2)
	45–59	57.5 (53.4–61.6)	45.2 (41.3–49.1)
	60–69	71.8 (66.6–77.0)	59.8 (54.9–64.8)
Georgia	18–29	29.2 (21.7–36.8)	7.9 (4.5–11.3)
	30–44	44.9 (37.8–52.0)	15.9 (12.7–19.1)
	45–59	57.2 (50.8–63.5)	38.9 (35.2–42.7)
	60–69	50.8 (43.5–58.0)	51.2 (46.4–56.1)
Kyrgyzstan	18–29	23.0 (16.1–30.0)	12.5 (9.0–16.1)
	30–44	41.9 (33.5–50.2)	26.7 (21.3–32.2)
	45–59	57.6 (49.6–65.5)	43.2 (36.9–49.5)
	60–69	54.7 (44.9–64.5)	53.6 (46.0–61.2)
Republic of Moldova	18–29	29.2 (21.7–36.8)	7.9 (4.5–11.3)
	30–44	44.9 (37.8–52.0)	15.9 (12.7–19.1)
	45–59	57.2 (50.8–63.5)	38.9 (35.2–42.7)
	60–69	50.8 (43.5–58.0)	51.2 (46.4–56.1)

Table A1.5 contd

Country	Age group	Men % (CI 95%)	Women % (CI 95%)
Ukraine	18–29	15.4 (10.2–20.7)	7.4 (3.5–11.3)
	30–44	35.4 (22.9–47.9)	17.8 (13.1–22.5)
	45–59	57.3 (48.1–66.6)	33.4 (28.1–38.8)
	60–69	56.0 (48.5–63.6)	46.8 (40.6–52.9)
Uzbekistan	18–29	6.0 (2.2–9.8)	6.6 (3.1–10.2)
	30–44	15.9 (11.6–20.2)	15.4 (1.7–12.0)
	45–59	28.2 (23.7–32.8)	26.9 (22.7–31.0)
	60–69	34.4 (27.5–41.3)	36.1 (22.7–31.0)

CI: confidence interval.

Table A1.6. Prevalence of biological risk factors by age group

Country	Risk factor		Aged 18–29 % (CI 95%)	Aged 30–44 % (CI 95%)	Aged 45–59 % (CI 95%)	Aged 60–69 % (CI 95%)
Armenia	Overweight (BMI ≥ 25)	Men	30.7 (21.9–39.5)	45.0 (36.0–53.9)	60.0 (51.9–68.2)	60.2 (50.3–70.0)
		Women	19.0 (13.3–24.8)	48.2 (42.7–53.6)	76.1 (71.5–80.6)	84.8 (79.7–89.9)
	Obesity (BMI ≥ 30)	Men	3.8 (0.8–6.7)	14.1 (7.6–20.6)	24.9 (18.3–31.6)	20.7 (12.5–28.9)
		Women	5.1 (2.2–7.9)	20.8 (16.3–25.4)	42.7 (37.2–48.3)	52.7 (46.1–59.3)
	Raised blood pressure (or on medication)	Men	16.7 (9.9–23.5)	35.4 (27.4–43.4)	62.6 (53.3–71.9)	67.4 (58.5–76.2)
		Women	9.6 (5.8–13.4)	28.3 (23.5–33.2)	61.2 (55.9–66.6)	78.3 (72.5–84.2)
	Raised blood pressure (NOT on medication)	Men	15.1 (8.3–21.8)	31.5 (23.5–39.5)	56.8 (46.6–67.0)	57.5 (46.3–68.8)
		Women	7.4 (3.7–11.0)	25.4 (20.5–30.3)	49.2 (43.1–55.3)	64.2 (55.6–72.8)
	Raised blood glucose (or on medication)	Men	3.8 (0.5–7.1)	7.1 (0.5–13.7)	10.1 (5.0–15.1)	10.5 (4.3–16.7)
		Women	1.1 (0.0–2.6)	3.2 (1.0–5.4)	6.7 (4.1–9.4)	14.3 (9.3–19.3)
	Raised cholesterol (or on medication)	Men	11.5 (5.5–17.5)	25.1 (17.1–33.1)	36.2 (27.4–44.9)	38.9 (27.6–50.2)
		Women	5.5 (2.7–8.4)	19.2 (14.1–24.2)	48.5 (42.7–54.3)	43.7 (36.0–51.4)
Belarus	Overweight (BMI ≥ 25)	Men	40.0 (33.7–46.2)	62.6 (57.7–67.4)	70.7 (66.9–74.6)	77.7 (72.9–82.5)
		Women	23.6 (18.3–29.0)	49.3 (45.2–53.5)	80.1 (77.3–82.9)	83.8 (80.4–87.1)
	Obesity (BMI ≥ 30)	Men	7.0 (4.0–9.9)	18.3 (14.8–21.8)	28.8 (24.8–32.7)	29.5 (24.0–35.1)
		Women	6.7 (3.4–10.0)	21.1 (17.7–24.5)	43.0 (39.4–46.7)	50.1 (45.4–54.9)
	Raised blood pressure (or on medication)	Men	17.0 (12.4–21.5)	35.1 (30.2–40.0)	64.4 (60.0–68.8)	81.8 (77.0–86.6)
		Women	10.3 (7.1–13.4)	24.4 (20.8–28.0)	63.4 (60.1–66.7)	84.8 (81.6–88.1)
	Raised blood pressure (NOT on medication)	Men	13.9 (9.5–18.4)	30.5 (25.7–35.3)	53.6 (48.5–58.8)	66.8 (58.9–74.7)
		Women	8.0 (5.0–11.0)	17.1 (13.8–20.3)	43.3 (38.9–47.8)	58.5 (51.1–65.8)
	Raised blood glucose (or on medication)	Men	0.5 (0.0–1.2)	1.1 (0.3–1.9)	5.7 (3.3–8.1)	7.4 (4.4–10.4)
		Women	0.7 (0.0–1.4)	2.1 (0.8–3.3)	4.3 (2.8–5.7)	10.6 (7.2–14.1)
	Raised cholesterol (or on medication)	Men	7.4 (4.1–10.8)	32.9 (28.2–37.6)	44.9 (40.5–49.3)	48.5 (41.9–55.1)
		Women	15.2 (10.7–19.8)	30.7 (27.0–34.5)	57.0 (53.3–60.8)	66.5 (62.0–71.1)
Georgia	Overweight (BMI ≥ 25)	Men	45.9 (37.8–54.0)	66.3 (59.3–73.4)	78.3 (72.7–83.8)	73.0 (65.4–80.5)
		Women	26.8 (21.5–32.1)	60.5 (55.8–65.2)	79.1 (76.1–82.1)	88.5 (85.5–91.4)
	Obesity (BMI ≥ 30)	Men	18.3 (11.9–24.6)	29.1 (23.1–35.1)	38.7 (33.0–44.4)	37.2 (28.7–45.6)
		Women	9.2 (5.2–13.1)	28.0 (24.0–31.9)	50.0 (46.3–53.8)	57.7 (53.4–62.0)
	Raised blood pressure (or on medication)	Men	16.7 (10.3–23.1)	32.7 (26.4–39.1)	48.3 (43.1–53.4)	71.2 (64.0 –78.3)
		Women	7.0 (4.3–9.7)	19.6 (16.3–22.8)	54.4 (50.8–57.9)	74.5 (70.8–78.2)
	Raised blood pressure (NOT on medication)	Men	15.4 (9.2–21.6)	26.6 (20.6–32.6)	35.7 (30.2–41.2)	54.6 (44.2–65.0)
		Women	5.8 (3.5–8.2)	15.3 (12.1–18.5)	36.3 (32.0–40.5)	46.4 (40.4–52.4)
	Raised blood glucose (or on medication)	Men	0.3 (0.0–0.8)	1.9 (0.0–3.9)	10.4 (7.0–13.9)	7.3 (4.3–10.4)
		Women	0.0 (0.0–0.0)	1.6 (0.6–2.6)	6.8 (4.9–8.7)	10.2 (7.4–13.1)
	Raised cholesterol (or on medication)	Men	8.4 (2.7–14.1)	22.9 (16.2–29.5)	30.6 (24.8–36.4)	26.5 (20.2–32.7)
		Women	9.9 (5.8–14.1)	23.9 (19.6–28.2)	46.9 (42.9–50.8)	55.0 (50.1–59.9)

Table A1.6 contd

Country	Risk factor		Aged 25–34 % (CI 95%)	Aged 35–44 % (CI 95%)	Aged 45–54 % (CI 95%)	Aged 55–64 % (CI 95%)
Kyrgyzstan	Overweight (BMI ≥ 25)	Men	35.2 (26.2–44.2)	52.5 (43.3–61.7)	61.8 (53.9–69.7)	66.0 (54.9–77.0)
		Women	42.7 (35.3–50.0)	65.9 (60.2–71.5)	79.3 (74.9–83.8)	81.2 (76.0–86.4)
	Obesity (BMI ≥ 30)	Men	7.8 (3.8–11.8)	18.7 (12.8–24.6)	26.3 (20.2–32.4)	30.4 (21.7–39.2)
		Women	12.2 (8.0–16.4)	28.0 (22.4–33.6)	39.1 (33.0–45.2)	50.7 (45.1–56.4)
	Raised blood pressure (or on medication)	Men	26.1 (18.5–33.6)	39.0 (30.4–47.7)	59.0 (50.8–67.2)	71.9 (63.2–80.7)
		Women	18.4 (14.0–22.9)	40.4 (34.6–46.2)	63.9 (58.8–69.0)	75.4 (65.7–85.1)
	Raised blood pressure (NOT on medication)	Men	25.8 (18.2–33.4)	37.8 (29.1–46.6)	54.4 (45.5–63.2)	62.8 (51.9–73.8)
		Women	18.1 (13.7–22.5)	36.8 (30.8–42.8)	54.2 (48.0–60.3)	62.8 (51.2–74.4)
	Raised blood glucose (or on medication)	Men	2.1 (0.5–3.8)	5.6 (2.3–9.0)	13.3 (7.9–18.7)	14.1 (8.3–20.0)
		Women	4.9 (1.9–7.8)	9.5 (5.8–13.2)	14.7 (9.9–19.5)	19.0 (14.8–23.2)
	Raised cholesterol (or on medication)	Men	7.2 (3.2–11.1)	19.6 (14.0–25.2)	29.8 (21.2–38.4)	24.2 (17.0–31.5)
		Women	22.0 (15.7–28.3)	23.5 (18.8–28.1)	34.9 (29.3–40.6)	49.9 (38.0–61.8)
			Aged 18–29 % (CI 95%)	**Aged 30–44** % (CI 95%)	**Aged 45–59** % (CI 95%)	**Aged 60–69** % (CI 95%)
Republic of Moldova	Overweight (BMI ≥ 25)	Men	39.6 (33.0–46.2)	63.0 (57.6–68.3)	66.8 (62.6–71.1)	67.5 (61.8–73.2)
		Women	25.0 (20.5–29.6)	53.5 (48.8–58.1)	79.8 (76.9–82.7)	85.2 (81.8–88.6)
	Obesity (BMI ≥ 30)	Men	5.5 (3.0–8.0)	19.8 (15.5–24.1)	26.1 (22.2–29.9)	36.2 (30.3–42.1)
		Women	9.5 (5.9–13.1)	23.0 (19.2–26.8)	45.7 (42.1–49.4)	50.4 (45.8–54.9)
	Raised blood pressure (or on medication)	Men	20.6 (14.9–26.2)	38.0 (32.4–43.5)	58.2 (53.3–63.2)	72.2 (66.2–78.2)
		Women	12.7 (8.5–16.9)	28.6 (24.8–32.4)	63.7 (60.0–67.4)	81.3 (77.6–85.0)
	Raised blood pressure (NOT on medication)	Men	20.4 (14.8–26.0)	35.7 (30.1–41.3)	52.1 (46.7–57.5)	61.5 (53.8–69.1)
		Women	10.9 (7.0–14.9)	25.9 (22.2–29.6)	52.6 (47.9–57.3)	65.8 (60.0–71.6)
	Raised blood glucose (or on medication)	Men	6.1 (2.2–9.9)	10.4 (7.0–13.9)	15.7 (12.1–19.4)	20.5 (15.0–25.9)
		Women	4.5 (2.2–6.9)	10.8 (8.2–13.5)	19.5 (16.4–22.6)	25.9 (21.5–30.3)
	Raised cholesterol (or on medication)	Men	15.5 (9.7–21.4)	27.4 (22.3–32.5)	35.3 (30.0–40.5)	37.7 (30.7–44.7)
		Women	20.0 (15.1–24.9)	26.7 (22.7–30.7)	42.3 (38.0–46.6)	52.8 (47.5–58.2)
			Aged 15–29 % (CI 95%)	**Aged 30–44** % (CI 95%)	**Aged 45–59** % (CI 95%)	**Aged 60–69** % (CI 95%)
Turkey	Overweight (BMI ≥ 25)	Men	38.2 (33.2–43.1)	70.6 (66.0–75.2)	76.5 (72.0–81.0)	83.6 (79.3–88.0)
		Women	33.5 (28.9–38.1)	66.8 (62.5–71.2)	90.1 (87.6–92.5)	91.9 (88.6–95.2)
	Obesity (BMI ≥ 30)	Men	8.0 (4.8–11.1)	19.7 (15.9–23.5)	32.5 (28.0–36.9)	40.6 (34.3–46.9)
		Women	9.9 (7.4–12.4)	30.1 (26.5–33.7)	55.9 (51.2–60.5)	66.9 (61.3–72.4)
	Raised blood pressure (or on medication)	Men	12.5 (8.1–16.9)	16.3 (12.7–20.0)	36.6 (32.0–41.2)	54.8 (48.6–61.1)
		Women	9.8 (6.3–13.2)	16.3 (13.3–19.2)	41.8 (37.3–46.4)	61.9 (55.9–67.8)
	Raised blood pressure (NOT on medication)	Men	11.0 (6.8–15.3)	14.1 (10.8–17.5)	27.0 (22.3–31.7)	36.3 (29.0–43.6)
		Women	8.9 (5.5–12.3)	12.5 (10.0–15.1)	24.8 (20.7–28.9)	37.2 (30.2–44.1)
	Raised blood glucose (or on medication)	Men	2.1 (0.1–4.2)	7.8 (3.0–12.6)	14.5 (9.3–19.8)	30.6 (21.3–39.9)
		Women	0.9 (0.0–2.2)	8.9 (4.7–13.2)	18.4 (12.1–24.8)	21.8 (14.9–28.7)
	Raised cholesterol (or on medication)	Men	8.8 (4.3–13.3)	21.8 (15.1–28.4)	28.2 (21.1–35.4)	34.1 (25.4–42.8)
		Women	5.8 (2.8–8.8)	22.5 (16.5–28.5)	50.9 (43.3–58.5)	51.3 (43.0–59.7)
			Aged 18–29 % (CI 95%)	**Aged 30–44** % (CI 95%)	**Aged 45–59** % (CI 95%)	**Aged 60–69** % (CI 95%)
Ukraine	Overweight (BMI ≥ 25)	Men	40.9 (32.1–49.7)	51.6 (36.1–67.0)	75.1 (68.4–81.9)	66.6 (59.5–73.6)
		Women	31.8 (21.3–42.3)	52.8 (47.2–58.4)	76.4 (71.6–81.3)	77.5 (72.5–82.4)
	Obesity (BMI ≥ 30)	Men	6.6 (0.5–12.8)	14.0 (8.4–19.7)	34.6 (24.8–44.5)	28.2 (21.8–34.5)
		Women	13.6 (4.5–22.6)	23.0 (17.1–28.9)	37.8 (32.8–42.8)	46.4 (40.7–52.0)
	Raised blood pressure (or on medication)	Men	15.9 (8.6–23.1)	20.4 (12.6–28.1)	53.3 (44.4–62.2)	68.3 (61.9–74.8)
		Women	9.5 (2.8–16.2)	20.5 (15.8–25.3)	47.7 (41.9–53.5)	73.1 (67.6–78.7)
	Raised blood pressure (NOT on medication)	Men	13.9 (7.2–20.7)	17.6 (10.6–24.7)	49.1 (39.7–58.5)	59.1 (52.2–66.1)
		Women	9.0 (2.4–15.7)	17.2 (12.6–21.8)	39.0 (33.3–44.7)	58.0 (52.0–64.0)
	Raised blood glucose (or on medication)	Men	3.7 (0.6–6.8)	3.7 (1.3–6.2)	9.2 (4.8–13.6)	14.6 (8.5–20.8)
		Women	2.7 (0.0–5.4)	4.6 (1.9–7.4)	6.1 (3.8–8.4)	20.2 (15.1–25.4)
	Raised cholesterol (or on medication)	Men	21.3 (13.1–29.6)	35.2 (26.6–43.8)	56.7 (46.6–66.7)	46.9 (38.8–55.0)
		Women	22.4 (12.5–32.3)	31.0 (24.2–37.7)	53.8 (48.1–59.4)	57.7 (51.2–64.3)

Table A1.6 contd

Country	Risk factor		Aged 25–34 % (CI 95%)	Aged 35–44 % (CI 95%)	Aged 45–54 % (CI 95%)
Uzbekistan	Overweight (BMI ≥ 25)	Men	38.0 (28.1–47.9)	63.4 (58.0–68.8)	73.2 (69.7–76.7)
		Women	29.7 (23.2–36.1)	63.1 (59.1–67.2)	83.2 (80.7–85.6)
	Obesity (BMI ≥ 30)	Men	11.8 (6.1–17.6)	21.9 (17.0–26.8)	35.4 (30.5–40.3)
		Women	7.1 (3.6–10.7)	24.9 (21.2–28.7)	47.1 (43.0–51.2)
	Raised blood pressure (or on medication)	Men	26.6 (17.8–35.4)	36.9 (30.7–43.0)	59.8 (55.7–63.8)
		Women	22.3 (15.5–29.2)	34.3 (29.5–39.2)	60.2 (55.8–64.6)
	Raised blood pressure (NOT on medication)	Men	18.0 (10.7–25.4)	30.4 (24.9–36.0)	47.6 (43.1–52.1)
		Women	11.7 (5.8–17.6)	19.7 (15.8–23.5)	45.0 (41.1–48.8)
	Raised blood glucose (or on medication)	Men	4.1 (1.0–7.2)	5.8 (3.4–8.2)	18.1 (15.4–20.9)
		Women	3.2 (1.1–5.3)	6.6 (4.2–9.0)	16.0 (13.1–18.9)
	Raised cholesterol (or on medication)	Men	5.8 (1.5–10.2)	9.5 (5.7–13.3)	17.8 (14.7–21.0)
		Women	6.3 (2.9–9.8)	11.0 (8.6–13.3)	26.5 (23.7–29.4)

CI: confidence interval.

Table A1.7. Prevalence of behavioural risk factors by geographic location

Country	Risk factor		Rural % (CI 95%)	Urban % (CI 95%)
Belarus	Current tobacco use	Men	54.1 (49.4–58.8)	43.3 (39.8–46.7)
		Women	11.7 (9.4–14.0)	13.2 (11.3–15.2)
	Alcohol	Men	63.8 (59.5–68.2)	65.9 (60.9–71.0)
		Women	35.4 (30.6–40.1)	46.7 (42.6–50.9)
	Alcohol (heavy episodic)	Men	35.9 (31.1–40.6)	34.1 (29.9–38.4)
		Women	7.7 (5.5–9.9)	6.3 (4.8–7.8)
	Unhealthy diet (< 5 fruit/veg)	Men	77.3 (71.6–83.0)	78.4 (73.9–83.0)
		Women	66.5 (60.4–72.6)	69.8 (65.4–74.2)
	Unhealthy diet (add salt)	Men	39.0 (33.7–44.2)	33.0 (27.3–38.8)
		Women	33.5 (28.0–39.0)	23.6 (19.3–28.0)
	Unhealthy diet (processed foods)	Men	47.6 (43.3–51.9)	40.0 (35.6–44.5)
		Women	32.0 (27.8–36.2)	25.7 (22.5–28.9)
	Insufficient physical activity	Men	11.0 (8.2–13.8)	14.4 (11.4–17.4)
		Women	13.6 (10.3–16.9)	13.4 (10.9–15.8)
Georgia	Current tobacco use	Men	55.6 (50.2–61.0)	58.6 (54.3–62.9)
		Women	3.2 (2.0–4.4)	10.6 (8.6–12.7)
	Alcohol	Men	61.5 (56.2–66.8)	56.2 (51.3–61.0)
		Women	18.1 (15.1–21.2)	23.1 (20.1–26.1)
	Alcohol (heavy episodic)	Men	38.5 (32.2–44.8)	32.0 (26.8–37.2)
		Women	2.8 (1.4–4.2)	2.4 (1.3–3.5)
	Unhealthy diet (< 5 fruit/veg)	Men	58.1 (51.8–64.4)	69.7 (64.6–74.7)
		Women	58.8 (54.4–63.2)	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	11.4 (8.2–14.7)	21.4 (17.4–25.4)
		Women	14.9 (12.1–17.6)	21.5 (18.7–24.4)

Table A1.7 contd

Country	Risk factor		Rural % (CI 95%)	Urban % (CI 95%)
Kyrgyzstan	Current tobacco use	Men	53.8 (46.4–61.2)	45.6 (40.2–51.1)
		Women	4.7 (2.7–6.8)	1.5 (0.7–2.4)
	Alcohol	Men	56.3 (39.8–72.8)	39.4 (33.8–45.1)
		Women	21.9 (15.5–28.3)	15.3 (11.7–19.0)
	Alcohol (heavy episodic)	Men	34.3 (25.5–43.1)	17.5 (13.7–21.2)
		Women	2.0 (0.6–3.4)	3.2 (1.7–4.6)
	Unhealthy diet (< 5 fruit/veg)	Men	75.1 (64.8–85.4)	77.5 (71.0–84.0)
		Women	71.6 (61.3–81.9)	70.8 (64.5–77.2)
	Unhealthy diet (add salt)	Men	13.2 (5.8–20.7)	23.6 (16.6–30.7)
		Women	11.1 (7.1–15.0)	18.3 (12.9–23.6)
	Unhealthy diet (processed foods)	Men	30.4 (19.6–41.3)	27.6 (21.9–33.3)
		Women	24.0 (18.3–29.6)	26.1 (21.4–30.7)
	Insufficient physical activity	Men	11.4 (4.9–17.8)	7.7 (5.3–10.1)
		Women	19.2 (15.1–23.4)	11.1 (8.4–13.9)
Republic of Moldova	Current tobacco use	Men	44.3 (39.7–48.9)	42.9 (39.0–46.7)
		Women	1.3 (0.3–2.2)	10.4 (8.4–12.5)
	Alcohol	Men	71.6 (66.6–76.5)	67.7 (63.0–72.4)
		Women	56.6 (52.3–61.0)	50.0 (46.2–53.7)
	Alcohol (heavy episodic)	Men	32.1 (26.8–37.4)	25.3 (20.8–29.8)
		Women	10.5 (7.8–13.1)	7.9 (5.9–9.9)
	Unhealthy diet (< 5 fruit/veg)	Men	63.0 (51.1–68.8)	69.1 (65.0–73.3)
		Women	66.7 (62.1–71.3)	68.4 (64.6–72.3)
	Unhealthy diet (add salt)	Men	26.4 (22.2–30.6)	29.8 (24.8–34.8)
		Women	20.2 (17.3–23.2)	20.4 (17.0–23.7)
	Unhealthy diet (processed foods)	Men	32.0 (27.5–36.4)	41.7 (37.0–46.5)
		Women	25.8 (21.6–30.0)	30.6 (27.4–33.7)
	Insufficient physical activity	Men	9.3 (5.8–12.8)	12.1 (9.5–14.8)
		Women	8.0 (5.3–10.6)	11.0 (8.9–13.1)
Turkey	Current tobacco use	Men	46.3 (41.0–51.5)	42.6 (39.6–45.6)
		Women	11.0 (7.8–14.3)	21.8 (19.3–24.3)
	Alcohol	Men	11.7 (7.6–15.8)	13.5 (11.4–15.7)
		Women	1.7 (0.0–3.4)	3.4 (2.3–4.4)
	Alcohol (heavy episodic)	Men	9.3 (5.4–13.1)	8.5 (6.7–10.3)
		Women	1.6 (0.0–3.2)	1.9 (1.0–2.8)
	Unhealthy diet (< 5 fruit/veg)	Men	86.1 (82.2–90.1)	88.3 (85.9–90.6)
		Women	84.6 (80.9–88.4)	88.7 (86.9–90.5)
	Unhealthy diet (add salt)	Men	32.1 (26.3–37.9)	28.5 (25.5–31.4)
		Women	31.9 (26.7–37.1)	25.6 (23.1–28.0)
	Unhealthy diet (processed foods)	Men	22.8 (18.1–27.6)	29.3 (26.4–32.2)
		Women	15.7 (11.4–20.0)	25.2 (22.5–27.8)
	Insufficient physical activity	Men	24.9 (20.7–29.2)	35.5 (32.5–38.5)
		Women	46.6 (41.9–51.3)	55.7 (53.0–58.4)

Table A1.7 contd

Country	Risk factor		Rural % (CI 95%)	Urban % (CI 95%)
Ukraine	Current tobacco use	Men	53.8 (48.5–59.1)	48.6 (39.2–58.1)
		Women	11.3 (7.8–14.7)	20.4 (17.2–23.6)
	Alcohol	Men	65.8 (59.2–72.3)	66.3 (59.2–73.5)
		Women	37.8 (32.0–43.6)	49.1 (44.8–53.3)
	Alcohol (heavy episodic)	Men	31.9 (24.7–39.1)	28.3 (15.4–41.3)
		Women	10.1 (5.8–14.3)	9.0 (6.6–11.3)
	Unhealthy diet (< 5 fruit/veg)	Men	67.1 (58.1–76.1)	76.3 (70.1–82.5)
		Women	58.2 (51.4–65.1)	60.3 (55.2–65.4)
	Unhealthy diet (add salt)	Men	48.4 (41.1–55.7)	55.3 (46.3–64.3)
		Women	37.3 (30.7–44.0)	35.8 (31.1–40.6)
	Unhealthy diet (processed foods)	Men	32.7 (24.9–40.4)	32.5 (25.3–39.7)
		Women	20.7 (15.5–25.8)	21.5 (17.9–25.0)
	Insufficient physical activity	Men	6.6 (3.3–10.0)	10.4 (6.8–13.9)
		Women	7.4 (4.5–10.3)	13.1 (9.4–16.9)
Uzbekistan	Current tobacco use	Men	17.8 (13.9–21.6)	21.4 (14.1–28.7)
		Women	0.4 (0.0–0.7)	0.9 (0.0–1.8)
	Alcohol	Men	8.6 (5.2–12.0)	8.8 (6.1–11.6)
		Women	0.3 (0.1–0.5)	2.0 (0.3–3.6)
	Alcohol (heavy episodic)	Men	2.8 (1.5–4.0)	2.5 (0.3–4.7)
		Women	0.1 (0.0–0.1)	0.6 (0.0–1.4)
	Unhealthy diet (< 5 fruit/veg)	Men	14.2 (10.4–18.0)	16.2 (8.7–23.6)
		Women	17.7 (14.3–21.2)	16.1 (9.8–22.5)
	Unhealthy diet (add salt)	Men	38.4 (31.8–44.9)	24.0 (15.7–32.3)
		Women	43.3 (37.8–48.7)	28.6 (21.1–36.1)
	Unhealthy diet (processed foods)	Men	38.1 (30.6–45.6)	23.4 (14.2–32.7)
		Women	43.4 (38.4–48.4)	26.9 (19.4–34.5)
	Insufficient physical activity	Men	18.0 (13.6–22.4)	27.3 (19.6–34.9)
		Women	29.8 (25.3–34.3)	34.4 (25.5–43.4)

CI: confidence interval.

Table A1.8. Prevalence of biological risk factors by geographic location

Country	Risk factor		Rural % (CI 95%)	Urban % (CI 95%)
Belarus	Overweight (BMI ≥ 25)	Men	57.0 (53.1–60.8)	65.5 (61.6–69.4)
		Women	65.1 (61.3–68.8)	55.9 (52.5–59.3)
	Obesity (BMI ≥ 30)	Men	20.0 (16.9–23.1)	20.3 (17.1–23.4)
		Women	35.7 (32.2–39.2)	26.0 (23.0–29.0)
	Raised blood pressure (or on medication)	Men	50.6 (46.3–54.9)	41.1 (37.2–45.1)
		Women	49.8 (46.2–53.3)	39.9 (36.8–43.0)
	Raised blood pressure (NOT on medication)	Men	40.9 (36.2–45.6)	30.2 (26.2–34.2)
		Women	30.7 (26.7–34.7)	21.2 (18.3–24.2)
	Raised blood glucose (or on medication)	Men	2.8 (1.7–3.8)	3.6 (2.1–5.0)
		Women	4.2 (2.6–5.9)	3.7 (2.4–5.0)
	Raised cholesterol (or on medication)	Men	32.3 (28.1–36.5)	34.5 (30.8–38.1)
		Women	41.9 (37.9–46.0)	43.2 (39.8–46.5)

Table A1.8 contd

Country	Risk factor		Rural % (CI 95%)	Urban % (CI 95%)
Georgia	Overweight (BMI ≥ 25)	Men	61.4 (54.9–68.0)	69.7 (65.2–74.2)
		Women	67.1 (63.6–70.6)	60.7 (57.4–64.1)
	Obesity (BMI ≥ 30)	Men	28.3 (23.2–33.5)	32.2 (28.1–36.3)
		Women	38.4 (35.0–41.8)	33.7 (30.8–36.7)
	Raised blood pressure (or on medication)	Men	39.6 (34.5–44.7)	37.6 (32.7–42.5)
		Women	40.8 (37.5–44.1)	33.3 (30.3–36.4)
	Raised blood pressure (NOT on medication)	Men	30.2 (25.3–35.2)	27.2 (22.2–32.1)
		Women	26.0 (22.8–29.3)	17.5 (14.7–20.4)
	Raised blood glucose (or on medication)	Men	4.7 (3.1–6.4)	4.8 (2.7–6.9)
		Women	4.2 (2.9–5.5)	4.4 (3.2–5.6)
	Raised cholesterol (or on medication)	Men	19.8 (15.0–24.6)	24.2 (19.3–29.2)
		Women	32.0 (28.0–36.1)	33.9 (30.5–37.4)
Kyrgyzstan	Overweight (BMI ≥ 25)	Men	48.7 (30.3–67.1)	49.7 (44.2–55.3)
		Women	64.6 (58.6–70.6)	62.9 (59.1–66.7)
	Obesity (BMI ≥ 30)	Men	18.8 (12.8–24.8)	17.1 (13.2–21.0)
		Women	28.2 (23.0–33.3)	29.5 (26.2–32.8)
	Raised blood pressure (or on medication)	Men	43.4 (34.1–52.7)	42.4 (37.0–47.8)
		Women	37.1 (31.4–42.7)	46.5 (42.7–50.2)
	Raised blood pressure (NOT on medication)	Men	40.6 (31.8–49.4)	38.2 (32.6–43.8)
		Women	29.7 (24.7–34.6)	38.8 (34.9–42.7)
	Raised blood glucose (or on medication)	Men	6.9 (4.4–9.4)	4.3 (2.6–6.1)
		Women	4.6 (2.6–6.5)	5.3 (3.3–7.4)
	Raised cholesterol (or on medication)	Men	18.2 (13.3–23.1)	17.2 (13.6–20.8)
		Women	34.8 (25.0–44.6)	27.0 (23.7–30.3)
Republic of Moldova	Overweight (BMI ≥ 25)	Men	52.4 (47.7–57.1)	60.4 (55.5–65.2)
		Women	62.4 (58.8–66.0)	48.6 (44.5–52.6)
	Obesity (BMI ≥ 30)	Men	16.4 (13.5–19.2)	19.5 (16.1–22.9)
		Women	33.5 (30.4–36.7)	22.9 (20.1–25.7)
	Raised blood pressure (or on medication)	Men	44.7 (39.6–49.7)	35.3 (31.2–39.4)
		Women	46.7 (42.8–50.5)	31.5 (27.9–35.1)
	Raised blood pressure (NOT on medication)	Men	40.8 (35.5–46.1)	30.1 (26.0–34.2)
		Women	37.9 (33.7–42.0)	21.9 (18.6–25.3)
	Raised blood glucose (or on medication)	Men	10.6 (7.9–13.3)	12.7 (9.9–15.5)
		Women	13.4 (11.2–15.7)	12.5 (10.2–14.8)
	Raised cholesterol (or on medication)	Men	28.4 (23.9–33.0)	24.3 (20.2–28.4)
		Women	32.3 (28.5–36.0)	31.8 (27.9–35.7)
Turkey	Overweight (BMI ≥ 25)	Men	67.5 (62.6–72.3)	61.4 (58.4–64.4)
		Women	72.3 (67.8–76.8)	64.5 (61.7–67.2)
	Obesity (BMI ≥ 30)	Men	28.5 (23.8–33.1)	19.6 (17.2–22.0)
		Women	44.0 (39.3–48.7)	33.9 (31.6–36.3)
	Raised blood pressure (or on medication)	Men	33.6 (28.8–38.3)	23.8 (21.0–26.6)
		Women	40.1 (35.4–44.7)	26.6 (24.2–29.1)
	Raised blood pressure (NOT on medication)	Men	24.6 (20.0–29.1)	16.8 (14.1–19.6)
		Women	24.2 (20.1–28.3)	15.8 (13.5–18.0)
	Raised blood glucose (or on medication)	Men	12.3 (8.1–16.4)	10.2 (7.4–13.0)
		Women	13.3 (9.5–17.1)	11.1 (8.2–13.9)
	Raised cholesterol (or on medication)	Men	19.0 (12.9–25.2)	21.4 (17.6–25.1)
		Women	28.2 (21.4–35.0)	28.6 (24.6–32.5)

Table A1.8 contd

Country	Risk factor		Rural % (CI 95%)	Urban % (CI 95%)
Ukraine	Overweight (BMI ≥ 25)	Men	60.7 (54.3–67.2)	56.6 (45.9–67.2)
		Women	66.9 (62.1–71.8)	55.4 (51.3–59.6)
	Obesity (BMI ≥ 30)	Men	22.1 (16.6–27.6)	19.2 (12.8–25.5)
		Women	35.9 (30.0–41.8)	25.4 (21.7–29.2)
	Raised blood pressure (or on medication)	Men	36.3 (29.6–43.0)	33.7 (25.7–41.6)
		Women	40.9 (34.9–46.8)	30.9 (27.1–34.6)
	Raised blood pressure (NOT on medication)	Men	24.5 (17.8–31.1)	24.1 (16.3–31.9)
		Women	23.4 (16.4–30.3)	15.1 (11.8–18.3)
	Raised blood glucose (or on medication)	Men	6.4 (3.3–9.5)	6.9 (4.3–9.6)
		Women	7.8 (5.1–10.4)	7.1 (5.2–9.0)
	Raised cholesterol (or on medication)	Men	41.4 (33.0–49.8)	40.1 (32.6–47.5)
		Women	41.2 (32.7–49.6)	40.0 (32.6–47.4)
Uzbekistan	Overweight (BMI ≥ 25)	Men	55.9 (50.1–61.7)	54.8 (46.4–63.2)
		Women	59.1 (55.0–63.3)	53.0 (47.0–59.1)
	Obesity (BMI ≥ 30)	Men	24.3 (19.7–29.0)	13.9 (9.1–18.7)
		Women	28.2 (25.0–31.5)	19.3 (14.9–23.7)
	Raised blood pressure (or on medication)	Men	37.9 (31.9–43.9)	40.1 (30.3–49.8)
		Women	42.8 (37.6–47.9)	25.9 (19.4–32.4)
	Raised blood pressure (NOT on medication)	Men	26.6 (22.1–31.1)	30.6 (20.2–41.0)
		Women	21.7 (16.7–26.7)	13.7 (9.5–18.0)
	Raised blood glucose (or on medication)	Men	8.3 (6.2–10.4)	9.4 (5.7–13.1)
		Women	9.5 (7.6–11.3)	5.3 (2.9–7.8)
	Raised cholesterol (or on medication)	Men	8.8 (6.2–11.4)	14.6 (9.5–19.8)
		Women	13.5 (11.2–15.8)	15.3 (11.8–18.9)

CI: confidence interval.

Table A1.9. Education level for analysis (STEPS survey categories and ISCED levels)

Country	Education level for analysis	STEPS survey categories	ISCED levels
Armenia	Low level of education	1 = no formal schooling 2 = less than primary school 3 = primary school completed 4 = secondary school completed	ISCED 0–2
	Medium level of education	5 = high school completed	ISCED 3–5
	High level of education	6 = college/university completed 7 = postgraduate degree	ISCED 6–8
Belarus	Low level of education	1 = no formal schooling 2 = primary school completed 3 = secondary school completed	ISCED 0–2
	Medium level of education	4 = college completed 5 = high school completed	ISCED 3–5
	High level of education	6 = university completed 7 = postgraduate degree	ISCED 6–8
Georgia	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 = postgraduate degree	ISCED 6–8

Table A1.9 contd

Country	Education level for analysis	STEPS survey categories	ISCED levels
Kyrgyzstan	Low level of education	1 = no formal schooling 2 = primary school completed 3 = secondary school not fully completed 4 = secondary school completed	ISCED 0–3
	Medium level of education	5 = secondary technical	ISCED 4–5
	High level of education	6 = college/university completed 7 = candidate of medical sciences	ISCED 6–8
Republic of Moldova	Low level of education	1 = no formal schooling/less than primary school 2 = primary school completed 3 = gymnasium completed 4 = lyceum/secondary school completed	ISCED 0–3
	Medium level of education	5 = college/vocational school completed	ISCED 4–5
	High level of education	6 = university completed/postgraduate degree	ISCED 6–8
Turkey	Low level of education	1 = illiterate 2 = literate, but not completed formal school 3 = primary school completed	ISCED 0–2
	Medium level of education	4 = secondary or vocational secondary completed 5 = high school or vocational high school completed	ISCED 3–4
	High level of education	6 = 2- or 3-year college completed 7 = 4-year college or faculty completed 8 = master's degree completed 9 = doctoral degree completed	ISCED 5–8
Ukraine	Low level of education	1 = no formal schooling 2 = less than primary school 3 = primary school completed 4 = secondary school completed	ISCED 0–3
	Medium level of education	5 = high school completed 6 = special secondary completed	ISCED 4–5
	High level of education	7 = college/university completed 8 = postgraduate degree	ISCED 6–8
Uzbekistan	Low level of education	1 = no formal schooling 2 = less than primary school 3 = primary school completed	ISCED 0–1
	Medium level of education	4 = secondary school completed 5 = secondary professional (college)	ISCED 3–4
	High level of education	6 = university degree (bachelor)/associate of science 7 = postgraduate degree (master's degree, doctoral degree)	ISCED 5–8

ISCED: International Standard Classification of Education.

Table A1.10. Prevalence of behavioural risk factors by education level

Country	Risk factor		Low % (CI 95%)	Medium % (CI 95%)	High % (CI 95%)
Armenia	Current tobacco use	Men	52.5 (47.2–57.7)	53.7 (45.5–61.9)	47.4 (38.6–56.2)
		Women	1.6 (0.6–2.6)	1.5 (0.5–2.5)	2.5 (0.8–4.2)
	Alcohol	Men	43.5 (36.4–50.7)	54.9 (45.6–64.1)	43.5 (33.5–53.4)
		Women	17.2 (13.3–21.1)	23.9 (19.0–28.9)	25.9 (19.9–31.8)
	Alcohol (heavy episodic)	Men	10.7 (6.6–14.7)	11.4 (6.5–16.2)	11.7 (6.1–17.3)
		Women	0.0 (0.0–0.0)	0.3 (0.0–0.6)	0.3 (0.0–0.8)
	Unhealthy diet (< 5 fruit/veg)	Men	79.2 (73.7–84.7)	74.9 (66.5–83.4)	79.6 (72.2–87.1)
		Women	77.7 (73.4–82.0)	69.9 (64.7–75.1)	70.6 (64.1–77.1)
	Unhealthy diet (add salt)	Men	39.6 (33.7–45.6)	39.6 (31.5–47.8)	42.2 (33.5–50.8)
		Women	31.3 (26.7–35.9)	31.0 (26.0–36.0)	27.1 (21.6–32.5)
	Unhealthy diet (processed foods)	Men	32.6 (26.7–38.5)	34.5 (26.4–42.5)	37.8 (30.0–45.5)
		Women	28.2 (23.7–32.7)	28.1 (22.9–33.2)	26.7 (21.2–32.2)
	Insufficient physical activity	Men	24.7 (18.8–30.6)	16.6 (11.0–22.3)	21.3 (13.4–29.2)
		Women	23.9 (19.5–28.2)	19.1 (14.4–23.7)	16.1 (10.9–21.4)

Table A1.10 contd

Country	Risk factor		Low % (CI 95%)	Medium % (CI 95%)	High % (CI 95%)
Belarus	Current tobacco use	Men	49.4 (44.1–54.6)	53.7 (50.2–57.2)	32.1 (26.8–37.3)
		Women	16.0 (12.0–20.0)	13.3 (11.4–15.2)	9.2 (6.9–11.5)
	Alcohol	Men	56.1 (50.5–61.7)	68.4 (64.3–72.5)	65.2 (59.1–71.3)
		Women	33.8 (28.0–39.7)	42.2 (38.5–45.8)	46.1 (41.4–50.8)
	Alcohol (heavy episodic)	Men	31.1 (25.7–36.6)	38.1 (34.1–42.2)	30.3 (24.7–35.8)
		Women	10.2 (6.9–13.5)	7.1 (5.3–9.0)	4.5 (2.8–6.2)
	Unhealthy diet (< 5 fruit/veg)	Men	75.4 (69.4–81.4)	79.3 (75.4–83.2)	76.8 (71.2–82.4)
		Women	71.2 (65.7–76.6)	68.3 (63.9–72.8)	66.6 (61.9–71.3)
	Unhealthy diet (add salt)	Men	40.7 (34.9–46.6)	35.4 (30.7–40.0)	31.6 (25.8–37.3)
		Women	35.8 (29.7–41.9)	28.3 (24.0–32.6)	22.5 (17.9–27.1)
	Unhealthy diet (processed foods)	Men	42.8 (36.4–49.1)	45.8 (41.7–49.9)	38.1 (32.3–43.9)
		Women	28.8 (23.6–34.0)	30.2 (26.7–33.7)	25.4 (21.5–29.3)
	Insufficient physical activity	Men	12.6 (9.0–16.1)	10.5 (8.2–12.8)	19.7 (15.1–24.3)
		Women	16.4 (11.4–21.4)	10.7 (8.6–12.7)	16.1 (12.7–19.5)
Georgia	Current tobacco use	Men	57.4 (50.8–63.9)	57.9 (53.1–62.7)	55.1 (49.1–61.2)
		Women	6.1 (4.0–8.2)	6.3 (4.6–8.1)	9.9 (7.4–12.4)
	Alcohol	Men	52.6 (45.0–60.2)	59.1 (54.2–64.1)	64.6 (58.5–70.8)
		Women	15.4 (12.2–18.5)	23.1 (19.8–26.5)	22.4 (18.7–26.1)
	Alcohol (heavy episodic)	Men	31.8 (24.2–39.4)	35.1 (29.8–40.3)	39.3 (32.5–46.2)
		Women	2.6 (1.0–4.3)	3.0 (1.5–4.4)	1.9 (0.5–3.3)
	Unhealthy diet (< 5 fruit/veg)	Men	67.4 (60.1–74.7)	64.0 (58.4–69.6)	59.6 (53.1–66.2)
		Women	62.0 (57.2–66.8)	64.3 (60.4–68.2)	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	15.5 (10.0–21.1)	15.1 (11.2–19.0)	18.9 (13.7–24.2)
		Women	20.8 (17.3–24.4)	16.3 (13.3–19.2)	19.6 (15.5–23.7)
Kyrgyzstan	Current tobacco use	Men	43.5 (37.2–49.8)	52.3 (45.8–58.8)	52.9 (44.7–61.1)
		Women	1.9 (0.7–3.1)	2.8 (1.1–4.4)	4.7 (2.3–7.1)
	Alcohol	Men	43.3 (35.1–51.5)	40.8 (34.3–47.3)	50.9 (35.4–66.5)
		Women	14.2 (10.6–17.8)	22.2 (17.0–27.4)	20.6 (14.1–27.1)
	Alcohol (heavy episodic)	Men	20.6 (15.6–25.6)	22.1 (16.5–27.6)	27.3 (17.5–37.0)
		Women	2.1 (0.7–3.4)	3.4 (1.7–5.1)	3.5 (1.2–5.8)
	Unhealthy diet (< 5 fruit/veg)	Men	77.5 (70.5–84.4)	75.7 (68.4–82.9)	76.4 (67.7–85.2)
		Women	73.3 (67.1–79.5)	74.2 (67.9–80.5)	60.8 (50.9–70.7)
	Unhealthy diet (add salt)	Men	22.0 (15.6–28.5)	19.1 (12.9–25.4)	18.5 (7.1–30.0)
		Women	15.1 (11.2–19.1)	16.9 (10.9–22.8)	15.1 (8.8–21.4)
	Unhealthy diet (processed foods)	Men	28.7 (21.1–36.2)	26.5 (18.8–34.3)	29.9 (20.8–39.1)
		Women	28.0 (21.8–34.2)	23.2 (18.0–28.5)	21.2 (14.8–27.6)
	Insufficient physical activity	Men	8.2 (5.4–11.1)	8.5 (4.1–12.9)	10.3 (4.9–15.7)
		Women	15.8 (12.0–19.6)	10.5 (7.3–13.6)	14.8 (10.4–19.2)

Table A1.10 contd

Country	Risk factor		Low % (CI 95%)	Medium % (CI 95%)	High % (CI 95%)
Republic of Moldova	Current tobacco use	Men	47.6 (42.3–52.9)	43.3 (38.5–48.2)	36.1 (30.1–42.1)
		Women	5.7 (4.1–7.4)	5.2 (3.3–7.0)	6.0 (4.0–8.0)
	Alcohol	Men	68.9 (64.1–73.6)	72.5 (67.9–77.1)	67.7 (60.2–75.2)
		Women	55.5 (51.6–59.4)	53.2 (48.7–57.6)	50.2 (44.2–56.1)
	Alcohol (heavy episodic)	Men	29.6 (24.5–34.8)	30.7 (25.7–35.7)	24.9 (18.0–31.7)
		Women	11.7 (8.9–14.5)	8.1 (5.4–10.8)	6.0 (3.7–8.3)
	Unhealthy diet (< 5 fruit/veg)	Men	69.6 (64.7–74.5)	62.9 (57.2–68.7)	62.6 (56.1–69.0)
		Women	72.7 (68.5–76.8)	64.3 (60.0–68.5)	62.2 (56.8–67.6)
	Unhealthy diet (add salt)	Men	31.3 (26.2–36.4)	27.5 (22.9–32.2)	21.9 (17.0–26.9)
		Women	24.0 (20.3–27.7)	17.0 (13.9–20.1)	17.0 (13.0–20.9)
	Unhealthy diet (processed foods)	Men	35.6 (30.4–40.8)	36.9 (31.6–42.1)	38.0 (31.4–44.6)
		Women	27.1 (23.1–31.0)	27.0 (22.7–31.3)	31.0 (26.2–35.8)
	Insufficient physical activity	Men	9.6 (5.9–13.4)	8.8 (6.3–11.3)	15.6 (11.3–20.0)
		Women	9.8 (7.3–12.3)	8.0 (5.9–10.1)	10.8 (7.6–14.0)
Turkey	Current tobacco use	Men	37.4 (33.5–41.4)	46.8 (43.0–50.7)	40.9 (35.0–46.8)
		Women	13.7 (11.8–15.6)	23.4 (20.0–26.8)	26.2 (19.0–33.5)
	Alcohol	Men	6.8 (5.1–8.6)	13.3 (10.6–15.9)	21.3 (16.3–26.3)
		Women	0.4 (0.1–0.7)	4.0 (2.3–5.8)	7.6 (4.4–10.9)
	Alcohol (heavy episodic)	Men	4.2 (2.9–5.6)	9.3 (6.9–11.6)	12.8 (8.4–17.3)
		Women	0.4 (0.1–0.7)	2.7 (1.1–4.3)	3.7 (1.4–5.9)
	Unhealthy diet (< 5 fruit/veg)	Men	87.8 (84.2–91.4)	88.1 (85.6–90.7)	86.6 (82.4–90.9)
		Women	87.7 (85.7–89.7)	87.2 (84.6–89.9)	90.4 (86.8–94.1)
	Unhealthy diet (add salt)	Men	29.1 (24.6–33.5)	29.8 (26.3–33.4)	28.0 (22.1–34.0)
		Women	26.6 (24.0–29.2)	27.9 (24.3–31.4)	24.4 (17.6–31.2)
	Unhealthy diet (processed foods)	Men	21.4 (17.5–25.3)	29.6 (26.1–33.1)	31.1 (25.3–36.9)
		Women	17.3 (15.1–19.6)	27.6 (23.9–31.3)	27.7 (20.6–34.8)
	Insufficient physical activity	Men	34.0 (30.1–37.8)	32.2 (28.5–36.0)	34.3 (28.8–39.8)
		Women	58.7 (56.0–61.4)	52.1 (48.1–56.0)	45.3 (38.4–52.3)
Ukraine	Current tobacco use	Men	72.8 (61.0–84.5)	58.3 (53.3–63.3)	33.3 (21.5–45.2)
		Women	23.3 (9.5–37.1)	17.6 (14.4–20.8)	14.1 (10.7–17.5)
	Alcohol	Men	67.7 (53.9–81.5)	65.3 (60.1–70.4)	67.6 (56.1–79.1)
		Women	56.4 (43.0–69.9)	43.1 (38.7–47.4)	45.3 (39.8–50.8)
	Alcohol (heavy episodic)	Men	25.1 (11.4–38.9)	28.4 (22.5–34.3)	32.4 (10.6–54.3)
		Women	10.6 (4.0–17.2)	10.7 (7.5–13.9)	7.1 (4.3–9.9)
	Unhealthy diet (< 5 fruit/veg)	Men	78.3 (67.4–89.2)	73.0 (67.9–78.0)	72.8 (61.6–83.9)
		Women	57.1 (43.4–70.9)	61.4 (56.2–66.6)	56.4 (50.4–62.3)
	Unhealthy diet (add salt)	Men	62.9 (48.3–77.5)	50.0 (44.2–55.7)	56.4 (41.1–71.7)
		Women	41.9 (28.3–55.6)	38.8 (33.7–43.8)	31.8 (26.3–37.2)
	Unhealthy diet (processed foods)	Men	20.2 (9.9–30.5)	35.5 (30.5–40.4)	29.8 (18.2–41.4)
		Women	17.3 (8.9–25.7)	22.2 (18.7–25.8)	19.7 (15.4–24.0)
	Insufficient physical activity	Men	6.7 (1.0–12.5)	9.9 (6.9–13.0)	8.1 (3.8–12.4)
		Women	12.5 (5.8–19.2)	10.3 (7.4–13.2)	11.2 (6.6–15.7)

Table A1.10 contd

Country	Risk factor		Low % (CI 95%)	Medium % (CI 95%)	High % (CI 95%)
Uzbekistan	Current tobacco use	Men	13.5 (5.4–21.7)	19.4 (15.8–23.1)	19.3 (9.0–29.6)
		Women	0.9 (0.0–1.9)	0.5 (0.1–0.9)	0.0 (0.0–0.0)
	Alcohol	Men	7.6 (0.6–14.6)	9.5 (6.4–12.7)	5.0 (1.6–8.4)
		Women	0.1 (0.0–0.2)	1.0 (0.3–1.7)	0.6 (0.0–1.5)
	Alcohol (heavy episodic)	Men	1.6 (0.1–3.1)	3.1 (1.8–4.5)	0.9 (0.0–2.0)
		Women	0.1 (0.0–0.2)	0.3 (0.0–0.6)	0.0 (0.0–0.0)
	Unhealthy diet (< 5 fruit/veg)	Men	8.2 (2.1–14.2)	16.2 (11.9–20.5)	12.4 (6.6–18.1)
		Women	8.4 (5.3–11.5)	19.7 (16.2–23.2)	10.2 (4.2–16.2)
	Unhealthy diet (add salt)	Men	34.4 (15.6–53.1)	36.3 (30.4–42.1)	24.8 (15.4–34.2)
		Women	28.2 (21.5–34.9)	41.6 (36.7–46.5)	30.9 (23.0–38.8)
	Unhealthy diet (processed foods)	Men	34.6 (16.7–52.5)	35.1 (28.5–41.7)	28.3 (16.7–39.9)
		Women	25.7 (19.4–32.0)	41.5 (36.9–46.1)	30.8 (23.0–38.6)
	Insufficient physical activity	Men	12.1 (5.3–19.0)	19.8 (14.9–24.7)	29.1 (17.9–40.3)
		Women	35.3 (26.4–44.2)	29.7 (25.3–34.1)	37.0 (29.6–44.5)

CI: confidence interval.

Table A1.11. Prevalence of biological risk factors by education level

Country	Risk factor		Low % (CI 95%)	Medium % (CI 95%)	High % (CI 95%)
Armenia	Overweight (BMI ≥ 25)	Men	39.6 (33.5–45.7)	19.4 (15.8–23.1)	19.3 (9.0–29.6)
		Women	54.2 (49.0–59.4)	54.6 (48.6–60.6)	37.0 (31.0–43.0)
	Obesity (BMI ≥ 30)	Men	11.0 (7.5–14.5)	19.5 (12.4–26.6)	15.6 (9.1–22.1)
		Women	28.2 (23.8–32.6)	29.6 (24.8–34.3)	13.6 (9.7–17.6)
	Raised blood pressure (or on medication)	Men	31.0 (24.7–37.3)	55.7 (45.8–65.7)	42.3 (30.7–54.0)
		Women	38.8 (34.3–43.3)	40.1 (35.1–45.1)	27.0 (21.2–32.7)
	Raised blood pressure (NOT on medication)	Men	26.4 (20.4–32.5)	49.3 (38.5–60.0)	37.0 (25.2–48.8)
		Women	30.3 (25.9–34.6)	28.5 (23.5–33.6)	20.2 (14.7–25.8)
	Raised blood glucose (or on medication)	Men	5.0 (2.2–7.8)	9.2 (3.4–15.1)	7.5 (0.9–14.2)
		Women	4.5 (2.7–6.3)	5.1 (2.8–7.5)	4.2 (1.6–6.9)
	Raised cholesterol (or on medication)	Men	18.0 (11.9–24.2)	30.6 (20.4–40.8)	25.6 (16.3–34.9)
		Women	22.7 (18.8–26.5)	32.4 (27.2–37.6)	19.8 (14.5–25.1)
Belarus	Overweight (BMI ≥ 25)	Men	53.4 (48.0–58.8)	62.8 (59.2–66.4)	66.8 (61.0–72.6)
		Women	61.2 (55.8–66.6)	66.6 (63.4–69.7)	48.3 (43.9–52.6)
	Obesity (BMI ≥ 30)	Men	19.6 (15.5–23.6)	19.9 (16.9–22.9)	21.5 (16.5–26.6)
		Women	35.0 (30.3–39.6)	35.2 (32.2–38.3)	19.2 (16.3–22.1)
	Raised blood pressure (or on medication)	Men	50.3 (44.6–56.0)	45.4 (41.6–49.1)	40.8 (35.0–46.6)
		Women	54.5 (49.0–60.1)	48.4 (45.3–51.5)	31.0 (27.4–34.5)
	Raised blood pressure (NOT on medication)	Men	40.4 (34.3–46.6)	35.3 (31.4–39.2)	29.3 (23.2–35.4)
		Women	32.9 (26.8–39.0)	29.0 (25.9–32.2)	15.9 (12.7–19.1)
	Raised blood glucose (or on medication)	Men	4.2 (2.4–6.0)	2.8 (1.9–3.8)	2.9 (1.3–4.6)
		Women	7.0 (4.0–9.9)	3.8 (2.6–5.0)	2.2 (1.0–3.4)
	Raised cholesterol (or on medication)	Men	33.0 (27.4–38.6)	33.7 (30.3–37.1)	33.0 (27.9–38.2)
		Women	45.0 (39.3–50.7)	43.1 (39.7–46.4)	40.3 (36.2–44.4)

Table A1.11 contd

Country	Risk factor		Low % (CI 95%)	Medium % (CI 95%)	High % (CI 95%)
Georgia	Overweight (BMI ≥ 25)	Men	63.2 (56.5–69.8)	61.8 (55.9–67.7)	74.7 (68.8–80.6)
		Women	72.3 (68.5–76.2)	62.3 (58.6–66.0)	57.0 (51.9–62.1)
	Obesity (BMI ≥ 30)	Men	24.2 (19.0–29.4)	27.7 (22.8–32.7)	41.0 (34.8–47.1)
		Women	45.5 (41.6–49.5)	35.6 (32.0–39.1)	25.8 (22.0–29.5)
	Raised blood pressure (or on medication)	Men	38.5 (32.1–45.0)	38.0 (32.7–43.2)	39.9 (33.0–46.9)
		Women	48.1 (44.2–52.0)	33.3 (30.1–36.5)	30.8 (26.8–34.8)
	Raised blood pressure (NOT on medication)	Men	29.3 (22.8–35.7)	28.3 (23.0–33.6)	29.0 (22.3–35.8)
		Women	27.9 (23.4–32.4)	19.9 (16.9–22.9)	18.4 (14.6–22.2)
	Raised blood glucose (or on medication)	Men	4.1 (2.0–6.3)	4.3 (2.4–6.2)	6.2 (3.0–9.3)
		Women	6.5 (4.4–8.5)	3.6 (2.5–4.8)	3.0 (1.6–4.4)
	Raised cholesterol (or on medication)	Men	17.7 (12.3–23.1)	22.0 (17.1–26.9)	26.0 (19.4–32.6)
		Women	34.1 (29.8–38.4)	32.1 (28.5–35.8)	33.1 (28.0–38.2)
Kyrgyzstan	Overweight (BMI ≥ 25)	Men	46.4 (38.9–53.8)	52.9 (45.9–59.9)	51.7 (35.7–67.7)
		Women	65.1 (60.6–69.6)	64.9 (59.3–70.5)	57.0 (50.0–64.0)
	Obesity (BMI ≥ 30)	Men	13.5 (9.7–17.4)	24.4 (18.5–30.3)	18.8 (13.1–24.5)
		Women	30.2 (26.2–34.1)	30.0 (25.0–35.0)	24.2 (18.2–30.3)
	Raised blood pressure (or on medication)	Men	41.2 (35.8–46.6)	49.5 (42.1–57.0)	39.4 (30.9–47.8)
		Women	44.5 (39.5–49.6)	47.6 (42.6–52.7)	32.5 (26.4–38.5)
	Raised blood pressure (NOT on medication)	Men	38.3 (32.8–43.9)	44.1 (36.4–51.9)	35.6 (28.0–43.3)
		Women	37.5 (32.4–42.5)	39.0 (33.2–44.8)	25.3 (19.8–30.8)
	Raised blood glucose (or on medication)	Men	5.6 (3.1–8.0)	7.4 (3.9–10.9)	9.5 (6.3–12.7)
		Women	12.5 (9.0–16.0)	11.2 (7.4–15.0)	3.9 (1.7–6.1)
	Raised cholesterol (or on medication)	Men	15.2 (11.4–19.1)	21.1 (15.1–27.0)	18.4 (13.7–23.1)
		Women	27.3 (22.1–32.5)	32.6 (26.3–39.0)	32.5 (26.3–38.7)
Republic of Moldova	Overweight (BMI ≥ 25)	Men	49.4 (44.1–54.6)	58.4 (53.4–63.4)	66.1 (59.7–72.6)
		Women	55.3 (51.0–59.7)	65.3 (61.4–69.3)	43.5 (38.2–48.8)
	Obesity (BMI ≥ 30)	Men	13.6 (10.7–16.5)	21.6 (18.0–25.2)	20.1 (15.0–25.2)
		Women	29.1 (25.6–32.6)	36.4 (32.5–40.3)	16.2 (13.0–19.3)
	Raised blood pressure (or on medication)	Men	37.9 (32.6–43.2)	45.5 (40.7–50.2)	36.2 (29.9–42.5)
		Women	41.3 (37.2–45.5)	47.9 (43.8–52.0)	23.6 (19.4–27.8)
	Raised blood pressure (NOT on medication)	Men	34.6 (29.2–39.9)	39.9 (35.0–44.9)	31.6 (25.3–38.0)
		Women	32.3 (28.2–36.4)	37.6 (33.0–42.2)	16.5 (12.5–20.6)
	Raised blood glucose (or on medication)	Men	12.0 (8.8–15.2)	12.1 (8.9–15.3)	9.2 (5.7–12.7)
		Women	12.8 (10.6–15.1)	13.5 (11.0–15.9)	12.7 (9.2–16.3)
	Raised cholesterol (or on medication)	Men	27.5 (22.7–32.4)	29.1 (24.5–33.7)	20.2 (14.3–26.1)
		Women	31.0 (26.9–35.1)	33.6 (29.5–37.7)	31.3 (26.1–36.5)
Turkey	Overweight (BMI ≥ 25)	Men	71.9 (67.6–76.2)	59.9 (56.0–63.8)	59.1 (53.2–65.1)
		Women	86.2 (84.3–88.1)	51.1 (47.0–55.2)	49.6 (42.3–57.0)
	Obesity (BMI ≥ 30)	Men	31.4 (27.8–35.0)	17.5 (14.7–20.4)	20.9 (16.1–25.8)
		Women	57.6 (54.9–60.3)	20.5 (17.6–23.5)	16.6 (9.9–23.2)
	Raised blood pressure (or on medication)	Men	39.8 (35.9–43.7)	21.4 (18.0–24.7)	21.5 (16.4–26.7)
		Women	45.3 (42.7–48.0)	18.2 (14.8–21.6)	14.3 (7.9–20.7)
	Raised blood pressure (NOT on medication)	Men	28.8 (24.9–32.7)	16.0 (12.8–19.3)	13.6 (9.4–17.8)
		Women	27.7 (25.0–30.3)	12.0 (8.9–15.1)	7.8 (4.0–11.5)
	Raised blood glucose (or on medication)	Men	18.9 (14.6–23.2)	9.2 (5.7–12.7)	3.9 (0.9–6.8)
		Women	19.9 (16.1–23.6)	4.6 (2.0–7.3)	7.3 (0.7–13.8)
	Raised cholesterol (or on medication)	Men	21.6 (16.9–26.3)	20.8 (16.1–25.5)	20.1 (12.8–27.4)
		Women	38.7 (34.5–42.8)	21.2 (15.6–26.8)	20.1 (11.9–28.3)

Table A1.11 contd

Country	Risk factor		Low % (CI 95%)	Medium % (CI 95%)	High % (CI 95%)
Ukraine	Overweight (BMI ≥ 25)	Men	52.7 (34.9–70.5)	61.7 (56.5–66.9)	52.6 (34.8–70.4)
		Women	67.8 (53.4–82.2)	64.1 (60.0–68.2)	52 (46.5–57.5)
	Obesity (BMI ≥ 30)	Men	18.5 (8.0–28.9)	24.4 (18.1–30.6)	13.8 (7.6–19.9)
		Women	37.1 (23.1–51.1)	32.7 (28.2–37.3)	23.2 (18.3–28.2)
	Raised blood pressure (or on medication)	Men	42.9 (25.7–60.1)	39.6 (33.5–45.7)	24.3 (14.6–34.1)
		Women	49.8 (35.0–64.6)	38.8 (34.4–43.2)	26.3 (21.8–30.9)
	Raised blood pressure (NOT on medication)	Men	24.6 (12.6–36.7)	30.0 (22.8–37.2)	14.5 (7.5–21.6)
		Women	15.7 (6.6–24.9)	21.1 (16.1–26.2)	14.6 (10.6–18.7)
	Raised blood glucose (or on medication)	Men	7.2 (1.6–12.9)	6.6 (4.2–9.0)	6.6 (2.8–10.5)
		Women	16.5 (6.9–26.1)	6.9 (5.1–8.6)	7.0 (4.1–9.8)
	Raised cholesterol (or on medication)	Men	55.5 (37.0–73.9)	42.0 (34.6–49.5)	35.0 (26.9–43.0)
		Women	53.8 (35.9–71.6)	44.1 (38.6–49.6)	33.7 (28.0–39.3)
Uzbekistan	Overweight (BMI ≥ 25)	Men	59.8 (43.3–76.2)	54.3 (48.6–59.9)	60.0 (51.5–68.6)
		Women	58.6 (51.1–66.1)	55.5 (51.3–59.7)	70.2 (63.6–76.9)
	Obesity (BMI ≥ 30)	Men	21.1 (5.9–36.3)	21.3 (17.4–25.2)	23.2 (16.0–30.4)
		Women	26.4 (20.0–32.8)	24.9 (22.1–27.8)	29.9 (21.7–38.1)
	Raised blood pressure (or on medication)	Men	38.5 (21.8–55.2)	37.1 (31.8–42.4)	45.7 (33.7–57.7)
		Women	30.2 (21.3–39.1)	38.7 (34.7–42.8)	36.0 (23.6–48.5)
	Raised blood pressure (NOT on medication)	Men	25.9 (14.7–37.1)	27.2 (22.6–31.7)	31.4 (15.5–47.4)
		Women	16.7 (9.7–23.7)	19.1 (15.3–22.9)	19.2 (5.4–32.9)
	Raised blood glucose (or on medication)	Men	6.5 (1.4–11.7)	8.2 (6.2–10.2)	12.0 (5.9–18.2)
		Women	8.1 (4.0–12.2)	8.1 (6.5–9.6)	9.6 (5.6–13.6)
	Raised cholesterol (or on medication)	Men	11.3 (4.7–17.9)	9.2 (6.7–11.7)	15.5 (9.0–22.1)
		Women	9.6 (5.2–14.0)	14.1 (11.7–16.5)	20.5 (15.4–25.7)

CI: confidence interval.

Table A1.12. Prevalence of behavioural risk factors by income level

Country	Risk factor		Low income % (CI 95%)	High income % (CI 95%)
Armenia	Current tobacco use	Men	55.3 (50.2–60.4)	48.0 (41.8–54.3)
		Women	1.4 (0.6–2.2)	2.3 (1.3–3.4)
	Alcohol	Men	48.1 (41.2–55.1)	44.2 (36.7–51.8)
		Women	21.4 (17.5–25.2)	21.7 (17.7–25.6)
	Alcohol (heavy episodic)	Men	11.3 (7.3–15.3)	10.9 (7.0–14.7)
		Women	0.1 (0.0–0.2)	0.2 (0.0–0.6)
	Unhealthy diet (< 5 fruit/veg)	Men	82.3 (77.7–86.9)	74.9 (68.9–80.9)
		Women	76.9 (73.2–80.5)	69.0 (64.1–73.9)
	Unhealthy diet (add salt)	Men	40.1 (34.0–46.1)	40.4 (35.1–45.8)
		Women	29.1 (25.1–33.0)	31.5 (27.0–36.0)
	Unhealthy diet (processed foods)	Men	30.4 (24.5–36.4)	38.0 (31.6–44.3)
		Women	27.4 (23.6–31.2)	28.3 (24.0–32.5)
	Insufficient physical activity	Men	21.2 (16.2–26.1)	22.8 (17.0–28.5)
		Women	18.0 (14.7–21.2)	23.7 (18.9–28.5)
Kyrgyzstan	Current tobacco use	Men	43.6 (36.3–50.9)	52.8 (44.7–60.8)
		Women	1.9 (0.8–3.1)	2.9 (1.4–4.3)
	Alcohol	Men	44.2 (34.7–53.7)	46.2 (37.7–54.7)
		Women	15.7 (11.6–19.9)	20.4 (14.9–25.9)
	Alcohol (heavy episodic)	Men	21.6 (15.2–27.9)	23.5 (18.0–29.1)
		Women	2.4 (1.1–3.7)	2.6 (1.0–4.1)
	Unhealthy diet (< 5 fruit/veg)	Men	76.6 (68.7–84.6)	78.2 (72.4–84.1)
		Women	74.0 (68.0–80.0)	72.4 (65.1–79.7)
	Unhealthy diet (add salt)	Men	21.2 (13.2–29.2)	20.4 (14.0–26.8)
		Women	16.4 (11.2–21.7)	13.4 (9.3–17.6)
	Unhealthy diet (processed foods)	Men	25.9 (18.8–33.0)	32.7 (25.7–39.7)
		Women	26.6 (21.6–31.7)	25.8 (21.0–30.6)
	Insufficient physical activity	Men	5.1 (2.8–7.5)	10.9 (7.2–14.5)
		Women	13.3 (9.5–17.1)	14.2 (11.3–17.1)

Table A1.12 contd

Country	Risk factor		Low income % (CI 95%)	High income % (CI 95%)
Republic of Moldova	Current tobacco use	Men	43.4 (38.8–48.0)	43.9 (40.0–47.8)
		Women	4.6 (3.2–5.9)	6.8 (5.0–8.5)
	Alcohol	Men	71.5 (67.0–76.1)	68.0 (63.4–72.7)
		Women	55.1 (51.2–59.1)	51.7 (47.7–55.7)
	Alcohol (heavy episodic)	Men	31.8 (26.8–36.9)	26.0 (20.9–31.2)
		Women	11.0 (8.6–13.4)	7.3 (5.5–9.2)
	Unhealthy diet (< 5 fruit/veg)	Men	67.3 (62.1–72.5)	64.4 (60.0–68.7)
		Women	71.3 (67.4–75.1)	63.5 (59.6–67.5)
	Unhealthy diet (add salt)	Men	32.2 (27.3–37.2)	23.7 (19.7–27.6)
		Women	23.7 (20.5–26.9)	16.6 (14.0–19.2)
	Unhealthy diet (processed foods)	Men	35.5 (30.9–40.2)	37.4 (32.9–42.0)
		Women	26.8 (23.3–30.3)	29.4 (25.9–32.9)
	Insufficient physical activity	Men	9.1 (5.8–12.4)	12.3 (9.3–15.3)
		Women	8.7 (6.7–10.7)	10.2 (7.8–12.6)
Turkey	Current tobacco use	Men	43.7 (40.0–47.4)	44.7 (39.6–49.7)
		Women	16.8 (14.5–19.0)	28.6 (22.4–34.7)
	Alcohol	Men	11.7 (9.0–14.4)	14.9 (11.1–18.8)
		Women	2.1 (1.0–3.1)	5.0 (2.3–7.7)
	Alcohol (heavy episodic)	Men	7.6 (5.5–9.8)	9.8 (6.3–13.3)
		Women	1.1 (0.3–1.9)	3.8 (1.4–6.2)
	Unhealthy diet (< 5 fruit/veg)	Men	87.7 (85.0–90.4)	86.8 (83.0–90.5)
		Women	86.2 (83.7–88.7)	87.4 (83.7–91.2)
	Unhealthy diet (add salt)	Men	30.2 (26.6–33.8)	25.1 (20.6–29.6)
		Women	29.5 (26.5–32.5)	23.9 (18.2–29.5)
	Unhealthy diet (processed foods)	Men	26.3 (22.6–30.0)	33.5 (28.9–38.1)
		Women	24.6 (21.5–27.8)	28.5 (22.8–34.1)
	Insufficient physical activity	Men	26.8 (23.4–30.3)	38.3 (32.6–44.0)
		Women	47.1 (43.9–50.3)	53.6 (47.4–59.9)
Ukraine	Current tobacco use	Men	53.1 (39.2–67.0)	53.4 (45.0–61.9)
		Women	16.6 (13.2–20.0)	21.5 (16.4–26.6)
	Alcohol	Men	69.6 (60.6–78.6)	68.4 (61.5–75.2)
		Women	48.5 (43.8–53.2)	49.9 (43.6–56.3)
	Alcohol (heavy episodic)	Men	40.8 (25.4–56.2)	24.1 (13.9–34.3)
		Women	12.2 (8.6–15.7)	10.0 (5.7–14.3)
	Unhealthy diet (< 5 fruit/veg)	Men	74.9 (66.3–83.5)	70.5 (62.5–78.5)
		Women	58.5 (53.1–63.9)	55.1 (46.6–63.6)
	Unhealthy diet (add salt)	Men	55.4 (43.3–67.6)	56.3 (47.9–64.6)
		Women	37.0 (31.8–42.2)	39.6 (31.8–47.4)
	Unhealthy diet (processed foods)	Men	32.3 (22.6–42.0)	34.0 (26.3–41.7)
		Women	20.6 (16.3–24.8)	26.5 (20.2–32.7)
	Insufficient physical activity	Men	7.4 (4.2–10.5)	8.4 (3.8–13.0)
		Women	11.9 (8.2–15.5)	10.1 (6.1–14.0)

CI: confidence interval.

Table A1.13. Prevalence of behavioural risk factors by employment status

Country	Risk factor		Employed % (CI 95%)	Unemployed or not in the labour force % (CI 95%)
Belarus	Current tobacco use	Men	50.2 (47.0–53.4)	43.3 (38.2–48.4)
		Women	13.7 (11.9–15.5)	10.3 (7.7–12.9)
	Alcohol	Men	68.8 (65.2–72.4)	54.0 (48.5–59.5)
		Women	46.3 (42.8–49.7)	33.0 (28.6–37.3)
	Alcohol (heavy episodic)	Men	37.0 (33.4–40.6)	29.1 (23.9–34.3)
		Women	7.6 (6.0–9.3)	5.5 (3.9–7.1)
	Unhealthy diet (< 5 fruit/veg)	Men	78.0 (74.2–81.8)	77.7 (72.3–83.0)
		Women	68.0 (63.8–72.1)	69.1 (64.8–73.3)
	Unhealthy diet (add salt)	Men	35.8 (31.6–39.9)	36.1 (30.5–41.6)
		Women	27.5 (24.0–31.1)	28.8 (24.1–33.6)
	Unhealthy diet (processed foods)	Men	45.4 (41.9–48.9)	38.2 (33.2–43.3)
		Women	31.2 (28.0–34.3)	23.2 (19.6–26.7)
	Insufficient physical activity	Men	9.8 (7.9–11.7)	21.2 (16.5–26.0)
		Women	11.4 (9.4–13.4)	17.6 (14.3–20.8)

Table A1.13 contd

Country	Risk factor		Employed % (CI 95%)	Unemployed or not in the labour force % (CI 95%)
Georgia	Current tobacco use	Men	59.1 (54.2–63.9)	54.7 (50.4–59.1)
		Women	10.8 (7.9–13.7)	5.7 (4.4–7.0)
	Alcohol	Men	61.3 (56.5–66.0)	57.0 (52.0–62.0)
		Women	23.9 (20.2–27.7)	19.6 (17.2–22.0)
	Alcohol (heavy episodic)	Men	37.2 (32.3–42.1)	33.8 (28.6–39.0)
		Women	2.8 (1.2–4.3)	2.6 (1.4–3.7)
	Unhealthy diet (< 5 fruit/veg)	Men	64.2 (58.9–69.5)	63.8 (58.7–68.9)
		Women	60.1 (55.6–64.7)	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	17.2 (13.4–21.0)	15.5 (12.0–19.0)
		Women	14.4 (11.2–17.6)	19.7 (17.3–22.1)
Republic of Moldova	Current tobacco use	Men	45.6 (41.5–49.6)	46.0 (37.2–54.7)
		Women	6.1 (4.6–7.6)	5.6 (2.4–8.9)
	Alcohol	Men	71.9 (67.5–76.3)	77.3 (69.9–84.6)
		Women	55.1 (50.9–59.3)	68.4 (60.8–76.0)
	Alcohol (heavy episodic)	Men	28.2 (23.7–32.8)	41.2 (33.7–48.7)
		Women	8.6 (6.4–10.8)	14.0 (8.0–20.1)
	Unhealthy diet (< 5 fruit/veg)	Men	65.2 (60.9–69.5)	62.7 (53.5–71.9)
		Women	64.6 (60.5–68.7)	63.9 (54.7–73.0)
	Unhealthy diet (add salt)	Men	28.4 (24.5–32.3)	29.0 (21.4–36.6)
		Women	18.3 (15.6–21.1)	29.9 (21.4–38.3)
	Unhealthy diet (processed foods)	Men	37.3 (33.2–41.3)	35.4 (27.2–43.7)
		Women	28.0 (24.3–31.7)	41.1 (32.9–49.4)
	Insufficient physical activity	Men	11.3 (8.5–14.1)	8.4 (0.7–16.1)
		Women	10.0 (7.0–12.9)	9.6 (5.0–14.2)
Ukraine	Current tobacco use	Men	51.6 (42.2–61.0)	47.7 (41.5–53.8)
		Women	18.3 (15.0–21.7)	13.9 (10.5–17.2)
	Alcohol	Men	69.5 (62.9–76.0)	58.7 (52.7–64.6)
		Women	46.2 (41.7–50.7)	42.9 (38.1–47.6)
	Alcohol (heavy episodic)	Men	31.6 (19.5–43.6)	25.7 (20.3–31.1)
		Women	9.9 (6.9–12.9)	9.0 (6.4–11.5)
	Unhealthy diet (< 5 fruit/veg)	Men	75.8 (69.4–82.2)	68.6 (61.9–75.2)
		Women	59.7 (54.7–64.7)	58.9 (53.3–64.6)
	Unhealthy diet (add salt)	Men	56.2 (47.5–64.9)	45.3 (38.9–51.6)
		Women	35.8 (31.2–40.4)	37.0 (31.7–42.2)
	Unhealthy diet (processed foods)	Men	31.7 (24.5–38.9)	33.8 (27.2–40.4)
		Women	21.4 (17.8–25.0)	20.4 (16.5–24.2)
	Insufficient physical activity	Men	7.6 (4.7–10.6)	12.9 (9.2–16.6)
		Women	8.4 (5.3–11.5)	13.9 (10.5–17.3)

CI: confidence interval.

Table A1.14. Prevalence of biological risk factors by income level

Country	Risk factor		Low % (CI 95%)	High % (CI 95%)
Armenia	Overweight (BMI ≥ 25)	Men	42.5 (35.7–49.4)	48.0 (40.4–55.6)
		Women	51.5 (46.8–56.1)	48.3 (43.9–52.6)
	Obesity (BMI ≥ 30)	Men	13.2 (9.1–17.2)	14.7 (10.2–19.2)
		Women	26.3 (22.7–30.0)	23.2 (19.3–27.1)
	Raised blood pressure (or on medication)	Men	42.1 (35.3–48.8)	36.7 (29.9–43.5)
		Women	38.2 (34.1–42.4)	33.6 (28.9–38.3)
	Raised blood pressure (NOT on medication)	Men	36.2 (29.2–43.2)	31.7 (24.7–38.7)
		Women	28.5 (24.4–32.6)	25.4 (21.1–29.8)
	Raised blood glucose (or on medication)	Men	3.7 (1.5–5.8)	8.9 (4.6–13.2)
		Women	5.3 (3.7–6.8)	3.7 (2.0–5.5)
	Raised cholesterol (or on medication)	Men	21.9 (16.0–27.9)	23.2 (17.4–28.9)
		Women	25.9 (22.1–29.6)	23.3 (19.4–27.2)

Table A1.14 contd

Country	Risk factor		Low % (CI 95%)	High % (CI 95%)
Kyrgyzstan	Overweight (BMI ≥ 25)	Men	47.0 (39.7–54.4)	50.4 (40.5–60.3)
		Women	63.0 (57.7–68.2)	65.1 (59.8–70.5)
	Obesity (BMI ≥ 30)	Men	16.0 (11.4–20.5)	19.2 (14.2–24.2)
		Women	28.1 (23.7–32.5)	30.8 (26.9–34.7)
	Raised blood pressure (or on medication)	Men	40.7 (34.7–46.7)	44.8 (37.3–52.3)
		Women	47.3 (43.1–51.6)	39.1 (34.6–43.6)
	Raised blood pressure (NOT on medication)	Men	37.0 (31.0–42.9)	41.5 (34.1–48.9)
		Women	38.4 (34.3–42.6)	32.5 (27.9–37.0)
	Raised blood glucose (or on medication)	Men	6.3 (3.4–9.1)	3.4 (1.5–5.3)
		Women	6.3 (3.7–8.9)	4.8 (2.6–6.9)
	Raised cholesterol (or on medication)	Men	16.4 (12.2–20.6)	17.7 (13.8–21.6)
		Women	25.2 (21.1–29.3)	33.5 (26.6–40.4)
Republic of Moldova	Overweight (BMI ≥ 25)	Men	49.7 (45.0–54.4)	62.1 (57.3–66.9)
		Women	55.6 (51.3–59.9)	56.1 (52.5–59.8)
	Obesity (BMI ≥ 30)	Men	16.2 (13.3–19.0)	19.3 (16.1–22.5)
		Women	30.4 (27.0–33.9)	26.5 (23.6–29.5)
	Raised blood pressure (or on medication)	Men	44.3 (39.3–49.2)	36.9 (32.9–40.9)
		Women	45.2 (40.8–49.6)	33.5 (30.2–36.9)
	Raised blood pressure (NOT on medication)	Men	40.7 (35.6–45.8)	31.6 (27.4–35.8)
		Women	35.7 (31.3–40.1)	24.7 (21.3–28.0)
	Raised blood glucose (or on medication)	Men	12.8 (9.9–15.8)	10.2 (7.6–12.7)
		Women	13.7 (11.4–16.0)	12.2 (10.0–14.4)
	Raised cholesterol (or on medication)	Men	29.3 (24.7–33.8)	24.2 (20.1–28.4)
		Women	32.1 (28.2–36.0)	31.9 (28.6–35.1)
Turkey	Overweight (BMI ≥ 25)	Men	65.4 (61.8–69.1)	63.7 (58.5–68.9)
		Women	70.6 (67.6–73.6)	57.7 (51.6–63.9)
	Obesity (BMI ≥ 30)	Men	22.8 (19.8–25.9)	21.2 (16.6–25.7)
		Women	40.6 (37.7–43.5)	27.3 (21.8–32.7)
	Raised blood pressure (or on medication)	Men	26.9 (23.7–30.2)	26.6 (21.3–31.9)
		Women	31.8 (29.0–34.6)	26.2 (20.3–32.2)
	Raised blood pressure (NOT on medication)	Men	19.0 (15.9–22.1)	20.3 (15.0–25.6)
		Women	18.0 (15.5–20.4)	16.2 (11.1–21.4)
	Raised blood glucose (or on medication)	Men	11.3 (7.8–14.8)	8.9 (4.7–13.1)
		Women	13.5 (9.8–17.1)	8.3 (3.6–13.0)
	Raised cholesterol (or on medication)	Men	20.7 (15.9–25.5)	20.8 (14.6–27.0)
		Women	31.7 (26.7–36.6)	23.3 (16.6–30.1)
Ukraine	Overweight (BMI ≥ 25)	Men	52.8 (38.6–66.9)	66.3 (58.1–74.6)
		Women	67.0 (62.8–71.1)	51.9 (44.9–58.9)
	Obesity (BMI ≥ 30)	Men	18.1 (11.8–24.4)	24.7 (14.4–35.0)
		Women	37.2 (32.2–42.2)	18.1 (12.8–23.3)
	Raised blood pressure (or on medication)	Men	33.1 (23.4–42.8)	35.0 (24.9–45.1)
		Women	41.3 (36.6–45.9)	22.9 (17.2–28.7)
	Raised blood pressure (NOT on medication)	Men	22.3 (14.0–30.6)	25.4 (13.6–37.3)
		Women	23.6 (18.2–29.1)	11.8 (6.7–16.9)
	Raised blood glucose (or on medication)	Men	7.7 (4.7–10.7)	7.7 (3.1–12.2)
		Women	9.5 (7.0–11.9)	5.2 (2.5–7.9)
	Raised cholesterol (or on medication)	Men	40.6 (33.0–48.3)	41.5 (10.4–52.6)
		Women	43.7 (37.8–49.6)	32.9 (25.5–40.2)

CI: confidence interval.

Table A1.15. Prevalence of biological risk factors by employment status

Country	Risk factor		Employed % (CI 95%)	Unemployed or not in the labour force % (CI 95%)
Belarus	Overweight (BMI ≥ 25)	Men	62.7 (59.6–65.9)	57.8 (52.6–63.0)
		Women	56.5 (53.5–59.4)	66.5 (62.2–70.9)
	Obesity (BMI ≥ 30)	Men	20.0 (17.5–22.5)	20.6 (16.8–24.4)
		Women	26.8 (24.1–29.4)	37.0 (33.1–41.0)
	Raised blood pressure (or on medication)	Men	41.6 (38.5–44.7)	57.0 (51.5–62.4)
		Women	35.6 (33.0–38.2)	61.1 (56.7–65.4)
	Raised blood pressure (NOT on medication)	Men	33.1 (29.8–36.4)	42.3 (35.9–48.8)
		Women	21.4 (18.8–23.9)	35.6 (30.7–40.4)
	Raised blood glucose (or on medication)	Men	2.5 (1.5–3.6)	5.0 (3.1–6.9)
		Women	2.5 (1.7–3.3)	6.8 (4.8–8.8)
	Raised cholesterol (or on medication)	Men	34.1 (31.0–37.2)	31.4 (26.9–36.0)
		Women	38.3 (35.3–41.2)	51.0 (46.8–55.3)
Georgia	Overweight (BMI ≥ 25)	Men	68.5 (62.8–74.2)	62.5 (57.5–67.6)
		Women	64.7 (60.3–69.1)	63.5 (60.7–66.3)
	Obesity (BMI ≥ 30)	Men	32.6 (28.1–37.1)	28.1 (23.6–32.5)
		Women	31.5 (27.5–35.6)	37.5 (34.8–40.1)
	Raised blood pressure (or on medication)	Men	35.3 (30.5–40.0)	41.8 (37.0–46.6)
		Women	32.0 (28.1–36.0)	38.6 (36.0–41.1)
	Raised blood pressure (NOT on medication)	Men	26.0 (21.2–30.7)	31.4 (26.5–36.3)
		Women	19.3 (15.7–23.0)	22.4 (19.8–25.0)
	Raised blood glucose (or on medication)	Men	5.0 (2.9–7.2)	4.5 (2.8–6.1)
		Women	3.2 (1.5–4.8)	4.6 (3.6–5.6)
	Raised cholesterol (or on medication)	Men	24.1 (18.7–29.5)	19.8 (15.9–23.8)
		Women	36.1 (31.4–40.9)	32.0 (29.1–34.8)
Republic of Moldova	Overweight (BMI ≥ 25)	Men	60.7 (56.6–64.7)	53.5 (44.8–62.2)
		Women	58.4 (54.7–62.1)	61.5 (52.7–70.3)
	Obesity (BMI ≥ 30)	Men	18.7 (15.9–21.6)	16.6 (11.1–22.0)
		Women	26.8 (23.9–29.8)	39.4 (31.3–47.4)
	Raised blood pressure (or on medication)	Men	37.9 (33.5–42.2)	46.3 (37.4–55.1)
		Women	36.1 (32.6–39.6)	57.2 (47.7–66.7)
	Raised blood pressure (NOT on medication)	Men	33.6 (29.2–38.1)	43.8 (34.6–52.9)
		Women	28.7 (25.2–32.3)	51.6 (41.0–62.3)
	Raised blood glucose (or on medication)	Men	10.8 (8.2–13.4)	13.1 (7.4–18.8)
		Women	13.5 (10.8–16.1)	13.9 (7.7–20.1)
	Raised cholesterol (or on medication)	Men	24.5 (20.7–28.2)	30.2 (21.8–38.6)
		Women	32.8 (29.3–36.3)	37.2 (27.8–46.5)
Ukraine	Overweight (BMI ≥ 25)	Men	60.7 (56.6–64.7)	53.5 (44.8–62.2)
		Women	58.4 (54.7–62.1)	61.5 (52.7–70.3)
	Obesity (BMI ≥ 30)	Men	57.7 (47.1–68.3)	58.1 (51.7–64.4)
		Women	57.8 (53.4–62.3)	63.8 (59.2–68.4)
	Raised blood pressure (or on medication)	Men	20.0 (13.8–26.3)	21.1 (15.9–26.3)
		Women	28.1 (23.3–32.8)	32.3 (27.9–36.6)
	Raised blood pressure (NOT on medication)	Men	29.7 (22.2–37.1)	46.2 (39.6–52.8)
		Women	25.8 (21.8–29.9)	48.9 (43.7–54.2)
	Raised blood glucose (or on medication)	Men	21.5 (14.3–28.7)	32.0 (24.4–39.7)
		Women	13.9 (10.0–17.7)	26.9 (20.6–33.2)
	Raised cholesterol (or on medication)	Men	6.6 (4.0–9.3)	6.1 (3.8–8.5)
		Women	4.9 (3.1–6.7)	11.3 (8.4–14.2)

CI: confidence interval.

Table A1.16. Percentage with three or more risk factors by age group in Georgia

Age – STEPS	Year	Men % (CI 95%)	Women % (CI 95%)
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)
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)
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)
60+	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)
Age – migrant health survey		**Men**	**Women**
18–29		23.8 (10.4–37.1)	6.6 (4.3–8.9)
30–44		55.9 (42.8–69.0)	29.4 (23.9–34.8)
45–59		74.4 (62.7–86.1)	52.6 (46.4–58.9)
60+		57.4 (42.3–72.5)	62.1 (46.7–77.5)

CI: confidence interval.

Table A1.17. Prevalence of biological risk factors with differences by marital status

Country	Risk factor		Currently living without a partner % (CI 95%)	Currently living with a partner % (CI 95%)
Belarus	Overweight (BMI ≥ 25)	Men	50.6 (45.6–55.5)	67.9 (64.9–71.0)
		Women	52.7 (49.2–56.2)	64.6 (61.6–67.6)
	Obesity (BMI ≥ 30)	Men	12.5 (9.9–15.1)	24.7 (21.8–27.5)
		Women	24.4 (21.4–27.3)	34.1 (31.3–36.9)
	Raised blood pressure (or on medication)	Men	32.4 (27.9–36.9)	53.4 (50.2–56.7)
		Women	41.9 (38.5–45.2)	45.7 (42.7–48.8)
	Raised blood pressure (NOT on medication)	Men	27.0 (22.7–31.4)	41.0 (37.2–44.8)
		Women	22.5 (19.5–25.4)	27.1 (23.9–30.2)
	Raised blood glucose (or on medication)	Men	2.0 (1.0–3.0)	3.9 (2.6–5.2)
		Women	3.6 (2.4–4.9)	4.1 (2.9–5.4)
	Raised cholesterol (or on medication)	Men	22.0 (18.5–25.6)	39.9 (36.6–43.2)
		Women	41.0 (37.2–44.8)	43.6 (40.6–46.7)
Uzbekistan	Overweight (BMI ≥ 25)	Men	37.7 (28–47.4)	63.8 (59.2–68.3)
		Women	40.4 (33.1–47.6)	63.3 (59.5–67.1)
	Obesity (BMI ≥ 30)	Men	11.3 (6.4–16.2)	26.1 (21.5–30.6)
		Women	15.3 (11.1–19.5)	29.2 (26–32.3)
	Raised blood pressure (or on medication)	Men	23.8 (14.4–33.3)	45.9 (40–51.8)
		Women	28.7 (21–36.4)	40.4 (36.3–44.5)
	Raised blood pressure (NOT on medication)	Men	20.8 (11.6–30)	31.7 (26.9–36.5)
		Women	18.2 (10.2–26.1)	19.0 (15.7–22.3)
	Raised blood glucose (or on medication)	Men	6.0 (2.2–9.8)	9.9 (8–11.9)
		Women	7.4 (4.6–10.2)	8.3 (6.6–10)
	Raised cholesterol (or on medication)	Men	6.4 (2.5–10.2)	12.3 (9.4–15.1)
		Women	12.9 (8.3–17.5)	14.5 (12.5–16.4)

CI: confidence interval.

Table A1.18. Prevalence of biological risk factors with differences by ethnicity in Kyrgyzstan

Risk factor		Kyrgyz % (CI 95%)	Russian % (CI 95%)	Uzbek % (CI 95%)
Overweight (BMI ≥ 25)	Men	50.7 (44.0–57.4)	36.4 (10.4–62.4)	45.5 (33.5–57.5)
	Women	64.5 (60.7–68.3)	64.6 (54.0–75.2)	55.5 (46.7–64.4)
Obesity (BMI ≥ 30)	Men	17.7 (14.1–21.2)	10.4 (0.5–20.3)	23.5 (13.9–33.0)
	Women	28.7 (25.4–32.1)	34.2 (26.0–42.4)	29.1 (22.2–35.9)
Raised blood pressure (or on medication)	Men	42.9 (37.9–48.0)	35.4 (22.2–48.5)	41.3 (28.6–53.9)
	Women	41.8 (38.3–45.3)	49.8 (39.1–60.4)	45.7 (37.2–54.3)
Raised blood pressure (NOT on medication)	Men	39.3 (34.2–44.5)	32.6 (20.1–45.1)	35.1 (22.2–48.0)
	Women	34.6 (31.1–38.1)	39.8 (28.9–50.7)	36.6 (27.2–45.9)
Raised blood glucose (or on medication)	Men	6.9 (4.8–8.9)	5.2 (0.0–11.1)	7.9 (1.9–14.0)
	Women	9.2 (6.9–11.5)	7.3 (3.2–11.3)	19.0 (6.7–31.3)
Raised cholesterol (or on medication)	Men	15.9 (12.6–19.2)	25.6 (17.5–33.8)	20.1 (9.3–30.9)
	Women	28.5 (25.1–31.9)	55.3 (44.8–65.7)	19.1 (12.4–25.8)

CI: confidence interval.

Table A1.19. Percentages not measured for risk factors by a health-care professional

Country	Risk factor measurement	Men % (CI 95%)	Women % (CI 95%)
Armenia	Blood pressure not measured	39.4 (34.0–44.8)	23.2 (20.4–25.9)
	Blood glucose not measured	71.6 (68.1–75.1)	56.0 (52.7–59.3)
	Cholesterol not measured	75.5 (71.5–79.5)	66.4 (63.1–69.7)
Belarus	Blood pressure not measured	2.1 (1.4–2.9)	1.0 (0.4–1.5)
	Blood glucose not measured	12.9 (10.2–15.6)	9.7 (7.6–11.8)
	Cholesterol not measured	23.4 (20.1–26.7)	19.1 (16.4–21.9)
Georgia	Blood pressure not measured	30.1 (26.9–33.3)	15.4 (13.6–17.3)
	Blood glucose not measured	68.7 (65.6–71.7)	56.7 (54.2–59.1)
	Cholesterol not measured	86.2 (84.0–88.3)	82.5 (80.6–84.3)
Kyrgyzstan	Blood pressure not measured	40.4 (32.8–47.9)	18.1 (14.0–22.3)
	Blood glucose not measured	79.9 (76.2–83.6)	67.0 (62.5–71.6)
	Cholesterol not measured	87.3 (83.2–91.4)	83.9 (81.3–86.5)
Republic of Moldova	Blood pressure not measured	10.8 (8.6–13.0)	6.0 (4.6–7.3)
	Blood glucose not measured	45.4 (41.7–49.1)	34.9 (32.0–37.8)
	Cholesterol not measured	64.0 (60.3–67.7)	56.5 (53.6–59.4)
Turkey	Blood pressure not measured	16.1 (14.1–18.2)	11.1 (9.5–12.7)
	Blood glucose not measured	39.9 (37.2–42.6)	30.2 (27.9–32.6)
	Cholesterol not measured	50.4 (47.6–53.2)	40.9 (38.4–43.3)
Ukraine	Blood pressure not measured	9.7 (7.0–12.4)	7.0 (5.2–8.8)
	Blood glucose not measured	29.6 (24.1–35.0)	25.1 (21.9–28.3)
	Cholesterol not measured	67.7 (62.1–73.2)	60.1 (56.6–63.6)
Uzbekistan	Blood pressure not measured	50.8 (44.8–56.7)	41.8 (37.7–45.9)
	Blood glucose not measured	79.3 (75.8–82.8)	71.3 (68.1–74.5)
	Cholesterol not measured	91.1 (88.7–93.4)	89.9 (87.8–91.9)

CI: confidence interval.

Table A1.20. Percentages not measured for risk factors by age group

Country	Risk factor		Aged 18–29 % (CI 95%)	Aged 30–44 % (CI 95%)	Aged 45–59 % (CI 95%)	Aged 60–69 % (CI 95%)
Armenia	Blood pressure not measured	Men	45.2 (36.5–54.0)	39.5 (31.1–47.9)	36.2 (28.2–44.3)	27.5 (18.8–36.1)
		Women	26.1 (20.1–32.1)	26.6 (22.6–30.5)	20.1 (16.1–24.1)	12.0 (7.9–16.1)
	Blood glucose not measured	Men	78.1 (71.8–84.5)	77.6 (70.5–84.8)	61.5 (54.4–68.5)	57.8 (49.0–66.6)
		Women	65.8 (59.0–72.7)	58.2 (53.0–63.4)	46.9 (41.9–52.0)	41.1 (34.8–47.3)
	Cholesterol not measured	Men	81.5 (75.3–87.6)	82.4 (76.1–88.8)	65.9 (58.4–73.3)	59.5 (50.7–68.3)
		Women	74.4 (68.0–80.7)	70.8 (66.0–75.7)	56.8 (51.6–61.9)	53.1 (46.6–59.5)
Belarus	Blood pressure not measured	Men	3.9 (1.7–6.1)	1.4 (0.5–2.3)	1.8 (0.8–2.8)	1.1 (0.1–2.2)
		Women	2.5 (0.3–4.8)	0.6 (0.0–1.1)	0.5 (0.0–1.0)	0.6 (0.0–1.3)
	Blood glucose not measured	Men	16.4 (11.3–21.5)	13.5 (9.6–17.5)	10.6 (7.5–13.8)	10.1 (6.4–13.7)
		Women	15.7 (11.0–20.4)	9.7 (6.9–12.6)	7.9 (5.5–10.2)	5.8 (3.6–8.0)
	Cholesterol not measured	Men	35.3 (28.2–42.5)	24.1 (19.4–28.9)	16.1 (12.4–19.7)	15.8 (11.4–20.2)
		Women	36.4 (29.6–43.1)	20.0 (16.0–24.0)	13.3 (10.4–16.1)	7.3 (4.9–9.7)
Georgia	Blood pressure not measured	Men	54.7 (47.0–62.3)	29.3 (23.0–35.6)	18.4 (13.5–23.3)	10.0 (6.1–13.8)
		Women	23.9 (18.5–29.2)	15.4 (12.4–18.4)	13.7 (11.2–16.3)	7.1 (5.0–9.2)
	Blood glucose not measured	Men	81.3 (75.2–87.3)	74.5 (69.1–80.0)	58.7 (53.6–63.8)	52.7 (45.7–59.6)
		Women	66.0 (60.7–71.4)	60.8 (56.5–65.2)	53.8 (49.9–57.6)	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)
			Aged 25–34 % (CI 95%)	**Aged 35–44** % (CI 95%)	**Aged 45–54** % (CI 95%)	**Aged 55–64** % (CI 95%)
Kyrgyzstan	Blood pressure not measured	Men	50.8 (39.7–61.8)	39.7 (30.7–48.7)	33.5 (22.7–44.3)	21.8 (14.6–29.1)
		Women	21.9 (15.9–27.8)	20.0 (14.5–25.5)	15.9 (11.1–20.7)	9.9 (5.4–14.4)
	Blood glucose not measured	Men	86.0 (77.7–94.2)	82.3 (76.5–88.1)	73.1 (66.6–79.5)	68.7 (60.5–77.0)
		Women	71.8 (64.7–78.8)	71.8 (65.6–78.0)	66.7 (61.2–72.2)	49.9 (42.3–57.6)
	Cholesterol not measured	Men	90.0 (81.3–98.6)	91.7 (88.0–95.5)	82.9 (76.9–88.9)	78.9 (72.2–85.7)
		Women	90.2 (86.8–93.5)	85.1 (80.6–89.7)	80.5 (75.8–85.2)	72.0 (66.0–77.9)
			Aged 18–29 % (CI 95%)	**Aged 30–44** % (CI 95%)	**Aged 45–59** % (CI 95%)	**Aged 60–69** % (CI 95%)
Republic of Moldova	Blood pressure not measured	Men	14.1 (9.2–19.0)	10.5 (7.0–14.0)	7.8 (5.5–10.1)	7.4 (4.1–10.6)
		Women	7.6 (5.0–10.2)	5.8 (3.8–7.7)	5.1 (3.5–6.7)	3.7 (2.0–5.5)
	Blood glucose not measured	Men	58.8 (51.6–65.9)	40.3 (35.3–45.4)	38.0 (33.3–42.7)	30.3 (24.4–36.3)
		Women	52.9 (47.2–58.6)	34.4 (30.0–38.8)	22.3 (18.8–25.9)	15.5 (12.2–18.8)
	Cholesterol not measured	Men	73.3 (66.4–80.1)	62.0 (56.6–67.3)	57.1 (52.2–61.9)	53.7 (46.9–60.6)
		Women	73.4 (68.9–77.9)	56.0 (51.2–60.7)	44.5 (40.5–48.5)	38.6 (34.0–43.3)
			Aged 15–29 % (CI 95%)	**Aged 30–44** % (CI 95%)	**Aged 45–59** % (CI 95%)	**Aged 60–69** % (CI 95%)
Turkey	Blood pressure not measured	Men	32.0 (27.2–36.9)	11.6 (8.7–14.5)	7.3 (5.2–9.5)	4.7 (2.3–7.0)
		Women	23.4 (19.4–27.4)	6.9 (4.6–9.2)	5.8 (4.0–7.6)	3.8 (2.0–5.6)
	Blood glucose not measured	Men	62.4 (57.8–66.9)	37.9 (33.1–42.7)	26.7 (22.2–31.2)	13.9 (9.5–18.2)
		Women	52.1 (47.1–57.2)	25.8 (22.2–29.4)	17.8 (14.5–21.1)	13.7 (10.0–17.4)
	Cholesterol not measured	Men	72.2 (67.7–76.6)	49.9 (45.0–54.9)	35.6 (30.7–40.5)	23.4 (17.9–29.0)
		Women	64.3 (59.9–68.8)	37.4 (33.4–41.4)	25.8 (22.2–29.3)	22.0 (17.4–26.6)
			Aged 18–29 % (CI 95%)	**Aged 30–44** % (CI 95%)	**Aged 45–59** % (CI 95%)	**Aged 60–69** % (CI 95%)
Ukraine	Blood pressure not measured	Men	11.4 (5.9–16.9)	10.3 (5.4–15.3)	8.4 (5.3–11.6)	7.7 (2.3–13.1)
		Women	14.5 (9.0–20.0)	7.3 (4.2–10.4)	3.4 (1.6–5.2)	3.1 (1.1–5.0)
	Blood glucose not measured	Men	39.7 (30.4–49.1)	26.6 (17.3–36.0)	26.4 (20.0–32.8)	30.2 (23.4–37.1)
		Women	33.7 (25.9–41.6)	28.2 (22.7–33.7)	20.2 (15.6–24.8)	16.8 (12.8–20.8)
	Cholesterol not measured	Men	66.9 (57.6–76.3)	71.1 (61.0–81.2)	64.4 (56.5–72.2)	64.8 (58.3–71.4)
		Women	68.4 (62.0–74.9)	63.6 (57.9–69.2)	54.2 (48.6–59.8)	53.2 (47.3–59.2)
			Aged 18–29 % (CI 95%)	**Aged 30–44** % (CI 95%)	**Aged 45–59** % (CI 95%)	
Uzbekistan	Blood pressure not measured	Men	57.8 (45.9–69.7)	53.8 (48.3–59.2)	37.3 (33.0–41.6)	
		Women	50.6 (43.2–58.0)	42.1 (36.8–47.3)	30.4 (27.0–33.8)	
	Blood glucose not measured	Men	87.9 (82.6–93.2)	77.9 (72.4–83.5)	68.1 (63.4–72.9)	
		Women	80.1 (74.3–85.9)	71.5 (67.1–75.8)	60.0 (55.6–64.4)	
	Cholesterol not measured	Men	95.9 (93.1–98.7)	87.8 (83.1–92.4)	87.5 (84.4–90.6)	
		Women	92.7 (88.9–96.4)	89.9 (87.2–92.6)	86.4 (84.0–88.8)	

CI: confidence interval.

Table A1.21. Percentage not measured for risk factors by geographic location

Country	Risk factor measurement		Rural % (CI 95%)	Urban % (CI 95%)
Belarus	Blood pressure not measured	Men	2.6 (1.4–3.9)	1.6 (0.8–2.5)
		Women	0.8 (0.2–1.4)	1.1 (0.2–2.0)
	Blood glucose not measured	Men	14.2 (10.0–18.5)	11.7 (8.2–15.3)
		Women	13.1 (9.3–16.9)	7.1 (4.8–9.4)
	Cholesterol not measured	Men	25.1 (20.3–29.8)	21.8 (17.3–26.4)
		Women	22.6 (18.3–26.9)	16.5 (12.9–20.0)
Georgia	Blood pressure not measured	Men	33.9 (28.8–38.9)	26.1 (22.0–30.2)
		Women	15.4 (12.7–18.2)	15.4 (13.0–17.9)
	Blood glucose not measured	Men	69.9 (65.6–74.2)	67.4 (63.2–71.7)
		Women	58.5 (54.9–62.1)	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)
Kyrgyzstan	Blood pressure not measured	Men	45.5 (38.9–52.2)	29.1 (14.7–43.6)
		Women	20.2 (14.7–25.7)	14.5 (8.7–20.4)
	Blood glucose not measured	Men	83.8 (80.1–87.4)	71.5 (64.9–78.1)
		Women	74.3 (70.0–78.6)	54.4 (46.4–62.4)
	Cholesterol not measured	Men	90.7 (87.5–94.0)	80.0 (71.4–88.5)
		Women	86.4 (83.4–89.4)	79.5 (74.6–84.4)
Republic of Moldova	Blood pressure not measured	Men	12.5 (9.0–15.9)	8.9 (6.2–11.5)
		Women	6.3 (4.3–8.3)	5.6 (3.8–7.3)
	Blood glucose not measured	Men	50.0 (44.7–55.4)	39.9 (35.0–44.9)
		Women	35.5 (31.5–39.6)	34.3 (30.2–38.3)
	Cholesterol not measured	Men	68.1 (62.9–73.3)	59.2 (54.0–64.4)
		Women	56.6 (52.2–61.0)	56.4 (52.7–60.0)
Turkey	Blood pressure not measured	Men	15.8 (12.3–19.2)	16.2 (13.8–18.7)
		Women	12.9 (9.6–16.2)	10.7 (8.8–12.5)
	Blood glucose not measured	Men	43.0 (37.7–48.3)	39.0 (35.8–42.1)
		Women	37.4 (32.3–42.5)	28.4 (25.7–31.1)
	Cholesterol not measured	Men	57.2 (51.8–62.5)	48.4 (45.1–51.7)
		Women	47.9 (42.6–53.1)	39.1 (36.3–42.0)
Ukraine	Blood pressure not measured	Men	13.0 (7.4–18.6)	8.1 (5.4–10.8)
		Women	7.2 (4.3–10.2)	6.8 (4.5–9.1)
	Blood glucose not measured	Men	30.7 (22.1–39.3)	29.0 (22.1–35.8)
		Women	25.2 (20.1–30.2)	25.0 (20.9–29.2)
	Cholesterol not measured	Men	64.8 (56.4–73.1)	69.0 (62.0–76.1)
		Women	62.8 (56.9–68.6)	58.3 (54.0–62.6)
Uzbekistan	Blood pressure not measured	Men	52.8 (45.9–59.8)	45.4 (34.7–56.2)
		Women	41.1 (36.0–46.3)	43.2 (35.0–51.5)
	Blood glucose not measured	Men	77.9 (73.7–82.1)	82.8 (76.4–89.3)
		Women	70.8 (66.8–74.9)	72.4 (66.0–78.7)
	Cholesterol not measured	Men	92.0 (89.6–94.4)	88.7 (83.5–93.9)
		Women	90.6 (87.9–93.3)	88.3 (84.7–92.0)

CI: confidence interval.

Table A1.22. Percentage not measured for risk factors by education level

Country	Risk factor measurement		Low % (CI 95%)	Medium % (CI 95%)	High % (CI 95%)
Armenia	Blood pressure not measured	Men	44.2 (38.0–50.3)	38.5 (30.0–47.1)	30.2 (20.0–40.5)
		Women	23.3 (19.2–27.5)	22.9 (18.2–27.6)	23.3 (18.0–28.6)
	Blood glucose not measured	Men	75.7 (70.9–80.5)	69.7 (62.0–77.4)	65.0 (56.8–73.1)
		Women	59.6 (54.4–64.7)	56.6 (51.1–62.1)	49.4 (43.5–55.3)
	Cholesterol not measured	Men	81.2 (76.5–85.9)	69.7 (61.5–78.0)	69.1 (61.2–77.1)
		Women	69.8 (65.2–74.5)	68.4 (63.7–73.1)	58.2 (52.0–64.4)
Belarus	Blood pressure not measured	Men	3.7 (1.8–5.6)	1.2 (0.5–1.9)	3.0 (0.9–5.1)
		Women	1.4 (0.0–2.9)	0.8 (0.2–1.4)	0.9 (0.1–1.7)
	Blood glucose not measured	Men	17.7 (12.6–22.8)	11.2 (8.5–13.9)	12.2 (7.8–16.5)
		Women	12.7 (8.6–16.9)	9.8 (7.4–12.2)	7.7 (5.0–10.4)
	Cholesterol not measured	Men	28.6 (22.9–34.3)	22.0 (18.4–25.6)	21.3 (16.1–26.5)
		Women	22.0 (16.5–27.6)	19.0 (15.9–22.1)	17.5 (13.5–21.5)

Table A1.22 contd

Country	Risk factor measurement		Low % (CI 95%)	Medium % (CI 95%)	High % (CI 95%)
Georgia	Blood pressure not measured	Men	33.4 (26.5–40.3)	32.8 (27.8–37.9)	21.6 (15.9–27.4)
		Women	17.6 (14.3–20.9)	16.9 (14.1–19.8)	10.1 (7.3–12.9)
	Blood glucose not measured	Men	72.3 (66.7–77.8)	72.1 (67.6–76.7)	58.7 (52.5–64.9)
		Women	58.9 (54.2–63.6)	59.6 (56.3–62.8)	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)
Kyrgyzstan	Blood pressure not measured	Men	45.7 (37.5–53.9)	35.7 (28.3–43.1)	35.1 (20.0–50.2)
		Women	19.7 (13.9–25.6)	15.5 (10.8–20.3)	17.7 (11.6–23.9)
	Blood glucose not measured	Men	86.9 (83.3–90.5)	78.6 (72.8–84.4)	68.5 (58.4–78.7)
		Women	69.1 (62.3–75.9)	65.1 (58.5–71.7)	64.4 (56.2–72.6)
	Cholesterol not measured	Men	92.9 (89.8–96.0)	87.0 (82.7–91.2)	77.8 (66.2–89.4)
		Women	87.4 (84.5–90.2)	79.7 (75.1–84.2)	80.8 (74.1–87.4)
Republic of Moldova	Blood pressure not measured	Men	12.5 (8.9–16.1)	10.9 (7.9–13.9)	6.8 (3.0–10.7)
		Women	7.2 (5.1–9.3)	5.5 (3.7–7.2)	4.2 (2.1–6.3)
	Blood glucose not measured	Men	53.1 (47.7–58.5)	41.6 (36.5–46.7)	35.5 (28.7–42.3)
		Women	39.2 (35.2–43.3)	31.2 (26.5–35.8)	31.9 (26.4–37.4)
	Cholesterol not measured	Men	70.4 (65.2–75.7)	62.2 (57.2–67.1)	53.5 (46.9–60.2)
		Women	63.7 (59.7–67.6)	52.2 (47.9–56.4)	48.5 (43.3–53.8)
Turkey	Blood pressure not measured	Men	14.0 (10.5–17.6)	18.9 (15.9–21.9)	10.3 (6.7–13.9)
		Women	6.8 (5.5–8.2)	16.5 (13.4–19.7)	7.6 (4.3–10.9)
	Blood glucose not measured	Men	36.1 (31.8–40.3)	45.6 (41.8–49.4)	27.2 (22.2–32.2)
		Women	25.5 (23.1–28.0)	37.3 (33.3–41.3)	23.3 (17.6–28.9)
	Cholesterol not measured	Men	47.3 (42.9–51.8)	55.4 (51.6–59.2)	38.8 (32.7–45.0)
		Women	36.7 (34.1–39.3)	48.1 (44.1–52.1)	31.9 (25.5–38.3)
Ukraine	Blood pressure not measured	Men	10.5 (2.0–19.0)	11.2 (8.1–14.4)	6.9 (2.7–11.1)
		Women	9.3 (2.8–15.8)	7.5 (5.0–10.0)	5.5 (3.3–7.8)
	Blood glucose not measured	Men	34.2 (20.5–47.9)	32.8 (27.6–38.1)	23.0 (14.0–32.1)
		Women	28.2 (18.0–38.4)	28.2 (24.0–32.4)	19.1 (14.8–23.4)
	Cholesterol not measured	Men	75.2 (63.5–87.0)	68.6 (63.6–73.5)	64.7 (51.6–77.8)
		Women	62.9 (48.9–76.9)	60.1 (55.9–64.2)	59.8 (54.0–65.5)
Uzbekistan	Blood pressure not measured	Men	62.5 (45.2–79.8)	52.3 (46.2–58.4)	33.9 (23.2–44.6)
		Women	51.6 (42.2–60.9)	39.9 (35.3–44.5)	43.1 (33.9–52.3)
	Blood glucose not measured	Men	77.9 (62.1–93.6)	81.2 (77.9–84.6)	69.0 (59.3–78.7)
		Women	77.7 (72.0–83.5)	70.8 (67.0–74.5)	66.3 (57.9–74.6)
	Cholesterol not measured	Men	95.0 (90.6–99.5)	92.0 (89.8–94.2)	82.8 (75.7–89.8)
		Women	93.1 (89.6–96.6)	89.6 (87.2–92.0)	87.9 (84.5–91.3)

CI: confidence interval.

Table A1.23. Percentage not measured for risk factors by income level

Country	Risk factor measurement		Low % (CI 95%)	High % (CI 95%)
Armenia	Blood pressure not measured	Men	41.0 (35.0–47.1)	37.9 (29.6–46.1)
		Women	25.1 (21.7–28.6)	20.6 (16.7–24.5)
	Blood glucose not measured	Men	76.4 (71.4–81.4)	67.3 (61.7–72.8)
		Women	60.6 (57.0–64.3)	49.9 (44.7–55.1)
	Cholesterol not measured	Men	81.8 (77.2–86.4)	69.8 (63.1–76.4)
		Women	71.5 (68.0–75.0)	59.5 (54.4–64.7)
Kyrgyzstan	Blood pressure not measured	Men	41.1 (32.0–50.1)	38.7 (29.8–47.6)
		Women	19.4 (14.1–24.8)	13.5 (9.4–17.7)
	Blood glucose not measured	Men	84.0 (79.7–88.3)	76.6 (71.0–82.2)
		Women	71.4 (66.2–76.6)	60.7 (54.8–66.6)
	Cholesterol not measured	Men	91.6 (88.2–94.9)	84 .0(77.9–90.1)
		Women	86.3 (83.0–89.7)	80.8 (77.4–84.2)
Republic of Moldova	Blood pressure not measured	Men	12.3 (9.4–15.3)	9.3 (6.2–12.3)
		Women	7.0 (5.1–8.9)	4.8 (3.2–6.4)
	Blood glucose not measured	Men	48.7 (43.3–54.0)	42.0 (37.4–46.7)
		Women	39.9 (35.8–44.0)	29.6 (26.3–32.8)
	Cholesterol not measured	Men	65.9 (60.6–71.2)	62.0 (57.3–66.8)
		Women	59.4 (55.5–63.4)	53.3 (49.7–56.9)

Table A1.23 contd

Country	Risk factor measurement		Low % (CI 95%)	High % (CI 95%)
Turkey	Blood pressure not measured	Men	17.7 (14.6–20.7)	10.8 (7.7–13.9)
		Women	12.6 (10.4–14.9)	8.9 (4.8–13.0)
	Blood glucose not measured	Men	42.1 (38.1–46.0)	29.4 (24.3–34.5)
		Women	34.3 (30.9–37.7)	19.2 (14.3–24.0)
	Cholesterol not measured	Men	55.1 (51.4–58.7)	39.4 (33.7–45.1)
		Women	45.8 (42.5–49.2)	29.7 (24.1–35.2)
Ukraine	Blood pressure not measured	Men	11.0 (6.0–15.9)	6.1 (2.7–9.5)
		Women	5.9 (3.6–8.1)	6.8 (2.7–10.8)
	Blood glucose not measured	Men	33.7 (23.3–44.0)	26.9 (19.4–34.4)
		Women	27.5 (22.7–32.3)	23.5 (16.7–30.2)
	Cholesterol not measured	Men	71.0 (62.1–79.8)	63.7 (55.6–71.8)
		Women	59.6 (54.8–64.4)	57.1 (50.2–64.0)

CI: confidence interval.

Table A1.24. Percentage not measured for risk factors by employment status

Country	Risk factor		Employed % (CI 95%)	Unemployed or not in the labour force % (CI 95%)
Belarus	Blood pressure not measured	Men	0.9 (0.4–1.5)	5.4 (0.5–10.3)
		Women	0.7 (0.2–1.2)	3.3 (0.0–8.5)
	Blood glucose not measured	Men	10.8 (8.1–13.4)	19.3 (9.2–29.4)
		Women	9.7 (7.5–12.0)	7.6 (0.0–16.1)
	Cholesterol not measured	Men	21.9 (18.5–25.3)	25.1 (13.9–36.4)
		Women	20.0 (16.9–23.0)	7.1 (0.0–15.4)
Georgia	Blood pressure not measured	Men	28.2 (23.6–32.9)	32.1 (27.2–37.1)
		Women	15.5 (11.8–19.1)	15.4 (13.3–17.5)
	Blood glucose not measured	Men	68.8 (64.2–73.5)	68.5 (64.2–72.8)
		Women	56.4 (52.2–60.7)	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)
Republic of Moldova	Blood pressure not measured	Men	9.9 (7.1–12.8)	12.9 (7.7–18.2)
		Women	4.7 (3.2–6.3)	6.9 (2.6–11.1)
	Blood glucose not measured	Men	42.6 (38.2–47.1)	56.4 (47.6–65.1)
		Women	26.7 (23.3–30.1)	43.8 (35.1–52.5)
	Cholesterol not measured	Men	61.0 (56.4–65.6)	72.9 (65.2–80.5)
		Women	49.6 (45.7–53.5)	67.7 (58.9–76.4)
Ukraine	Blood pressure not measured	Men	8.5 (5.6–11.3)	12.9 (8.3–17.6)
		Women	6.5 (4.2–8.8)	7.6 (5.0–10.1)
	Blood glucose not measured	Men	26.7 (20.3–33.1)	35.2 (28.9–41.6)
		Women	23.0 (18.9–27.0)	27.8 (23.4–32.3)
	Cholesterol not measured	Men	68.7 (61.6–75.7)	65.4 (59.0–71.8)
		Women	59.8 (55.1–64.5)	60.9 (56.6–65.2)

CI: confidence interval.

Table A1.25. Percentages not measured for risk factors by a health-care professional in Georgia

Risk factor measurement – STEPS	Men % (CI 95%)		Women % (CI 95%)	
	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)
Risk factor measurement – migrant health survey	**Men** % (CI 95%)		**Women** % (CI 95%)	
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)	

CI: confidence interval.

Table A1.26. Percentage not measured for risk factors by marital status

Country	Risk factor		Currently living without a partner % (CI 95%)	Currently living with a partner % (CI 95%)
Belarus	Blood pressure not measured	Men	3.9 (2.2–5.6)	1.1 (0.5–1.6)
		Women	1.8 (0.6–3.1)	0.4 (0.0–0.8)
	Blood glucose not measured	Men	15.7 (11.8–19.5)	11.3 (8.5–14.0)
		Women	10.2 (7.6–12.8)	9.4 (7.0–11.8)
	Cholesterol not measured	Men	29.2 (24.0–34.4)	19.9 (16.6–23.2)
		Women	18.5 (15.0–22.1)	19.5 (16.4–22.6)
Uzbekistan	Blood pressure not measured	Men	56.1 (42.7–69.4)	48.1 (42.7–53.4)
		Women	51.9 (42.6–61.1)	37.9 (33.6–42.3)
	Blood glucose not measured	Men	90.9 (85.8–96.1)	73.5 (69.2–77.8)
		Women	81.8 (77.2–86.4)	67.7 (63.8–71.6)
	Cholesterol not measured	Men	93.9 (89.5–98.4)	89.8 (87.3–92.3)
		Women	93.0 (90.3–95.7)	88.9 (86.4–91.4)

CI: confidence interval.

Table A1.27. Percentages of lifestyle advice given for related risk factors

Country	Risk factor		Advice given % (CI 95%)	Prevalence of related risk factor % (CI 95%)
Armenia	Tobacco	Men	17.4 (13.7–21.1)	51.5 (47.4–55.6)
		Women	1.7 (1.0–2.5)	1.8 (1.1–2.5)
	Diet – added salt	Men	13.9 (10.5–17.2)	40.3 (36.1–44.4)
		Women	14.7 (12.4–16.9)	30.1 (27.1–33.1)
	Diet – fruit and vegetables	Men	18.0 (14.0–21.9)	78.4 (74.3–82.4)
		Women	25.3 (22.4–28.1)	73.5 (70.4–76.6)
	Physical activity	Men	15.2 (11.5–18.9)	22.0 (18.0–26.1)
		Women	15.7 (13.1–18.3)	20.4(17.3–23.5)
	Body weight	Men	10.6 (7.7–13.5)	45.4 (40.6–50.2)
			14.8 (12.4–17.3)	50.1 (46.7–53.5)
Belarus	Tobacco	Men	43.6 (40.0–47.1)	48.4 (42.8–48.6)
		Women	20.7 (17.6–23.9)	12.6 (8.9–11.6)
	Diet – added salt	Men	42.3 (38.5–46.2)	35.8 (31.9–39.7)
		Women	41.7 (37.8–45.6)	28.0 (24.5–31.4)
	Diet – fruit and vegetables	Men	38.9 (34.5–43.3)	77.9 (74.3–81.5)
		Women	42.7 (38.8–46.7)	68.4 (64.7–72.0)
	Physical activity	Men	38.6 (34.4–42.7)	12.8 (10.7–14.9)
		Women	43.2 (39.5–46.9)	13.5 (11.5–15.5)
	Body weight	Men	38.2 (34.1–42.3)	61.5 (58.7–64.2)
			46.8 (43.1–50.5)	60.0 (57.3–62.4)
Georgia	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 – fruit 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)
Kyrgyzstan	Tobacco	Men	44.5 (38.3–50.7)	48.2 (43.6–52.8)
		Women	27.2 (22.5–32.0)	2.7 (1.7–3.7)
	Diet – added salt	Men	39.4 (33.2–45.6)	20.4 (14.7–26.1)
		Women	54.7 (49.1–60.3)	15.6 (11.9–19.4)
	Diet – fruit and vegetables	Men	43.9 (39.1–48.8)	76.7 (71.3–82.2)
		Women	57.9 (53.1–62.7)	71.1 (65.6–76.7)
	Physical activity	Men	38.7 (33.4–43.9)	8.9 (6.4–11.3)
		Women	43.1 (37.6–48.5)	14.1 (11.7–16.5)
	Body weight	Men	32.5 (26.9–38.2)	49.4 (42.4–56.5)
		Women	40.1 (35.6–44.7)	63.5 (60.2–66.8)

Table A1.27 contd

Country	Risk factor		Advice given % (CI 95%)	Prevalence of related risk factor % (CI 95%)
Republic of Moldova	Tobacco	Men	50.4 (46.5–54.3)	43.6 (37.5–43.7)
		Women	32.1 (28.1–36.1)	5.6 (4.5–6.7)
	Diet – added salt	Men	54.7 (50.4–59.0)	28.0 (24.7–31.3)
		Women	61.2 (57.6–64.9)	20.3 (18.1–22.5)
	Diet – fruit and vegetables	Men	59.2 (55.2–63.2)	65.8 (62.1–69.5)
		Women	66.4 (63.3–69.6)	67.5 (64.5–70.6)
	Physical activity	Men	51.6 (47.4–55.9)	10.7 (8.5–12.9)
		Women	57.2 (53.4–61.1)	9.4 (7.7–11.1)
	Body weight	Men	48.6 (44.1–53.1)	56.0 (52.7–59.4)
			56.0 (52.1–59.9)	55.9 (53.1–58.7)
Turkey	Tobacco	Men	18.6 (16.3–20.8)	43.4 (40.8–46.0)
		Women	11.1 (9.6–12.6)	19.7 (17.6–21.8)
	Diet – added salt	Men	20.8 (18.5–23.1)	29.3 (26.7–31.9)
		Women	23.9 (21.9–25.9)	26.8 (24.6–29.0)
	Diet – fruit and vegetables	Men	19.3 (17.0–21.7)	87.8 (85.8–89.8)
		Women	20.4 (18.3–22.4)	87.9 (86.3–89.5)
	Physical activity	Men	20.3 (18.0–22.5)	33.1 (30.5–35.6)
		Women	26.2 (24.1–28.3)	53.9 (51.6–56.3)
	Body weight	Men	18.9 (16.6–21.2)	62.8 (60.2–65.4)
			25.4 (23.2–27.5)	66.0 (63.7–68.4)
Ukraine	Tobacco	Men	37.5 (29.6–45.3)	50.3 (43.6–57.1)
		Women	19.3 (15.1–23.5)	16.7 (14.3–19.1)
	Diet – added salt	Men	30.2 (22.0–38.4)	53.0 (46.3–59.7)
		Women	26.2 (22.3–30.2)	36.5 (32.5–40.4)
	Diet – fruit and vegetables	Men	39.1 (31.3–46.9)	73.2 (67.9–78.6)
		Women	39.4 (34.4–44.3)	59.4 (55.3–63.6)
	Physical activity	Men	32.2 (25.9–38.5)	9.1 (6.6–11.7)
		Women	32.9 (28.3–37.4)	10.8 (8.3–13.3)
	Body weight	Men	30.1 (23.8–36.6)	58.0 (50.4–65.5)
		Women	36.6 (32.1–41.1)	60.2 (57.0–63.4)
Uzbekistan	Tobacco	Men	38.9 (26.6–51.2)	18.8 (15.3–22.2)
		Women	15.5 (9.3–21.6)	0.5 (0.2–0.9)
	Diet – added salt	Men	49.0 (38.5–59.5)	34.4 (29.2–39.6)
		Women	39.4 (30.1–48.7)	38.7 (34.6–42.7)
	Diet – fruit and vegetables	Men	66.6 (56.1–77.0)	14.7 (11.4–18.1)
		Women	68.0 (60.5–75.6)	17.2 (14.3–20.1)
	Physical activity	Men	63.6 (54.8–72.5)	20.5 (16.7–24.4)
		Women	58.6 (51.7–65.4)	31.2 (27.2–35.3)
	Body weight	Men	58.7 (49.7–67.7)	55.6 (50.8–60.4)
		Women	51.0 (42.7–59.4)	57.3 (53.8–60.8)

CI: confidence interval.

REFERENCES

1. Global burden of disease (GBD). In: Institute for Health Metrics and Evaluation [website]. Seattle (WA): Institute for Health Metrics and Evaluation; 2020 (http://www.healthdata.org/gbd, accessed 19 August 2020).

2. European mortality database. In: WHO Regional Office for Europe [website]. Copenhagen: WHO Regional Office for Europe; 2020 (https://gateway.euro.who.int/en/datasets/european-mortality-database/, accessed 19 August 2020).

World Health Organization
REGIONAL OFFICE FOR Europe

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

Member States

Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
North Macedonia
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Turkey
Turkmenistan
Ukraine
United Kingdom
Uzbekistan

World Health Organization
Regional Office for Europe

UN City, Marmorvej 51,
DK-2100, Copenhagen Ø, Denmark
Tel.: +45 45 33 70 00
Fax: +45 45 33 70 01
Email: eurocontact@who.int
Website: www.euro.who.int