

# Health behaviors of Armenian schoolchildren as a risk factor for developing NCDs

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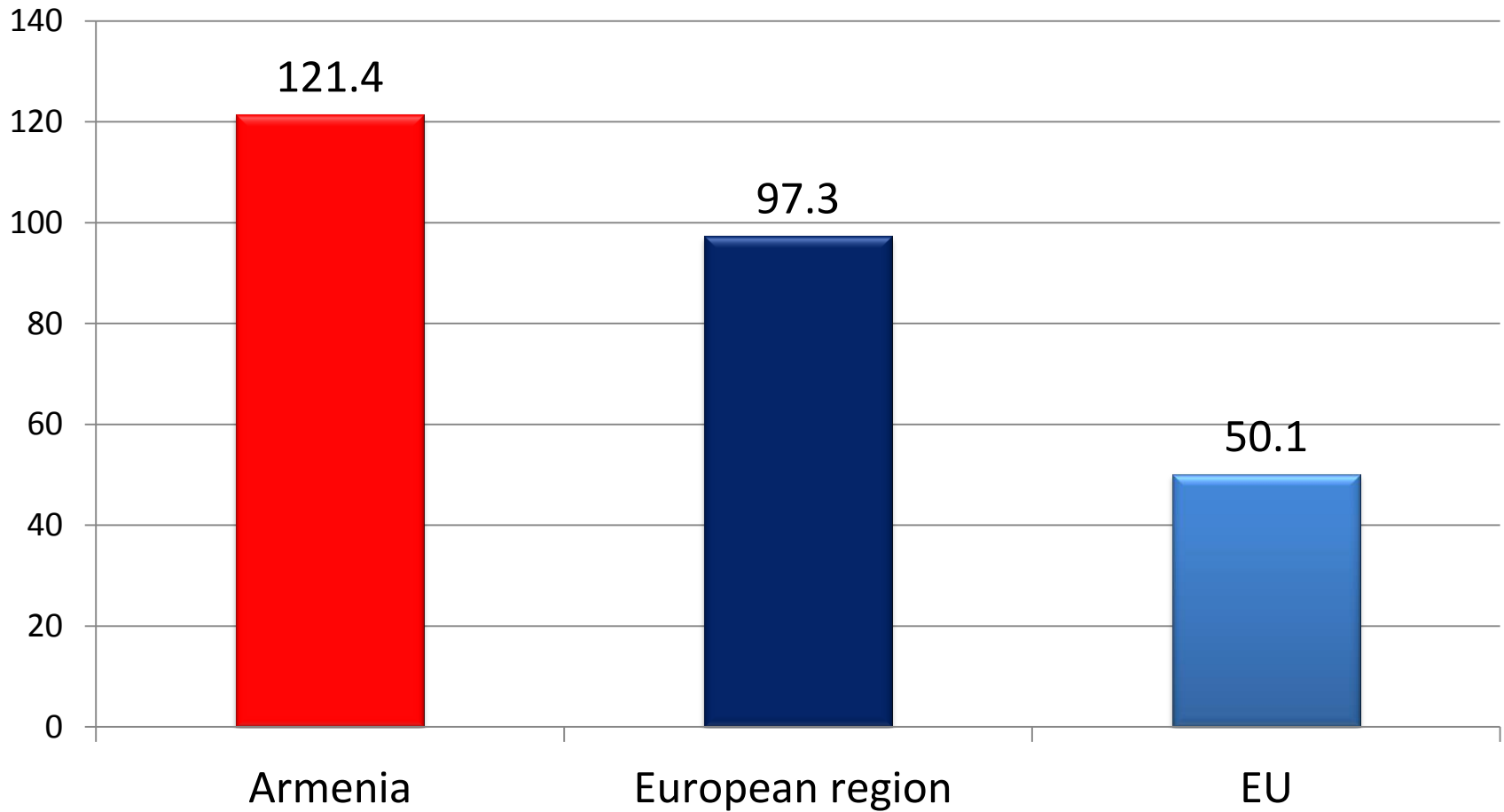
*American University of Armenia, May 26, 2014*

# Morbidity and mortality in Armenia: some comparisons



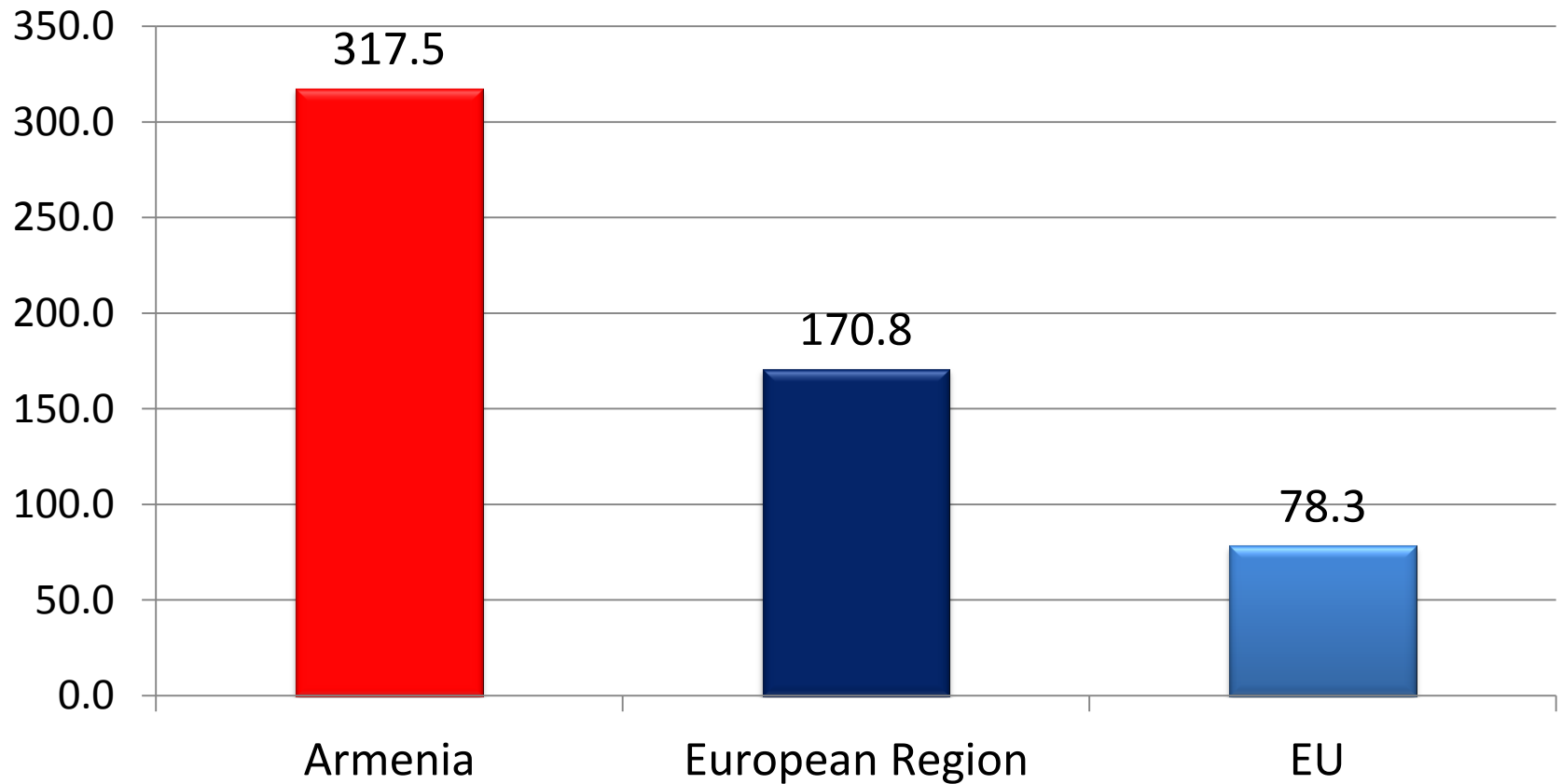
# SDR, cerebrovascular diseases

all ages per 100000 (WHO Database, 2013)



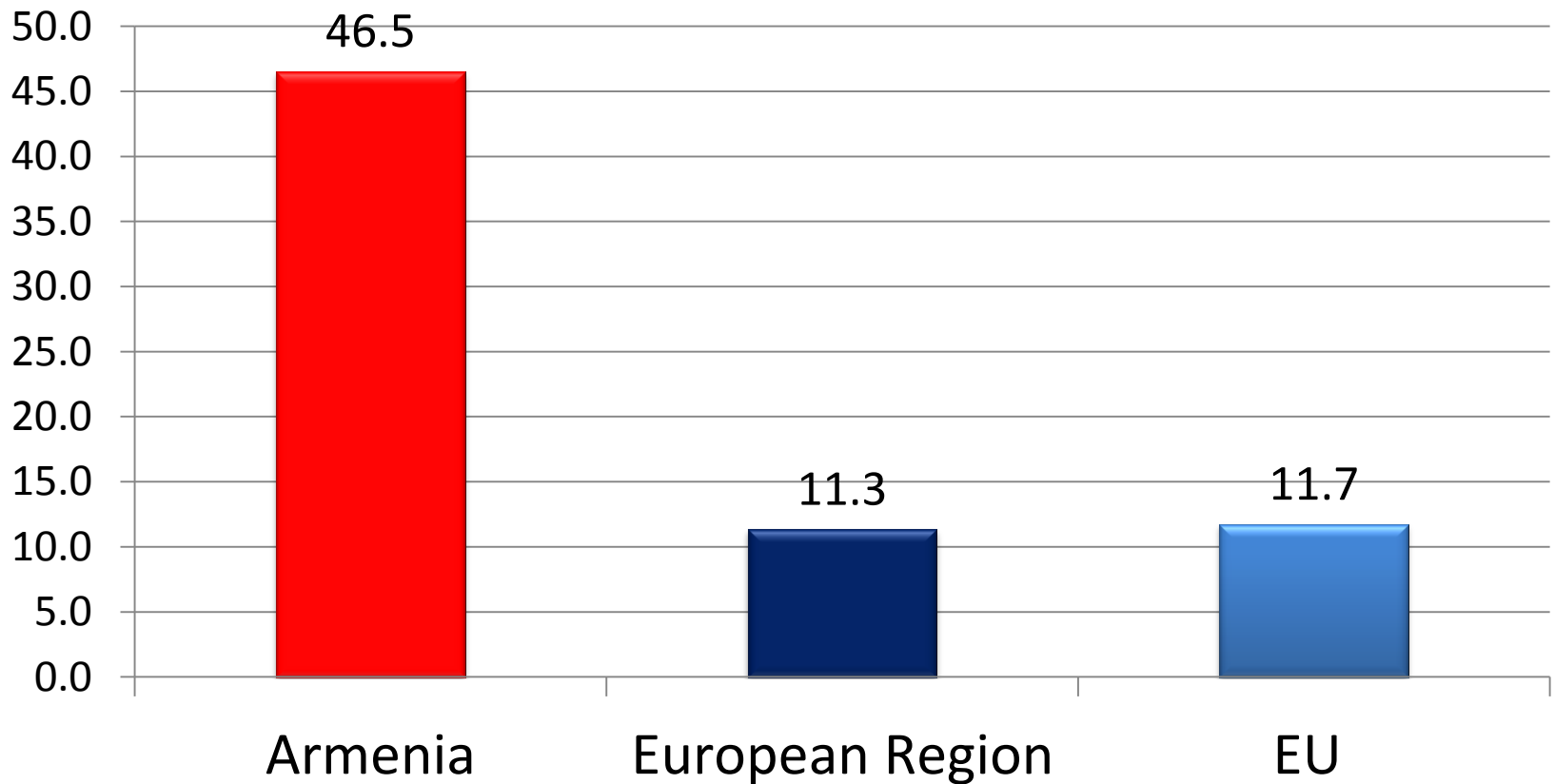
# SDR, ischemic heart disease

all ages per 100000 (WHO Database, 2013)



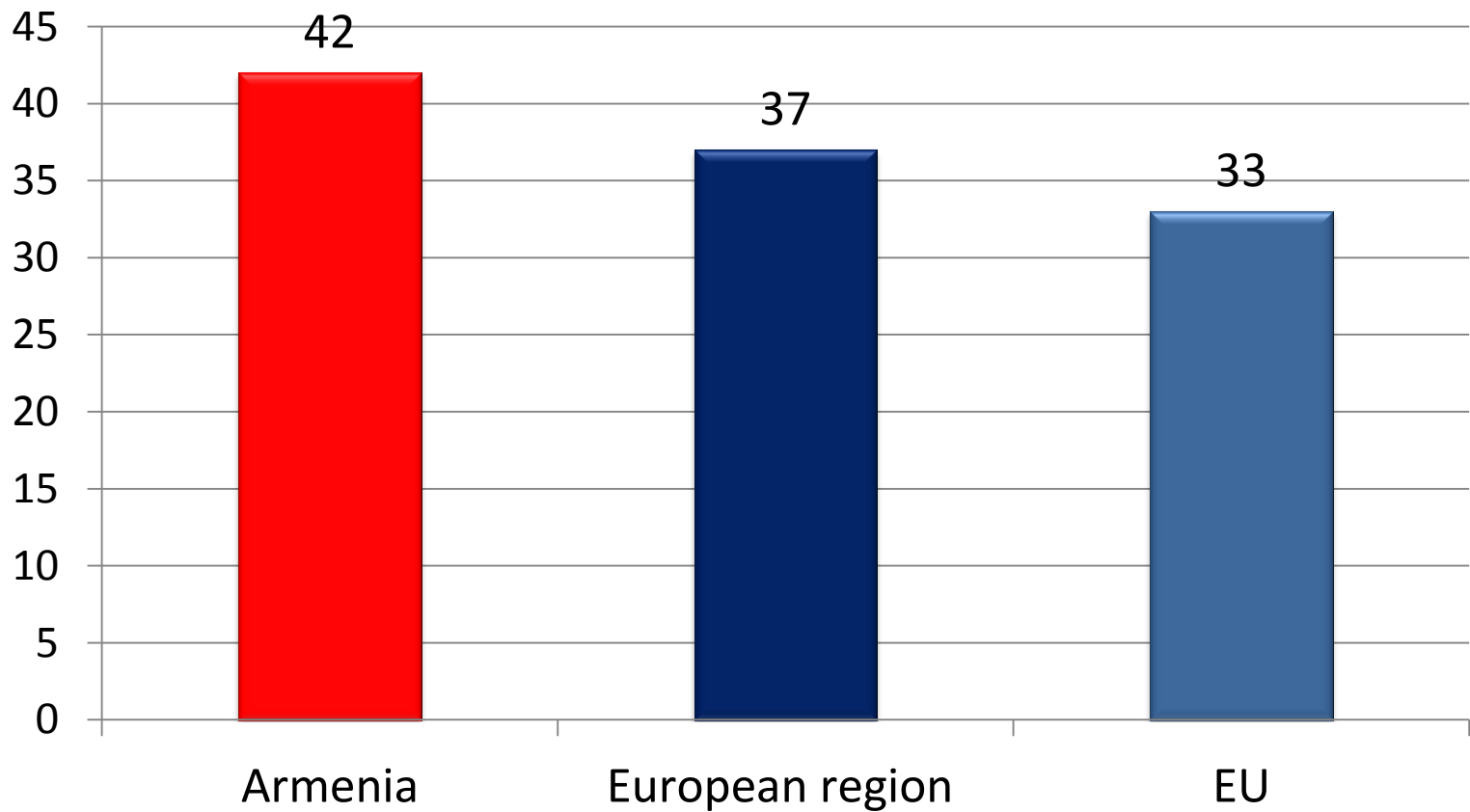
# SDR, diabetes

all ages per 100000 ( WHO Database, 2013)



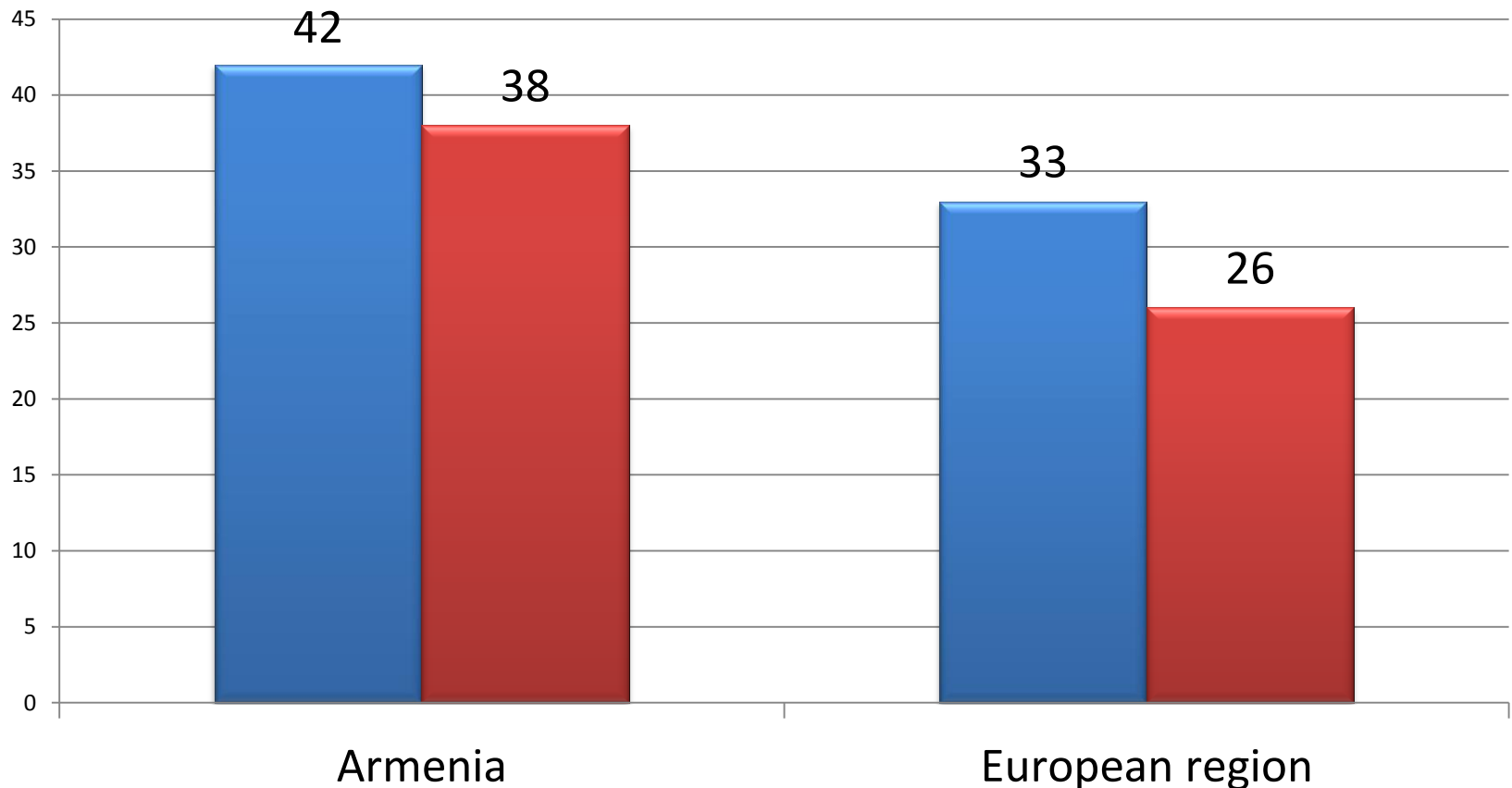
# SDR, trachea/bronchus/lung cancer

all ages per 100000, (WHO, 2013)



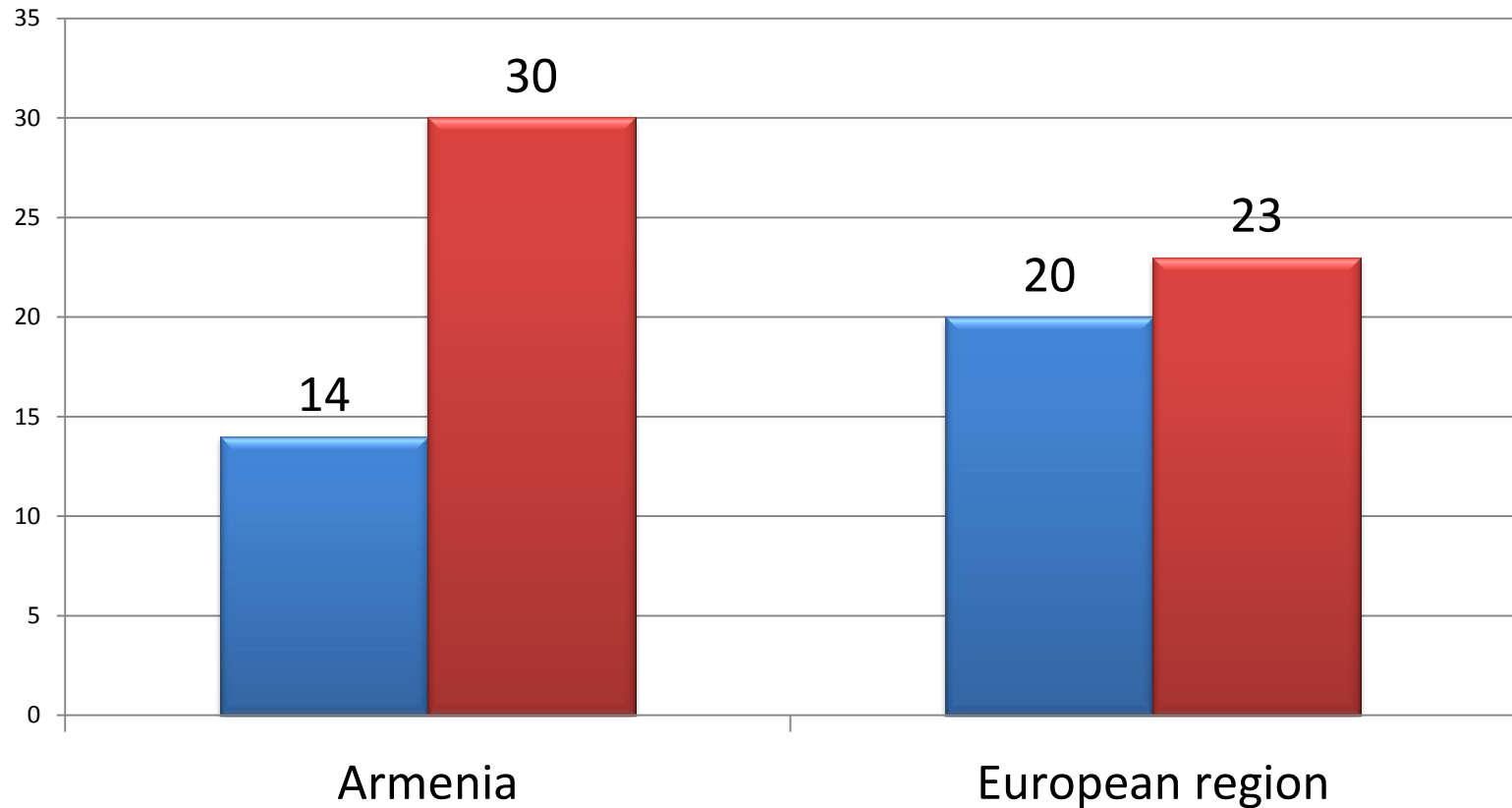
# Prevalence of raised blood pressure in **men** and **women** 25 years and above (%)

WHO, World Health Statistics, 2013



# Men and women aged $\geq 20$ years who are obese (%)

WHO, World Health Statistics, 2013

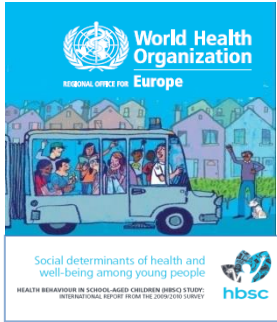




# What affects adults' health ?

..up to 60 per cent of early deaths in adults  
and one third of DALY are caused by behaviors  
established in adolescence period

(WHO, 2002)



# Study on Health Behavior in School-aged Children (HBSC)

- Cross – country study of behaviors of school-aged adolescents of three age groups: 11, 13, 15
- Started in 1983 by colleagues from UK, Norway, Finland; now 39 countries of Europe, US, Canada, Israel (and beyond )
- HBSC network: consortium of independent research groups; unified and agreed methodology
- Coordination: ICC in Edinburgh, auspice of WHO Euro



# Armenian HBSC 2009 / 2010

- Armenia: 2005, 2009/2010/ 2013/2014
- Sampling study 2009/2010: 2833 children of 64 schools sampled by probability-proportional-to-size method
- A standard HBSC anonymous questionnaire of 220 variables, combined in 81 questions and divided into 17 categories
- Data are included in WHO reports

# Eating behaviors

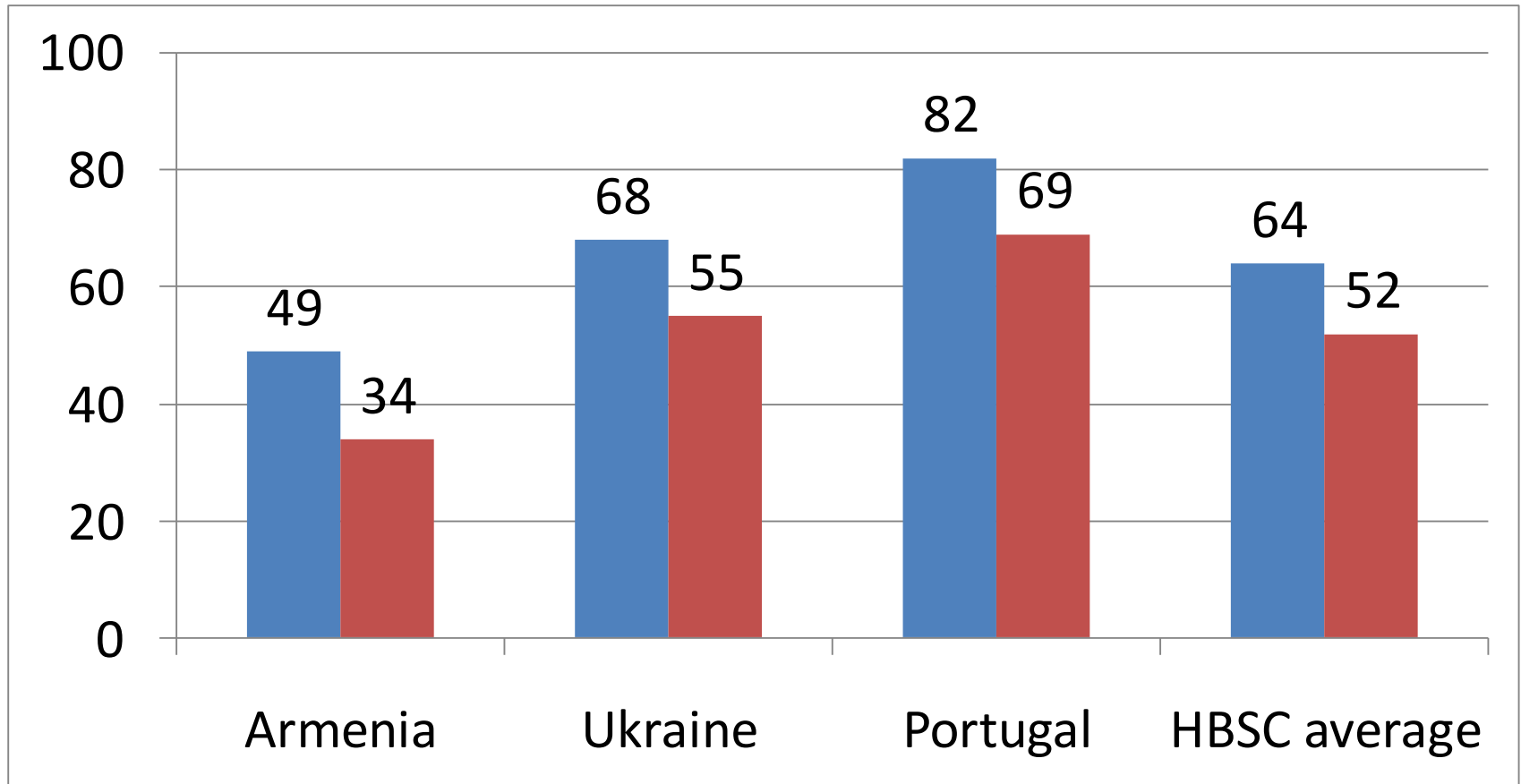


# Breakfast consumption

- ▶ Have breakfast every day on weekdays 57% of 15-year-old boys and 46% of girls
- ▶ With age the prevalence of having breakfast decreases
- ▶ Adolescents from villages have breakfast less often
- ▶ **“Never have breakfast during weekdays” 19% of boys and 30% of girls**

# Breakfast every working day

Per cent of 15 year-old **boys** and **girls**,  
(WHO HBSC report, 2012)

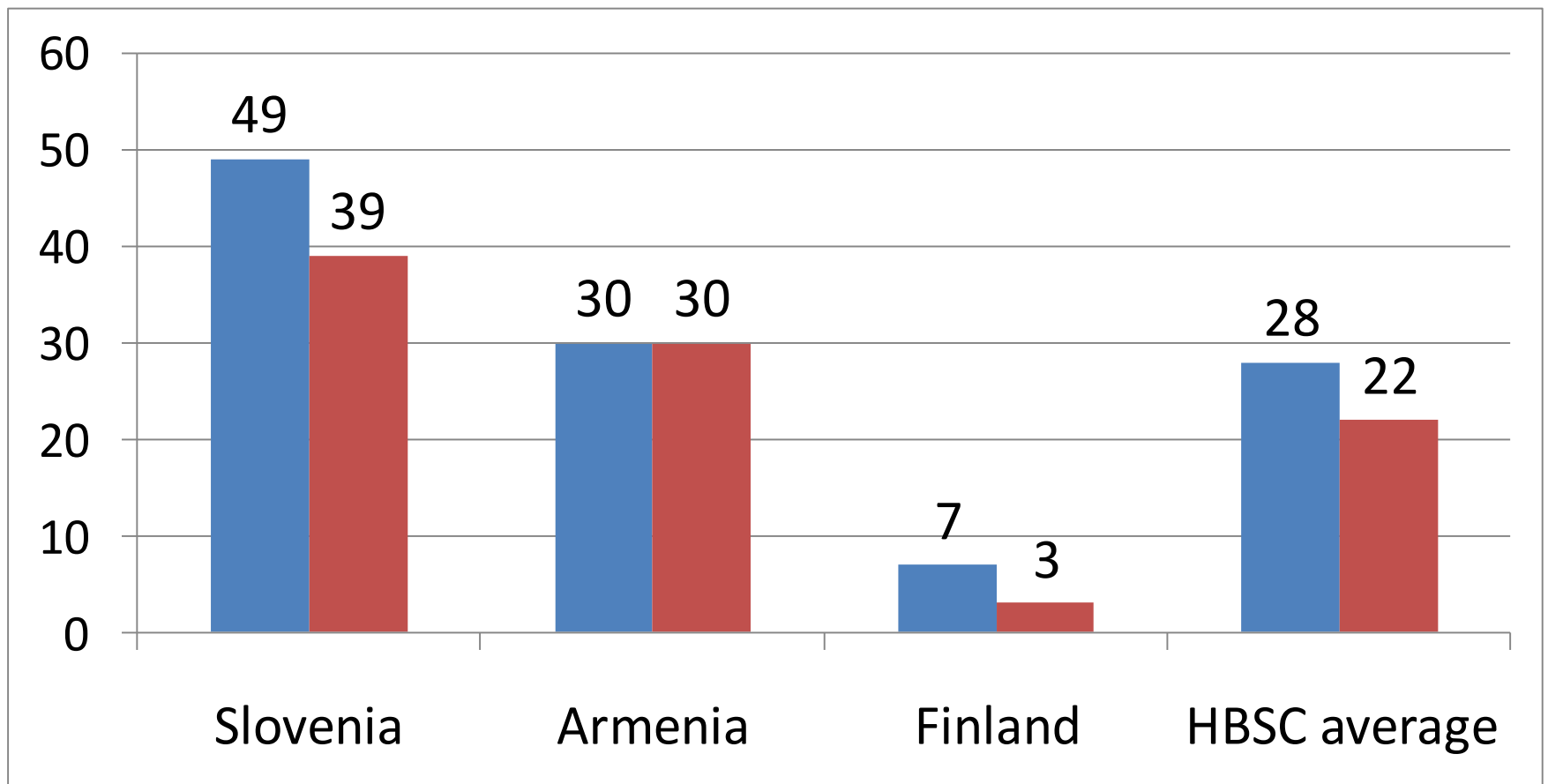


# Consumption of carbonated soft drinks

- ▶ Every day, once or more than once soft drinks are used by 30 % of adolescents
- ▶ With age the prevalence increases
- ▶ **No difference between sexes (Armenia is only country, where girls use soft drinks with same frequency)**

# Use carbonated soft drinks every day

Per cent of 15 year-old **boys** and **girls**  
(WHO HBSC report, 2012)





# Sweet consumption

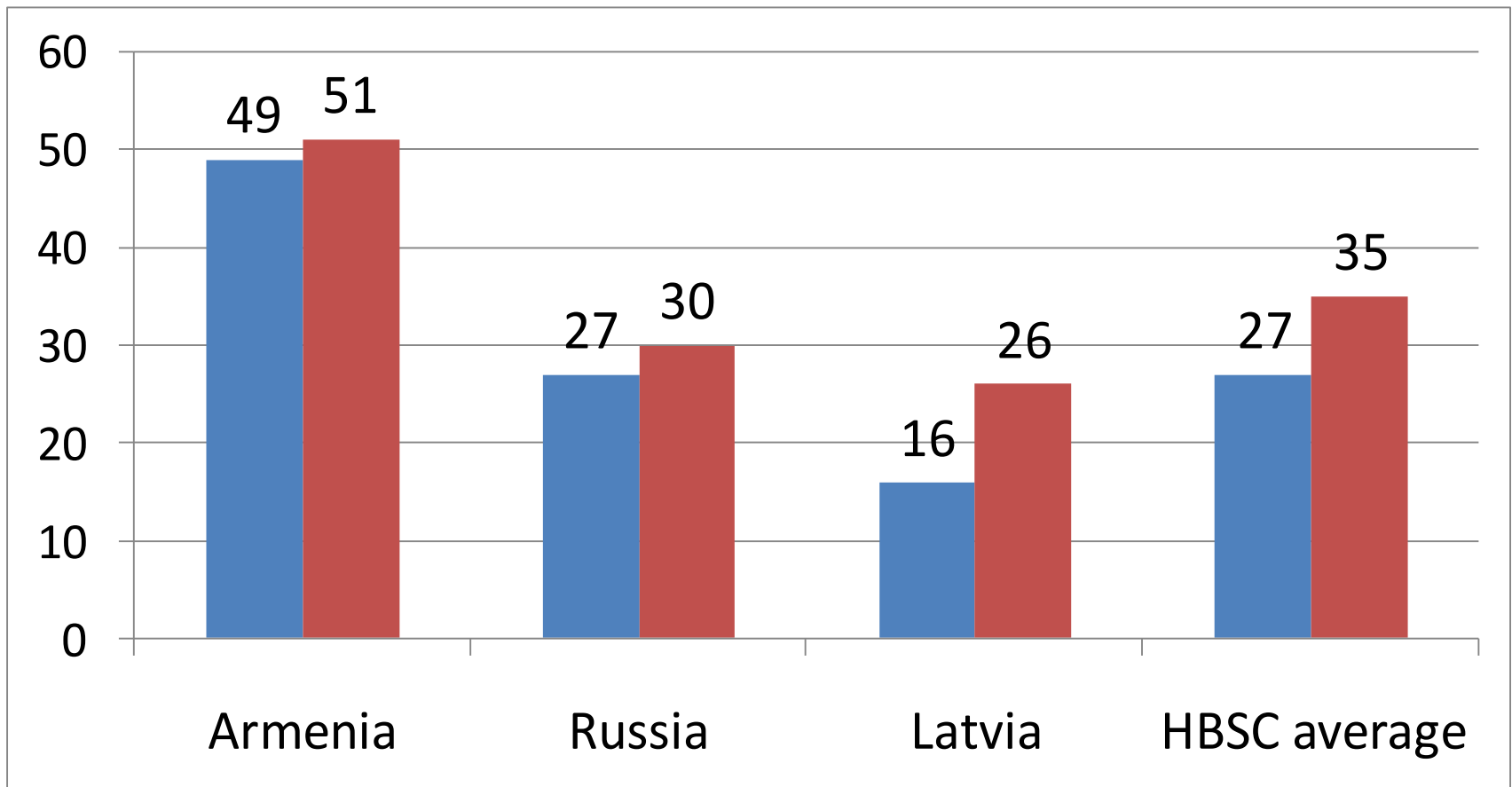
- ▶ More than half eat sweets every day
- ▶ One third of all these respondents use sweets more than once a day
- ▶ Girls tend to use more often
- ▶ **Sweet consumption during TV watching is used by 13% of girls and 11% of boys**

# Consumption of fruits and vegetables

- ▶ Vegetable and fruit consumption level is moderate-to-high
- ▶ Children from villages consume fruits less than urban
- ▶ Only 27% of 11-year old boys and 32% of 11-year old girls eat vegetables every day

# Eat fruits everyday

15 year-old **boys** and **girls**,  
(WHO HBSC report, 2012)





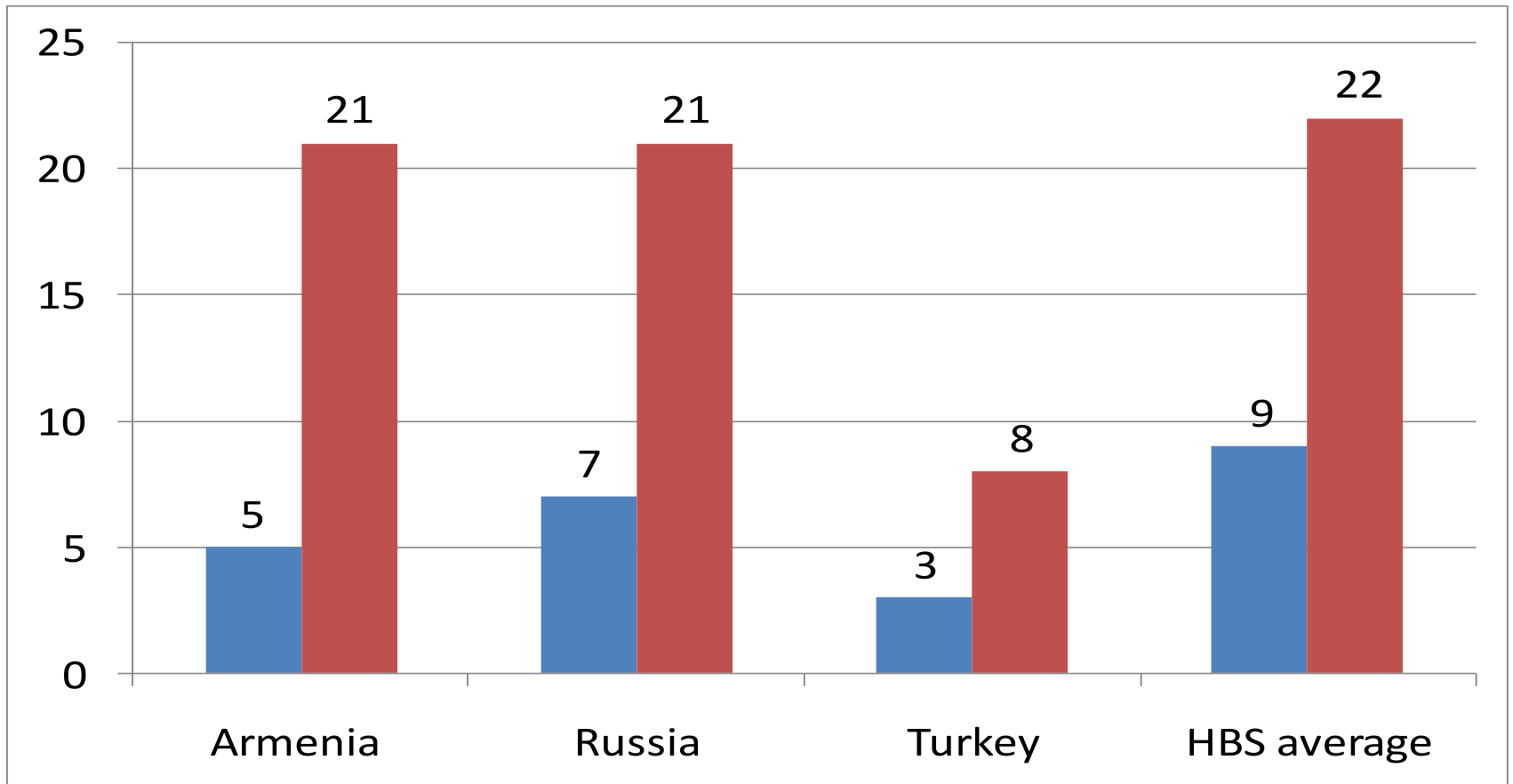
**BMI, weight  
control and  
body image**

# Body Mass Index

- ▶ There is a tendency of overweight among Armenian adolescents
- ▶ One of sixth of 11-years boys and 13% of girls have overweight or obese
- ▶ One of five 15-year old girls thinks that she is fat and do something to lose weight

# Try to lose weight

Per cent of 15 year-old **boys** and **girls**  
(WHO HBSC report, 2012)





Physical  
activities,  
Sedentary  
behaviors

# Physical activity

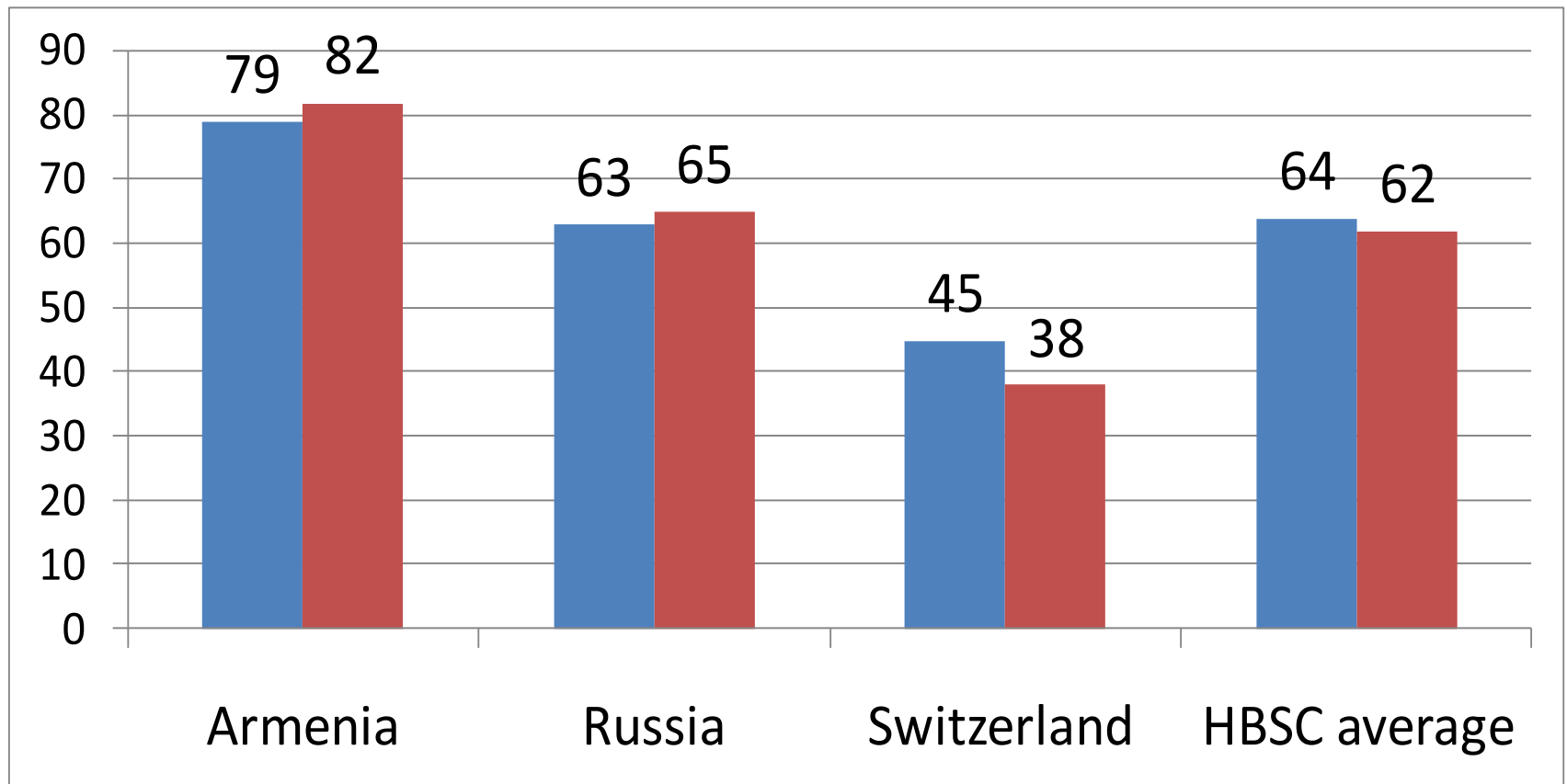
- ▶ Almost one of ten reported not attending physical education classes
- ▶ Only one third attended mentioned classes 3 times per week (as in school curriculum)
- ▶ Rural children are more active
- ▶ More than half of respondents are not engaged in any sports



# Daily TV watching 2 hours and longer

Per cent of 15 year-old **boys** and **girls**

(WHO HBSC report, 2012)





# Prevalence of chronic diseases

# Chronic diseases

- ▶ Eight per cent of teens claimed that they have some chronic disease and regularly take medications for long period

# Conclusions

- ▶ Behaviors of Armenian children, adolescents (adults), including eating habits are risk factors for developing NCDs and by itself are «hided killers» , the same as tobacco
- ▶ Improving nutrition is a crucial point for improving health status of Armenian children, adolescents and adults and reducing health and social expenses («double burden»)
- ▶ Implementation of evidence-based both «public health» and «clinical» interventions, based on life-cycle approach, starting childhood and adolescence periods is needed

# Հնորհակալություն

