

# **Do all traditional risk factors predict mortality in the elderly**

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# A risk factor

- ▶ is any attribute, characteristic or exposure of an individual that increases the likelihood of developing a disease or injury.
- ▶ Some examples of the more important risk factors are underweight, unsafe sex, high blood pressure, tobacco and excessive alcohol consumption, and unsafe water, sanitation and hygiene.

WHO

- ▶ Something that increases a person's chances of developing a disease.
- ▶ For example, cigarette smoking is a risk factor for lung cancer, and obesity is a risk factor for diabetes mellitus.

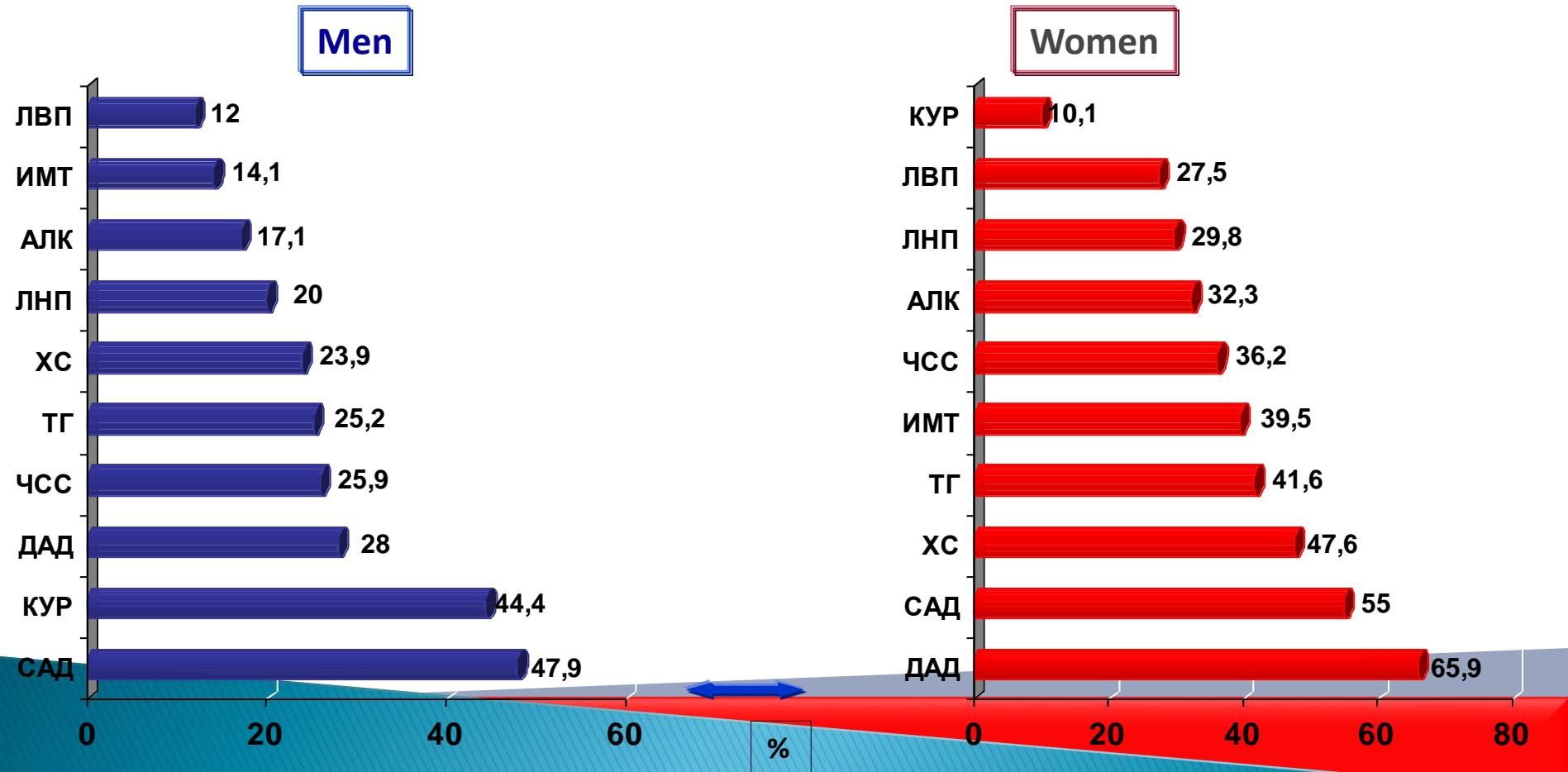
Medical definition

# Consider three main risk factors of CVD

- ▶ Arterial hypertension
- ▶ Smoking
- ▶ High cholesterol

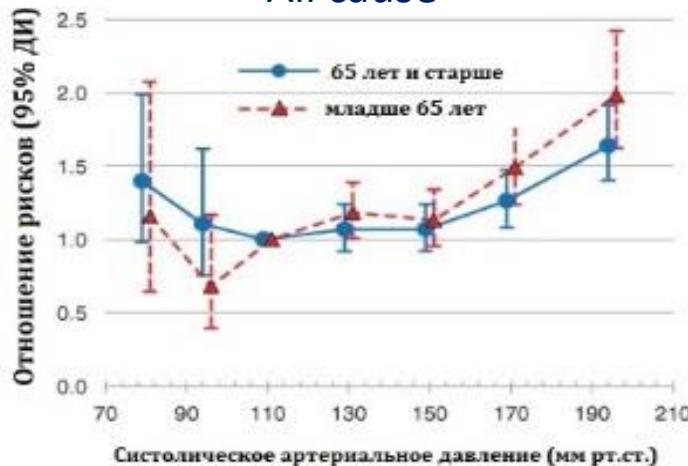
**WHY those?**

# Attribution of risk factors in 10 years CVD mortality in Russia

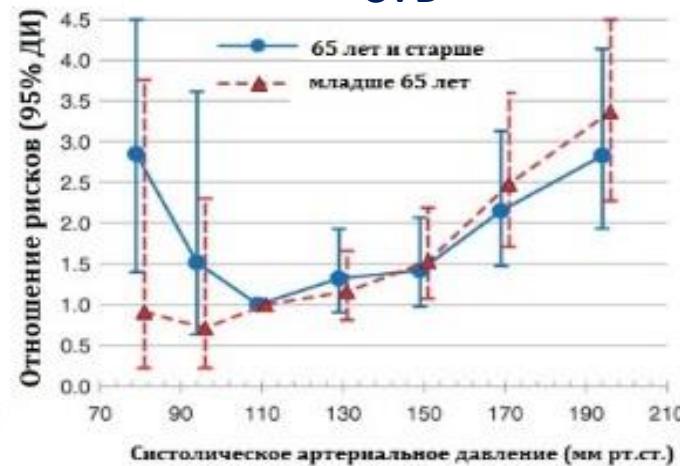


# Association between BP level and mortality before and after 65 years

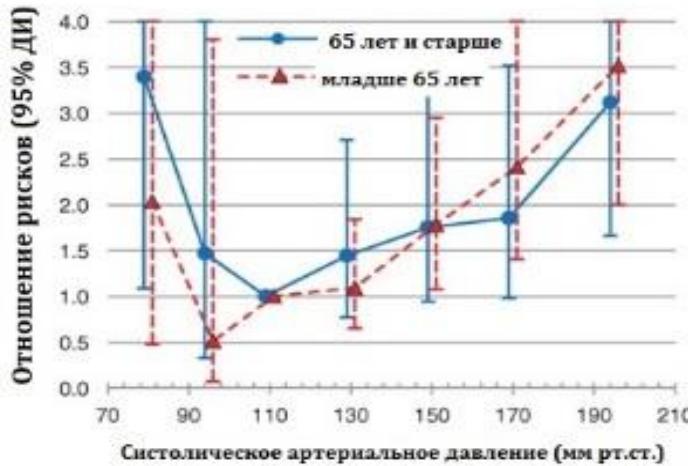
All cause



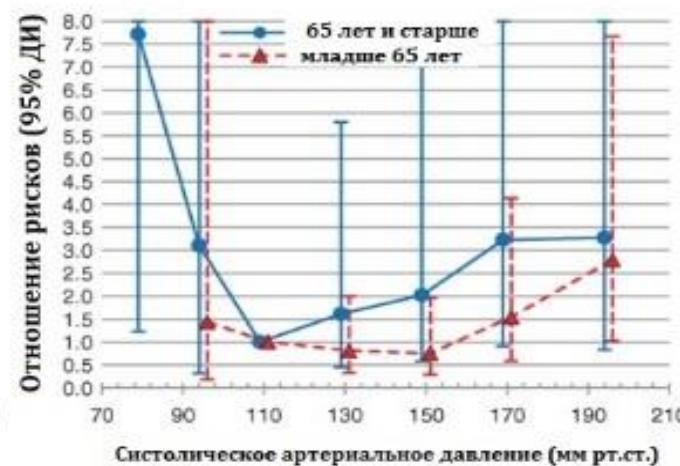
CVD



Stroke

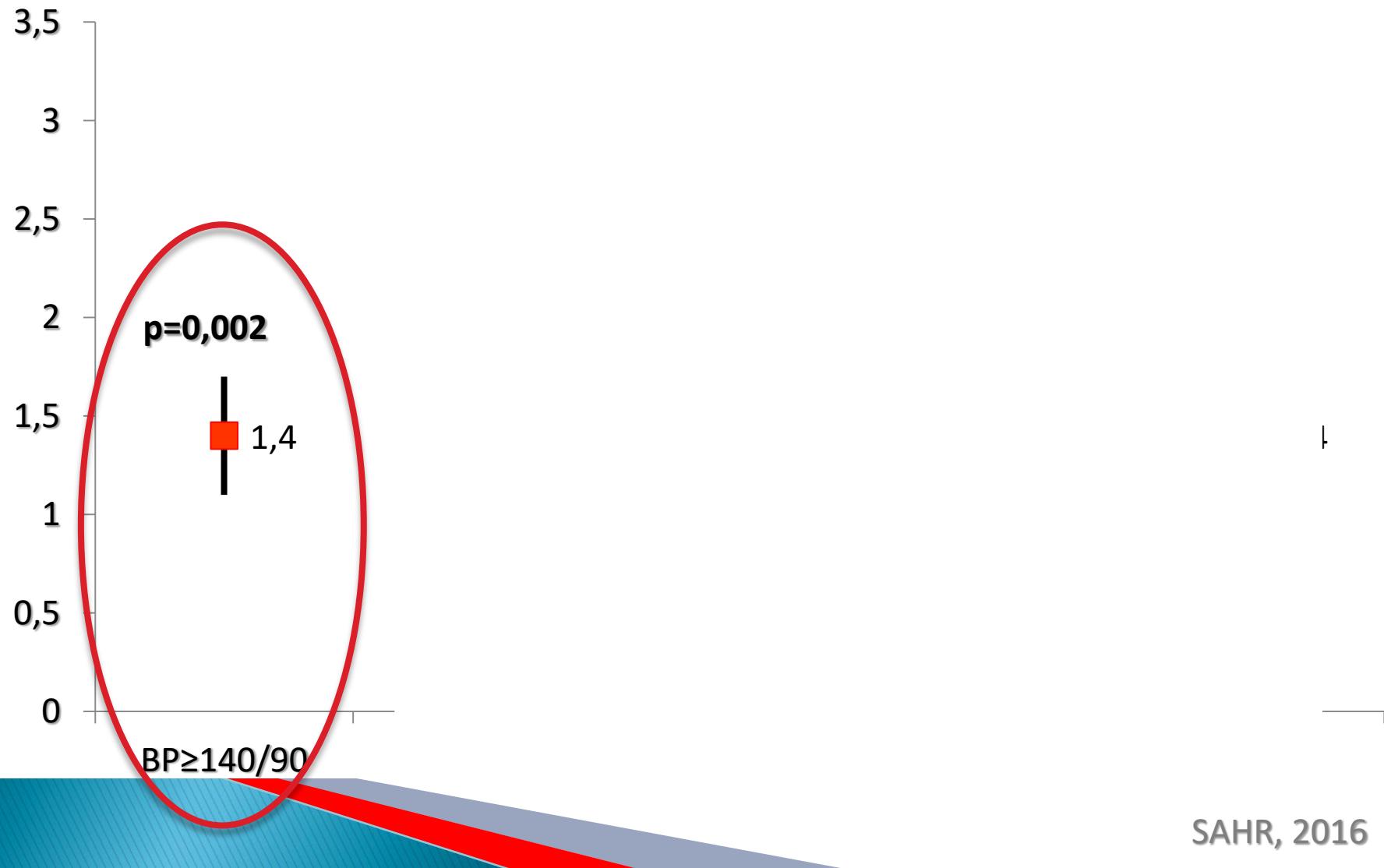


CHD

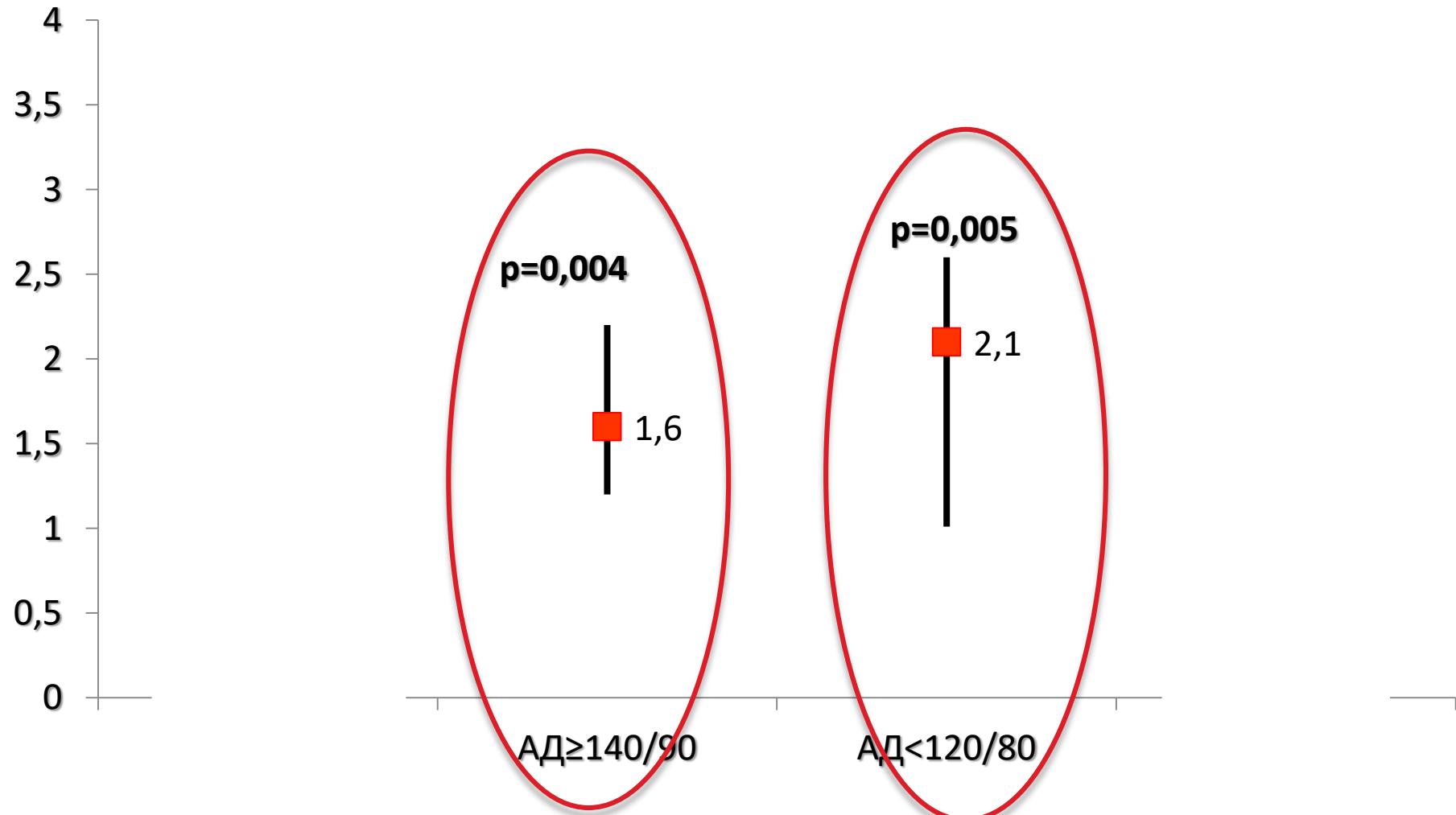


- ▶ The representative sample of 1,876 (47.9 % men) subjects was examined in the baseline survey of the Stress, Aging and Health study in Russia (SAHR). The SAHR is a prospective population-based cohort study that is being conducted in Moscow.
- ▶ The participants of this study are residents of Moscow 55 years and older participated in representative Moscow cohort studies done in National Research Center for Preventive Medicine earlier.
- ▶ The study was approved by the Local Ethical Committee of the National Research Centre for Preventive Medicine, Moscow. All study subjects gave informed consent.
- ▶ Mean follow-up is about 8 years; All cause and CVD deaths 473 and 286 were found, respectively, at 2016 contacts

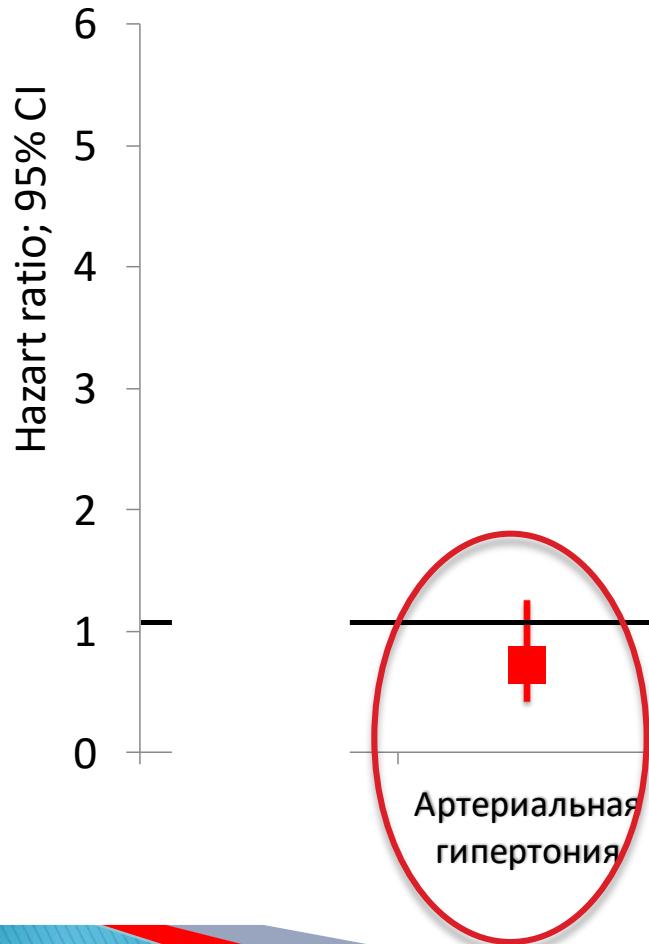
# Risk factors and all cause mortality among SAHR participants (age over 55)



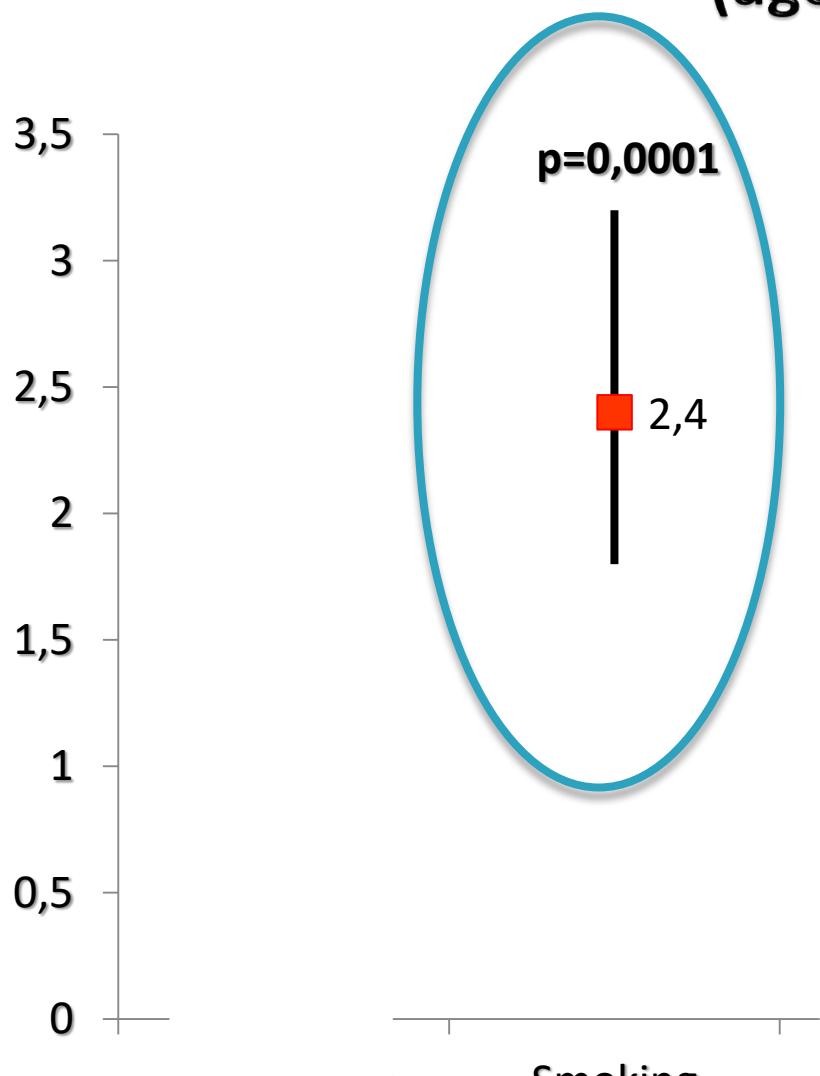
# Risk factors and CVD mortality among SAHR participants (over 55)



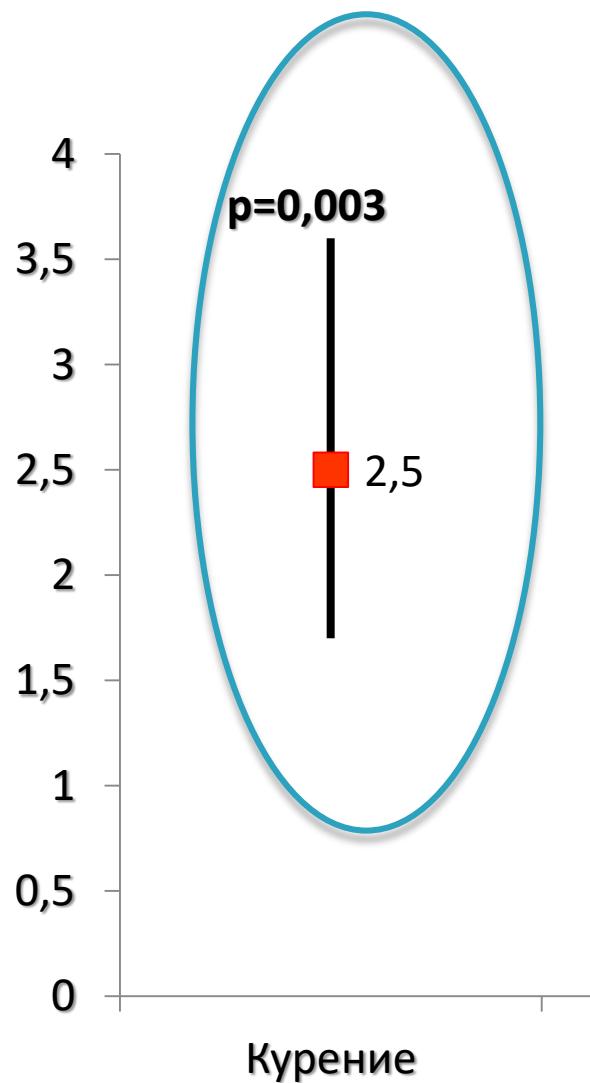
# Associations between Hypertension and all cause mortality in age 75-80\*



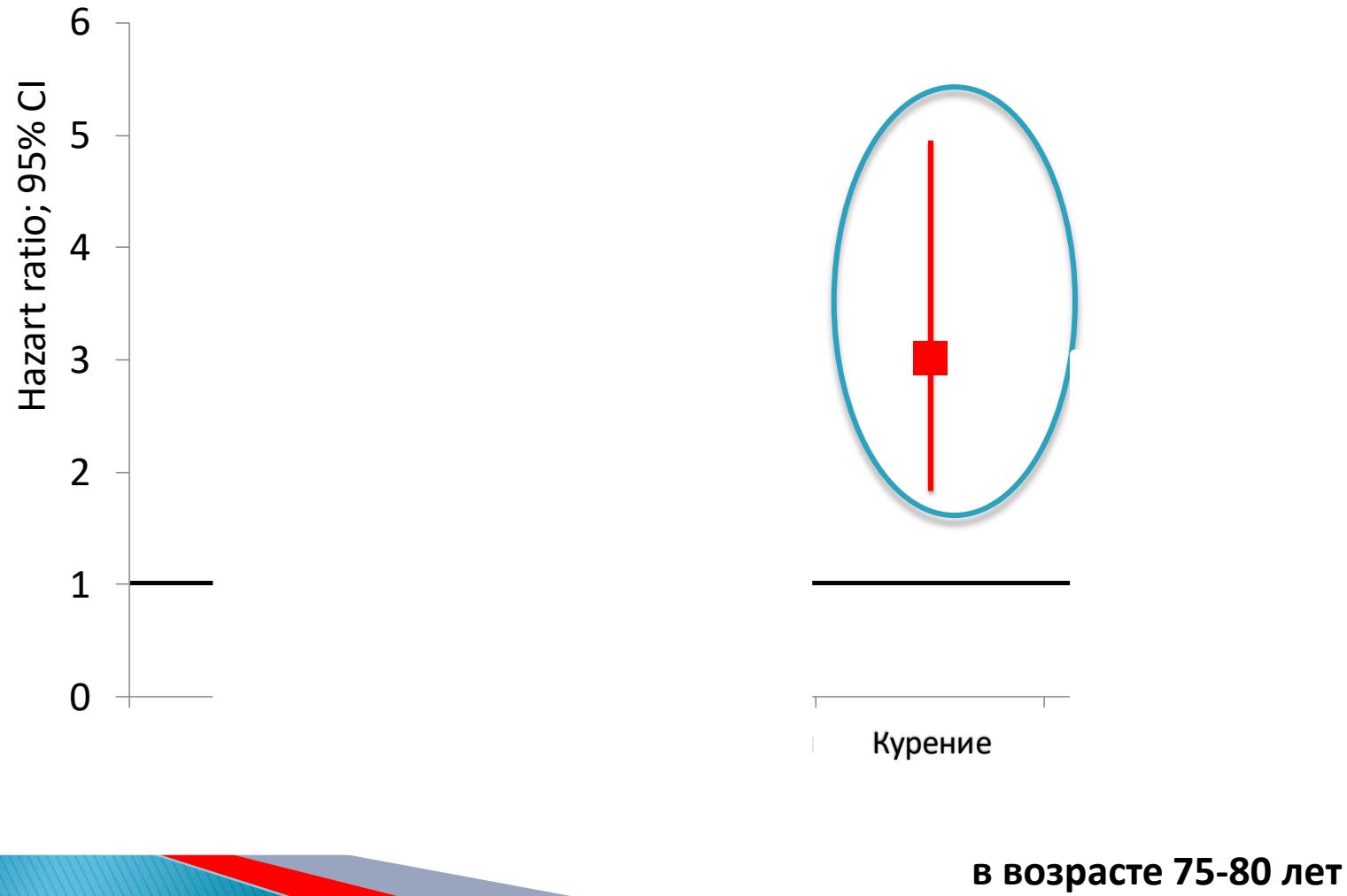
# Smoking and all cause mortality among SAHR participants (age over 55)



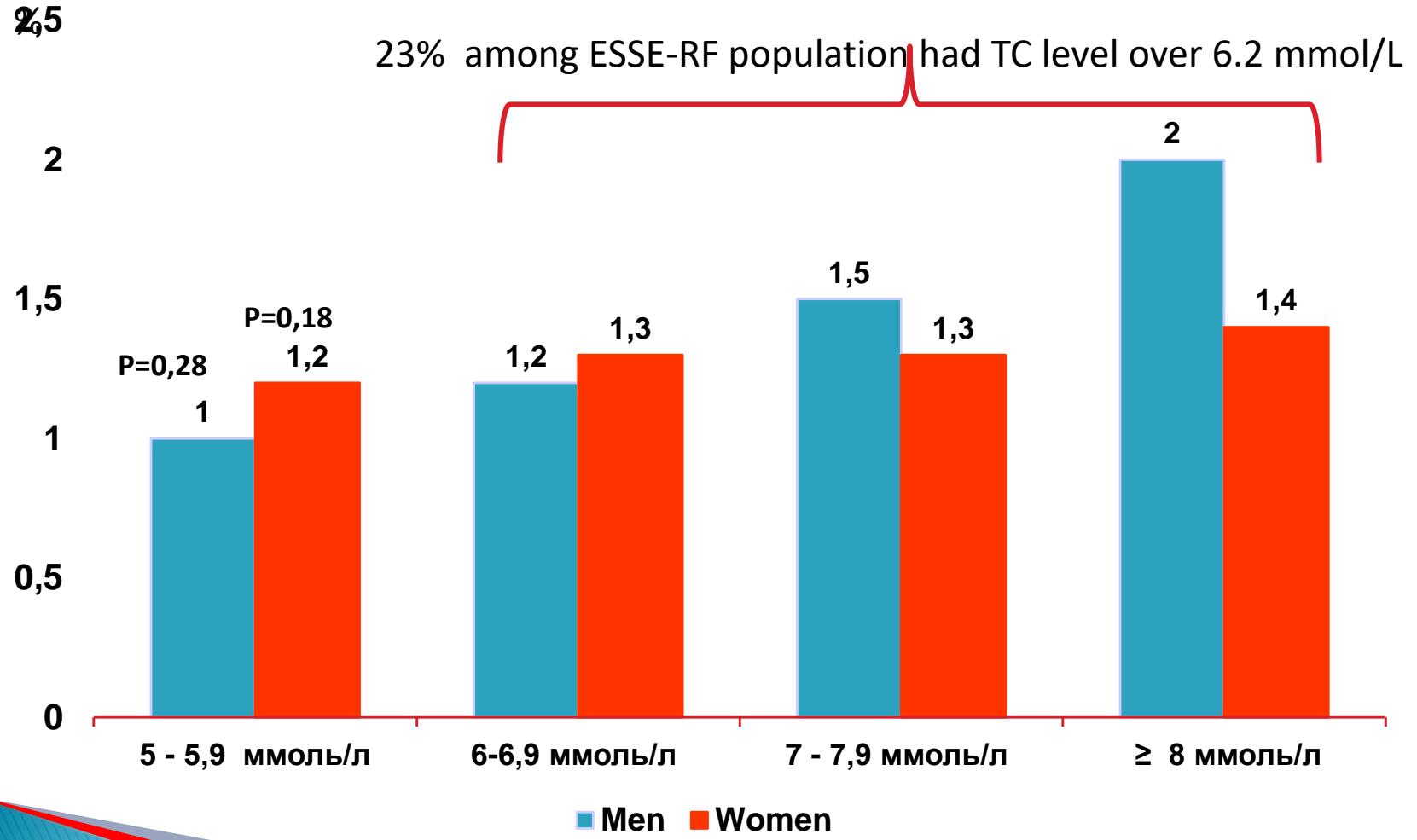
# Smoking and CVD mortality among SAHR participants (over 55)



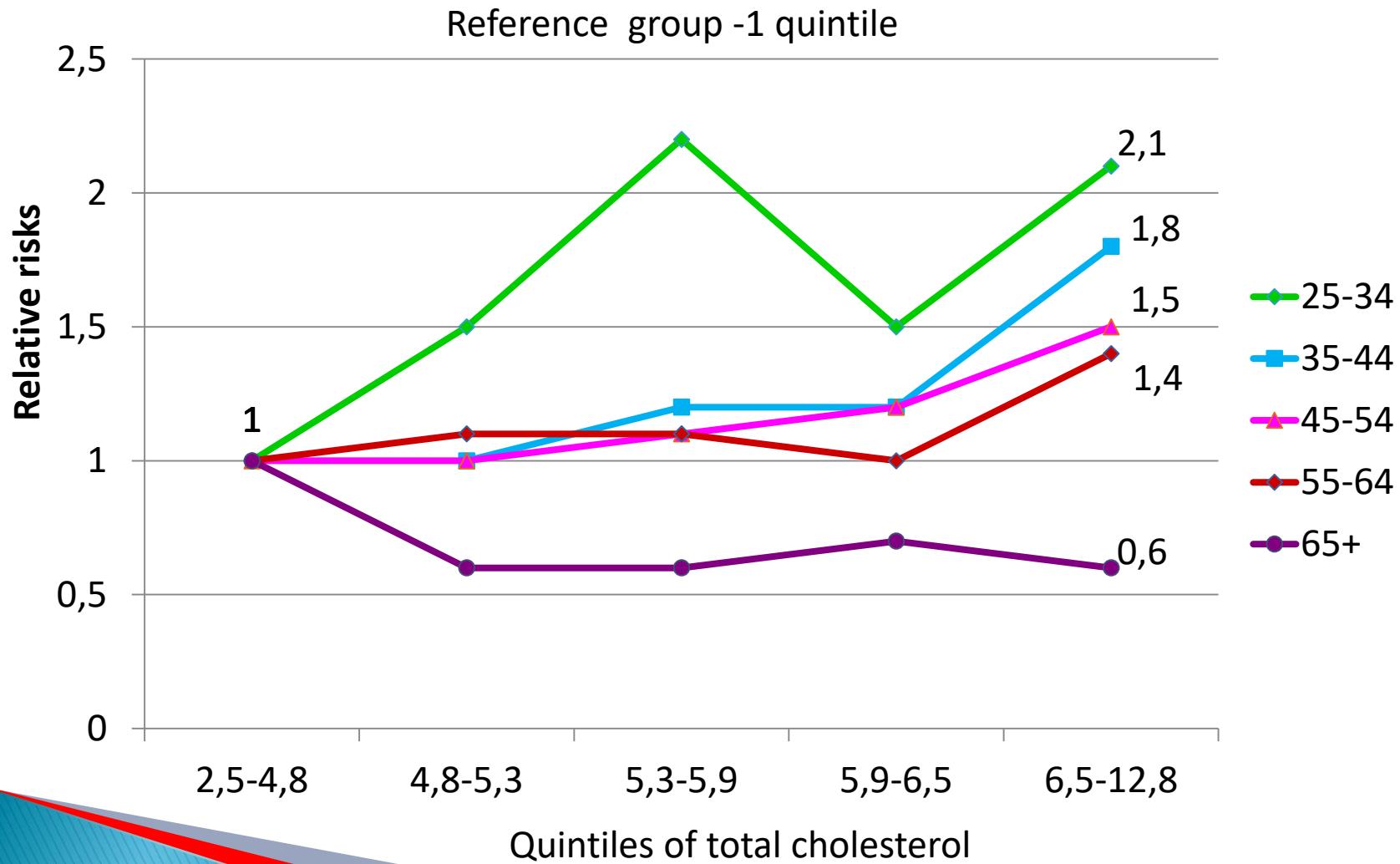
# Smoking and all cause mortality in 75-80 age group



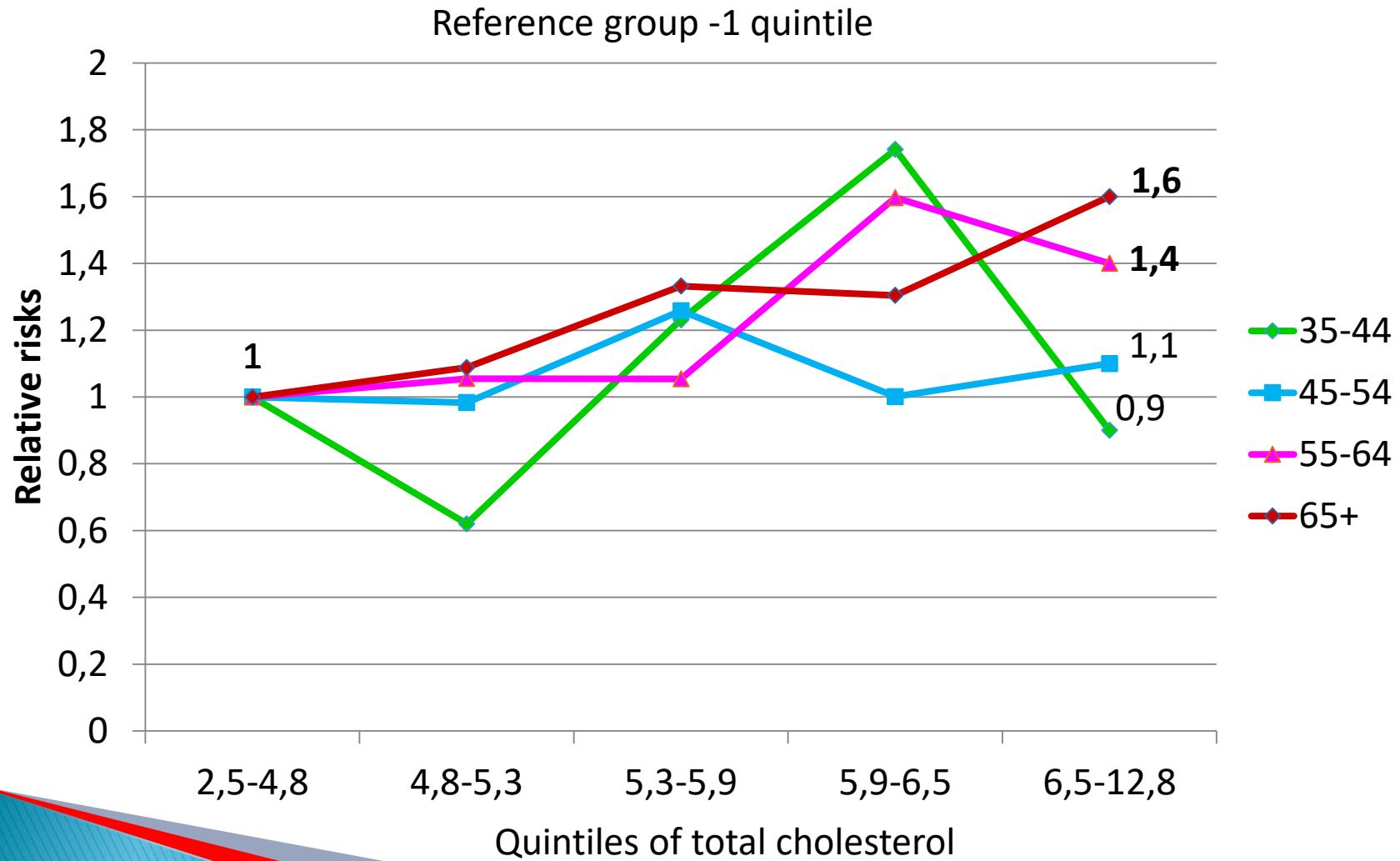
# Relative Risk of cardiovascular mortality according total cholesterol level in Russian cohorts NRCPM



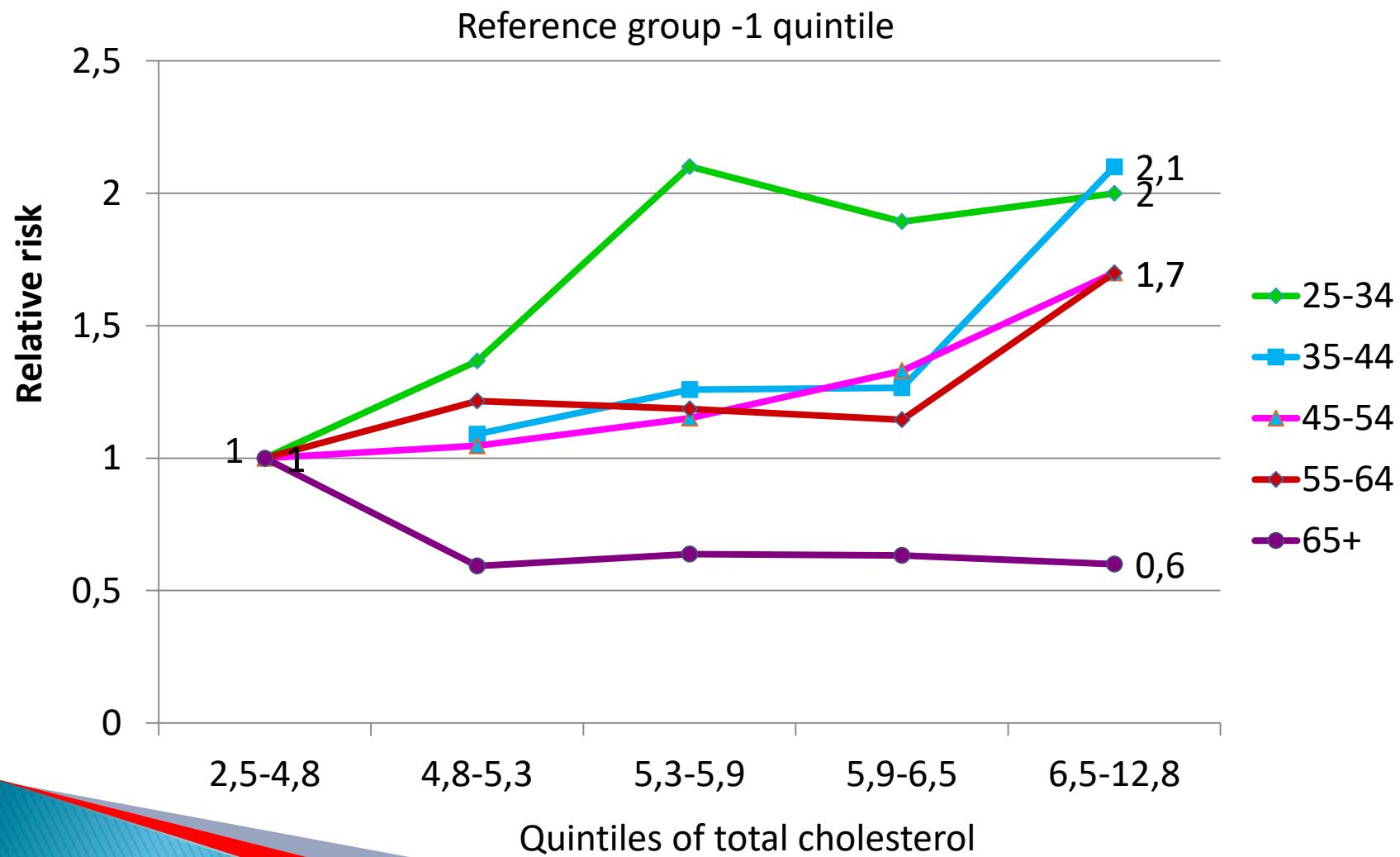
# RR for CVD mortality in total cholesterol quintiles by age decade (men)



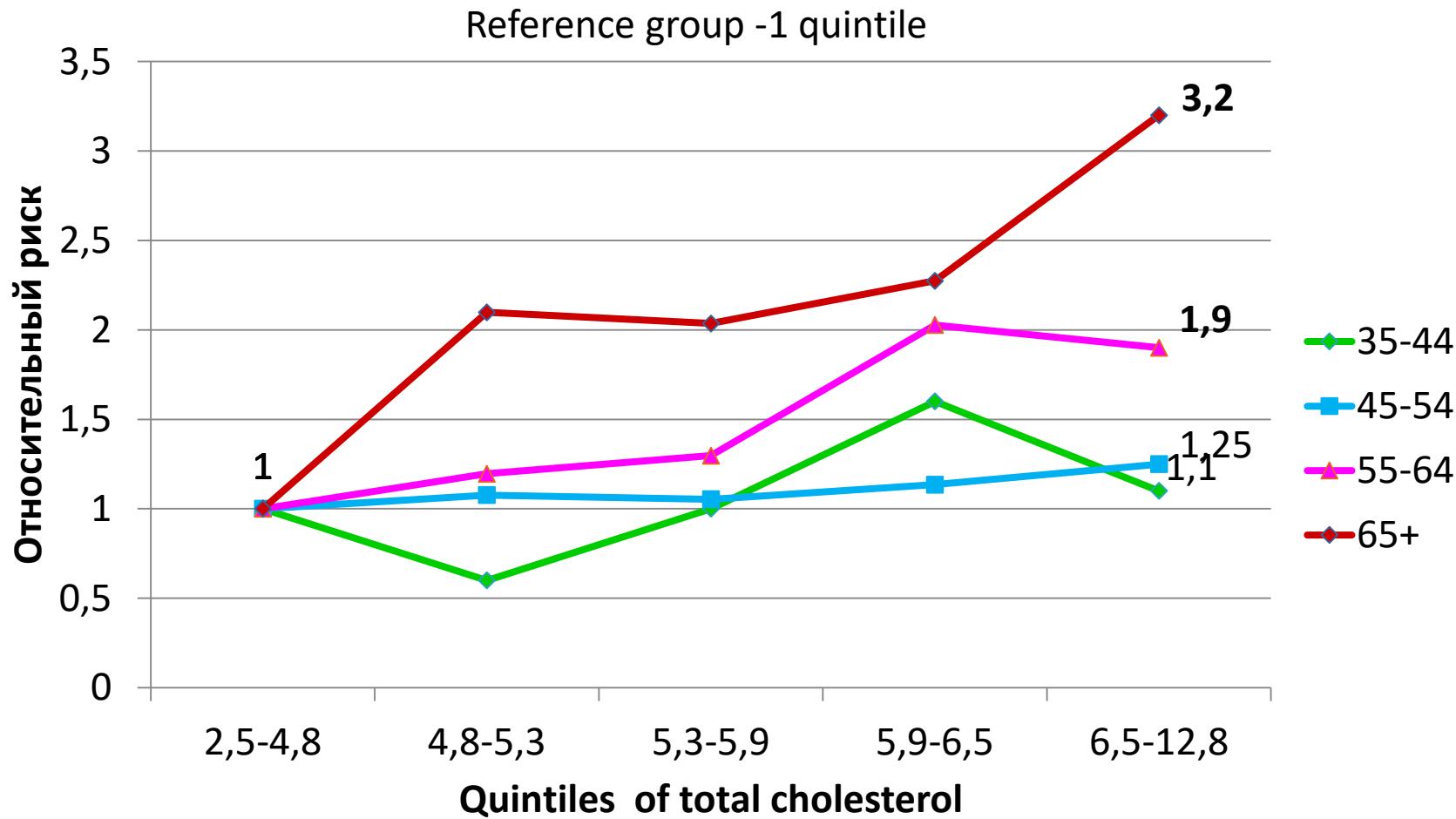
# RR for CVD mortality in total cholesterol quintiles by age decade (women)



# RR for CHD mortality in total cholesterol quintiles by age decade (men)



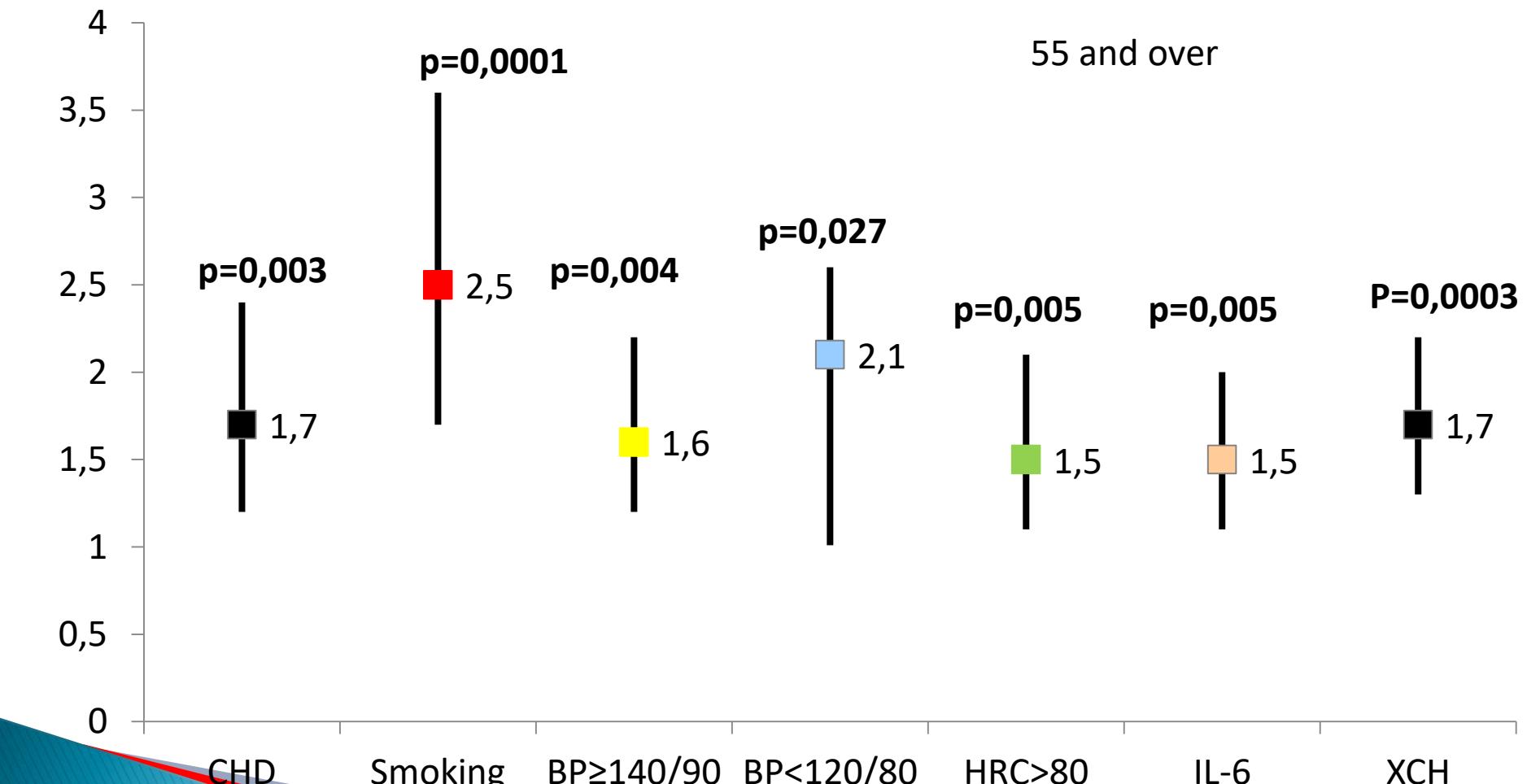
# RR for CHD mortality in total cholesterol quintiles by age decade (women)



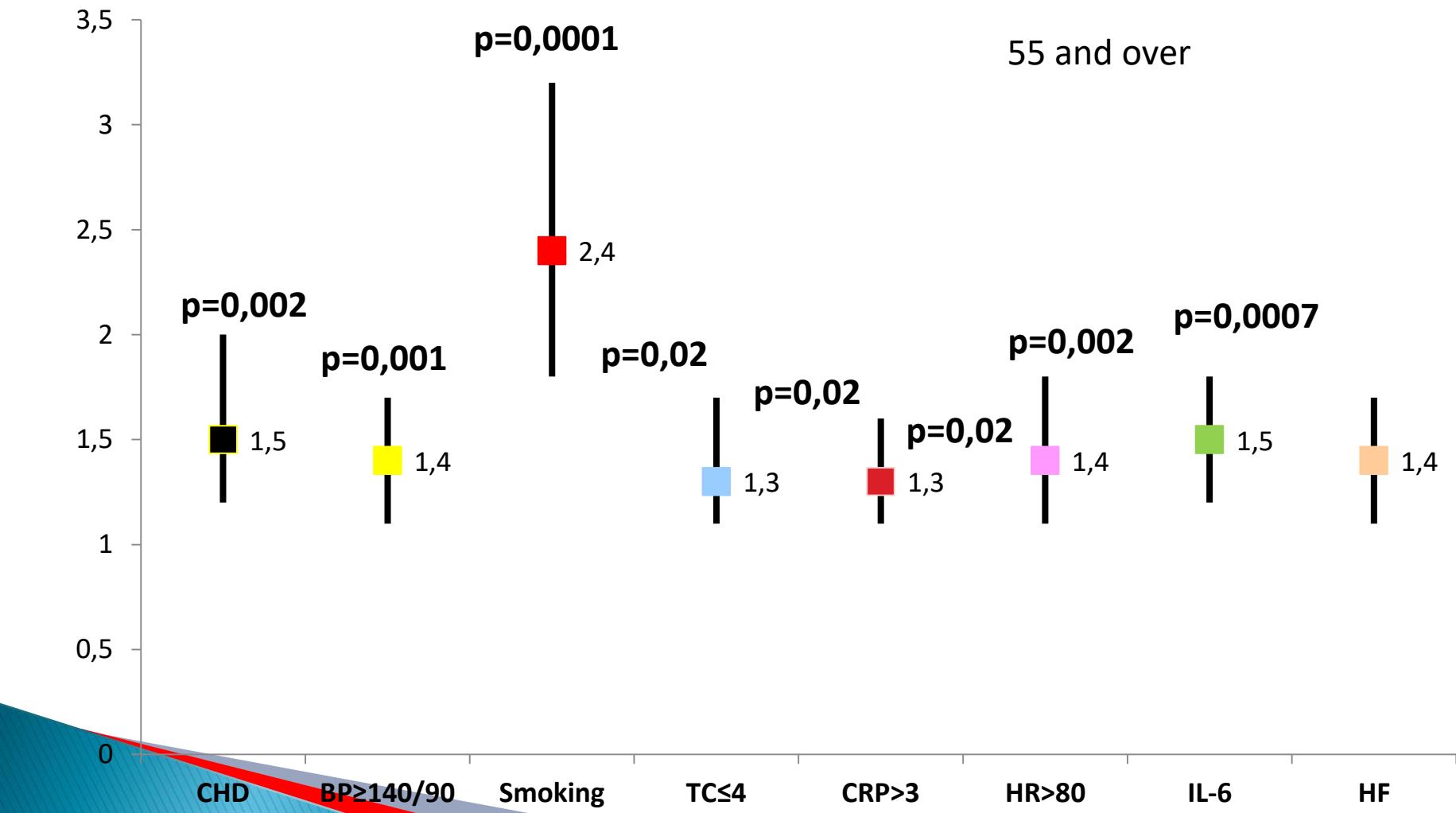
Prospective cohort of NMRC PM (LRC, MONICA, National BP control program)

# Associations between RF, some CVD and CVD mortality

(Cox regression multivariate model)

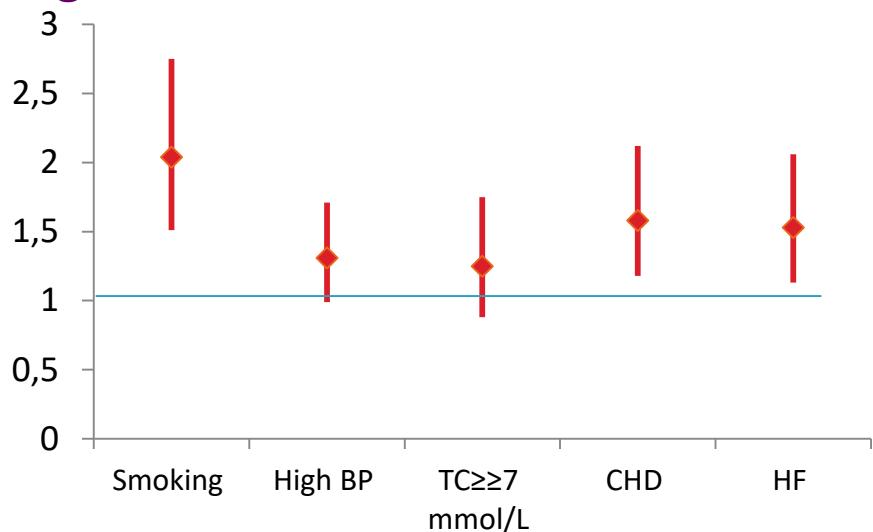


# Associations between RF, some CVD and all cause mortality (Cox regression multivariate model)

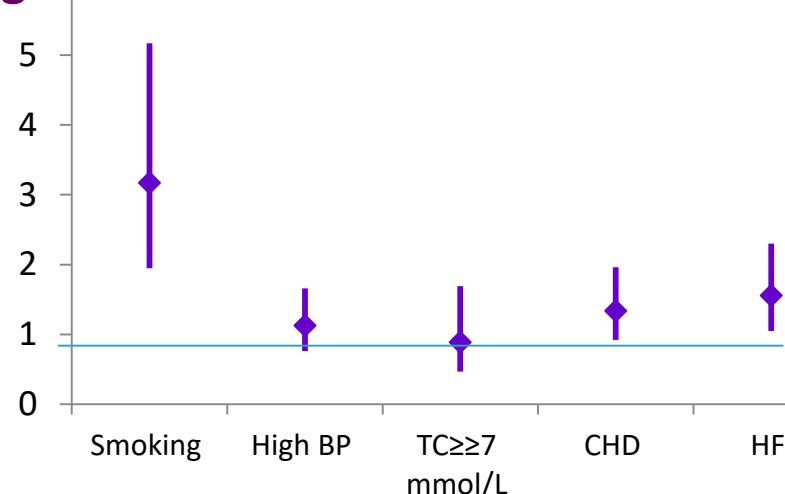


# Relative risk for all cause mortality according some risk factors and CVD characteristics by age groups

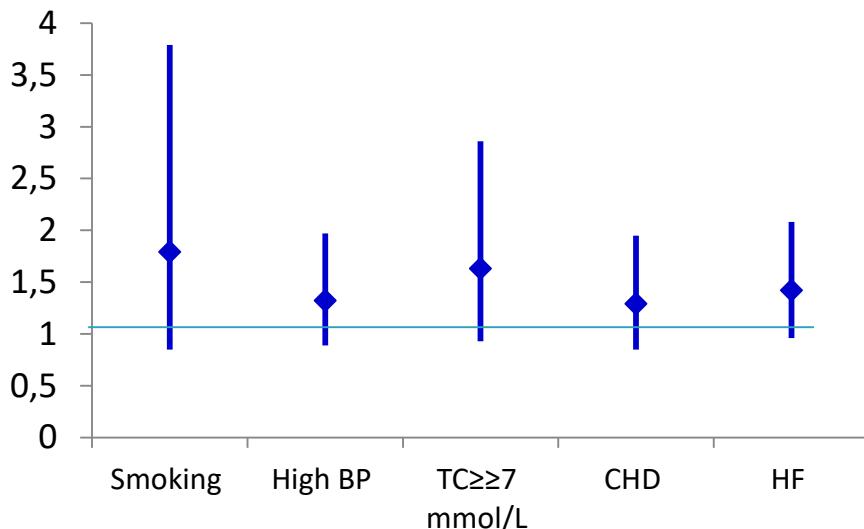
**Age 55-74**



**Age 75-79**



**Age 80+**



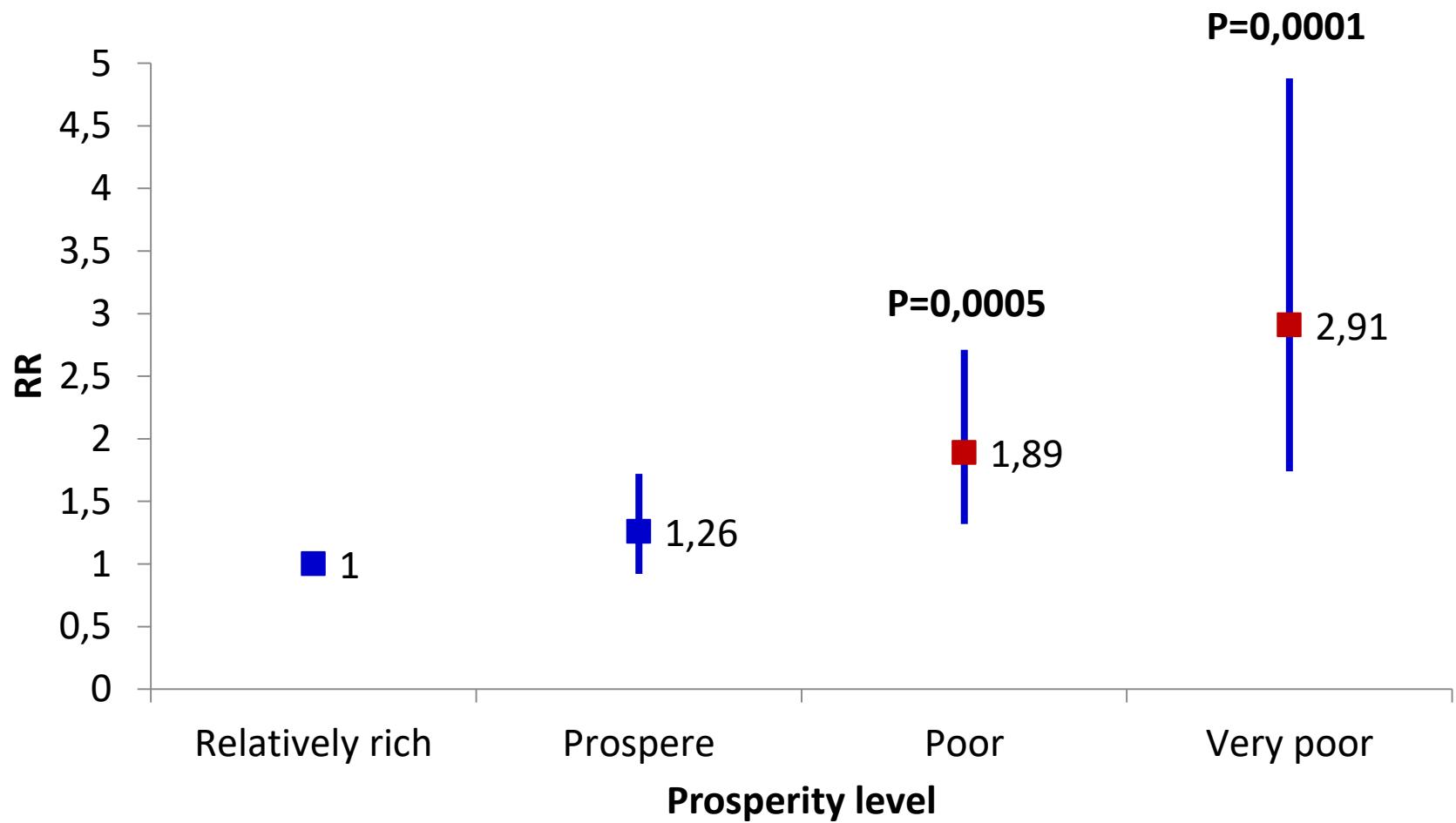
BP      Blood pressure

TC      Total cholesterol

CHD    Coronary heart disease

HF      Heart failure

# Association of prosperity levels with all cause mortality in ESSE-RF population





**Thank you for your  
attention**