OBJECTIVE: The objective of this study was to assess consistency between qualitative (NCEP-II) and quantitative methods used to recommend cholesterol reduction in individuals without coronary heart disease in Spain.

METHODS: Qualitative (NCEP-II) and quantitative recommendations for cholesterol reduction were applied to individuals without coronary heart disease (n = 304) studied in a random sample of the adult population of Catalonia aged > 7 years. Pharmaceutical treatment of hypercholesterolemia should be recommended for individuals with a LDL cholesterol concentration >190mg/dl or 160–189mg/dl with at least two other risk factors based on the NCEP-II method, and to individuals with a coronary heart disease risk in 10 years >20% based on the quantitative method. Dietary treatment should be recommended for those detected with the NCEP-II method and for those with coronary heart disease risk in 10 years >10%. Concordance between both the qualitative and quantitative method was assessed using the Kappa index. RESULTS: Pharmaceutical treatment of hypercholesterolemia should be recommended in 20,0% of men and 20,1% of women based on the NCEP-II method and to 24% of men and 33,1% based on the quantitative method. Concordance was low (Kappa = 0,31) in men and moderate (Kappa = 0,45) in women between the qualitative and quantitative method. Hypercholesterolemia >240mg/dl was the main factor explaining recommendations based on the NCEP-II method (ORadj = 64), while age, hypertension and hypercholesterolemia explained recommendations based on the quantitative method. CONCLUSION: Results obtained in this study showed a low concordance between qualitative and quantitative methods to recommend cholesterol reduction in individuals without coronary heart disease.

OBJECTIVES: Three current guidelines for the management of hypertension (JNC-VI 1997, WHO/ISH 1999, BHS 1999) were compared with respect to their potential impacts on rates of treatment indication. METHODS: After systematic comparisons, the divergent recommendations of the three guidelines were operationalized. Specific complex algorithms were developed for each guideline to calculate the percentage of the population with an indication for antihypertensive treatment (= indication rates). Each guideline-specific algorithm was applied to 10,460 men and women aged 35–74 from a representative sample of the WHO-MONICA-Augsburg study population. The computation was performed in groups according to the risk strata of the three guidelines. Additionally age-, gender- and blood-specific indication rates were calculated. RESULTS: Each guideline uses complex but different structures for the determination of treatment indications. Generally, men had a higher treatment rate than women independent of guideline applied. Within each age decade, the guideline specific indication rates differed by about five percent points. The age-specific differences decreased with higher age within JNC, were stable within WHO and increased within the BHS-guideline. There were significant differences of indication rate by blood pressure categories below 160/90 mmHg. CONCLUSION: Different stringent conditions of antihypertensive treatment indications are based on differing influences of blood pressure, age and gender as potential risk factors. The different risk stratifications may lead to highly divergent economic consequences.