

Hypertension in community dwelling subjects aged 85 years: Is it a mortality risk factor?

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Abstract: Objective: To assess the relationship of blood pressure (BP) with all cause, 5-year mortality in 85 years olds.

Design and Methods: A prospective survey of 1159 subjects, born in 1920-1921, (of who 523 were males: 109 normotensive, 159 untreated, and 897 treated hypertensives). BP was the average of 6 measurements taken at home on 2 different visits. Follow-up lasted 5 years. Hypertension was defined as treatment with antihypertensive medications or blood pressure higher than 140mmHg systolic or 90mmHg.

Results: Treated subjects were more likely to be physically inactive, have poor self rated health, be diabetic, to have heart disease, to be heavier, to have higher systolic BP (SBP) pulse pressure. Patient awareness of hypertension was 73%, prevalence 91%, treatment rate 78%, controlled hypertension rate 38%. During 5 years 328 (28.3%) patients died. There was no difference in mortality between normotensive, untreated and treated hypertensive men or women. Treated subjects with controlled SBP had the lowest survival rate of 67%, $p=0.029$. Because treated hypertensives had more risk factors and co morbidities a Cox proportional hazard model was performed. Continuous SBP yielded a hazard ratio (HR) of 1.00, 95%confidence interval (CI) 0.95-1.01, in a model that included gender HR=1.78, 95%CI 1.39-2.30, diagnosis of heart failure HR=1.60, 95%CI 1.17-2.18, physical activity HR=0.49, 95%0.38-0.63, and good health perception HR=0.52, 95%CI 0.40-0.68, the diagnoses of diabetes, coronary and cerebrovascular diseases, smoking and antihypertensive therapy were not predictive. Exclusion of the 114 dead during the first two years of follow up did not affect the results.

Conclusion: In the community SBP does not seem to affect mortality of 85 year olds, and if anything patients with controlled SBP tended to have the worse outcome.