



**A cross-sectional study on the impact of age and sex on primary preventive treatment for cardiovascular disease**

### Do age and sex inequalities exist in the prescribing drugs for primary prevention of cardiovascular disease?

#### Background

- We know that there are age and sex inequalities in the prescribing of secondary prevention drugs given to those at risk of cardiovascular disease (CVD).
- There is little evidence to guide treatment for prevention of CVD in people over 75 years of age and it is not clear what effect this has on clinical practice.
- Researchers looked at the impact of age and sex on the prescription of drugs to lower blood pressure (antihypertensives) and cholesterol (statins) in patients with no previous history of CVD.
- 36,679 patients aged over 40 with no history of CVD from 19 general practices across the West Midlands were subdivided into five-year age bands up to the age of 84. Those aged 85 and over were analysed as one group.

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## Findings

- The proportion of patients receiving antihypertensives increased with age, from 5% in those aged 40–44 to 57% in those aged 85 and over.
- The proportion of people taking statins also increased with age in those up to 74 years, from 3% (in those aged 40–44) to 29% (in those aged 70–74). However, in those aged 75 and over, the proportion of patients prescribed a statin reduced steadily with age.
- Patients aged 55–59 were as likely to receive statins as those aged 85 and over, despite older patients being at significantly higher risk of developing CVD.
- There were no significant differences in prescription rates between men and women.

## Implications

- As the population ages, statins and antihypertensives may reduce mortality and CVD, but only if prescribed.
- Given the underlying risk associated with age, a case can be made for offering primary prevention to a larger proportion of people aged 80 and over than are currently receiving it.
- More research is needed to determine why GPs refrain from prescribing primary preventative treatment in elderly people, the attitudes of older people towards preventative drugs and the costs and benefits of prescribing in this age group.

## References

Sheppard JP, Singh S, Fletcher K, McManus RJ, Mant J. Impact of age and sex on primary preventative treatment for cardiovascular disease in the West Midlands, UK: cross sectional study. BMJ. 2012; 345:e4535. Available from <http://www.bmjjournals.org/content/345/bmj.e4535>.



## Recommendations for practice

Evidence is needed to inform new guidelines that offer more precise recommendations on primary prevention. Guidelines focusing on people aged 40–74 affect the care of patients aged 75 and over. Drugs may be beneficial in older people and they should have the opportunity to decide if they want to take them.

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