



## PRESS RELEASE

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### **Prescription costs rise more than six times when patients reach 65 says study of five million people**

Prescribing costs increase dramatically when people reach 65, according to a detailed analysis of more than five million patients published in the March issue of the **British Journal of Clinical Pharmacology**.

Average costs were six-and-a-half times higher than for people under 65 and 16 times higher than for children under four.

When researchers from the Faculty of Pharmacy at the University of Barcelona looked at the primary care records of 5.47 million patients in Catalonia, they found that just under three-quarters had been prescribed at least one drug and that women were 23 per cent more likely to receive a prescription.

But the outstanding finding was the significant cost differences based on the ages of the patients. When the researchers looked at the average number of drugs that patients were prescribed, people over 75 had almost eight times as many prescriptions as children under four years of age.

And the cost differentials for people over 65 were much higher than the four-and-a half times' increase reported by a previous study in 1993.

"This is probably due to a number of factors" explains lead researcher Professor Eduardo L Marino from the Faculty's Clinical Pharmacy and Pharmacotherapy Unit. "Our population is progressively ageing, we are better at detecting problems than 15 years ago and more expensive drugs are being developed."

Being able to predict prescribing costs is very important, he adds, especially when there are so many demands and pressures on healthcare budgets.

"We looked at prescribing by gender, breaking down patients into ten age categories and analysing their use of 15 different categories of drugs" he says.

"This enabled us to build up a very clear picture of what sort of drugs people were taking, depending on their age and gender."

Other key findings of the study included:

- Overall prescribing rates were highest in children under four (85 per cent of boys and 81 per cent of girls) and adults over 54.
- The only categories not to reach 100 per cent prescribing rates over the age of 54 were men aged 55 to 64 (85 per cent) and men who were 85 years plus (91 per cent).
- The most common prescriptions for children under four were for pain killers and fever-reducing drugs, followed by cough suppressants.
- The authors found a higher use of antibiotics in children under 14 than reported in other studies and suggested that this could indicate that doctors were over prescribing them.
- Female patients were prescribed more drugs than men (81 per cent compared to 68 per cent), except in children under 15 where the percentage was higher in males.
- Women were more than twice as likely to use antidepressants as men (12 per cent versus five per cent) and this was most notable in the 35 to 44 age group.

“Our study underlines the significantly higher costs of prescribing to older patients and this information is vital at a time when we face a progressively ageing population” concludes co-author Eladio Fernandez-Liz of the Institut Catala de la Salut, who analysed the data. “It also provides a detailed breakdown of the drugs most commonly prescribed in ten age groups and by gender.

“By combining this information with details of the local patient population, our study can help healthcare providers to predict future prescription costs and look at specific health interventions in those age groups with the heaviest prescription drug use.”

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#### Notes to editors

- Identifying how age and gender influence prescription drug use in a primary health care environment in Catalonia, Spain. Fernandez-Liz et al. **British Journal of Clinical Pharmacology**. 65.3, 407-417. (March 2008).
- The **British Journal of Clinical Pharmacology** is published monthly on behalf of the British Pharmacological Society by Wiley-Blackwell. It contains papers and

reports on all aspects of drug action in humans, bridging the gap between the medical profession, clinical research and the pharmaceutical industry.

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