Impact of injuries in the UK more than two and a half times higher than estimated

06 Dec 2011 22:00:00.000   
  
Injuries in the UK are having a much greater impact on peoples’ lives than previously estimated, a study has found.  
  
The research, involving academics from The University of Nottingham, used data direct from patient experiences combined with information on the number of patients treated in emergency departments and admitted to hospital to reveal that the true impact of injuries in the UK is actually 2.6 times higher than experts believed.  
  
For the study, published this week in the journal PLoS Medicine, the researchers recruited patients aged over five years old with a wide range of injuries, including fractures and dislocations, cuts, bruises and abrasions, sprains, burns and scalds, and head, eye, chest and abdominal injuries, from hospitals in four UK cities — Swansea, Nottingham, Bristol and Guildford — between September 2005 and April 2007.

A total of 1,517 injured people, with an average age of 37.4 years, took part in the study, the majority of whom had suffered an accidental injury in the home.

Using the data and information collected from patient questionnaires about their injuries and the effect on their lives, the authors found that in 2005, there were an estimated 750,999 injury-related hospital admissions, 7,982,947 emergency department attendances and 22,185 injury-related deaths.

This translated to a rate per 100,000 of the population of 1,240; 13,339; and 36.8 respectively.  
  
The researchers estimated the disability adjusted life years (DALYs), which combine the years of life lost due to premature death and the years of productive life lost due to disability after an injury, to summarise the impact of the injuries.

Putting all the information together, the total number of DALYs related to injury was 1,771,486 in 2005, 2.6 times higher than previously thought.  
  
The study was led by researchers from the Centre for Health Information Research and Evaluation, College of Medicine, at Swansea University in Wales and involved academics from the Division of Primary Care at The University of Nottingham, Nottingham, the Centre for Child and Adolescent Health at the University of the West of England, Oakfield House, Bristol, the Centre for Transport Studies at University College London, London and the School of Public Health and Preventive Medicine, Monash University, Victoria in Australia.  
  
Professor Denise Kendrick, lead researcher on the study at The University of Nottingham, said: “While considerable uncertainties remain, our best estimate is that injury-related DALYs are 2.6 times greater than previously thought, and even if we are very conservative and assume that everyone we were unable to follow up had completely recovered from their injury, the estimate of DALYs would still be 1.6 times greater than earlier estimates.”  
  
The researchers believe that, while the study was carried out in the UK, the principal findings are relevant across the globe.

The results suggest that if the pattern of underestimation seen in the UK was mirrored across the world, then injuries may account for up to one-quarter of global DALYs rather than one-sixth as previously estimated.  
  
The study concludes that healthcare policy and provision may be grossly inadequate, given they are based on previous estimates of the impact of injury in the UK.  
  
A copy of the paper is available online from the journal PLoS Medicine.  
  
The Nottingham researchers are currently working on another five year study assessing the impact of injuries.

This is a collaboration with the Universities of the West of England, Loughborough and Surrey and funded through the National Institute for Health Research (NIHR) Nottinghamshire, Derbyshire and Lincolnshire CLAHRC (Collaboration for Leadership in Applied Health Research and Care).  
  
The study is measuring the impact of injuries on people’s physical, psychological, social and occupational wellbeing at one month, two months, four months and 12 months post-injury.

It will also assess health and social care use and costs and quantify the impact of psychological problems on recovery.  
  
The study is recruiting almost 700 patients aged between 16 and 70 years who have been admitted to hospital following an accidental injury from hospitals in Nottingham, Bristol, Leicester and Surrey.  
  
As part of the research, the academics will also be interviewing injured people, representatives from services which help people recover from injuries and carers to explore how well services met their needs and how they might be improved to help injured people make a better, faster recovery.

**— Ends —**

**Notes to editors:** The University of Nottingham, described by The Sunday Times University Guide 2011 as ‘the embodiment of the modern international university’, has award-winning campuses in the United Kingdom, China and Malaysia. It is ranked in the UK's Top 10 and the World's Top 75 universities by the Shanghai Jiao Tong (SJTU) and the QS World University Rankings. It was named ‘Europe’s greenest university’ in the UI GreenMetric World University Ranking, a league table of the world’s most environmentally-friendly higher education institutions, which ranked Nottingham second in the world overall.  
  
The University is committed to providing a truly international education for its 40,000 students, producing world-leading research and benefiting the communities around its campuses in the UK and Asia. Impact: The Nottingham Campaign, its biggest ever fund-raising campaign, will deliver the University’s vision to change lives, tackle global issues and shape the future. For more details, visit: <http://www.nottingham.ac.uk/impactcampaign>

More than 90 per cent of research at The University of Nottingham is of international quality, according to the most recent Research Assessment Exercise, with almost 60 per cent of all research defined as ‘world-leading’ or ‘internationally excellent’. Research Fortnight analysis of RAE 2008 ranked the University 7th in the UK by research power. The University’s vision is to be recognised around the world for its signature contributions, especially in global food security, energy & sustainability, and health.  
  
More news from the University at: <http://www.nottingham.ac.uk/news>

The National Institute for Health Research provides the framework through which the research staff and research infrastructure of the NHS in England is positioned, maintained and managed as a national research facility.  
  
The NIHR provides the NHS with the support and infrastructure it needs to conduct first class research funded by the Government and its partners alongside high-quality patient care, education and training. Its aim is to support outstanding individuals (both leaders and collaborators), working in world class facilities (both NHS and university), conducting leading-edge research focused on the needs of patients. [www.nihr.ac.uk](http://www.nihr.ac.uk)

**Story credits**

More information is available from **Professor Denise Kendrick** on +44 (0)115 846 6914, denise.kendrick@nottingham.ac.uk