Economic burden and prevalence of atrial fibrillation imposed on district general hospital in the UK

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Introduction: Atrial fibrillation (AF) is the most common cardiac arrhythmia. Many studies demonstrate an increasing prevalence with persistent or permanent forms affecting 10-15% of population aged over 75 years. Management of AF is a source of debate among the American College of Cardiology, American Heart Association, European Society of Cardiology and National Institute of Health Care and Excellence (NICE). Acute Medical Units (AMU) is the first point of assessment. In view of increasing prevalence of AF and its impact on cost, we decided to complete this prospective audit.

Methods: 815 patients attended AMU between 28.6.2015 to 27.7.15. Weight, blood pressure, heart rate, systemic examination, chest X-ray, ECG, CRP and Thyroid function were recorded. AF was confirmed by ECG. The number of days in hospital and total cost was calculated (NHS reference costs 2012 – 2013, November 2013).

Results: Of the 815 patients, 126 suffered from AF, of which 64 males and 62 females. The average age was 76.4, ranging 30-96 years. The average prevalence was 15.45%. Data was categorized by age, <65, 66-75, 76-85 and >85, of which, the prevalence was 6.56, 18.06, 21.03 and 23.40 respectively. The average cost per day per bed was £273.00. Average hospital stay was 2.5, 4.45, 6.53, 8.61 days and average cost was £682.50, £1218.25, £1783.60 and £2349.45, respectively. 5.5% had paroxysmal AF.

Conclusions: Our results show the prevalence and cost of AF is higher in over 75 years. The cost and hospital stay progressively increased with age. Thus care provision structures in the UK will be challenged by requirement to treat more patients with AF in future. It imposes a substantial economic as well as health-care burden to the NHS (National Health Service). This is likely to be true of other countries.

Biography
Venkat Tirlapur qualified from Seth G S Medical College, Bombay in 1971. He came to Britain in 1976 and spent his junior years as a Doctor in Internal Medicine and Cardiology. His work on cardiac rehabilitation in post-myocardial infarction patients was published in The Lancet in 1979. He moved to the University of Wales as a Research Fellow for 3 years in Internal Medicine and 2 in Cardiology. His PhD research on nocturnal hypoxia and electrocardiographic changes in cor pulmonale patients was published in the NEJM in 1982. From 1986-1996 he worked as an International Investigator for multi-centre and multinational cardiovascular research studies. He has published papers in prestigious medical journals including The Lancet, Thorax, British Journal of Pharmacology, American Medical Journal, and The New England Journal of Medicine. He presently works as a Consultant in Acute Internal Medicine.

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