

Research excellence in anaesthesia



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Two publications during 2011 have highlighted the health of academic anaesthesia in the UK.

In an article published in the *British Journal of Anaesthesia*, Iain Moppett and Jonathan Hardman reported the number of publications, and subsequent citations, by UK anaesthesia researchers. Using academic search engines, they identified more than 1,492 papers published during 2004–2008. By the end of 2010, these papers had a cumulative citation count of almost 20,000. Of 23 research active university departments, two had published more than three papers per month, and five more produced more than one paper per month. This analysis included only university affiliated researchers, and is almost certainly an underestimate of the true scope of UK research productivity. For example, a substantial volume of high quality research from district general hospitals may not be included. These data are similar to published data evaluating publications from other specialties.

Earlier this year, the independent not for profit research institute 'RAND Europe', published 'Bibliometric analysis of highly cited publications of health research in England, 2002–2006', commissioned by the National Institute of Health Research. The report identified 46 separate English institutions (28 hospitals and 18 universities) that had produced papers in the top 20% of the most highly cited anaesthetic publications worldwide, between 2002 and 2006. The number of citations required for a paper to be in the top 20% worldwide also provides a measure of research quality that can be compared between specialties. For anaesthesia, this number was 11.0 in 2006, the most recent year for which data is available. For comparison, the values for some other specialties were: critical care medicine 14.5; haematology 14.7; microbiology 11.0; obstetrics and gynaecology 11.0; paediatrics 9.0 and surgery 8.0.

Two themes are common to both publications. Firstly, anaesthesia research in the UK is healthy, productive and internationally competitive. Secondly, much of the activity is concentrated within a few highly performing institutions. The same four universities that together account for 45% of highly cited publications across all specialties, also contributed more than 50% of the papers and more than 50% of the citations for anaesthesia. Whilst this should not detract from the quality and impact of research from other universities and hospitals in the UK, it highlights a striking concentration of research expertise.

However, despite these very encouraging figures, it is likely that a substantial proportion of anaesthesia research is logged under other areas, including critical care medicine, physiology, and surgery, making accurate evaluations difficult.

Documenting research activity within anaesthesia

To better document research output from UK anaesthesia researchers, the HSRC has added a website function to facilitate anonymous benchmarking of researchers against their peers and academics in other specialties. Researchers are encouraged to record their publications on ResearcherID (www.researcherid.com) and to register their unique identification number on the HSRC website. This will allow anonymised national reporting of research output and benchmarking within and outside our specialty. On an individual basis, it will help individuals to support the case for local institutional support. At a national level, it will allow the NIAA to have more accurate data about who is publishing what and where, as well as the accrued number of citations. This in turn will increase the power of the NIAA to lobby at local, national and international levels, and encourage funders to invest in anaesthesia research. Please engage with this initiative.