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Drop in new drugs output 'a myth'

Posted on Monday 25th February 2013

The widely held belief that the UK supply of innovative new medicines has conspicuously dwindled in recent decades, is not borne out by the evidence, reveals research by the University of Birmingham published in the online journal *BMJ Open*.

In fact, the reverse may be true, the figures suggest.

Until recently, the prevailing view was that pharmaceutical industry innovation was in decline, with fewer new drugs launched in recent decades than before, despite more cash being pumped into research and development prompting a good deal of hand-wringing, says lead researcher Dr Derek Ward, of the NIHR Horizon Scanning Centre at the University of Birmingham.

The team wanted to find out whether this view was justified, by looking at all new medicines added every year to the prescribing and dispensing drugs bible, the *British National Formulary*, or BNF for short, over 30 years. The BNF is updated every six months.

After the US, the UK is the next largest source of new drug development, generating more than 10 per cent of all new medicines around the globe.

They included all new synthetic chemical entities and new biological drugs, such as vaccines, blood products, and gene therapies, based on their first appearance in the BNF between 1982 and 2011

New products covered modifications of existing drugs as well as radical breakthrough treatments. Different doses and different formulations were only counted once if they contained the same active ingredients and generic versions of brand drugs were excluded.

There was no significant linear trend pointing to a decline in the number of new drugs introduced into the UK over that period, which averaged just under 24 a year.

But they did find a pattern of peaks and troughs, with dips invariably followed by a surge in new arrivals.

After a dip in the mid 1980s, with around a dozen new drugs coming on to the market between 1985 and 1987, new arrivals increased every year, peaking at 34 in 1997.

This peak was again followed by a dip with around 20 new drugs a year between 2003 and 2006, followed by a further peak in 2010.

And extending the timeline back to the 1970s indicates an overall slight but significant increase of 0.16 new drugs every year between 1971 and 2011, “contradicting the widely held view that the number of new medicines being launched is declining,” say the authors.

They conclude that the perceived “innovation dip” is a product of the time periods studied in the past.

“Although there was indeed a dip in new drug introductions during the decade from 1997 to 2006, this was largely an artefact of a peak in 1997, which was itself preceded by an unusually low number of launches in 1985-87,” they write. “Additionally, the peak number of new drugs added to the BNF in 1997 was matched in 2010.”

The authors point out that their study does not distinguish between varying degrees of innovation, and launches are not the only indicator of pharmaceutical industry health, but theirs is the most up to date study of new launch trends in the UK, they say.

Nevertheless, they do sound a note of caution: the costs of drug development have soared and the time taken to bring a new drug to market has risen from three years in 1960 to 12 in 2000.

Decline in new drug launches: myth or reality? Retrospective observational study using 30 years of data from the UK doi: 10.1136/bmjopen-2012-002088]

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