

# Worldwide research productivity of paracetamol (acetaminophen) poisoning: A bibliometric analysis (2003–2012)

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## Abstract

**Purpose:** There is a lack of data concerning the evaluation of scientific research productivity in paracetamol poisoning from the world. The purposes of this study were to analyse the worldwide research output related to paracetamol poisoning and to examine the authorship pattern and the citations retrieved from the Scopus database for over a decade.

**Methods:** Data were searched for documents with specific words regarding paracetamol poisoning as ‘key-words’ in the title or/and abstract. Scientific output was evaluated based on a methodology developed and used in other bibliometric studies. Research productivity was adjusted to the national population and nominal gross domestic product (GDP) per capita.

**Results:** There were 1721 publications that met the criteria during study period from the world. All retrieved documents were published from 72 countries. The largest number of articles related to paracetamol poisoning was from the United States (US; 30.39%), followed by India (10.75%) and the United Kingdom (UK; 9.36%). The total number of citations at the time of data analysis was 21,109, with an average of 12.3 citations per each documents and median (interquartile range) of 4 (1–14). The *h*-index of the retrieved documents was 57. After adjusting for economy and population power, India (124.2), Nigeria (18.6) and the US (10.5) had the highest research productivity. Countries with large economies, such as the UK, Australia, Japan, China and France, tended to rank relatively low after adjustment for GDP over the entire study period.

**Conclusion:** Our study demonstrates evidence that research productivity related to paracetamol poisoning has increased rapidly during the recent years. The US obviously dominated in research productivity. However, certain smaller country such as Nigeria has high scientific output relative to their population size and GDP. A highly noticeable increase in the contributions of Asia-Pacific and Middle East regions to scientific literature related to paracetamol poisoning was also observed.

## Keywords

Bibliometric, paracetamol, acetaminophen, poisoning, Scopus, citations

## Introduction

The terms *acetaminophen* (used in the United States (US), Canada, other Latin American countries, Hong Kong, Iran and Colombia) and *paracetamol* (used elsewhere)<sup>1</sup> both derived from chemical names for the compound: *para-acetylaminophenol* and *para-acetylaminophenol*. In some situations, it is simply abbreviated as APAP, for *N-acetyl-para-aminophenol*.<sup>2</sup> Paracetamol was synthesised by Morse in Germany in 1878 and subsequently produced by numerous methods. Paracetamol was introduced into clinical practice by von Mering in 1893.<sup>3</sup> Shortly after, it was replaced by phenacetin in Germany, since phenacetin was assumed to be safer than paracetamol. Paracetamol

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