Scientific literature response in Pubmed for the novel Coronavirus outbreak: a literature analysis

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Background:
Recent events highlight how emerging and re-emerging pathogens are actually becoming global challenges for public health. In December 2019, a novel coronavirus (SARS-CoV-2) has emerged. This has suddenly turned out into a global health concern which has led to a very high number of papers published in the scientific literature. Aim of this research is to focus on the bibliometric aspects in order to give researchers a glimpse on what is published in the first 30-days of a global epidemic outbreak.
Methods:
We searched MEDLINE (PubMed) electronic database in order to find all relevant studies in the first 30-days from the first publication (which appeared on Pubmed at 14/01/2020), meaning the period 15/01/2020-13/02/2020. We used the following search string: coronavirus* OR Pneumonia of Unknown Etiology OR Covid-19 OR nCoV. We placed a language restriction for English, but no publication status or study design limit was put in place for our search.
Results:
From the initial 462 identified articles, 234 articles were found as pertinent and read in extenso in order to classify them. The vast majority of papers come from China, UK and USA. 66.2% of the papers were Editorials, comments, letters or other kind of mainly reported data. 10.7% of papers were secondary literature papers (mainly narrative reviews). The remaining 23.1% were original primary studies. Only 17.5% of the sources used data which were directly collected on the field.
Conclusions:
Almost all of data came from China. Even if some preferential channels were guaranteed for publishing those results in the most important journals, it appears that the vast majority of publication in scientific literature in the first 30-days of an epidemic outbreak is based more on reported data and comments, and only a small fraction of the papers have primary data collected in the field. Nevertheless the whole international literature depends on that type of data sources in the early days of the epidemic.
Key messages:
- This is the first bibliometric research in Pubmed Database on the first 30 days of publications regarding the novel Coronavirus (2019-nCoV) outbreak of 2019.
- The vast majority of publication in the first 30-days of an epidemic outbreak are reported data or comments, and only a small fraction of the papers has directly collected data.