中文題目：被引用最多論文的台灣健保資料庫之研究作者分析:書目計量法

英文題目：The most highly-cited authors who applied Taiwan health insurance database to publish papers indexed in PubMed Center (PMC): A bibliometric study

作　　者：楊翼寧，錢才瑋，王憲奕

服務單位：奇美醫學中心 [1]內科部 [2]醫學研究部

Background: Millions of scholars have paid close attentions to the Journal Citation Reports (JCR), locating journal impact factors (JIF) each year in June. However, no such author IFs (AIF) that attracts the scientists so much as JIF did annually in academia. An appropriate scheme for quantifying author contributions applied to a simple five-year moving average (SMA) AIF is required to develop. Selecting the most highly-cited authors who applied Taiwan health insurance database to publish papers indexed in PubMed Center (PMC) is needed to report.

Methods: By searching the PubMed database, we used the keyword of [Taiwan] and [Health Insurance Research Database], downloaded 1,997 articles published from 2012 to 2016. An authorship-weighted scheme (AWS) was developed in terms of Rasch rating scale model. A total of 4,684 authors were collected for calculating AIFs and 976 eligible authors reaching acceptable criteria of weighted publications and cited papers were located on dashboards using social network analysis (SNA) and Google Maps to display. The four-combined indices illustrated include　(2018), R(2007), A(2007), and authors-developed y-index, all of which are based on Hirsch's h-index(2005). The association between the number of citable and cited articles among those 1131 authors was investigated.

Results: A perfect positive linear relation (n=1131, r=0. 82) between the authors' publications and cited papers was found. The most prominent author in research achievements is Shih-Wei Lai(x=7.42, R=7.52, A=1.95, and y=7.52). Tze-Fan Chao(x=4.15, R=4.18, A=1.94, and y=5.84) followed. We demonstrated the AWS-based AIF (SMA) that could be used in many scientific disciplines as the illustration at http://www.healthup.org.tw/gps/NHIDBpubbc3.htm.

Conclusion: The AIFs incorporated with SNA shown on Google Maps provide insight into the relationships between citable and cited achievements for authors. The AWS-based AIF (SMA) can be applied to other academic fields for understanding the most highly cited authors in a specific discipline.

Keywords: Pubmed center, authorship collaboration, health insurance database, social network analysis, Google Maps, author impact factor.