158 | **ASSESSING THE QUALITY OF SEARCH STRATEGIES IN DECISION SUPPORT SYSTEM (DSS) SYSTEMATIC REVIEWS**

Zahra Fathifar,[1] Hossein Saeedi Hasankandi,[2] Fatemeh Sadeghi-Ghyassi[3,4].
[1]Faculty of Health, Tabriz University of Medical Sciences, Tabriz, Iran;
[2]Central Library, Tabriz University of Medical Sciences, Tabriz, Iran;
[3]PhD Student, Health Information Management, Faculty of Management and Medical Informatics Tabriz University of Medical Sciences, Tabriz, Iran; [4]Research Center for Evidence Based Medicine, Tabriz University of Medical Sciences, Tabriz, Iran.

Background and aims: Search strategies play a major role in developing a systematic review. A comprehensive literature search dramatically reduces publication bias. The higher sensitive search leads to a more well-prepared systematic review. The aim of this study is evaluating the quality of search strategies in decision support system (DSS) systematic reviews.

Methods: A comprehensive literature search using MEDLINE (via Ovid), Embase, Pubmed and Cochrane Library was conducted until September August 2016. The search was limited to systematic reviews and with no language restriction. Meta-reviews were excluded. Only results of searching for "decision support systems" or "decision support system" keywords and limited to title of documents were included in this study. Two independent authors screened the results. Disagreement was resolved by discussion. The search strategies of the included studies were assessed with a nine-question checklist prepared by Faggion et al[1]. Data were extracted into Excel.

Results: A total of 47 systematic reviews (SRs) were included. There was a dramatic increase in the number of SRs in recent decade; however no significant improvement was seen in search strategies during the time. The mean score of search strategies among SRs was 4.63 (out of 9). The highest score was 7 (21.2%) and more than 53% of SRs obtained a score between 5 and 7. In 74.4% of SRs, 3–8 databases were searched which 40.4% were considered 4 databases. About 55% of SRs reported search keywords and using Boolean operators that has increased in recent years. Near to 98% of studies were not conducted in duplicate. In near to 75% of studies hand-searching was performed but instead, in 72.3% grey literature was not searched and in 65.9% the authors of studies were not contacted for further relevant information. Fortunately, in about 60% of studies the literature search was performed without language restriction.

Conclusions: Lack of duplicate literature searching in systematic reviews was notable. Although most of SRs were searched more than four databases but it seems that in most of them the major databases were not searched and instead, local or specialized databases were considered. Low tendency to grey literature searching was remarkable. It seems that the quality of reporting search strategies in the field of DSS is poor or moderate.

REFERENCE

1   Faggion Jr CM, Wu YC, Tu YK, et al. Quality of search strategies reported in systematic reviews published in stereotactic radiosurgery. Brit j Radiol 2016;89:20150878.