

Comparing Search Engines and Meta Search Engines in Dentistry Information Retrieval

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Abstract:

Background & aim: One of the ways to retrieve the expert information from Internet, is using search tools. The objective of this research is to measure the relevance of documents retrieved from search engines and meta search engines in the field of Dentistry and assess the accuracy of given data.

Material & Methods: This research was done in descriptive survey method. 5 major search engines and 5 Meta search engines that are introduced by the website of www.searchenginewatch.com as well-used search tools of Internet were chosen. Dentistry keywords were chosen from medical subject Headings (Mesh) 2010 version and then selected terms of Dentistry were searched in each search engines. The first 10 results of search engines were selected for evaluation of recall and precision. Data collection was prepared through direct observation. Searching was conducted using selected keywords of dentistry field in each search engine. First 10 results were selected to evaluate the comprehensiveness and blocking. Data were analyzed using Excell & R version 3.3.1 and SPSS version 22.

Results: Yahoo retrieved the most Dentistry documents and scored the highest rank (66%). Ask had (70%) precision and (30%) recall and retrieved the most relevant Dentistry documents. Clusty retrieved the most Dentistry documents and scored the highest rank (47%). Clusty with (66%) precision and (33%) recall retrieved the most relevant Dentistry documents. For retrieval of Dentistry information, there were significant difference for comprehensiveness between search engines and meta search engines at significance level of 0.05 and level of R software was more than critical point. So, equality of ratio hypothesis was not accept.

Conclusion: Regarding given results, Meta search engines are suitable tools for amateur or professional users and they have suitable search capabilities and facilities might be used to access the relevant documents in the field of Dentistry.

Keywords: Medical Information Storage and Retrieval; Dentistry; Internet.