Lessons from Covid-19 & first living search strategy for Covid-19 resources - Mittwoch, 29. Juli 2020

Dear colleagues,

Many of you are busy with doing research on Covid-19 and related topics. We would therefore like to draw your attention to the following publication if you have not yet discovered it:

Shokraneh, Farhad, and Tony Russell-Rose. 2020. "Lessons from COVID-19 to Future Evidence Synthesis Efforts: First Living Search Strategy and out of Date Scientific Publishing and Indexing Industry." Journal of Clinical Epidemiology 123 (July): 171-173. DOI: 10.1016/j.jclinepi.2020.04.014.

In this letter to the editor Shokraneh et al. describe the lessons learned from Covid-19. One of the most important challenge is that a variety of terms were used and also are still being used to describe the concept of Covid-19. Furthermore, the Medical Subject Headings (MeSH) — which supports the researcher in finding synonyms and refining their search strategy — were updated regarding Covid-19 related terms so frequently that it was hard to keep up:

"Apart from the fact that designing search strategies can be subjective and strategies may vary from one search expert to another, terminology is changing rapidly and search strategies that were accurate when first pub-lished can become unreliable and unable to retrieve relevant literature in a consistent manner."

Shokraneh et al. intend to solve this problem via their creation of the <u>first living search strategy on Covid-19</u> for which they used the 2Dsearch platform. This living search strategy is being constantly updated and curated as the Covid-19 concept develops and new terminology appears in MESH –the permanent link to it is: https://app.2dsearch.com/new-query/5e8072c5e0b7360004cd2b74.

At that 2Dsearch platform you can directly get the results from Pubmed via the top-right link "Open Pubmed results". (BTW: within only 4 hours the Pubmed results for this Covid-19 search strategy were rising from 37.400 to 37.529 hits.) Moreover, via "Tree view" (middle of the top-menu) you can display the search terms as a tree map. You can also adapt and refine the search strategy and export it. For more details see How to use/ Help (in left menu): https://www.2dsearch.com/help

Shokraneh et al. also suggest to use additionally preprint servers for searching on Covid-19 and other rapidly growing topics: "...at the time of writing, more than a quarter of studies on COVID-19 are not published in any journal and are not indexed in MEDLINE or Embase. This means that any evidence synthesis effort must consider searching preprint servers such as medRxiv and bioRxiv etc. in addition to ClinicalTrials.Gov" (for more details see Shokraneh's publication"Keeping up with studies on COVID-19: systematic search strategies and resources" ²)

Regarding searching Covid-19 related preprints there exist some meta-search tools:

<u>PreVIEW: COVID-19</u> (ZB Med/ nfdi4health Task Force COVID-19): includes all COVID-19
related preprints from medRxiv, bioRxiv, ChemRxiv, arXiv & Preprints.org, updated daily,
extended search and filter functions for abstracts, direct links to the full texts and export
functions for retrieved results. To improve retrieval functionality, concepts from

¹ Shokraneh, F. and Russell-Rose, T. (2020): "Lessons from COVID-19 to Future Evidence Synthesis Efforts: First Living Search Strategy and out of Date Scientific Publishing and Indexing Industry." – In: Journal of Clinical Epidemiology (2020) Vol. 123 (July): 171-173. DOI: 10.1016/j.jclinepi.2020.04.014

² Shokraneh, F. (2020): Keeping up with studies on covid-19: systematic search strategies and resources. In: BMJ (2020); Vol. 369: m1601. DOI: <u>10.1136/bmj.m1601</u>

standardized disease and symptom vocabularies are marked in the abstracts. Additional terminology for the search for transmission and seroprevalence information has been added.

- Outbreak Science Rapid PREreview: aims to centralize reviews from different preprint server
- Integrated search of preprints from <u>medRxiv & bioRxiv</u>
- <u>Collabovid</u> (created by TU-BS students during "Code vs Covid-Hackaton"): Collabovid helps researchers to identify the most relevant information by using Natural Language Processing.
 Search for any topic you want. Visit <u>search</u> to review all articles or browse a list of predefined <u>topics</u>. For additional help visit the <u>frequently asked questions</u>.

(Those and additional tools are part of our <u>regularly updated collection "Free and useful resources on Corona"</u>, last update: 28. July 2020, 13 pages)

Beside ignoring Preprints it is also not advisable to ignore non-English publications as Nussbaumer-Streit et al. argue: "Ignoring Chinese language publications for any evidence synthesis during the early phase of the outbreak would have meant ignoring the bulk of the evidence. We would even argue that including the Chinese language in searches of English-speaking databases (e.g., PubMed or Embase) is not enough—a situation such as the COVID-19 pandemic requires searches in Chinese databases."³

This conclusion is based on a study whose result Nussbaumer-Streit et al. describe as follows: "From 29 included studies, six were published in the Chinese language and listed in Chinese literature databases." ⁴ The results complement the guidance in the new edition of the Cochrane Handbook⁵.

³ Nussbaumer-Streit et al. (2020): *Reply to letter to the editor "Lessons from COVID-19 to future evidence synthesis efforts: first living search strategy and out of date scientific publishing and indexing industry"*. In: Journal of Clinical Epidemiology 123 (July): 173-174, DOI: 10.1016/j.jclinepi.2020.04.013)

⁵ C. Lefebvre et al.: Searching for and selecting studies. – In: (Eds.), Cochrane Handbook for Systematic Reviews of Interventions (2nd ed.), Chichester: Wiley, 2019, pp. 67-107. DOI: <u>10.1002/9781119536604.ch4)</u>