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ARE THE PUBLICATION DATABASES SUITABLE FOR STUDYING PUBLISHING PRACTICES OF A MULTIDISCIPLINARY RESEARCH FIELD AT SUBDISCIPLINARY LEVEL? CASE PHARMACY

PHARMACY

- Pharmacy is a multidisciplinary research field which combines natural sciences, health sciences and social sciences to study drugs and pharmaceutical preparations.
- There are several subdisciplines within pharmacy, e.g. biopharmaceutics, pharmacology, pharmaceutical biology, pharmaceutical chemistry, pharmaceutical technology, industrial pharmacy and social pharmacy

BIBLIOMETRICS

- My PhD project focuses on publishing practices in different subdisciplines within pharmacy.
- There is lack of research about publishing practices at the subdisciplinary level. However, it might be vital for example in research evaluation to recognize that there can be different publishing practices also within the disciplines.
- Are there differences in publication practices between the pharmacy subdisciplines, and if so, what kind of differences in terms of quantity indicators (e.g. number and type of publications) and structural indicators (e.g. publication and citation patterns)?
- In order to answer these questions data of the publications within pharmacy departments and faculties is needed.

DATABASES

- The research data for the bibliometric analyses can be collected from different databases. The features, advantages and shortcomings of different databases are evaluated.
- The databases included in the evaluation are international databases Scopus and Web of Science, Nordic national publication databases Juuli (Finland), Cristin (Norway) , SwePub (Sweden) and Danish National Research Database and organizational databases Uppsala University publications (Sweden) and research database Tuhat (University of Helsinki, Finland).

	Pharmacy publications in databases	Pros	Cons	Technical and Legal aspects
International Databases Web of Science Scopus	• Searching with affiliation is supported • Both databases have about equal amount of pharmacy publications (ca 500 000/2011-2016) • Affiliations can include information about subdiscipline, for example: WOS: ”Univ Oslo, Sch Pharm, Dept Pharmaceut Chem”.	• Number of publications is adequate for research purposes. Possibilities: to take a smaller sample. • Rich metadata (citations, references etc.) makes it possible to use a wide range of bibliometric methods	• All publication types are not included – differences in publishing practices can be missed	• Authorized users may use database for research • Technically easy to search and download data • Fuctionalities can help in preliminary analysis of data • Bibliometric tools support source system dataformats
Nordic national databases • Juuli • SwePub • Danish National Research Database • Cristin	• Searching with affiliation is possible: SwePub, Juuli, Cristin • Searching with affiliation is not possible DNRD -> can’t be used in study • Amount of pharmacy publications: (2011-2016) Juuli ca 2000, Cristin ca 2000 • Affiliations can include information about subdiscipline	• All publication types are included – differences in publishing practices can be detected	• Data can have inconsistencies because of distributed production of data • Possibilities: Combining data from different databases can give unique data for research but requires work	• To use data for research requires permission from organizations • Support from database administrators is needed for downloading data
Organizational databases • Uppsala University Publications • Tuhat	• Searching with affiliation is easy: searches can be done at departmental level • Amount of pharmacy publications (2011-2016) : Uppsala University Database ca 1700, Tuhat ca 1200	• All publication types are included – differences in publishing practices can be detected	• Combining data from different databases can give unique data for research but requires work	• To use data for research requires permission from organizations

CONCLUSIONS

- Studying publishing practices of pharmacy subdisciplines requires a combination of several databases.
- Databases have different advantages and shortcomings
- Databases have different data structure - data unification from different sources requires work.
- Multiple methods and triangulation is needed : interviews of pharmacy researchers can help planning of bibliometric analyses and analysing results.

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