

Background Pharmacists play an essential role in primary care as one of the most easily accessible health practitioners. Integrating evidence-based counselling advice into everyday pharmacy practice is challenging, but necessary for optimal patient outcomes. We present a programme to ease this challenge by introducing the digital counselling support tool *pharMe*.

Purpose The purpose of *pharMe* is to empower pharmacists to provide high-quality, evidence-based pharmaceutical counselling. As required by evidence-based pharmacy (EbPharm), *pharMe* is designed to combine external evidence, such as clinical guidelines and scientific publications, with patient preferences and the clinical expertise of pharmacists. In the future, *pharMe* could serve as a learning health system by incorporating patient-reported outcomes as an additional source of data.

Method Emergency contraception counselling, one of the most commonly used pharmacy services in Switzerland, was the first indication to be implemented in *pharMe*. The digital tool offers discretion and efficiency by enabling patients to self-report their health-related data and counselling preferences on their smartphone. Once the data is transferred to the pharmacy, *pharMe* guides the pharmacist through medication options, highlighting patient- and situation-specific, evidence-based advantages and disadvantages. While supporting the pharmacist, the tool is not a medical device designed to take over the decision-making process.

Findings A digital counselling tool such as *pharMe* appears to be helpful in facilitating evidence-based pharmacy in everyday practice. Early user experience with emergency contraception showed a high level of satisfaction and user-friendliness among both patients and pharmacists. Patients particularly appreciated the discretion, while pharmacists valued the easy access to evidence-based information, counselling support through illustrations, and efficient documentation and archiving of counselling sessions. Moreover, researchers can easily retrieve data from the counselling sessions, allowing the tool to be tailored to users' needs. Ultimately, the results can help shape future policy by emphasising the value of pharmacy counselling.

Conclusion Our digital counselling tool *pharMe* has the potential to substantially improve evidence-based pharmacy practice through data-driven counselling support for pharmacists. *pharMe*'s user-friendly interface, combined with its ability to provide valuable evidence-based insights, may be useful in transforming pharmaceutical care by promoting the holistic, evidence-based counselling approach. Additional topics are to be added, with the aim of further improving health-related outcomes at patient level and strengthening the role of pharmacists as high-quality primary care providers in a sustainable healthcare system.

ASSOCIATION BETWEEN INDEXING METHODS AND MEDICAL SUBJECT HEADINGS (MESH) ATTRIBUTED TO RESEARCH ARTICLES

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Background Medical Subject Headings (MeSH) is the controlled vocabulary that the National Library of Medicine uses to index articles in MEDLINE, which enhances their visibility. Until 2017, MeSH were manually assigned. Fully automated indexing was entirely implemented in mid-2022. Some of the automatically indexed articles may then be curated by humans. The quality of human-based indexing of social and clinical pharmacy practice journals was previously criticized.

Purpose To describe the association between the indexing method and MeSH attributed to original research articles published in social and clinical pharmacy practice journals compared to medical journals.

Method Original research articles published between 2016 and 2023 in two groups of journals were systematically searched in PubMed: three 'pharmacy' journals, signatory of the Granada Statements (Int J Clin Pharm, Int J Pharm Pract, and Res Social Adm Pharm) and the big-five medical journals (Ann Intern Med, BMJ, JAMA, Lancet, and N Engl J Med). MeSH terms, Publication Type (PT) attributes. Indexing methods were obtained

from the TXT files exported from PubMed. The number of MeSH, PT, and pharmacy-specific MeSH attributed to articles were compared by different indexing methods and between the two groups of journals.

Findings The number of MeSH was significantly lower in automated indexed articles, for both groups of journals compared to human indexing. A total of 8,479 original research articles were extracted (6,254 from the medical journals and 2,225 from the pharmacy journals). Overall, 5,990 (70.6%) articles were manually indexed, 1,659 (19.6%) were automatically indexed only, and 830 (9.8%) were curated after automated indexing. Automated indexing was higher in pharmacy practice journals (49.5%) than in medical journals (22.2%) (<0.001; OR 3.43; 95%CI 3.10:3.80). Post-automated indexing curation was more prevalent in medical journals (51.2%) than in pharmacy journals (10.9%) (<0.001; OR 8.56; 95%CI 6.89:10.63). Medical journal articles had a mean of 14.6 (SD 4.7) MeSH and pharmacy articles had a mean of 10.2 (SD 4.4) MeSH per paper (<0.001; Cohen's $d=0.941$; 95%CI 0.891:0.991). Pharmacy-specific MeSH existed in 58.8% pharmacy articles, with a mean of 1.1 (SD 1.2) per article. No difference existed in the number of pharmacy-specific MeSH between the indexing methods.

Conclusion Social and clinical pharmacy practice journals are indexed with less MeSH per article than medical journals. The number of MeSH significantly reduced after the implementation of the automated indexing by NLM.

ADHERENCE STRATEGIES FOR POLYPHARMACY IN EPILEPSY: A CASE REPORT UTILIZING ELECTRONIC MONITORING

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Background Epilepsy treatment is challenging due to the necessity of multiple daily regimens of anti-seizure medications (ASM). To determine adherence, therapeutic drug monitoring (TDM) is standard practice but falls short of the assessment of long-time adherence. Electronic monitoring enables a deeper understanding of adherence behavior and tailored interventions may be implemented. We present the case of a 34-year-old male with symptomatic multifocal epilepsy and emotional instability since 1999 who manages his triple ASM treatment with pillboxes. He lives independently in a village and is working part-time in the city. Poor adherence led to an unstable course of disease with repeated severe seizure manifestations. In January 2021, his neurologist asked the Pharmaceutical Care Research Group (PCRG) in Basel, Switzerland, to support the patient with optimizing his ASM intake behavior.

Purpose Identifying optimal adherence strategies for polypharmacy in epilepsy.

Method Baseline adherence was measured in 2021 with the recording card Time4MedTM. The patient was then successively offered various adherence aids with electronic monitoring over several weeks: weekly punch cards (Pharmis®) with Time4MedTM, and prefilled pouches (Medifilm®) in the electronic dispenser Medido®. Taking and timing adherence, correctly dosed days as well as drug holidays were calculated. An interview with open-ended questions on the usability and satisfaction of the devices was conducted in September 2023.

Findings Adherence with personal pillboxes was unsatisfactory leading to an unstable course of disease with recurrent seizures. The punch cards were too bulky so that the patient often left them at home, leading to 64% taking adherence, 63% timing adherence, 47% correctly dosed days and one drug holiday of five days (6 weeks in January to March/2022). Significant improvements in medication adherence metrics were observed with the transition to the Medido® device with 93% taking adherence, 90% timing adherence, 86% correctly dosed days (4 weeks in April to May/2023). No medication holiday was recorded during this period. No seizures were observed during both observational periods with electronic monitoring.