

A Cross-Sectional Study of The Journal of Emergency Medicine Journal Articles and Implications For Information Literacy

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Abstract

Objective: The goal of this research is to explore the retrieval of clinical terms applicable to the practice of emergency medicine through a cross-sectional study.

Materials and Methods: An Internet-based cross-sectional study is conducted to locate The Journal of Emergency Medicine Journal articles.

Results: The Journal of Emergency Medicine articles arm of the cross-sectional study reveals that some emergency medicine terms are not in the Medical Subject Headings.

Conclusion: Improved patient education and information literacy are key to improving clinical emergency medicine practice and library cataloging is key to patient education and practitioner education.

Keywords: Medical Subject Headings, Library Cataloging, Emergency Medicine

1. Introduction

While popular television shows, such as the Pitt, have sparked renewed interest in Emergency Medicine among the public and the Fauci effect increased applicants to medical schools and the mainstream media and social networking websites promote inaccurate and or dangerous remedies and or medical misinformation and some United States politicians champion medical disinformation, it is important that members of the public have tools to promote health literacy [1]. While low health literacy is prevalent among 36% of U.S. adults especially among non-whites, it is incumbent upon physicians and other providers to utilize information prescription or information Rx programs to direct patients to libraries to help manage chronic conditions and to help reduce emergency department overcrowding as those between the ages of 45 and 64 years had the highest percentage of emergency department visits with 59.5 percentage of emergency

department visits made by adults for 2017 to 2019 were for chronic conditions [2-4]. Additionally, as over 130 rural hospitals have closed since 2010 and rural adults have experienced higher rates of mortality and it is predicted to be a shortage of between 20200 and 40400 primary care physicians by 2036, there is very much a need for libraries to fill the gap as free sources of health information to not only help individuals stay healthy but also take charge of their health to not only reduce repeated emergency room visits but also in the face of physician shortages and hospital closures (including emergency departments) and a history of low information literacy among minorities [5,6]. Additionally the library supplements laughter prescriptions, produce prescriptions, and other lifestyle remedies to improve health [7,8].

Also with the advent of emergency medicine knowledge and the need to keep the needs of patients at the forefront in patient-

centric emergency departments and hospital-based practices, it is important to use a library science lens to identify how to improve patient education. A cross-sectional study seeks to demonstrate that cross-sectional analysis paves the way for potential improvements in emergency medicine practice while concurrently setting the foundation for answering the research question of: How does the library help the practice of emergency medicine?

2. Materials and Methods

Using a simple computer with an Internet connection, an Internet Browser, and Google, random sampling The Journal of Emergency Medicine journal articles from 1983-2026 are hand-counted and the following table 1 is designed [9]. Additionally table 2 is designed from a simple search of the Medical Subject Headings or MeSH browser using a computer with an Internet connection, and the Google Internet browser.

3. Results

The fact that some emergency medicine terms are not available in MESH makes it difficult to implement patient education strategies.

4. Discussion

As the lack of emergency medicine terminology from The Journal of Emergency Medicine journal articles in the MeSH browser impedes access to emergency terminology which in turn may foster low information literacy as people cannot inform themselves about the chronic or acute conditions that they may have, it is a temporary problem as the MeSH browser as artificial intelligence or AI driven web crawling allows for Artificial Intelligence or AI to locate emergency medicine terminology from emergency medicine journals, websites, and other sources freely available on the Internet which may in turn increase information literacy as folks have information about their chronic conditions at their fingertips which may in turn reduce the frequency of emergency department visits among those with chronic medical conditions as folks are better informed on how to manage their condition(s) on their own [9,10]. This can be accomplished by simply including a direction in plain English or another language, if the patient does not speak English, directing the patient to go to the library to learn more about their condition(s) as discharge is a part of the patient experience in the emergency department [11].

Also, the fact that many emergency medicine terms do not appear in MESH makes it difficult to implement such patient education strategies as what Liao and colleagues call bibliotherapy to improve the social determinants of health, especially around the area of health information literacy on emergency medicine [12,13]. Simply having patients read additional information freely available on the Internet, library, and elsewhere may reduce anxiety or other concerns about emergency medicine treatments or visiting the emergency department. Also, changing library cataloging practices makes it easier to promote health information literacy as it is easier to locate emergency department information, such as information about chronic conditions, in the library.

5. Library Cataloging Implications

If one looks in the WB call number class of the NLM Classification on the NLM website, one would expect that journals, such as The Journal of Emergency Medicine, would fall neatly into one category [14]. However, that is not the case and to answer the question of how advances in emergency medicine impact cataloging practice is that it leads to a creation of a new call number classification in the National Library of Medicine (NLM) Call Number classification. The new call number, WB 18.3 Emergency Medicine and Health Information Literacy, reflects that new need for information literacy which intersects the fields of emergency medicine and information literacy needs an easy way to access literature intersecting emergency medicine and information literacy.

The second way library cataloging is changed is that MARC subfields \$0 and \$1 is used in conjunction with lexical variants and natural language processing to identify emergency medicine and information literacy terminology which may extend beyond emergency medicine reference sources to provide subject access terms that make works on emergency medicine and information literacy accessible [14,15].

Thirdly, Buenida-Garcia et. al. 2025 proposes that Large Language Models (LLMs) can create digital collections from free-text medical reports, however one wonders if that would also include creating digital collections from all sources of emergency medicine, information literacy, and library holdings existing all over the world in various languages. Using LLMs may be very resource intensive, may infringe on copyrights, and face many hurdles before it can become a reality, if ever [16].

6. Conclusion

While the field of emergency medicine has a long history, shortcomings in patient education as evidenced by a deficit of emergency medicine terms in MESH, a commonly used database by libraries and patients for finding medical and allied health information, combined with information literacy tools has the potential to improve clinical practice but at the same time warrants additional feasibility, culture, and other studies to gauge how easy it is to change clinical practice to both improve patient education and clinician education as to explore the feasibility of changing MARC records and NLM call numbers to reflect advances in emergency medicine and information literacy [16].

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