

A Study of Strategies to Improve the Efficiency of Clinical Healthcare Communication

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Abstract

There has been an increased awareness of communication barriers in healthcare, particularly for disabled groups such as patients with sensory impairments. I aimed to understand how these challenges influenced patients in clinical settings and what strategies healthcare providers could use to improve patient communication efficiency and patient satisfaction.

Keywords: clinical healthcare communication, strategies

1. Topic Selection

I initially focused on children with vision impairments as I had prior work in vision research and wanted to explore this further as a guided research. However, after conducting searches on PubMed, I realized that there were few research papers available on this specific topic. The limited number of publications would have made a systematic review meaningless, and I sought to expand my original topic. Unfortunately, even with this broader approach, the number of available papers remained limited. After discussing these challenges with my mentor, Prof. Couloures, we decided to change the topic of my research, from visual impairment to hearing impairment. To ensure there were enough available references to continue the project, we finalized the research question to its current form, "What is the greatest difference/challenge when communicating with patients with hearing loss

compared to patients with normal hearing, and what is the best solution to achieve communication that patients are satisfied with?". The focus of my research was to identify the communication challenges faced by healthcare providers when interacting with patients with hearing loss compared to those with normal hearing. My goal was to pinpoint the key differences in these interactions and investigate potential solutions that can enhance communication effectiveness and patient satisfaction.

2. Literature Review

I began my research by searching in PubMed, initially with vague and broad keywords like "patient communication" and "hearing impairment." However, the search results were often irrelevant or too general. As I became more familiar with PubMed's search features, I started incorporating more specific terms like "communicating with deaf patients,"

“patient-physician communication,” and “accessibility in healthcare communications.” I also learned that PubMed uses MeSH: Medical Subject Headings when cataloging articles. Familiarity with how to use and combine these terms became a key part of my search process. These detailed search terms helped me narrow down the results to studies that were more relevant to my research question. Through this process, I realized the importance of using precise and well-defined search terms to filter relevant literature. Once I had gathered a more focused set of research articles, I uploaded the results into Covidence, a systematic review management tool. At this stage, I needed to define the inclusion and exclusion criteria to ensure the relevance and quality of the studies I would eventually review. Therefore, I learned how to define my research using the PICOS methodology and the PRISMA guidelines (Population, Intervention, Comparison, Outcome, Study type). The population of interest in my research was all patients with hearing loss, regardless of age or severity. I examined studies where the intervention or exposure involved efforts to improve communication between healthcare providers and these patients. The outcome I was interested in was patient satisfaction and the overall efficiency of communication. As for study characteristics, I focused on research that explored hearing loss, communication difficulties, patient-provider communication, and proposed solutions to these issues. Importantly, I excluded studies that only presented protocols without offering practical or tested solutions. Using these criteria, I began screening 322 papers by title and abstract. Covidence allows all members of a project to screen papers and vote on whether to include them, which was invaluable for collaboration. There were cases where Prof. Couloures and I voted differently on whether to include or exclude a certain paper. Using the PRISMA methodology, when 2 referees come to different conclusions on the suitability of an article, they then collaborate to determine designation. After completing the initial screening, I was left with 98 studies that met the criteria for a full-text review.

3. Personal Reflection

Before this project, I had never conducted a research project or used tools like PubMed or Covidence. The process wasn't easy, but it was

also an invaluable experience that taught me how to navigate and utilize resources efficiently. I also made use of Google Scholar to cross-reference studies and ensure that I wasn't missing any key articles that might not have appeared in my PubMed search. This project not only introduced me to the mechanics of conducting a literature review but also taught me how to manage large amounts of data, critically evaluate research, and think systematically. For example, I learned how to screen studies based on their abstracts, assessing their relevance before diving deeper into full-text papers. This skill will serve me well in future academic or professional projects that involve literature analysis or research.

One of the greatest challenges I encountered was dealing with a large amount of papers on the topic I was interested in. It was overwhelming to screen through hundreds of articles, especially when many of them overlapped in themes or findings. So I learned that developing inclusion/exclusion criteria was crucial to managing the amount of information. In addition, my initial unfamiliarity with research databases implicated that I had to spend a lot of time learning how to manage these tools effectively. I often felt unsure if I was using the right search terms or if I was missing important articles. However, these challenges ultimately helped me become more comfortable with the research tools and processes, while I developed a more strategic approach to organizing and evaluating information.

Even though I won't be able to complete a full systematic review due to time constraints, the knowledge and skills I gained throughout this process have been incredibly valuable. I now feel much more prepared to tackle research projects in the future, whether they are related to healthcare communication or other topics.

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