Email2MEDLINE Use by Rural Health Physicians in Remote Areas of the Philippines

Alex Gavino MD\textsuperscript{1}, Alvin Marcelo MD\textsuperscript{2,3}, Iris Thiele Isip-Tan MD, MSHI\textsuperscript{3}, Leilanie Apostol-Nicodemus MD\textsuperscript{3}, Faith Joan Mesa-Gaerlan MD\textsuperscript{3}, Paul Nimrod Firaza MD\textsuperscript{2}, John Francis Faustorilla Jr. RN\textsuperscript{2}, and Paul Fontelo, MD, MPH\textsuperscript{1}

\textsuperscript{1}National Library of Medicine, Bethesda, Maryland, \textsuperscript{2}National Telehealth Center, University of the Philippines, Manila, \textsuperscript{3}Philippine General Hospital, Manila

Abstract

Email2MEDLINE was introduced as a health information access tool for rural physicians practicing in remote areas of the Philippines. Of the 33 doctors trained, 21 (69.7\%) used it with 83 unique queries in a 2-month period. Mean usage was 3.89 (SD 5.55) per doctor. Most of the queries were on therapy (45.23\%) and health-related but non-clinical issues (35.71\%). Limited access to the Internet was the primary reason for not using the service.

Background

Medical in rural areas of developing countries, such as the Philippines, is challenging due to lack of information resources, so doctors tend to rely on their clinical judgment often. Most, are interested in practicing evidence-based medicine (EBM) to improve the delivery of quality care to patients. The National Library of Medicine has developed tools such as PubMed for Handhelds\textsuperscript{4}, txt2MEDLINE\textsuperscript{2} and PubMed Mobile\textsuperscript{3} to provide doctors with access to MEDLINE through their mobile devices. This paper describes the use of Email2MEDLINE among rural physicians from remote areas of the Philippines.

Methods

Thirty-three rural health physicians, all recent medical school graduates, in the Doctors-to-the-Barrios (DttB) Program of the Department of Health were trained on the use of Email2MEDLINE using their own mobile phones. Their search queries and browsing histories were tabulated after the study period. The participants were also asked to report on their experiences in using the tool.

Results

Among the 33 enrolled participants, 21 (69.7\%) were able to use Email2MEDLINE. There were 103 queries sent with 84 of them unique (some queries were sent more than once). Mean usage during the study period was 3.88 (SD 5.55; range 0 to 27 searches) per doctor. Most of the queries were on therapy (45.23\%), health-related but non-clinical issues (35.71\%) and unspecified clinical searches (14.28\%). Non-clinical issues included public health, epidemiology and health administration. Eight of the 27 (29.6\%) who participated in the post-study assessment found the results of the query adequate for their needs. Limited or weak Internet connection in their areas of assignment was the primary reason for not using the service.

Conclusions

Access to current medical literature is essential to practice EBM. Email2MEDLINE allows clinicians in remote locations to access health information from PubMed MEDLINE through email on their mobile devices. This preliminary study provided useful insights on how to improve the service. Based on the queries sent, the majority of clinicians’ questions were on therapy. This is similar to previous studies on clinician information needs. Usage of Email2MEDLINE may probably increase with the continuous expansion of the mobile telecommunication infrastructure in remote areas in the Philippines.

References