Joint Event

35th World Congress on
Advance Nursing Practice

7th World Congress on
Patient Safety & Quality Healthcare

30th International Conference on
World Nursing Education

November 14-15, 2022

Webinar

Chronic obstructive pulmonary disease health management application functional solution design

Zhao Fanyu
Sichuan University, China

COPD is a common, preventable, and treatable disease characterized by persistent respiratory symptoms and restricted airflow. Its protracted disease and protracted course cause patients' quality of life to diminish and place a significant financial strain on families and even society. Studies have shown that providing stable COPD patients with health management application can help them become more knowledgeable about their condition and improve their ability to take care of themselves, delaying the disease's progression, lowering the frequency of acute attacks, and lessening their overall quality of life. Therefore, it is of great significance to provide scientific, reasonable, practical and efficient health management application for COPD patients. Mobile health (m-Health) is the provision of medical services via mobile communication technology, with the main application being a medical health Application (APP). It is a brand-new health management mode that is causing widespread concern due to its consistency, convenience, and interactivity.

Based on a review of domestic and foreign literature, this study chooses the E-Health Enhanced Chronic Care Model (eCCM) as the theoretical foundation for developing application indicators, and establishes the core characteristics of application indicators regarding the theoretical components. In this study, 18 experts from related academic fields were asked to participate in two rounds of correspondence using the Delphi method. The effective recovery rate was 100% after two rounds of questionnaires, the authority coefficient was 0.86, the judgment coefficient was 0.91, the familiarity coefficient was 0.80, and the Kendall harmony coefficients of all levels were 0.056,0.145 and 0.080 respectively (P<0.05). The indexes of COPD health management application program were formed, including 3 first-class indexes, 11 second-class indexes and 44 third-class indexes. The research group further explored the internal system of the application program. In order to make it more suitable for standardized clinical management, the operation flow of the application program was designed according to the clinical pathway, and the COPD health management cycle system of "evaluation-planning-implementation-variation-evaluation-feedback" was formed according to the steps of "planning-implementation-examination-result processing". According to the index content and internal operation flow of the previous application program, the research group simulated the operation page of the application program in order to help COPD patients strengthen their self-management ability, help medical workers remotely monitor the disease changes, and rationally allocate medical resources.

Conclusion: Through literature analysis and two rounds of Delphi expert consultation, this study initially

Joint Event

35th World Congress on
Advance Nursing Practice

7th World Congress on
Patient Safety & Quality Healthcare

30th International Conference on
World Nursing Education

November 14-15, 2022

Webinar

completed the design of COPD health management application program, and finally formed three first-level indicators, 11 second-level indicators and 44 third-level indicators. The inquiry results are true and reliable, the research process is scientific and complete, the application interface is simple and generous, the design practicality is considered from multiple angles, and the clinical tasks of COPD health management are scientifically completed by making full use of the advantages of the Internet, which broadens ideas and provides theoretical reference for further improving and perfecting the existing COPD health management system. The next research plan is to develop the application and put it into the health management of clinical medical industry.

Importance of Research: With the development of information technology and the popularization of the Internet, mobile health (m-Health) has attracted wide attention because of breaking through the limitation of time and space. When mobile health is applied to the medical industry, it can provide medical services and information through the use of mobile communication technology. It is a brand-new health management mode based on terminal system medical health application. As an important part of mobile medicine, health management application is applied to the field of chronic disease health management, which can help COPD patients identify diseases early, remotely monitor disease changes, improve self-management ability, and thus save medical resource costs.

Biography

Zhao Fanyu is 24, from Tianjin, China. She is currently completing her postgraduate course in West China Clinical Medical College of Sichuan University. In 2022, she graduated from Tianjin Medical University, specializing in underlined elderly nursing. She actively participated in scientific research and academic activities, presided over scientific research projects for many times, and achieved good results. She has a deep interest in remote nursing and electronic information technology and devoted myself to related research.