Utility of Quick Response Codes for Patients' Education: A Systematic Review

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ABSTRACT

Introduction: The utility of quick response (QR) codes, a convenient tool for providing educational information to patients in various healthcare settings, lies in their ability to offer quick access to relevant information. However, the success of QR code implementation in patient education may be influenced by factors such as patient satisfaction and perceived usefulness. This systematic review aimed to explore patient satisfaction and the perceived usefulness of QR codes in delivering educational information.

Search Strategy: An extensive search was conducted in international electronic databases such as PubMed, Web of Science, and Scopus and Persian databases with keywords "Patient", "Education", "Learning", "Utility", "Satisfaction", "Usefulness" and "Quick Response Code" by May 1, 2024. In this systematic review, only observational studies were included, and their qualitative assessment was conducted using the Newcastle-Ottawa scale related to cohort and cross-sectional studies.

Results: Based on the inclusion and exclusion criteria, this review was conducted with five included studies and 767 participants. Among participants, 52.81% was female, and their mean age was 57.95 (SD = 9.11) years. The areas of application included (1) pharmaceutical information for outpatients, (2) information on casts in the orthopedic department, (3) bronchoscopy information in the respiratory department, and (4) cataract surgery information in the ophthalmology department. The results of the studies revealed that patients had a very satisfying experience using QR codes to access educational information. However, the level of perceived usefulness among patients could be improved. Despite nearly 90% of participants in two studies finding QR codes useful for accessing educational information, other studies showed percentages of 17.73% and 58.25%.

Conclusion and Discussion: Overall, QR codes are a satisfactory method for information transfer. However, there is conflicting evidence regarding their perceived usefulness, suggesting that researchers should conduct future well-designed studies to explore the factors influencing patients' perceived usefulness of this cost-effective and easy method.

Keywords: Education, Patients, Systematic review

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