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The Most Popular Iranian Smartphone Applications for Traditional Medicine: A Quality Assessment

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Abstract

Background: Traditional Iranian medicine (TIM) consists of all the knowledge and practices used in diagnosis, prevention, and elimination of diseases in Iran from ancient times to present. It is based entirely on practical experience and observations passed down from generation to generation. The use of smartphone applications (apps) related to health (mHealth) is increasing, while there is a potential for apps to be used as a tool for self-management and disease treatment.
Objectives: The aim of this study was to find the most popular and reviewed Iranian applications related to traditional medicine in the stores and to rate their quality.
Methods: A descriptive research was conducted in December 2016. Apps were selected from the 2 largest online stores of the most popular mobile operating systems (Google Play App Store for Android, iTunes App Store for iOS) based on popularity as measured by the number of installs and reviews. The inclusion criteria were as follows: Persian language, minimum number of installs (1000 for Google Play) or reviews (1000 for iTunes App Store), relation to traditional medicine and free version. The exclusion criteria were user ratings less than 3. Apps were evaluated using MARS (A new tool for assessing the quality of health mobile apps), which consists of 5 subscale scores (engagement, functionality, visual aesthetics, information quality, and subjective quality score). MARS items are scored using a 5-point Likert scale (1-inadequate, 2-poor, 3-acceptable, 4-good, and 5-excellent).
Results: Of 20 potentially relevant apps searched, 3 met the inclusion criteria. Most apps were excluded due to the fact that they were unrelated to traditional medicine and not in Persian. No application was found on the iTunes App Store for traditional medicine. The mean scores for each of the domains in MARS were: engagement (3.26), information (2.35), functionality (4.33), esthetics (3.66), and subjective (2.83). The highest rated app was 3.98. Two of the apps that were reviewed in this report met the minimum acceptable score of 3.0 out of the possible highest score of 5.
Conclusions: This review shows that few Iranian traditional medicine apps are available in the app stores that quality, information on all of them is low. Therefore, development of evidence-based traditional medicine apps are necessary and it is also recommended that apps be implemented on the IOS platform.

Keywords: Smartphone; Mobile Apps; Mobile Health (m-health); Traditional Medicine