A SCOPING REVIEW OF PATIENT-ORIENTED MOBILE APPS FOR POST-OPERATIVE PAIN MANAGEMENT

Chitra Lalloo, BHSc, PhD
The Hospital for Sick Children
Student/Trainee

INTRODUCTION / AIM

Acute post-operative pain in youth is common. Unrelieved or undertreated post-operative pain can delay re-mobilization and negatively impact quality of life. Currently, there is little if any support to help patients to self-manage their post-surgical pain once discharged home. Mobile devices (smartphones, tablets) offer an accessible and engaging medium to provide pain self-management support. The aim of this study was to identify and appraise the pain self-management content of apps available for patients undergoing surgery.

METHODS

An electronic search was conducted (February-March 2016) of the Apple, Android, and Windows app stores. Eligible apps were targeted at people undergoing surgery and purported to provide education, tools, or advice related to managing post-surgery pain. Three authors independently identified eligible apps. Discrepancies were resolved through consensus. Metadata were abstracted into a standard form. Pain self-management functionality was rated as present or absent.

RESULTS

A total of 7 apps (100% Android) met inclusion criteria. Education related to either surgery or post-operative pain was the most common function (71%). Apps also offered symptom self-monitoring (43%) and access to tools for pain self-care (29%). No apps provided goal-setting or social support, and none were comprehensive in terms of pain self-management content. Additionally, no apps were designed for pediatric patients.

DISCUSSION / CONCLUSIONS

Currently available post-operative pain apps lack goal setting and social support functions, and are not targeted to pediatric users. There is a need to develop and test comprehensive, theory-based apps to better support patients with pain self-management care following surgery.

OTHER AUTHORS

Jennifer Stinson
Ushma Sha
Arnav Agarwal
Jordan Rivera

Fiona Campbell