Impact of a Medicines Information App on Medication Knowledge and Worry in Post Myocardial Infarction Patients

G. CAMPBELL1,2, C. DEVANEY3, V. AUYEUNG2, T.F. ISMAIL1,2, J. WEINMAN2.
2GUY’S AND ST THOMAS’ NHS FOUNDATION TRUST, CARDIOLOGY DEPARTMENT, LONDON, UNITED KINGDOM.
1KING’S COLLEGE LONDON, INSTITUTE OF PHARMACEUTICAL SCIENCE, LONDON, UNITED KINGDOM.
3KING’S COLLEGE LONDON, SCHOOL OF BMEIS, LONDON, UNITED KINGDOM.

Background and importance
• Non-adherence to medications post-myocardial infarction (MI) is well documented.
• Identifying effective interventions to support patients with the management of medications is therefore crucial.

Aim and objectives
• MedTap® is a medicines information app developed by clinicians for patients and carers.
• The objective of this study was to evaluate whether utilising MedTap® had any impact on patient knowledge and worry.

Methods
• Patients admitted to a cardiology ward with an MI, completed a baseline questionnaire to assess medication knowledge and worry.
• They were given access to medicine information via MedTap®.
• A post-use questionnaire was completed via telephone two weeks later.
• Questions were grouped into “knowledge” (n=5) and “worry” (n=3) for analysis.
• A score of one was assigned to yes responses and zero for no and change over time was assessed with a paired Wilcoxon.

Results
• 54 patients were recruited (mean age 63, 4 female), with 10 (18.5%) lost to follow up.
• Of the 44 patients interviewed, 22 (50%) used the app.

App Users
• Knowledge
  • The median pre score = 3 (range:1-5) with a median change of 1 (range:-1-4).
  • There was a significant increase in knowledge (p=0.003) at two weeks follow up.
• Worry
  • The median pre-worry score = 0 (range:0-2) with a median change of 0 (range:-2-0).
  • However, this still translated into a net reduction in worry (p =0.011).

Results cont
Non- users
• Knowledge
  • Median pre-knowledge score = 3 (range: 0-5) with a median change of 1.5 (range:-4 - 4).
  • There was an increase in knowledge (p=0.009) at follow up.
• Worry
  • The median pre-worry score was 0 (range:0-2) with a median change of 0 (range:-1-2).
  • There was no significant change in worry (p=0.739).

Conclusion
• Digital apps can be used as an tool to deliver
  • medicines information
  • improve patient knowledge
  • decrease patient medication worry
A reduction in worry is significant as this is known to significantly influence adherence behaviour
Further work will assess adherence and determine whether using MedTap has an impact on clinical outcomes.

Example screen shots from the Android version of MedTap®. An identical version is also available for iOS.

bit.ly/medtapios
bit.ly/medtapandroid