Patient and dentist perspectives on collecting patient reported outcomes after painful dental procedures in the National Dental PBRN

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Background

Dental Patient Reported Outcomes (PROs) are health reports provided by patients, offering a more comprehensive understanding of disease interventions' effects. These PROs, particularly those specific to conditions, effectively document the patient's health status from their perspective. This study utilized FollowApp, a mobile health platform, to gauge PROs from patients who underwent potentially painful dental procedures.

Methods

Study Design and Participants

- 22 practitioners and 32 patients
- Participants provided feedback on using the mHealth (mobile health) platform to collect the pain experience after dental procedures.
- Data was collected through semi-structured interviews. The interviews were conducted with both practitioners and patients to gather their feedback on using the mHealth platform.

Measures and Data Analysis

- The measures used in this study were the feedback from the participants about their experience using the mHealth platform. This feedback was used to assess the usability and effectiveness of the platform.
- A themes analysis was conducted to identify barriers and facilitators that influenced the successful implementation of the mHealth platform.

Results

Five themes were uncovered:

1. **Sense of Better Care**: The mHealth platform provided a sense of better care for the patients.
2. **Tailored Follow-up**: The follow-up messages were tailored based on the dental procedure and patient's pain experience.
3. **Effective Messaging and Alerts**: The messaging and alerts from the mHealth platform were found to be effective.
4. **Usable Digital Platform**: The mHealth platform was user-friendly and easy to use.
5. **Routine mHealth Integration**: Most users expressed a desire to continue using the mHealth platform as part of their routine care

Conclusions

The use of an mHealth platform for frequent, automated, and personalized follow-up messages enhanced patient care experience and was time-efficient for providers. Patients found the mHealth questionnaires to be well-structured and of suitable length, and the platform user-friendly. Most expressed a desire to continue its use. The study thus suggests the effective use of mHealth platforms for collecting patient-reported outcomes in dental care.

"I personally would prefer the mHealth platform because I would much rather text and get stuff done that way than picking up the phone, looking for the phone number and calling and writing notes down because that's just how I work. But I would much rather text and have it in my phone and be able to know." – Patient, 56 years old.

"I had numerous patients that probably would have called the office numerous times, and instead they could just send me a little text message. And it was very convenient because it just pops right up and I could get back to them, you know, almost in real time or at my convenience if I was extraordinarily busy. And then. You know, avoid needing to wait for the receptionist to send a message to me or to have me have a free time to actually call the patient, or it was just it was a lot easier." – Dentist, 41 years old.

I'm 58 and I share that only because it's no secret that older people struggle with technology, right? It's usually not as intuitive for me as it would be a 20-year-old for example, but I thought this app was very user friendly and very easy to use, and no question, all of it worked beautifully, there were no glitches, there were no delays. It was very easy, quick, it was very nice." –Patient, 58 years-old.

"I thought it (the follow-up questionnaire) was spot on because it stayed focused on the pain you were experiencing and whether that pain is growing or diminishing or staying the same and what medications you're on. So, I thought it was simple, short, and to the point." –Patient, 67 years old.

"I think that the concept of how patients respond and the feedback going back and forth is fantastic, and you really hit the nail on the head with that one." –Dentist, 67 years old.
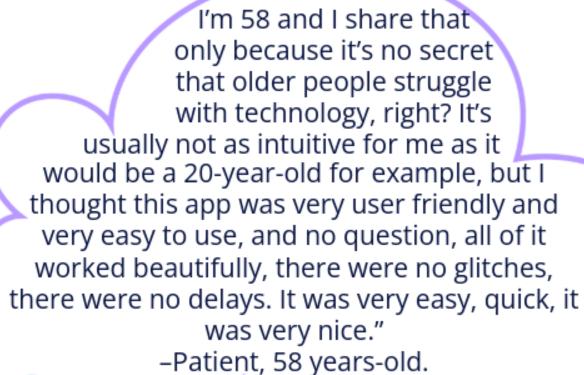
Image 1. Patient and Practitioner responses to the mHealth application.

The National Dental Practice-Based Research Network
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NIH National Institute of Dental and Craniofacial Research