YourCall Study: Development of a text message brief intervention aimed at reducing alcohol-related harm in injured patients

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YourCall Study

Part 1: Development of a text message intervention aimed at reducing alcohol-related harm in injured patients

Part 2: Evaluation of the effectiveness of the intervention in a randomised-controlled trial

Principal Investigator: Shanthi Ameratunga

Co-investigators: Ian Civil, Matthew Walker, Vanessa Thornton, Bridget Kool, Robyn Whittaker, Papaarangi Reid, Gordon Smith

Te Whare Wänanga o Tämaki Makaurau

Intervention Development Team: <u>Sarah Sharpe</u>, Matthew Shepherd, Bridget Kool, Robyn Whittaker, Vili Nosa, Enid Dorey, Susanna Galea, Papaarangi Reid, Shanthi Ameratunga

Background



- Hazardous alcohol use a leading risk factor for injury.
- Screening for alcohol misuse and brief intervention (SBI) in trauma care settings has been shown to reduce alcohol intake and injury recidivism, but is rarely implemented.
- Mobile phone a highly relevant communication channel.
- The idea of a text message intervention was found to be appealing to trauma patients.

Kool B, Smith E, Raerino K, Ameratunga S. Perceptions of adults trauma patients on the acceptability of text messaging as an aid to reduce harmful drinking behaviours. BMC Research Notes 2014, 7:4

Aim



To develop a text message Brief Intervention service to support behaviour change in admitted trauma patients who screen positive for hazardous alcohol use.

Methods



Conceptualisation

- Assemble Intervention Development Team
- Understand and develop the concept
- Create initial prototype

Pre-testing the prototype

- Conduct interviews with trauma patients
 & key informants
- Refine prototype
- Consult with Māori and Pacific groups
- Refine prototype

Technical development

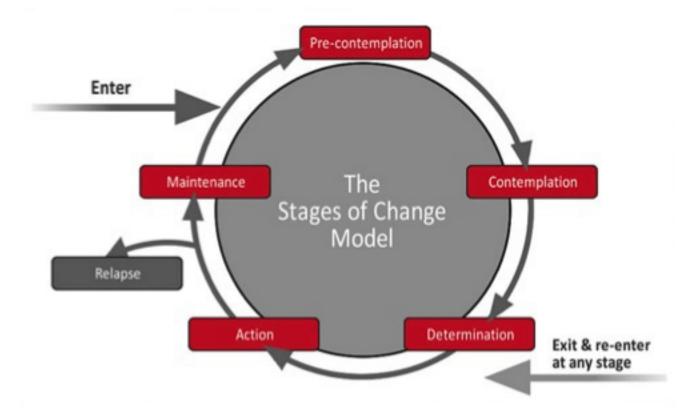
- Document systems requirements
- Develop IT systems
- Test functionality
- Refine prototype

Text message intervention

Step 1: concept



- Intervention Development Team: Experts in mobile phone health technology, drug and alcohol clinical services, health psychology, and Māori, Pacific, and Asian Health.
- Prototype based on Brief Intervention framework & Stages of Change model.



Step 2: pre-testing



- Pre-testing of content for text messages
 - In-depth interviews with 14 trauma inpatients.
 - In-depth interviews with 6 key informants from the Auckland City Trauma Service, ALAC, ACC, Alcohol HealthWatch, National Hauora Coalition, and Auckland Council.
 - Consultation and focus groups with Māori and Pacific drug and alcohol counsellors, Pacific staff at the University of Auckland, and Māori researchers.
- Iterative process for developing and refining text message content.

Step 2: pre-testing



Findings and issues:

- Complexity of text message content and pathway options.
- 2) Relevance of messages for Māori and Pacific audiences.
- Interactivity.
- Tone of message content.
- Name of text message programme.



Step 2: examples



- Intervention regimen:16 text messages in total over one month.
- Intervention pathway structure:
 - Week 1: Welcome, feedback, linking to existing services, encourage contemplation.





Step 2: examples



- Weeks 2 & 3:
 - Recommendation to cut down clear yet empathetic.
 - Information and tips/strategies.

YourCall: Kia ora. We recommend u cut down or quit alcohol. Making a positive change can be hard, try small steps. Kia kaha!

YourCall: Ideas 4 cutting down: plan no-alcohol days, have water between drinks, try low alcohol drinks like light beer.
Check out easeuponthedrink.org.nz

Step 2: examples



Week 4: Encouragement, key messages re-iterated.

YourCall: Kia ora.
Remember that u can get confidential help from Alcohol Helpline 0800 787
798 or your doctor

ToWaea: Kia ora. Kaua e wareware ka taea te awhina matatapu mai i Alcohol Helpline 0800 787 798, mai i to takuta ranei

YourCall: Kia ora. Make a positive change - cut down or quit drinking alcohol. Thanks 4 taking part in the study. We'll be in touch in 2 months. Kia kaha

Step 3: technology development

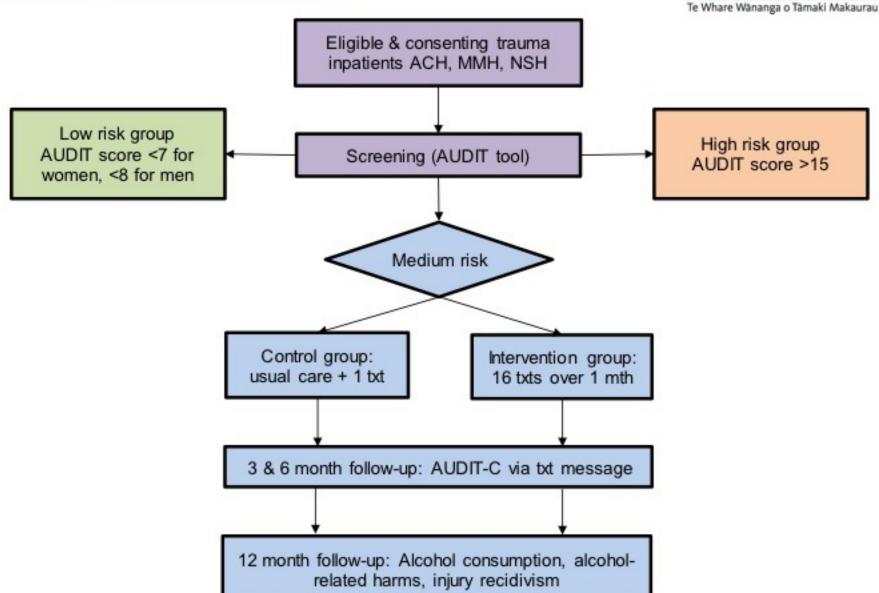


- Three main components:
 - An Oracle database holding the programme content and participant details.
 - A Content Delivery System which manages scheduling, delivery and processing of text messages.
 - An intermediary gateway for delivery of text messages between sender and receiver.
- Final phase was testing of functionality of IT and text message systems.



Part 2: RCT





Discussion



Strengths	Limitations
Underpinned by theory & evidence including findings from feasibility study	Intervention is unidirectional & automated, lacks 'interactivity'
Communication via mobile phone ➤ Convenient & integrated into people's lives ➤ Broad reach ➤ Potential to reduce inequities	Limited personalisation of text message content
Stakeholder involvement	Time & cost to develop/test ➤ Technology advances ➤ Change over time in way people use their mobile phones

Summary



- We have developed a text message intervention underpinned by established BI evidence and behaviour change theory.
- An integral part of the development process has been refinement of text message content based on feedback and consultation.
- Currently conducting an RCT to evaluate the effectiveness of the intervention in reducing hazardous alcohol use and injuries.

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