Development of Interventions to reduce patient delay with symptoms of Acute Coronary Syndrome: identifying optimal content and mode of delivery (CZH/4/1025)

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Aims

To develop and test an intervention designed to enable people to dial 999 within 15 minutes should they experience heart symptoms

Project Outline/Methodology

- A Systematic Review of previous studies aimed at reducing delay aimed at reducing delay for acute conditions was undertaken to examine the most effective behaviour change techniques.

- A Delphi study involving several rounds of questions and answers with behaviour change experts to obtain consensus on which techniques might be most effective in reducing delay.

- In collaboration with animators, a script writer, patients, doctors and nurses we created two interventions which included the identified techniques: an animation 'Text + Visual' version and a 'Text-only' version.

- The interventions were tested in an online experiment amongst n=145 people who recently (within 6 months) experienced a heart problem. Participants were asked to indicate how they would intend to respond to various symptom scenarios. They were then randomly allocated to a Text+Visual, Text-only or Usual care (a hospital leaflet) condition before responding again to symptoms scenarios.

Key Results

- The Systematic Review identified 39 interventions and found that around half (n=20) successfully reduced delay. No clear overall pattern between techiques and effectiveness was found.

- Delphi study: 12 specific techniques were judged by experts as necessary to include in an effective intervention to reduce patient delay withheart symptoms (see full report for list)

  Online experiment:

◊ People's intention to dial 999 was significantly increased after the Text + Visual intervention but not after Text-Only or Usual Care. Increased intentions were associated with positive attitudes about phoning an ambulance in these circumstances.

◊ However, when the sizes of the effect produced by the three interventions on intention to dial 999 for heart symptoms were compared, the differences did not reach statistical significance. Due to recruitment difficulties and non-completion of some measures, we did not have sufficient data to show significant differences.

◊ The intervention did NOT have unintended consequnces by affecting intentions for non-urgent symptoms.

◊ Engagement (measured by completion of intervention activities and time spent) was very high with both the Text & Visual and the Text-Only interventions

Conclusions

A Text + Visual intervention based on behavour change techniques is engaging for people with heart problems and can significantly increase intentions to dial 999 for heart symptoms without unwanted effects on responses to non-urgent symptoms.

What does this study add to the field?

Methods: explicitly and sytematically embedding behaviour change techniques is novel in this field
Theory: improved understanding of techniques and mode of delivery combinations to increase intentions to dial 999 for acute conditions such as ACS
Findings: a Text + Visual intervention based on behaviour change techniques is engaging and may be effective at reducing delay

Where to next?

Further testing of the effect of the Text + Visual intervention on actual behaviour is required (will seek NIHR funding)

Implications for Practice or Policy

If effective the Text+Visual intervention could be introduced into cardiac rehabilitation at low cost.

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