



# FOCUS ON RESEARCH

**TITLE: Assessing patients' cardiac related beliefs, motivation and mood over time to predict non-attendance at cardiac rehabilitation (CR).**

## Researchers:

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## Aim

To explore the role of patients' cardiac related beliefs, motivation and mood over time on attendance/non-attendance at CR by measuring weekly/monthly changes in these variables.

## Project Outline/Methodology

This mixed methods study combined data from (1) standardised questionnaires (pre-discharge to six month follow-up); (2) electronic diary data captured weekly or 4 weekly from discharge to the end of Phase 3 of CR. 170 patients provided data; (3) qualitative interviews, completed with 7 non-attenders, 8 non-completers and 10 completers to explore reasons for patterns of attendance.

## Key Results

Attendance at CR was predicted by high levels of Intention (to attend CR) at week 1 following discharge and an increase in Intention thereafter. Participants from areas of deprivation, current smokers and patients diagnosed with a heart attack with non-specific electrical changes on electrocardiogram (Non-ST elevation myocardial infarction: NSTEMI) were least likely to attend. Other predictors of attendance at week 1 following discharge included low negative emotional views of the illness, belief that CR was necessary, few Concerns about exercise, few Practical barriers to attendance and generally better mood.

Positive changes in Intention over the pre-CR period were predicted by the belief that CR was necessary, achievable (few Practical barriers) and better mood.

Improved levels of self-reported exercise were most apparent in those who completed CR compared to non-attenders, whose exercise levels were low on discharge from hospital and remained so.

Questionnaire reports **prior to discharge** did not predict attendance/non-attendance, with one exception. Patients who were concerned that the

exercise component of CR may be harmful to them were less likely to attend.

Non-attenders, non-completers & completers cited different Personal (e.g. fitness), Programme and Practical factor influences of attendance.

## Conclusions

**WHAT:** Improving patient intention to attend is key and best undertaken by increasing patient understanding of the need for CR and its effectiveness (i.e. Perceived Necessity), exploring and responding to any Practical barriers and engaging in strategies to reduce low mood. **WHEN:** Early tailored intervention from the first week of discharge. Intervention beyond this is also sensible given the fixed nature of these views. **WHO:** Patients from areas of social deprivation, current smokers and patients with NSTEMI are most likely to either not attend or not complete CR and are likely to benefit from intervention.

## What does this study add to the field?

**Methods:** This advances methods in this field by repeatedly collecting data nearer to the start of CR.

**Theory:** This advances theory by understanding change within-patients after they are discharged.

**Findings:** Tailored intervention is best undertaken early following discharge.

## Implications for Practice or Policy

The purpose and format of CR are not widely understood by people diagnosed with Acute Coronary Syndrome. Tailored intervention is required to increase intention to attend; attendance and completion; to better design CR to meet the needs of patients from areas of social deprivation, for current smokers, those with NSTEMI, and fitter patients.

## Where to next?

- Intervention development using MRC Framework for Complex Intervention development.
- To further explore the experience of non-attenders, particularly current smokers; from areas of deprivation; diagnosed with a NSTEMI.
- CSO PhD studentship to develop an intervention.

## Further details from:

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