



# Has coronary patients changed their health-habits a year after an in-house cardiac rehabilitation program?

## A quality management report

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### Background:

Coronary patients in Phase 2b and 3 may have a positive effect from comprehensive rehabilitation, where the importance of healthy lifestyle-choices is conveyed. Physical activity and a healthy diet are two important components that typically are emphasized during such programs. Several private rehabilitation centers offer comprehensive cardiac rehabilitation. We want to look into whether a four-week comprehensive in-house rehabilitation program can affect the exercise rate one year after discharge and whether there may be a correlation between exercise frequency and dietary habits.

### Method:

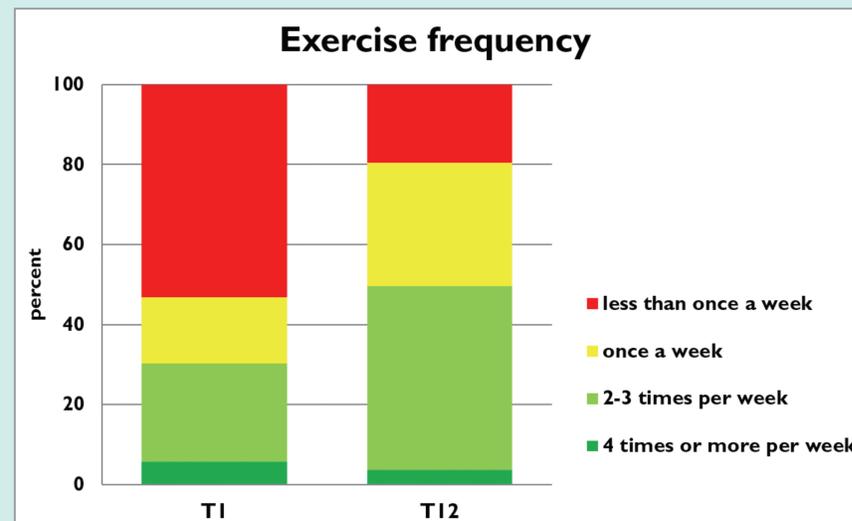
Participants: Patients with severe coronary disease in Phase 2b and 3 (from the age of 18 years). Mean age 63.3 years (SD: 10.0), 46 percent women. N = 97

Program: Four-week in-house rehabilitation program with interdisciplinary intervention;

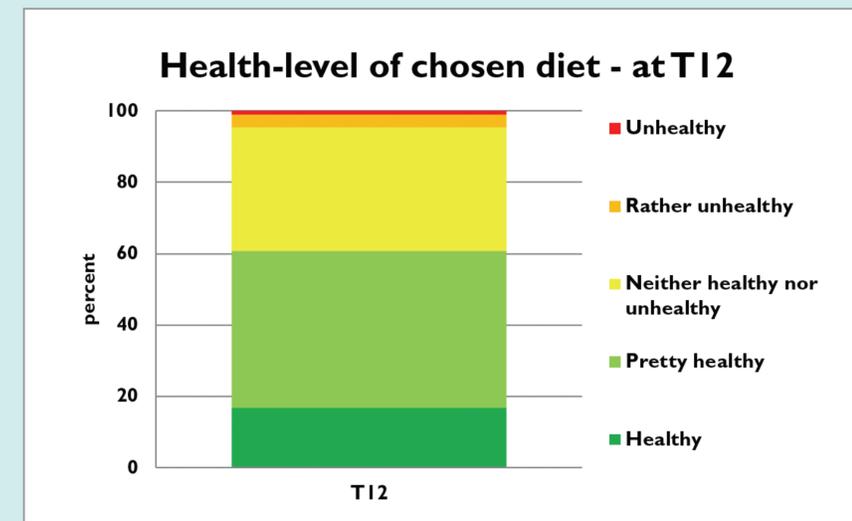
On average:

- Individual physiotherapy x10
- Group activities / conversation groups x35
- Education in health, physical activity and diet x7

Outcomes/instruments: Questionnaires on arrival (T1) and follow-up 12 months after discharge (T12);



Self-reported exercise frequency (T1, T12) – Likert Scale  
How often have you normally in the last months exercised enough to be short of breath or sweaty?  
1. Less than once a week  
2. Once a week  
3. 2-3 times per week  
4. 4 times or more per week



Self-reported diet (T12) – Likert Scale  
What kind of diet do you have?  
1. Unhealthy – Among others, no fruit and vegetables, lots of fat dairy and meat products  
2. Pretty unhealthy - Including little fruit and vegetables, lots of fat dairy and meat products  
3. Neither healthy nor unhealthy - Including some fruits and vegetables, some fat dairy and meat products  
4. Fairly healthy - Varied and among others, fruits and vegetables several times a day, little fat dairy and meat products  
5. Healthy - Varied and among others, fruits and vegetables for each meal, minimum of fat dairy and meat products

### Results/findings:

Change of median - (Wilcoxon Signed Rank Test)  
T1-T12: It is a significant ( $p < 0.05$ ) change of median values from arrival to one year after return. 46.7 percent have increased their weekly exercise frequency.

Correlation - (Pearson Bivariate Correlation)  
It is a significant ( $p < 0.05$ ) positive correlation - of small correlation size (0.23) - between the rate of weekly exercise and the health-level of the diet, one year after returning home (T12).

### Conclusion and implication:

Coronary patients who have participated in a four-week in-house comprehensive cardiac rehabilitation program seem to have a higher rate of weekly exercise frequency one year after discharge. There may be a positive correlation between the rate of weekly exercise-frequency and the health-level of chosen diet one year after returning home, indicating a direct correlation between level of physical activity and dietary habits - The more physically active, the healthier lifestyle one year after discharge. Information, insight and understanding may help promote independent and conscious choices for personal health. We as health-professionals should therefore consider also focusing on communicating the importance of a healthy diet for this patient group.

Research on the influences from rehabilitation-programs on lifestyle-choices after discharge is required.



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