

00450 Effectiveness of an Advanced Practice Nurse-led Telehealth on Readmissions and Health-related Outcomes Among Patients Post Acute Myocardial Infarction: A Randomised Controlled Trial With Process Evaluation

Karen Koh

National University Hospital

Aims: This pilot study aimed to develop and examine the feasibility and effectiveness of an Advanced Practice Nurse-Led Telehealth rehabilitative programme as a transitional nursing therapeutic on ReAdmissions and health-related outcomes among patients with AMI after discharge (ALTRA).

Methodology: A randomised controlled trial with repeated measures was undertaken. The intervention group (n= 41) received 6 months of APN-led telehealth while the control group (n= 39) received only usual care. A process evaluation assessing its acceptability, strength and weakness was conducted using a questionnaire and an exploratory qualitative semi-structured interview adopted a concurrent thematic analysis approach.

Result: The focus of the presentation will be on the outcomes from the RCT. The primary outcome showed lower incidences of readmissions in ALTRA compared to control group at both 30 days (4.9% versus 7.7%; p=0.671) and 180 days (7.3% versus 20.5%; p= 0.111). The accumulated readmission length of stay days was shorter in ALTRA than control group at both 30 days (4 days versus 16 days; U= 775; p= 0.574) and 180 days (6 days versus 54 days; U= 689; p= 0.076). The estimate mean for time taken to readmission was longer for the intervention group at both 30 days (29.1 days versus 28 days; log rank $\chi^2= 0.299$; p= 0.585) and 180 days (169.6 days versus 157.7 days; log rank $\chi^2= 2.805$; p= 0.094). The secondary outcomes analyzed included emergency department visits, cardiovascular risk factors, cardiac self-efficacy, quality of life, anxiety and depression.

Conclusion: The results were favourable towards ALTRA for readmissions, length of stay days and time to readmissions. The process evaluation showed that ALTRA was acceptable as a novel option in the delivery of modern healthcare to minimize preventable readmissions to save hospital beds days and improve patient's health related outcomes.