Self-management (SM) of a left ventricular assist device (LVAD) is a complex process and arduous to many patients. Thus, support from a family caregiver and a nurse is required to achieve the ultimate treatment goal for implanting an LVAD — to increase quantity and quality of life.\(^1\) A mobile phone application (VAD Care App version 1.0\(^{[6]}\)) was invented to simplify the LVAD SM process and empower patient's engagement in SM.\(^2\) The purposes of this presentation are the following: (1) illustrate the main components of the app; (2) describe the app-directed and nurse-supported LVAD SM intervention; and (3) present the results of the feasibility study as well as preliminary results of an ongoing pilot clinical trial. Future studies, app designs (versions 2.0 and 3.0), and implications for advancing the LVAD SM science will be discussed.\(^3\) Conference participants are encouraged to engage in a dialogue about the applicability of the app to other implantable devices (e.g. cardiac resynchronisation therapy) and complex conditions (e.g. pulmonary hypertension) within the context of healthcare delivery and culture in Asia.

REFERENCES


Prior to establishment of the heart failure (HF) nurse clinic at Queen Elizabeth Hospital (QEH), Hong Kong in 2003, high rates of hospital readmission were seen in HF patients. Despite shortage of manpower and resources in the Hong Kong public healthcare sector, the clinic has over the years improved patient outcomes including functional capacity and rates of hospital readmission.

Initially, cardiac nurses contributed to promoting patients’ health seeking behaviour through education. By 2012, the clinic provided protocol-guided titration of medications to achieve optimal dosing of medications. The HF clinic nurses would individually titrate and maximise medical therapy according to the pre-set protocol endorsed by cardiologists.\(^{[1]}\) HF patients were closely followed, particularly for those referred from Outpatient Clinics or recently discharged from hospital requiring medication adjustment and education.

On average, HF patients were followed up every 2–4 weeks, and sometimes even weekly for close monitoring. In contrast, follow-up at Outpatient Clinics occurred at 3- to 4 month intervals. Apart from education and medication titration, cardiac nurses of the HF clinic also helped to identify and refer difficult-to-manage patients for advanced treatment such as device therapy.

Nurses at the HF clinic have a high degree of autonomy, not only in titrating medication according to protocol but also in customising care plan for patients. The QEH HF nurse clinic has been successful in reducing HF patients’ length of...
hospital stay and readmission rates (figures 1 and 2), as well as in improving patients’ left ventricular ejection fraction, 6 min walk distance, quality of life, and compliance to diet and medications.

REFERENCES


Abstract 7 Figure 1 Hospital readmission rates for patients attending the Queen Elizabeth Hospital HF nurse clinic in 2016 and outcome measurement in 2017

Abstract 7 Figure 2 Length of hospital stay (LOS) for patients attending the Queen Elizabeth Hospital HF nurse clinic in 2016 and outcome measurement in 2017

Frailty is a condition that is characterised by reduced physiological reserve. Multiple instruments have been developed to measure frailty mainly in community-dwelling elderly people. We have adapted one of these instruments, the Fried frailty phenotype, to assess frailty in patients with...