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Producing an effective care plan in advanced heart failure

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An effective discharge plan is associated with better outcomes in advanced heart failure (HF) patients. Furthermore, a patient-centred care planning can improve patients' satisfaction, quality of life, and enhance self-care. Telemedicine may allow optimized monitoring of advanced HF patients. Nevertheless, its implementation into clinical practice across European countries is still limited. This document reflects the key points discussed concerning effective management plans in advanced HF by a panel of experts during a Heart Failure Association meeting on physiological monitoring of the complex multimorbid HF patient.

Introduction

Care planning may be defined as a strategy designed to guide healthcare professionals involved with patient care.[1] Such plans should be individualized and aimed at improving outcomes during the course of patients' care. This is especially challenging in advanced and complex multimorbid heart failure (HF) patients.[2] For this reason, a multidisciplinary panel of leading international experts was organized by the Heart Failure Association of the European Society of Cardiology (ESC) to discuss the latest evidence, ongoing research and recommendations on physiological monitoring of the complex multimorbid HF patient. This document reflects the key points on 'Producing an effective care plan in advanced HF' as part of this meeting.

Goals of the discharge plan in advanced heart failure

Planning for discharge is an important component of the HF patient's hospital stay, particularly in multimorbid patients or those in the advanced stages of their disease. Studies have shown that effective discharge planning, performed by a multidisciplinary team, can reduce rehospitalization rates and improve mortality[3–5] through better communication and patient care across disciplines, clinical specialties, and geographical boundaries.[6,7] Indeed, an earlier discharge can be facilitated when there is a collaborative approach involving the patient, secondary care HF professionals, and social and primary care teams.[8]

The ultimate goal is being to provide a 'seamless' system of care ensuring optimal patient management, no matter where the patient begins or continues their healthcare journey, resulting in better outcomes.[9]

Thus, the development of an effective plan of care for patients with advanced HF should be the responsibility of the multidisciplinary HF team, ideally commenced on diagnosis, be that within the hospital or community setting. Written or electronic recommendations should be tailored to the needs of the patient and family members,[10] the organization and resources available. For example, there is an increasing trend towards the remote monitoring of patients or telemedicine.[11,12]

Telemedicine and palliative care in patients with advanced heart failure

The electronic transmission of physiological or haemodynamic data from the patient to the healthcare professional has been shown to improve compliance as well as enable early recognition of clinical deterioration with a positive impact on mortality and hospitalization.[13] Nevertheless, implementation into European clinical practice remains

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limited due to diverse clinical outcomes seen in a number of different studies.[14]

The management plan should be evaluated in a timely manner and include components relating to the optimization of evidence-based medications, current clinical observations and biochemical markers, lifestyle advice including exercise,[15] planned interventions,[16–19] and information/education provided.[20] According to European and American guidelines, the HF patient should be reviewed by the HF MDT face -to-face within 2 weeks of hospital discharge[21] or by telephone contact within 3 days of hospital discharge.[22] The who, when, and where should therefore ideally be defined prior to hospital discharge. For patients in the advanced stages of disease, the management plan should include details of palliative discussions, for example concerning the problems of frailty,[23] and issues associated with ICD deactivation,[24,25] do-not-resuscitate and preferred place of care.[26] For many patients with advanced HF, due to poor mobility, financial implications or transport, long-term follow-up becomes increasingly reliant on the primary care physician and community teams. Good communication links between primary and secondary care are paramount for advice and support from the specialist HF team. Many nurses work across boundaries, with a recent systematic review and meta-analysis indicating their invaluable contribution enabling the HF patient to be cared for longer at home.[27] This is of particular relevance when the foci of management changes to a more palliative approach, whereby the priority may switch to the need to maximize the quality of life.[28]

Two exemplar studies include the 'Optimize heart failure program', an initiative implemented in 45 countries, with the purpose to improve outcomes post-discharge. Using pre- and post-discharge checklists, as well as a printed smartphone application ('My HF Passport'), positive preliminary results in terms of optimization of pharmacological therapy have been achieved.[29] Similarly, the quality improvement programme created by the American Heart Association and the American Stroke Association, named 'Get with the guidelines', has yielded results in a 30-day reduction in HF readmissions.[30]

Finally, effective discharge planning can be beneficial to the healthcare professional, through improved confidence in the management of patients with advanced HF, particularly for those professionals working in general practice.[31] Furthermore, a clear management plan facilitates the extended scope of nursing practice, for example in terms of medication adjustments, in accordance to defined protocols and the current literature.[32–35]

Conclusions

Effective care planning leads to improved outcomes in advanced HF patients and has the potential to positively impact clinical practice. It is an ongoing process from diagnosis to demise, and requires dedication and involvement from the HF multidisciplinary team, in a variety of healthcare settings. An effective care plan in advanced HF should include self-monitoring, lifestyle modification, diet, medication self-administration, follow-up treatment and palliative care, and should utilize every patient contact opportunity to improve care. Future studies should aim at specifically investigating the effectiveness of telemedicine systems and smartphone applications in advanced HF patients.[36]

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