The role of the specialist nurse

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Heart failure is growing in incidence as a result of the aging of the population and of improved survival from myocardial infarction. However, quality of life is poor among patients with heart failure, and has shown to be worse than in most chronic conditions.[1] These patients often have a poor prognosis—around 50% of those with severe heart failure will die within the first year.[2]

Since this is a condition associated with high admission rates, high readmission rates, and lengthy hospital stays, heart failure is associated with a high financial burden; the annual direct cost of heart failure to the National Health Service (NHS) in 1990-91 represented over 1% of the total NHS budget.[3]

Against this background, there is increasing evidence to show the important role that specialist heart failure nurses can play in the management of patients with heart failure.

WHY DO WE NEED SPECIALIST NURSES?

Patients with heart failure are often frail and vulnerable. The condition can have devastating effects on patients' quality of life, especially in a patient group that often has inadequate access to help and advice. This is mainly due to overstretched services in primary and secondary care.

Patients are often on suboptimal treatments and are not receiving the best management, thus creating a huge potential for care to be improved.

Often there is a lack of patient education and support. This can have a knock-on effect in terms of non-adherence both with pharmacological and non-pharmacological treatments.

In addition, it has been shown that around 54% of readmissions to hospital for heart failure are preventable.[4]

Since heart failure management can be complex, there is a need for a health care professional to coordinate what can be a complicated map of care. Nurses may well be able to take on this role.

Nurse led approaches to heart failure management have been shown to be cost effective. Nurses can promote collaborative working not only between primary and secondary care but also incorporating a multidisciplinary team approach in both areas. In this way, nurses can assist in meeting the milestones set in the National Service Framework for coronary heart disease (NSF for CHD), in both primary and secondary care.[5]

EVIDENCE FOR NURSE LED CARE

There is a growing body of evidence to support heart failure nurse intervention. In a prospective randomised trial, elderly patients with congestive heart failure received a nurse led multidisciplinary intervention. This comprised a comprehensive education of the patient and family, a prescribed diet, social service consultation and planning for an early discharge, a review of medications, and intensive follow up.[6] This intervention reduced hospital readmissions within 90 days of discharge by around 56% compared with those in the control group who received conventional care. In addition, the intervention reduced length of stay and medical costs, and importantly led to an improvement in patients' quality of life scores at 90 days.

In a further study, patients with chronic congestive heart failure were randomly assigned to usual care, consisting of multidisciplinary care before discharge, or to a multidisciplinary home visit intervention consisting of a home visit by a specialist nurse 7–14 days after discharge.[7]

This study showed that more patients in the usual care group than the intervention group had an event within six months (51 *v* 38, p = 0.04), and the intervention reduced the total number of events (129 *v* 77, p = 0.02).

At 18 months, this single home based intervention among a cohort of high risk patients had led to a significant reduction in unplanned readmissions, total hospital stay, hospital based costs, and mortality.[8]

The effects of a nurse delivered management programme on hospitalisation and health care costs one year after admission for heart failure were studied in a prospective randomised trial.[9] This was not a multidisciplinary study: the intervention group received two 30 minute educational sessions before discharge, and a one hour session post-discharge from a heart failure specialist nurse. They were then followed up in an outpatient clinic at one and four months by a cardiologist and at eight months by a specialist nurse. The control group was managed according to routine clinical practice.

This study showed that the number of hospital readmissions was reduced, and the time to readmission were increased, by the intervention. The duration of admissions were also reduced. In addition, there was a trend towards a reduction in the mean annual healthcare costs per patient in the intervention group compared with controls. No significant effect was shown on mortality or quality of life.

A recently published randomised controlled trial confirms that trained nurses can improve outcomes for patients with chronic heart failure.[10] Patients were seen within 48 hours of being discharged and received regular home based visits and telephone follow up. The study showed significantly reduced hospital readmissions, length of stay, and financial costs compared with usual care.

WHAT ARE THE NEEDS OF A HEART FAILURE PATIENT?

Patients with heart failure have a variety of needs, and there are many potential issues which may arise during their management. Heart failure nurses are in an ideal position to ensure that these are addressed.

Pharmacological needs

Many heart failure patients are taking multiple drug treatments, often with complex drug regimens. Patients often have little or no understanding of their medications, and are also at risk of developing side effects and possible drug interactions. These all hamper patient compliance with treatments.

In addition, it is important that biochemical observation is ongoing, particularly with regard to usage of diuretics, spironolactone, and angiotensin converting enzyme (ACE) inhibitors. Furthermore, influenza and pneumococcal immunisations require to be considered.

Non-pharmacological needs

Patients need to be aware of their condition and the implications that this condition may have on their lives. In addition, they need to be aware of their symptoms and when these are deteriorating, which implies a need for education and support, so that they can undertake self monitoring and self management. It is also important that patients know when and how to contact healthcare professionals.

There are numerous lifestyle changes that may require to be made. These may involve patients making changes in their diet/fluid intake, the need to self monitor their weight, to balance exercise and rest, adopt smoking cessation, and moderate alcohol intake. Clearly advice on these lifestyle adjustments will need to take account of the needs of each individual patient.

In addition, a range of other issues may need to be considered. Although most heart failure patients are elderly, some may be younger and may still be working; they may have to change their occupations or may be unable to work at all. This scenario can create financial and psychosocial implications that will require to be addressed.

Heart failure places a great deal of stress on all forms of relationships, often creating psychological issues. Therefore, support and counselling are very important when a patient is diagnosed with heart failure and may in some cases be required as part of long term care.

Ongoing care is important in ensuring that management is optimised. There may be a need to decide who is going to provide ongoing care, whether it is primary care or secondary care, or ideally shared by both. In addition, in more advanced patients it may be necessary to consider issues relating to palliative care.

ROLE OF THE HEART FAILURE NURSE

The majority of these needs can be met and coordinated by a heart failure nurse, but it needs to be recognised that in some cases further intervention from other specialists as well as other disciplines is required. This further highlights the need for a multidisciplinary approach.

All of the above needs should be considered when assessing a patient in order to ensure that patients benefit from a total care approach.

Ideally, the heart failure nurse should be available to coordinate tailored care for each patient, thus promoting a multidisciplinary approach. The nurse should also assist in ensuring that care is evidence based, and that drug regimens are optimised—this can be done through locally agreed protocols.

The nurse should take the lead in assisting the patient with self management, providing education to patients, their families and carers. It is essential that nurses are accessible to patients, their families and carers, which is often a limitation in most services where the nurse is only available during office hours on Monday to Friday.

Nurses can also play a large part in ongoing follow up care. They can provide support and counselling to patients, acting as the patient's advocate. They should promote communication between primary and secondary care and also within the multidisciplinary team. By assisting in professional education and development they should be considered as a resource to other professionals. With the advent of the NSF for CHD nurses in both primary and secondary care can assist with audit and disease registers, thus assisting in compliance with local, national, and international guidelines.

BENEFITS OF THE HEART FAILURE NURSE SERVICE

Clearly, the heart failure nurse brings a range of benefits, both to patients and to the health service.

For the health service, heart failure nurses can offer improved care and management, by providing a rapid response to patient problems. By providing follow up care they may lead to a reduction in medical time. Heart failure nurses also have the potential to reduce hospital admissions and length of stay, as well as the financial burden and bed pressures associated with heart failure. As discussed earlier, this has been demonstrated in various studies. As a specialist resource they are able to provide consistency of care. In addition, they can be an important resource in providing professional education and meeting clinical governance requirements.

For patients, heart failure nurses provide improved care and optimal management that can be flexible and tailored to the needs of individual patients. This allows patients to have a better understanding of their condition and treatment, and promotes patient empowerment. They offer patients easy access to a professional who knows them and who is able to provide consistent care. Through the care they offer, patients can benefit from reduced admissions and length of hospital stay. Patients can also receive regular follow up and monitoring, whether it be clinic based, home based or by telephone contact.

The heart failure nurse will lead to improved functional status and quality of life for patients.

CONSIDERATIONS IN DEVELOPING A ROLE

In developing a heart failure nurse service, it is essential first to assess the population needs and to be aware of what resources are available, including other services, which may prove adaptable for heart failure patients. This information will provide a base for deciding which model of service should be implemented.

Clearly, standards need to be set; these should be grounded in evidence based practice and should reflect any relevant local, national or international guidelines.

The roles and responsibilities of the nurse and team, and the qualifications and experience required of the nurses will be formed on the above. It is also important to ensure that appropriate tools are in place for ongoing monitoring of the service.

CONCLUSION

There is substantial evidence that shows much can and needs to be done for heart failure patients. Evidence continues to support the role of the heart failure nurse in improving management and providing cost effective care. This is also reflected in the NSF for CHD, which advocates specialist nurse intervention. It is also clear that there are substantial benefits to patients, their families and carers, as well as to the NHS.

Specialist heart failure nurses, therefore, can play a crucial role in the provision of evidence based care, which can assist in the reduction of mortality, reduction in hospital costs, and most importantly in the improvement of the quality of life of patients with heart failure.

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QUESTION AND ANSWER SESSION

Question: What are your feelings about the level of qualifications needed by a heart failure specialist nurse?

Ms Jolly: The specialist heart failure nurse needs a combination of academic achievement and experience. Generally, this tends to be a minimum of two years cardiology experience and a minimum of five years post-registration experience. Often NHS trusts are also asking for degree level education. There is clearly a role for qualification at the Masters level, particularly with the advent of nurse consultants for heart failure; they will almost certainly have to be at Masters level.

Question: Are there any data looking at compliance with drug treatment using a heart failure specialist nurse?

Ms Jolly: Simon Stewart in Australia has looked at this and shown improved concordance and compliance with heart failure specialist nurses.

Question: How do doctors, especially junior doctors, respond to empowered nurses?

Ms Jolly: Overall I have had very few problems.

Question: What is a reasonable caseload for a specialist heart failure nurse?

Ms Jolly: It depends whether you are talking about a home based, primary care or a secondary care based service. In the home based study in Glasgow the caseload was about 200 patients per nurse. As a secondary care clinic based nurse in Aberdeen, I had about 100 patients in my first year, although this rose to around 280. However, this was dealing with patients for education and drug management. I was attached to the cardiology clinics and started seeing patients with heart failure who were not specifically attending the clinic for heart failure. I also had two β blocker clinics each week, in which I saw about 20 patients per week. I also had a six weekly, one stop heart failure clinic with a cardiologist, as well as a heart failure follow up clinic. In addition, several registrars asked me to see patients rather than them being followed up at the cardiology clinic.

Question: Do your patients know they have heart failure when they arrive? If they don't, do you tell them, and if so, what do your GP colleagues think about this? Indeed, should heart failure nurses be called heart failure nurses?

Ms Jolly: Most patients I come in contact with don't know they have heart failure as such, although they do by the time they leave me. I don't just tell them and leave it at that—I provide them with education and information so they are not terrified by it. I don't like the term "heart failure nurse" which I have inherited.

Professor Alan Struthers: If you want to educate a patient about a certain disease, it doesn't help if the name changes too often. If you want heart failure to have a higher profile among the public, then people have to understand what it is. There won't be any political will to do anything about it if we keep changing the name.

Dr Hugh McIntyre: I think the term "heart function clinic" describes the function of the clinic, but I agree that we have to leave the term "heart failure" as it is so we are all talking about the same disease.

Professor John McMurray: The biggest disservice done to heart failure has been avoiding using the term "heart failure". People used to be like this about cancer and would hide it from patients and their relatives.