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SHORT COMMUNICATION

The tracheostomy clinical nurse specialist: an essential member of the multidisciplinary team

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Abstract

Background: Tracheostomies are a common procedure within the specialties of otolaryngology and intensive care. The ENT department at Monklands Hospital has developed the position of tracheostomy clinical nurse specialist to improve the management of tracheostomy patients. There is evidence to support the development of a multidisciplinary team for the management of tracheostomy patients following intensive care unit treatment; however, the creation of a specific tracheostomy clinical nurse specialist position has not been widely endorsed in the literature.

Objective: This paper describes the role of the tracheostomy clinical nurse specialist, advocating this position within the multidisciplinary team.

Key words: Tracheostomy; Interdisciplinary Communication; Nurse Clinicians

Introduction

Tracheostomies are performed frequently within the specialty of ENT (and are increasingly being carried out in intensive care departments) for the management of a variety of airway and ventilatory problems. The procedure is associated with several complications, such as bleeding, tube displacement, blockage or decannulation.[1] These can occur at any stage while the tracheostomy tube is in place, not just in the peri-operative period. This issue has been discussed in the literature, more so in recent years with the development of the National Tracheostomy Safety Project standardised guidelines.[1]

Patients who undergo a tracheostomy are managed by a team of individuals from a variety of specialties, in primary, secondary and critical care settings. Unsurprisingly, the range of experience needed to manage tracheostomy and laryngectomy patients across these specialties is varied. This point has been addressed previously, with some trusts developing critical care outreach units to assist in decannulation and to promote continuity of care following treatment in the intensive care unit.[2]

We believe that the recent increased focus on the care of tracheostomy patients has been partly due to reports of fatal accidents or near misses. One such event that occurred within the National Health Service (NHS) Lanarkshire sparked further investigation into the way tracheostomy patients were managed. An outcome of this investigation was the development of a specialised tracheostomy clinical nurse role. To our knowledge, this position is the first of its kind within Scotland.

This paper describes the role of the tracheostomy clinical nurse specialist, advocating this position within the multidisciplinary team (MDT) for the management of tracheostomy patients.

Case report

Background

In 2004, the events leading up to the unfortunate death of a tracheostomy patient on a non-ENT (non-intensive care unit) ward were explored during a local fatal accident enquiry. It was concluded that the death was the result of multiple failures. Many of these were related to the management of the tracheostomy patient on non-specialist wards and the communication of tracheostomy-related information between healthcare professionals. Insufficient training of healthcare professionals also appeared to be a major factor. These are a few of the problem areas identified and examined in a recent National Tracheostomy Safety Project publication.[1] An off-shoot of this enquiry was the development of a specialist clinical nurse position within NHS Lanarkshire.

A single clinical nurse specialist was recruited to cover the NHS Lanarkshire region, which spans an area of 4732 km^2 and a population of 563 185.[3] Three district general hospitals comprise NHS Lanarkshire; however, since 1997 all in-patient ENT care has been conducted at Monklands Hospital.

Our tracheostomy clinical nurse specialist had worked on the ENT ward in Monklands since 1994. She subsequently progressed to form part of the Hospital Emergency Care Team for ENT emergency admissions in 2005. This involved the initial assessment of adult patients presenting to the hospital via general practitioner referral, or those from the accident and emergency department. She successfully obtained the new position of tracheostomy clinical nurse specialist in 2009.

Roles and responsibilities

The tracheostomy clinical nurse specialist position involves co-ordinating the care of tracheostomy or laryngectomy

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patients across NHS Lanarkshire. The roles and responsibilities of this multifactorial position are described below.

The position entails regular liaison with the staff and patients across the different sites, and reviews of tracheostomy in-patients. It requires attendance at a variety of outpatient clinics for tracheostomy patients, and includes the running of tracheoesophageal fistula speaking valve and tube change clinics. The position involves a role in discharge planning; this requires frequent liaison with community nurses to prevent delayed discharges and avoid unnecessary hospital readmissions. It entails training nurses and doctors on safe tracheostomy management. It involves giving expert advice on current tracheostomy products, and making decisions relating to appropriate tracheostomy tubes for specific patients. It involves writing, developing and implementing Integrated Care Pathways across all relevant wards within NHS Lanarkshire, facilitated with assistance from the tracheostomy steering groups. The position entails assessments of patient weaning and decannulation. It requires organising equipment for patients following their treatment in the intensive care unit. It also involves providing psychological care and ongoing support to patients (and their families), some of whom may require a tracheostomy for the rest of their lives. The tracheostomy clinical nurse specialist must remain contactable for emergencies or advice via a mobile phone.

Our clinical nurse specialist works a flexible timetable that depends on multiple factors. A typical working week would involve attendance at and the running of the head and neck cancer clinic, and the tracheoesophageal fistula speaking valve or tube change clinics, reviewing an average of 10–15 patients per week. At the weekly MDT meeting, where approximately five tracheostomy patients are discussed, the clinical nurse specialist is a key figure in the management planning for each patient. Although the need for ward reviews varies considerably, around 25 patients will typically be reviewed by our clinical nurse specialist over the three hospital sites during an average week. Our clinical nurse specialist has committed to attending the Speak Easy support group for head and neck cancer patients one morning every month. In addition, she regularly visits (at least once a week) local hospices, brain injury units and nursing homes to assess tracheostomy patients. The flexibility of the timetable means that home visits can be organised as required, but during the average week this would include around three patients and would involve the training of district nurses on tracheostomy home care. Our clinical nurse specialist also has numerous telephone consultations every day to keep up to date with patients and to advise healthcare professionals on all matters relating to tracheostomies.

Financial considerations

With ongoing pressure to reduce costs within the NHS, there are financial implications to consider when developing the role of a tracheostomy clinical nurse specialist. Our clinical nurse specialist position has been banded at level 6, which corresponds to an average salary of between £25 783 and £34 530 per annum.[4] In light of the logistics of covering the three hospital sites within NHS Lanarkshire, we also have to consider travel expenditure, which typically amounts to between £60 and £100 per month.

Discussion

Comparisons with other studies

The benefits of a dedicated team for tracheostomy patients following intensive care unit treatment have been described previously. For instance, de Mestral *et al*. presented their experience of developing an MDT for the management of tracheostomy patients from tube placement to discharge from hospital.[5] The authors conducted an audit of: complication rates, time to decannulation and the incidence of speaking valve placement. Implementation of the MDT was associated with a statistically significant reduction in complication rates (i.e. decreases in the incidence of tube blockages (25 to 5 per cent, $p = 0.016$) and calls for respiratory distress (37.5 to 16.7 per cent, $p = 0.039$), and an increase in the number of patients receiving speaking valves (19.4 to 67.4 per cent, $p < 0.001$)).[5]

The development of a specialised tracheostomy care group in Leicester General Hospital was again associated with a significant reduction in tracheostomy-related complications ($p = 0.031$).[6] Norwood *et al*. demonstrated this improvement in care after implementing a specialist tracheostomy service (consisting of a respiratory physiotherapist with an interest in tracheostomies, and an intensive care unit sister) in which patients were assessed on a daily basis after tube placement, until discharge or death.[6]

The findings of these studies confirm the benefits of MDTs developed for the management of tracheostomy patients; however, the role of the tracheostomy clinical nurse specialist has not been widely supported. In 2001, Russell and Harkin attempted to promote the clinical nurse specialist position by demonstrating the associated benefits, which included the continuity of care provided to patients.[7] Unfortunately, this was not consolidated with any form of clinical audit data.

Benefits

Despite the lack of extensive audit data, we believe that the creation of the tracheostomy clinical nurse specialist position has been a benefit to both the patients and the medical professionals within NHS Lanarkshire. Since the position was introduced, there have been no reported tracheostomy-related deaths or clinical incidents, and, anecdotally, there have been fewer calls to the duty ENT specialist relating to tracheostomy or laryngectomy patients. We feel that the continuity of care for patients provided by this position is beyond doubt. The creation of this position has enabled the development of a mutual respect and trust between the tracheostomy clinical nurse and her patients, and has allowed better handling of practical and psychological issues.

The transfer of ENT in-patient care to a single centre within NHS Lanarkshire led to problems associated with the reduction in specialised tracheostomy trained staff activity within the other sites. Our specialised nurse has the benefits of being mobile, present within the other sites at least once per week and available for specific advice during office hours over the phone. We feel that developing this single point of call has been advantageous for patients, and nursing and medical staff within NHS Lanarkshire.

Concerns and limitations

Obviously, the development of a single specialised position brings concern regarding cover during illness or leave. However, this has not been a particular problem since the role was introduced in 2009. We believe this is primarily

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because a higher number of non-ENT (and non-intensive care unit) trained nurses are more familiar with tracheostomies and the associated complications as a result of improved training since the nurse specialist was appointed. In addition, in line with National Tracheostomy Safety Project advice, our tracheostomy patients are kept together within certain wards, which improves the continuity of care and safety. When the nurse specialist is absent, the on-call team or visiting ENT specialists assist by responding to the tracheostomy problems or queries of the different sites.

An ENT trainee may be concerned that the development of a tracheostomy clinical nurse specialist position will reduce their exposure. We would argue that the creation of this post improves the opportunities to learn safe and evidence-based methods of tracheostomy care. Although there are now very few patients who require tracheostomy tube changes or have speaking valve issues in general ENT clinics or on the ENT wards, these patients are seen in concentrated numbers in the clinics that are attended and run by our clinical nurse specialist. These dedicated clinics provide excellent training opportunities to gain a high degree of exposure in a safe and supported environment. We feel that this provides the trainee with a significantly better experience than the 'occasional tube change', and vastly improves confidence in the event of a tracheostomy problem whilst on call.

We also need to consider the impact of this newly created position on the other allied healthcare professionals within the MDT, in particular the speech and language therapists. In general, there has been a limited impact on the daily activities of the speech and language therapists since the appointment of the tracheostomy clinical nurse specialist. The introduction of the tracheoesophageal fistula valve change clinic has facilitated the joint care of patients by the ENT specialist, and speech and language therapists (care from the latter no longer represents an ad hoc service nor does it necessitate separate clinic visits), which has had positive implications in terms of resources and time management.

Conclusion

The development of tracheostomy clinical nurse specialist positions has been sparsely apparent within other areas of the UK; indeed, the only publications are from England.[7,8] To our knowledge, there are no other nurses employed in such a dedicated position within Scotland. We would urge other ENT units to consider creating this position within their departments and MDTs. We aim to support our anecdotal statements with further evidence via a clinical audit.

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