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# A PILOT STUDY EXPLORING QUALITY OF LIFE EXPERIENCED BY PATIENTS UNDERGOING NEGATIVE PRESSURE WOUND THERAPY AS PART OF THEIR WOUND CARE TREATMENT

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#### Introduction

Negative Pressure Wound Therapy [NPWT] has emerged as a non-pharmacological treatment for acute and chronic wounds, including pressure ulcers, diabetic wounds, abdominal wounds, and trauma wounds. It is primarily used for more complex chronic wounds (Kirby, 2007) although use proactively over high risk post operative incisions has recently emerged in the literature (Atkins 2009). Traditionally this type of treatment has been used within the hospital environment but as we witness more services being moved into the community/home environments there has been an increase in the use of NPWT in these areas.

Managing complex patients in the community setting can be challenging add to this scenario a device that has to remain attached for around 22 out of 24 hours a day then quality of life issues for these patients' requires exploration. Investigating the patient's level of satisfaction with the therapy delivered is important and pivotal to patient concordance. Von Essen et al, (2002) identified that satisfied patients were more likely to comply with treatment and take an active role in their own care.

There is little literature that investigates and explores the effect of NPWT has on the patients' quality of life or satisfaction. The researchers hope that this pilot study will enhance practitioner knowledge by exploring patient reported quality of life, associated with living with a wound and comparing these results with a group of patients that are living with a wound with NPWT insitu.

#### Method

Fifty patients will be recruited using a quasi-experimental design. Patients will be screened using an inclusion / exclusion criteria on admission to the Tissue Viability or Vascular Team and asked to participate if they are eligible (see table 1)

#### Table 1

#### Inclusion criteria

- Patient over 18 years in age
- Patient able to provide written consent
- Patient can be followed up / contacted by the same investigating team for the next
  12 weeks
- Has a wound being managed by either topical negative pressure or traditional wound dressings and is either post operative partial thickness dehisced wound or a surgical wound left open to heal by secondary intention or a diabetic foot ulcer or a digital amputation or a single category 3 or 4 pressure ulcer.
- Wound size is at least 40x40x20mm (LxWxD)

#### Exclusion criteria

- Patient is currently in another wound care study evaluating quality of life
- Patient is unwilling to give informed consent
- Patient has a full thickness open abdomen, or a burn wound or leg ulceration or STSG
- Patient is palliative
- Other clinical judgement excludes participant from this trial

Patients will be informed that participation in the study will not influence their care or treatment options and will be followed up for 12 weeks unless they express a wish to be withdrawn from the study. Once consent is obtained patients will receive the first questionnaire, thereafter questionnaires will be sent to participants by post and returned in pre paid envelopes to the study team in an attempt to minimise any bias in responses. All participants will be newly admitted to vascular and tissue viability services for their wound care condition.

Over 50 patients have been screened as eligible to participate however to date only 9 patients have given consent and been recruited, 7 patients using NPWT and 2 patients using Conventional therapy. Although recruitment has been slow we are confident that the same size will be achieved by Jan 2012.

#### Aim

To explore patient reported satisfaction and quality of life experienced by patients with a wound in contrast to the reported satisfaction and quality of life of patients undergoing negative pressure wound therapy as part of their wound care treatment.

## **Primary Objectives**

- To explore the impact that living with a wound has on a patients' quality of life
- To explore the impact of NPWT on a patient's quality of life

## **Data analysis**

Data will be entered and a statistical package (SPSS) will be used to perform both descriptive and inferential statistics Assuming normality and fulfillment of other conditions, an independent samples t-test will be performed on the control and intervention (conventional wound therapy vs. NPWT) groups. For the pilot studies, separate analyses will be performed at each of the above times, testing the null hypothesis of no difference between the quality of life score in the patients who used NPWT and those who did not use NPWT as part of their wound care treatment.

Analysis of the data will be completed by a health statistician who has not been involved in collection of data.

#### Discussion

The DH (2009a; 29) in the document 'NHS 2010–2015: from good to great; preventative, people-centred, productive' clearly identified that there will be 'safer care for patients, who can be confident that they will be protected from avoidable harm'. One essential metric has been identified as the feedback from patients, known as PROMS (Patient Related Outcome Measures), this is an important feature of the transparent quality initiative (DH 2009b). PROMs are measures of a patient's health status or health-related quality of life and are a means of assessing effectiveness of care from the patient's perspective (DH, 2009b) with the DH, (2008) stating that:

"This means understanding success rates from different treatments for different conditions. Assessing this will include clinical measures such as mortality or survival rates and measures of clinical improvement. Just as important is the effectiveness of care from the patient's own perspective which will be measured through patient-reported outcomes measures (PROMs)...".

### Summary

There is little literature that investigates and explores the effect of NPWT has on the patients' quality of life or satisfaction and as such this study will enhance the knowledge associated with living with a chronic wound and undergoing NPWT that will enhance quality of life for the patient and will develop practitioners knowledge and skills when delivering this therapy.

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