

An audit of nurse's use of compression hosiery within two NHS Trusts

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Introduction

Compression therapy is considered as one of the most significant advancements in relation to wound care in the last 50 years (Hampton 2002) and now plays an important role in the treatment and prevention of venous and lympho-venous disorders. (Lymphoedema Framework 2006, World Union of Wound Healing Societies 2008, Wounds U.K .2007).

Use of compression hosiery is common practice for many healthcare professionals, particularly nurses. Whilst manufacturers offer guidance for appropriate selection, there is limited research on the decision-making by nurses when selecting hosiery. An audit of 40 nurses from Worcestershire Primary Care Trust and Worcestershire Acute Trust has been undertaken to identify the factors influencing decision making when selecting hosiery for patients.

Method

Audit forms were distributed in 2010 amongst community and hospital nurses who attended 2 annual Trust-led study sessions. 100 audit forms were distributed, yielding a valid 42% return rate.

Results

The findings from the audit are multi-faceted and give valuable insight into the uses of compression therapy, the compression therapy selected and the decision making that underpins choice. This has implications for the trusts, in terms of formulary, education and clinical effectiveness.

Reasons for hosiery use were identified as follows:

- 83% use hosiery for prevention of ulcer recurrence
- 72% use hosiery for the management of chronic oedema
- 56 % use hosiery for prevention of venous leg ulceration
- 50% use hosiery to actively treat leg ulceration.
- 31% use hosiery for the management of varicose veins

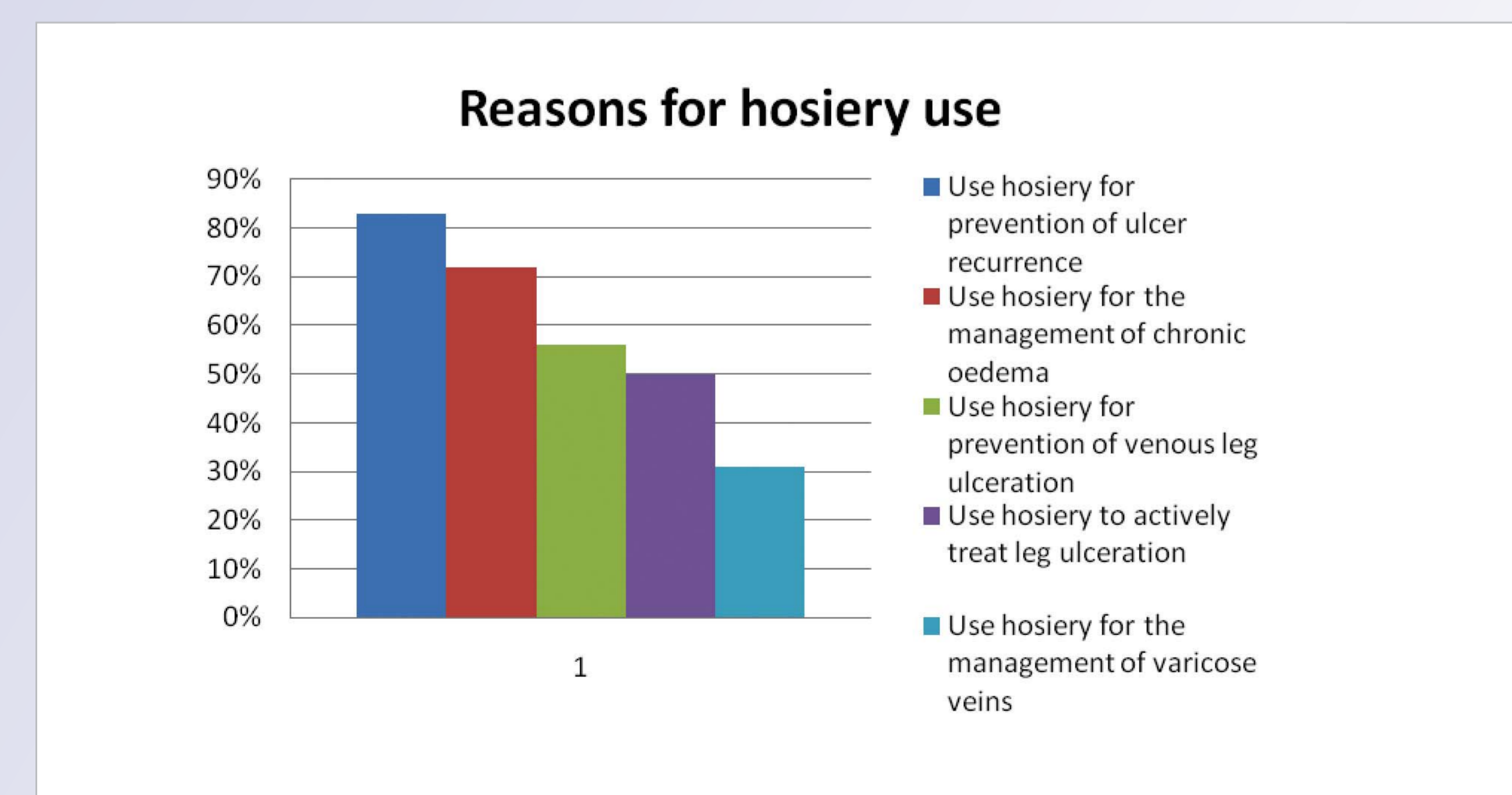


Figure 1: Reasons for hosiery use - respondents stated more than one reason

The respondents used the following hosiery:

- 97% use British Standard off-the-shelf hosiery
- 39% use custom made British Standard hosiery.
- 28% use European Union Standard off-the-shelf compression hosiery
- 8 % use hosiery treatment kits

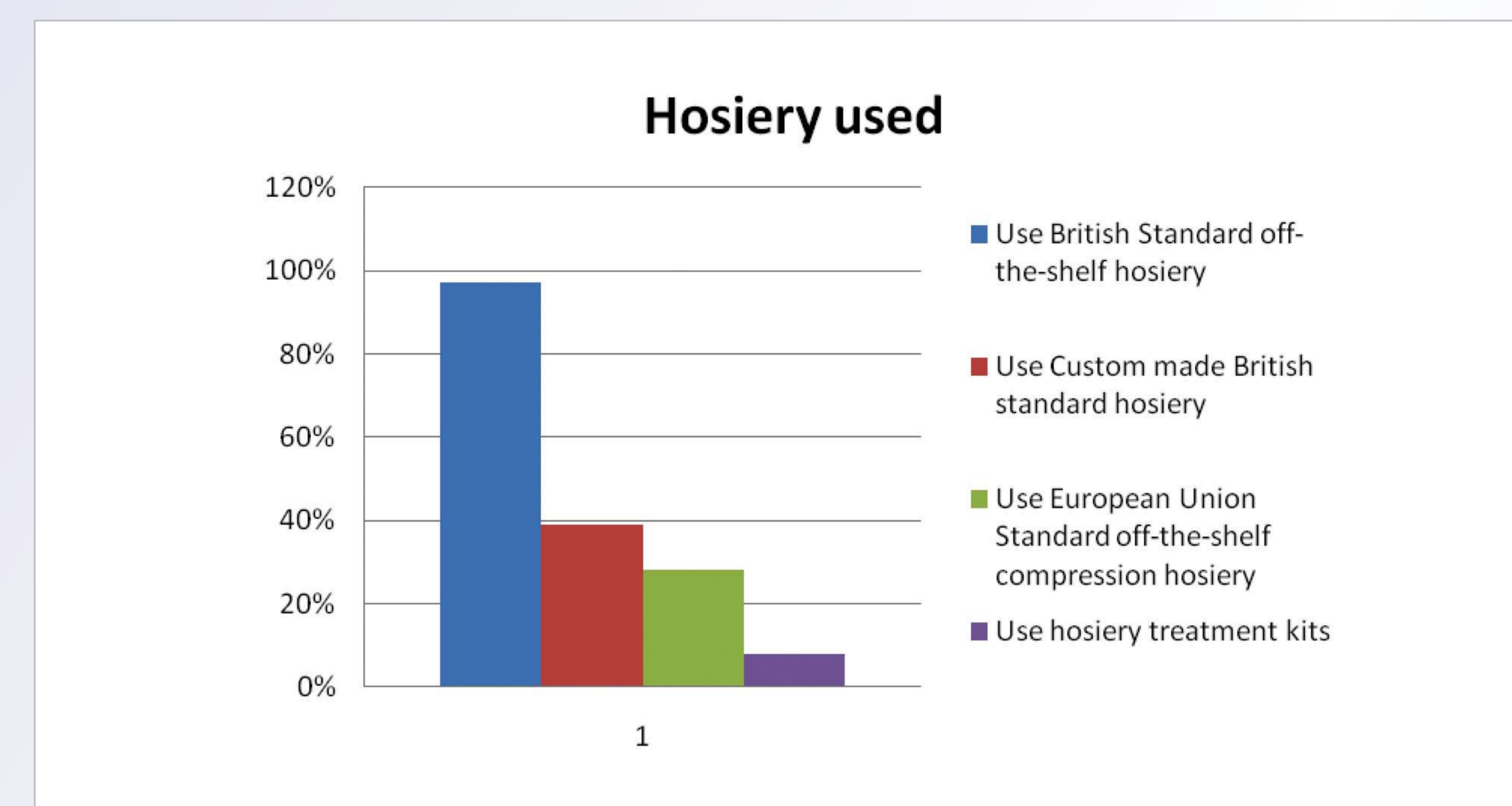


Figure 2: Hosiery used (number of respondents)

Several factors influence practitioners' choice of hosiery, being:

- 92% concordance
- 86% level of compression
- 83% sizing/fit
- 64% formulary listing

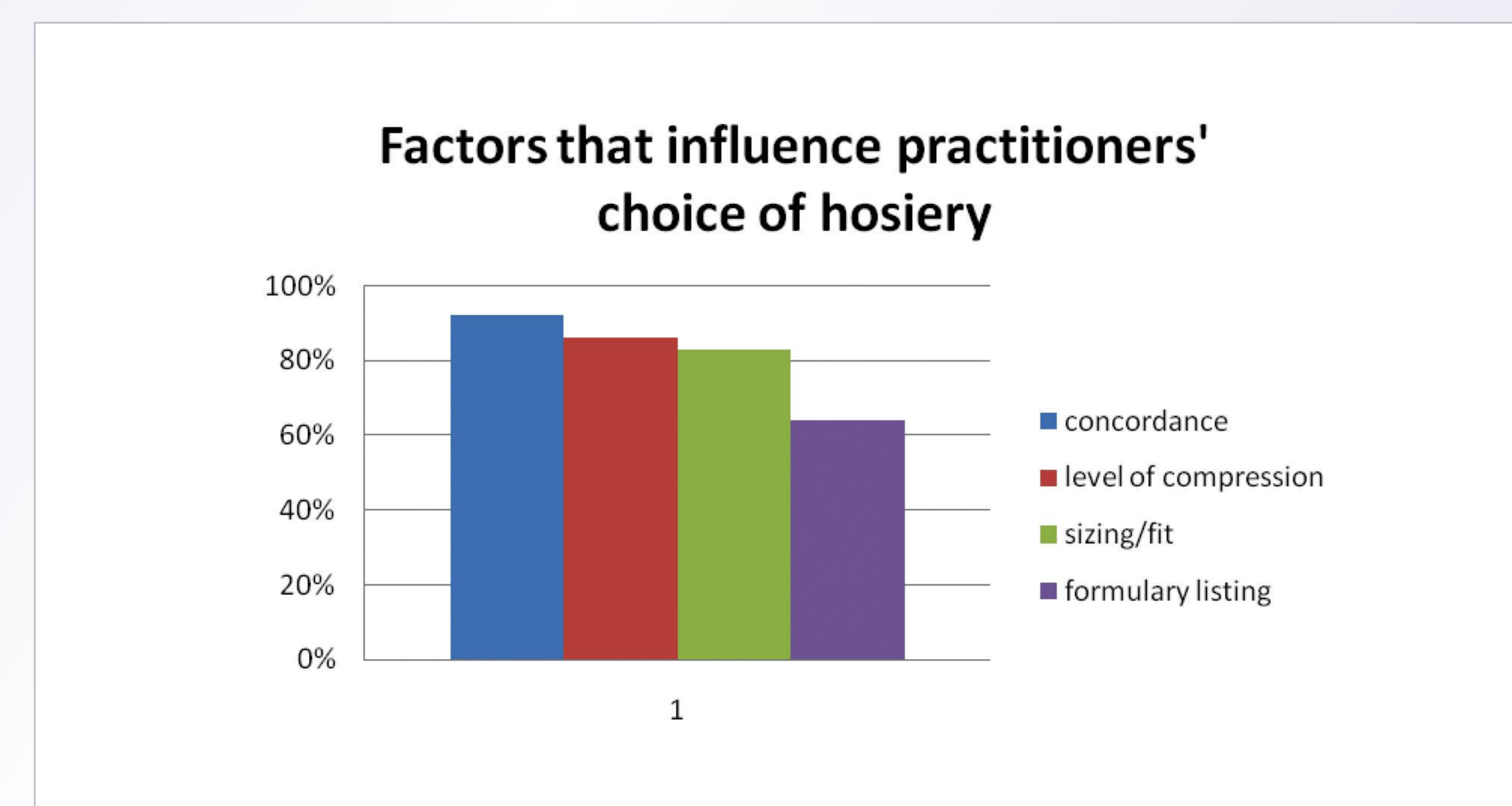


Figure 3: Factors that influence choice (number of respondents)

Discussion

Prevention of ulcer recurrence is the most common use for compression hosiery within the Trust. Consensus indicates that not wearing hosiery was strongly associated with ulcer recurrence (Nelson, Bell-Syer, Cullum and Webster 2010). Importantly, management of venous leg ulceration was cited as costing the National Health Service £230-400 million in 1991 (Bentley 2001). Appropriate selection of hosiery would therefore present considerable cost minimisation and, more importantly, improved quality of life for individuals.

The results also indicate that chronic oedema management is a common concern for staff within the Trusts. The findings also suggest that hosiery may be used for more than one reason at any one time. An example of this would be the significant number of patients who suffer from venous leg ulceration and chronic oedema (lympho-venous disease). Whilst it is acknowledged that the presence of chronic oedema impacts on the healing and prevention of ulcer recurrence (Williams 2009) the audit highlights that staff may not be selecting the most appropriate hosiery for those with chronic oedema. European Union (EU) standard garments, particularly those with a higher stiffness index, are commonly accepted as the most suitable hosiery choice for oedema management (Lymphoedema Framework Project 2006, Lawrance 2006). Making appropriate use of such hosiery, as on formulary will offer benefits in terms of economic cost and quality of life.

Whilst ActiLymph® EU Standard hosiery is listed on the Trust's formulary as the first choice for patients with chronic oedema, it was only used by 28% of staff. This contrasts with the fact that 64% of respondents stated they were influenced by formulary when selecting hosiery. This highlights further training needs within the Trust, particularly as such garments have only been available on FP10 for 18 months.

Steps have been taken to develop training in relation to the safe use of compression, particularly for those with chronic oedema. Training involves partnership between Tissue Viability, Lymphoedema and industry specialists. Prior to the audit, hosiery training has been delivered at the end of bandage training sessions. This may not have placed enough emphasis on the importance of appropriate hosiery selection and use. A new strategy for training in 2011 has been adopted and both hosiery and bandage training will take place in dedicated stand alone sessions. Measures have also been taken to adapt training delivered by the University of Worcester's leg ulcer course.

Guidelines for hosiery selection already exist within the Trusts and are now supported by guidelines for the management of chronic oedema, which aim to facilitate appropriate compression choices.

To facilitate appropriate hosiery use, an Honorary Tissue Viability Nurse is offering specialist clinical support to nurses managing patients who require compression, on a twice monthly basis. Re-audit in 12-months time will evaluate effectiveness.

Conclusion

The audit has highlighted the Trust's current practice in relation to the use of hosiery and scope for future development to ensure best practice, cost minimisation and improved quality of life for patients.

References

- Bentley J (2001) Preventing unnecessary suffering: An audit of a leg ulcer clinic. British Journal of Community Nursing, 6 (3).
- Hampton S (2002) Selecting and Fitting Activa compression hosiery, Nursing and Residential Care. August 2002 4,8; 396-398.
- Lawrance (2006) Evaluation of new lymphoedema drug tariff garments for lower limbs. Poster presentation, Wounds U.K Conference, Harrogate.
- Lymphoedema Framework (2006) Best Practice for the Management of Lymphoedema. International consensus. London: MEP Ltd.
- Nelson EA, Bell-Syer SEM, Cullum NA, Webster J (2010) Compression for preventing recurrence of venous ulcers (Review). The Cochrane Library, 2010 (2).
- Williams (2009) Chronic oedema in patients with CVI and ulceration of the lower limb. British Journal of Community Nursing, chronic oedema supplement 14(10) S4-S8.
- World Union of Wound Healing Societies (2008) Principles of best practice: Compression in venous leg ulcers. A consensus document. London: MEP Ltd.
- Wounds UK (2007) Best practice statement compression hosiery. www.wounds-uk.com