AN AUDIT OF FOOTWEAR FOR PATIENTS WITH LEG BANDAGES

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Brenda King conducted an audit to identify how many patients do not have adequate footwear as a consequence of wearing bandages and dressings on their feet and legs, and discusses the impact this has on quality of life.

Patients who have bandages and dressings on their feet frequently have problems wearing their own footwear. Therapeutic alternatives are not available on prescription and many patients have to adapt their footwear.

In secondary care patients may be given specialist footwear – this is usually because they are unable to get footwear to fit an abnormally shaped foot. Footwear may also be provided to patients either following surgical procedures or when there are wound dressings to their feet or bandages on their legs and they are unable to wear their normal footwear. In secondary care this is provided free of charge.

There are problems in the provision and quality of therapeutic footwear in the NHS (Society of Chiropodists and Podiatrists, 2004) and access to products in the community is a particular problem as they are not available on the drug tariff. The Sheffield Podiatry Service conducted an audit of footwear; it found that in the majority of cases in which therapeutic footwear was required, expensive bespoke footwear was not always necessary and health professionals needed to be aware of cheaper alternatives.

BACKGROUND TO THE AUDIT

In Sheffield the community nurses and practice nurses frequently contact the tissue viability service about the availability of footwear for patients. This is usually for patients with leg ulcers or those who have their legs bandaged and are unable to wear their own footwear. The service also manages nurse-led venous leg ulcer clinics and patients are frequently observed to be wearing inappropriate footwear, which could affect their mobility and place them at risk of falling. The nurses who are responsible for these patients have information about shoe companies that provide wider fittings but such footwear is often expensive and many patients cannot afford such alternatives. Expensive footwear may not always be necessary and sometimes a cheaper alternative may meet the patient’s requirements (Finlay, 1995).

We are aware that patients have requested a visit back to hospital purely to be able to access some clean or new footwear but this is an inappropriate use of resources.

As the problems identified with footwear were anecdotal and evidence was required to support a business case for a footwear budget, an audit was designed to explore the issues in more detail. It was anticipated that the results could also be used to support an argument for footwear to be available on the drug tariff.

AIM OF THE AUDIT

The audit aimed to identify the type of footwear worn by those patients who have to wear bandages and/or dressings on their feet or legs. It also aimed to identify whether that footwear posed any risk to the safety of the patients.

METHOD

A questionnaire was designed to elicit information regarding the age range of the patients and their ability to care for themselves. Any history of falls in the previous month were documented as it was considered that inappropriate or badly fitting footwear might contribute to this problem.

The questionnaire was piloted on five patients attending a venous leg ulcer clinic and amendments were made accordingly. The questionnaire was then distributed to 160 community nurses.

Data was collected over 11 weeks and a total of 102 completed questionnaires were returned and included in the analysis. The nurses were asked to complete a questionnaire for each patient who met the specified audit criteria. Ethical approval was not required, however consent for photography was sought if a photograph was taken.
Results and discussion
The audit identified that 84% of the included patients were over the age of 61.

Falls
A total of nine patients had reported falling in the previous month; one reported tripping to be the cause of the fall and one reported falling while accessing a stairlift. Although the evidence does not conclusively identify footwear as being a major contributing factor, it could be assumed that if footwear has adversely affected the mechanical functioning of the foot and/or lower limb – through, for example, inadequate fit or fastening – it could have contributed to the fall. This has been identified as a problem in the literature (Sherington and Menz, 2003; Frey and Kubasak, 1998; Lord and Bashford, 1996; Menz and Lord, 1996). Considering the risk of a bone injury associated with falls, this could represent a significant impact on healthcare resources.

Type of footwear
The audit found that 26% of patients were only able to wear socks or slippers or were barefoot (Fig 1). Although walking barefoot or wearing slippers may not be perceived as inappropriate by the podiatrist, in this context it may have implications for the patient’s mobility because of concerns about slipping. It could also render the patient housebound, thereby leading to social exclusion. Thirty-two per cent of patients had to wear open-toe shoes, sandals and ‘slip-ons’. This style of footwear was chosen to enable them to get their feet into their footwear and could be seen as restricting their ability to go out in bad weather. There were also some comments on how the footwear was fastened (Fig 2) that gave cause for concern, with reports of string and elastic bands being used as fasteners. Velcro straps not reaching to fasten properly, and even footwear being cut to enable the foot to be squeezed into it.

Condition of footwear
The audit requested information to ascertain whether footwear was washable and if it was stained with exudate. Some footwear is washable but manufacturers’ instructions have to be followed to prevent shrinking. Only 31% of patients had washable footwear and 16% had footwear stained with exudate. If the exudate had leaked through the bandages then the footwear was often wet with exudate. This resulted in patients having to put their footwear back on while it was still wet.

Many of the wounds were colonised with bacteria and, as a result of the exudate leaking into the footwear, bacteria was also found in the footwear. This has implications for wound infection and cross-infection, especially when the patient lives in a residential/care home with other vulnerable people. The footwear was constantly damp with offensive-smelling exudate, which can also lead to social exclusion. Twelve per cent of patients identified social exclusion as a reason for
wanting to change their footwear. These results suggested that these patients require footwear that is washable and can be prescribed alongside the bandages used to treat the patient.

**Provision/source of footwear**

Only 12% of patients reported that they had been provided with footwear, and most patients said they had to purchase alternatives or adapt their own footwear by cutting it.

Fifty-nine per cent of patients had received advice about footwear; this was provided by a nurse in 77% of cases. This highlights the skills and the training that nurses require to make recommendations, especially if patients are intending to purchase expensive shoes. Nurses need to be aware of the products that are available and have access to a multidisciplinary team that includes podiatry triage.

**Conclusion and recommendations**

At the time of the audit 25% of patients were wearing slippers or had no shoes at all that they could wear. This has implications for both mobility and being unable to leave the home, leading to social exclusion. Thirty-two per cent were wearing sandals, slip-ons or open-toe shoes - again, some not ideal for mobility - and this limited their activity in wet weather. Only 12% had footwear provided by the NHS. This left a large number of patients paying for their own footwear. When the need for different footwear comes as a result of the treatment prescribed by the healthcare practitioner, this may be considered unfair.

Falls have a significant impact on health-service resources (Department of Health, 2001) but there is very little research exploring poorly fitting or inappropriate footwear and its effect on mobility and falls.

**RECOMMENDATIONS**

As a result of this audit the following recommendations have been made:

- Adapted footwear for patients unable to wear their own footwear should be available in the community. Provision should be equitable across primary and secondary services
- Basic educational needs for nurses regarding footwear are assessed and addressed
- Local formularies and podiatry triage systems address the needs of patients who have problems wearing their own footwear
- A multidisciplinary approach involving the podiatry service should be developed
- Further research on the association of footwear and falls needs to be undertaken

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