Dating and labelling oral nutritional supplements, once opened, is vital to reduce the risk of contamination, unsafe storage and wastage. This is particularly important with multidose bottles of high-energy, fat-based emulsion. In clinical practice, wards are supplied with 500ml bottles from which patients are usually given 30ml doses three times a day. We observed that bottles were often kept on the bottom of the drug trolley, or sometimes at the bedside at room temperature, with no information about when they were opened. Manufacturers recommend storing these bottles in a dry, cool place (18-25°C), away from direct sunlight. Once opened, they should be stored in a refrigerator (<5°C) and used within 14 days.

Oral nutritional supplements are listed as borderline substances in the British National Formulary, and it is important that nurses apply the principles of safe and correct administration and storage of medication (Nursing and Midwifery Council, 2010).

Hywel Dda Health Board is working towards the implementation of All Wales Medicine Strategy Group advice relating to the prescribing and supply of sip feeds.

Identifying a problem
We carried out a mini-audit of eight registered nurses in one clinical area to assess their level of knowledge of storing the fat-based supplement. We asked:

- Are fat supplements labelled once they have been opened?
- What is their shelf life, once opened?
- Where should they be kept, once opened?

We then extended this audit to 20 wards, involving two nurses from each ward. A poster on correct storage was displayed on wards and nurses were re-audited after three weeks. In total, 40 staff questionnaires were completed.

There was an improvement in knowledge (Fig 1) and the audit and poster was rolled out throughout the health board with the help of the hospital nutrition groups. Posters were displayed on drug trolleys to maximise the number of nurses who would see them when providing supplements to patients.

Implications for practice
The audit demonstrated that many staff did not fully understand the correct storage instructions for opened multidose bottles of a fat-based supplement. There was uncertainty as to who had opened the bottle and when this had occurred, potentially increasing costs and wastage as well as risk to patients.

Pharmacy departments now attach refrigeration labels, as well as those on which nurses can record the date of opening. The pharmacy is also monitoring any significant increase in demand in a particular clinical area. Audit can then be targeted at these areas to identify the reasons and monitor clinical practice.

Conclusions
Nurses have an important role to play in ensuring oral nutritional supplements are used safely. We have demonstrated how using an awareness poster can enhance nurses’ understanding and knowledge of the correct storage procedures, and lead to changes in practice that will improve patient safety and reduce wastage of NHS resources.

Claire Harcourt-Watkins is staff nurse at Glangwili General Hospital, Hywel Dda Health Board; Linda Morgan is clinical nurse specialist nutrition at Hywel Dda Health Board

References

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In order to highlight to nurses the importance of safe and effective use of oral nutritional supplements, a poster was developed to raise awareness at ward level

Safe usage of fat-based emulsion supplements

FIG 1. STAFF KNOWLEDGE OF SUPPLEMENT STORAGE