

Endorsing medicines with meaningful instructions is important to improve efficacy and safety

In this month's *Pharmacy in Practice* Rawan Kajo and Alison Cotton (page 229) present the results of an audit, which they did on the appropriateness of endorsements on inpatient drug charts for medicines for diabetes. They found that doctors and pharmacists were not consistently following the Trust's guidelines for prescribing and endorsing of diabetic medicines. Only 66% of oral hypoglycaemics and 67% of insulin orders were prescribed at the right time in relation to food. This could have implications for patient care because it might increase hypoglycaemia, and with drugs such as metformin it could worsen tolerance.

Patients in the comfort of their own home have control over when they take their medicines. This control is lost in acute hospitals or institutions such as care homes. Patients are more likely to be given their medicines when it fits in with the

One way of at least ensuring that nursing staff are aware of the need to give medicines at a particular time in relation to food is to endorse the chart with clear instructions. This may improve the chances that the medicine is given at the correct time, but it is no guarantee. An alternative method is to allow patients to self-medicate. Despite national recommendations for self-administration of medicines by hospital inpatients¹ the practice is still not widespread.

Empowering the patient to remind the staff to give them their medicines at the correct time might also help. Although patients must be informed about how to take their medicines the hospital environment is not inductive to them prompting the staff who care for them. For example, 'Nurse can I take my medicines now please — I am having my breakfast?' is most likely to be met with 'No you must wait 'till the medicines round' (i.e. it's not convenient to me); it would take a brave soul to ask.

Medicines labels can be ambiguous and patients often need them explaining

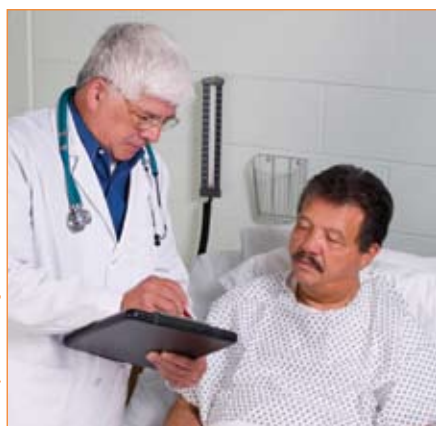
Endorsement of medicines is also an important issue for patients in the community. The *BNF* lists, in Appendix 9, cautionary and advisory labels for dispensed medicines. For some medicines the time of day to be taken is very important to maximise absorption and to improve efficacy. For instance ampicillin absorption is reduced if taken with food (one study found a 30% reduction in bioavailability in human volunteers).² Even if bisphosphonates are taken in the recommended way (i.e. 30 minutes before the first food or beverage of the day) they are only 0.39% bioavailable, and bioavailability drops by 60% if taken with coffee or orange juice.³

However, the recommendations in the *BNF* about endorsing medicine labels are ambiguous and there is some evidence that patients do not fully understand cautionary labels on medicines.⁴ For example, 'with or after food' is *meant* to mean take with food but could be interpreted by patients as 'take either on a full or empty stomach'. 'Take one hour before food' may mean to some patients take on an empty stomach while to others it may mean literally take one hour before food.

Does the *BNF* need revising?

As a profession we have a duty to patients to ensure they are given their medicines at the correct times and in the correct way. We also have a duty to ensure that the written instructions we provide on labels is clear, meaningful, practical and not ambiguous. It may be time to revisit some of the *BNF* cautionary and advisory labels. ✚

Duncan Petty, consultant editor



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organisation's workload. Consequently, many hospital patients may have reduced benefit from their medicines because the timing is wrong.

References

1. Audit Commission. *A spoonful of sugar: medicines management in NHS hospitals*, 2001.
2. Eshelman FN, Spyker DA. Pharmacokinetics of amoxicillin and ampicillin: crossover study of the effect of food. *Antimicrob Agents Chemother* 1978; **14**(4): 539-43.
3. Fosamax once weekly 70mg tablets. *Summary of Product Characteristics*. Available at <http://emc.medicines.org.uk>. Accessed 19.9.2008.
4. Department of Health. *Building a safer NHS. Improving medication safety*. (section 6.2.12) DoH, 2004.