Poor numeracy skills must be tackled to cut medication errors

Drug errors related to the wrong dose are a leading cause of serious incidents. Trusts must implement strategies to ensure staff are competent to calculate doses, says Paul Warburton.

The NHS next stage review said improving patient safety should be at the top of the healthcare agenda for the 21st century. However, medication errors are still far too common, even though they are largely preventable.

While drug calculation errors occur for several reasons in the clinical environment, the poor numeracy skills of clinical staff can be identified and addressed. Training and education for all health professionals is designed to ensure that when they qualify they are competent in their roles and care delivery. After qualification, all registered practitioners must remain competent and up to date in their practice.

It is reasonable for patients to expect that each health professional involved in their care is competent in the skills required to perform their role safely. For those involved in prescribing or administering medicines this includes the ability to calculate drug dosages safely and accurately. However, errors in medication delivery due to poor numeracy can result in serious incidents. In paediatrics, almost half of the medication errors reported are related to the wrong or unclear dose or strength of medication (NPSA, 2009). In addition to the human cost, the NHS was estimated to be more than £750m in England per year (NPSA, 2007).

In spite of the acknowledged importance of numeracy skills in delivering a range of clinical tasks, including accurate drug calculation, it is possible and common practice for health professionals to progress through their career without ever having their numeracy skills assessed after qualifying. In view of the continued risk of calculation errors. This should be an accepted part of continuing professional development and annual clinical update.

Poor numeracy skills must be addressed. Training and education for all health professionals is designed to ensure that when they qualify they are competent in their roles and care delivery. After qualification, all registered practitioners must remain competent and up to date in their practice.

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Incidence of medication errors due to incorrect drug calculations and the subsequent patient harm, healthcare organisations should implement strategies to address this important patient safety issue.

From April 2010 it will be compulsory rather than voluntary for NHS organisations to report safety incidents to the NRLS (E-Health Insider, 2009). This will undoubtedly lead to an increase in the number of reported medication errors, including those caused by incorrect dose calculations. It is likely that this will also result in an increase in public awareness of this issue.

All healthcare organisations should implement strategies that help to identify their clinical staff’s numeracy skills, improve awareness of the importance of calculation competence, and minimise the risk of drug calculation errors. They should also ensure routine and regular assessment of their clinical staff’s numeracy skills to reduce the risk of calculation errors. This should be an accepted part of continuing professional development and annual clinical update.

Such strategies will lead to increased awareness of the importance of numeracy, improved quality of care for patients and a reduced risk of medication errors due to poor numeracy.

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REFERENCES
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