

Liquid Medicines

Background

We have had a number of incidents reported involving liquid medicines and risk of accidental overdose. This is mostly related to the person administering the medicine misunderstanding the directions and reading the dose in mg as dose in ml.

Examples include:

Carbamazepine prescribed 20mg but patient's carer gave 20ml of 100mg/ 5ml solution resulting in a dose of 400mg.

Pregabalin prescribed as 50mg, but nurse gave 50ml 20mg/1ml solution resulting in a dose of 1,000mg (1g) dose.

Other things to consider:

- Even when it is clear what the dose should be people may find it difficult to measure the correct amount using a spoon or oral syringe. Especially if they have dexterity or sight problems.
- Some liquid medicines are not licensed medicines.
- Liquid medicines are often more expensive than solid dosage forms.
- There is growing evidence of the environmental impact of liquid medicines as they are heavier to transport and there is a higher likelihood of waste.
- There is information to help people who struggle to take tablets at [Problems swallowing pills - NHS \(www.nhs.uk\)](https://www.nhs.uk/healthcareprofessionals/clinicalguidance/problems-swallowing-pills/)

When prescribing:

- Can the dose be given using solid dosage form? For swallowing difficulties or feeding tubes an oradispersible or soluble preparation may be available
- If a liquid is the only option, ensure:

- The strength of the preparation is detailed on the prescription e.g., 100mg/ml.
- The volume of the dose as well as the number of mg e.g., 5ml
- Check that the patient or carer understands what needs to be given and how it can be measured. E.g., spoon or oral syringe.
- Review prescriptions for liquids regularly to make sure they are still required.

When administering liquid medicines:

Check

- The strength of the preparation
- The dose required.
- And where necessary calculate the volume of liquid required.
- Use a suitable device to measure e.g., spoon, measuring pot or oral syringe.
- If putting down a feeding tube, ensure you use a purple oral syringe.

Check with the BNF and your local pharmacy team for details of formulations available.