Medicines administration 2: procedure for administration of oral medicines

The administration of medicines is one of the most common procedures nurses undertake and the process is often complex and time-consuming. Organisations will have their own policies and procedures that govern the administration of medicines and nurses should be familiar with these; staff who administer medicines should receive appropriate training and have a competency assessment before carrying out the procedure.

The administration of prescribed medicines can be carried out by any suitably trained and competent member of staff in health or social care. Registered health professionals, such as nurses and doctors, are accountable for tasks they delegate to non-registered staff and must ensure that non-registered staff who administer medicines are competent. It is important to remember that when a task is delegated, non-registered staff are also accountable for their own practice (Royal Pharmaceutical Society and Royal College of Nursing, 2019; Specialist Pharmacy Services, 2018).

Professional responsibilities
This procedure should be undertaken only after approved training, supervised practice and competency assessment, and carried out in accordance with local policies and protocols.

Risks and avoiding errors
The procedure for the administration of medicines involves a number of risks. If they are to avoid error, nurses need to be familiar with the medicines they are administering – the information they are required to know is outlined in Box 1.

Several systems have been devised to help health professionals consider the key aspects of medicines administration in which an error(s) can occur. These are often referred to as ‘rights’; one commonly used version – ‘the five rights’ – is given in Box 2.

Medicine administration errors occur for a number of reasons. In a systematic review, Keers et al (2013) noted that understanding the causes of these errors can help minimise their occurrence and guide interventions. They identified several reasons why errors occur, including:

- Misidentification of a medicine;
- Misidentification of a patient;
- Lack of knowledge;
- Poorly written prescriptions, documentation and/or transcription;
- Medicine supply and storage problems;
- Staff inexperience and lack of training;
- High workload and problem of fatigue and stress among staff;
- Inappropriate skill mix among staff;
- Lack of ward-based equipment;
- Interruptions/distractions.

When an error or a near miss occurs, it is important that nurses report it immediately, in line with local policy. This will:

- Ensure appropriate care is delivered to the patient;
- Allow the factors contributing to the error to be explored and, if necessary, action to be taken to reduce the risk of error recurring in the future.

Adherence and concordance
Adherence
Although the term ‘compliance’ was previously used to describe patients taking medicines as prescribed, the term is now considered paternalistic and the term ‘adherence’ is more commonly used (Aronson, 2007). The National Institute for Health and Care Excellence (2009) suggests that adherence relates to an agreement about prescribed medicines between prescriber and patient and “defines the extent to which the patient’s action matches the agreed recommendations”.

Adherence is difficult to measure; however, it has been estimated that between a third and a half of all medicines for long-term conditions are not taken as intended (NICE, 2009). Non-adherence can be:

- Unintentional – the patient forgets to take a prescribed medicine;
- Intentional – the patient consciously decides not to.

The causes of non-adherence are complex and include:

- Polypharmacy;
- Complicated dose regimens;

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Practical procedures

- Unpleasant side-effects;
- Cognitive problems or physical disability preventing the patient from taking the medicines.

If a patient is non-adherent, the medicine should be reviewed to assess its:
- Appropriateness – is it still required?
- Safety – is it likely to interact with any other medicines?
- Effectiveness – is the patient taking it?
- Acceptability – does the patient understand and agree with the need for the medicine?
- Regimen clarity – does the patient understand the regimen?
- Side-effects – is the patient experiencing unpleasant side-effects?

Medicines that are required should be given in the smallest appropriate dose and in a form that reduces the number of daily doses to a minimum.

Concordance

Concordance describes a shared process leading to an agreement between the patient and prescriber about the aims of their treatment and how these can be achieved (Aronson, 2007). An important part of this process is the quality of the information patients are given to inform their decisions. Patient information leaflets (PILs) must be given with every medicine supplied to patients – however, research that examined the content of 100 PILs suggests that many of these leaflets do not communicate information about the rationale and benefits of treatment (Dickenson et al, 2017). As such, it is essential that when patients are given information they have an opportunity to discuss it with a knowledgeable health professional.

Adverse reactions

All medicines are evaluated to assess their safety, but no medicine is entirely risk free. Nurses should be aware of:
- Any potential problems patients may experience when taking a medication;
- How and when to report suspected reactions.

In the UK, the Yellow Card Scheme (yellowcard.mhra.gov.uk) collects and monitors information on suspected safety concerns or incidents involving medicines and medical devices. The scheme is run by the Medicines and Healthcare products Regulatory Authority and relies on voluntary reporting of suspected adverse drug reactions by health professionals and patients; it aims to provide an early warning that the safety of a product may require further investigation.

Fig 1. Patient details and allergy status

Meadow East NHS Trust

Allergies

None reported by patient

Signed: J Harrison

Date: 10/6/20

Check the patient details on the prescription are complete and their allergy status

Fig 2. Medicine prescription

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<td>10/6/20</td>
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<tr>
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<tr>
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<td></td>
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Check the medicine prescription includes all relevant details

Nurses should also be aware of local reporting systems.

Administration of oral medicines

The oral route is the most frequently used route of medicine administration, as well as being the most convenient and cost-effective (Dougherty and Lister, 2015). Many oral medicines are given in solid-dose forms such as tablets and capsules, which have a high degree of stability and provide accurate dosage. However, the oral route can be problematic because of the unpredictable nature of gastrointestinal absorption (see Part 1).

Some patients find tablets and other solid-dose forms difficult to take and, on occasion, a liquid formulation might be more appropriate or an alternative medicine may need to be considered. This should be discussed with the prescriber and pharmacist. If a patient finds oral doses difficult to tolerate, it can be tempting to crush tablets. However, this is usually outside of the product licence and nurses must seek advice from a pharmacist or the prescribing doctor to ascertain whether it is safe to do so (Dougherty and Lister, 2015). Modified-release tablets must not be crushed or broken as the medicine – which should be released over a period of time – may be absorbed immediately, leading to toxicity, or not absorbed at all, leading to suboptimal treatment.

Infection prevention precautions

Non-sterile gloves are not required routinely for this oral administration procedure. Nurses need to assess individual patients for the risk of exposure to blood and body fluids (Royal College of Nursing, 2018) and to be aware of local policies for glove use.

Equipment

- Prescription;
- Disposable medicines container;
- Medicines to be administered.

The procedure

1. Review the patient’s notes and prescription. Check that the details on the prescription are complete, including the patient’s name, hospital number, date of birth and allergy status (Fig 1).

2. Check that the prescription is unambiguous/legible and includes the medicine name, form (and/or route of administration), strength and dose of the medicine to be administered (RPS and RCN, 2019). Check the date and time when it should be administered, that the prescription is signed and includes a start and finish date, if appropriate (Fig 2). A medicine should not be administered if there are any concerns about the prescription; any such concerns should be discussed immediately with the prescriber.

3. Ensure you know why the medicine is being administered and are aware of potential complications associated with administration (Box 1). If necessary, ask for advice from the prescriber or a pharmacist (RPS and RCN, 2019).

4. Check the medicine has not been given to the patient and signed for by another member of staff.

5. Decontaminate your hands in line with local policy.

6. Discuss with the patient the medicine you are going to give to them and gain their verbal consent to administer it. This is an ideal opportunity to answer any questions the patient has about their treatment and check their understanding of the medicine regimen.

7. Position the patient comfortably so they can swallow the medicine.

8. Decontaminate your hands.

9. Select the medicine and check the expiry date (Fig 3).

10. If calculations are required and you are concerned about accuracy, these should be double-checked by a second person and any concerns raised with the prescriber or a pharmacist (RPS and RCN, 2019).

11. Decant the required dose into a medicine pot, avoiding touching the medicine.

12. Take the medicine and prescription to the patient and check the identity of the patient against the prescription using their name, hospital number and date of birth. Check their wristband according to local policy (Fig 4). It is important to ask the patient to state, rather than confirm, their name and date of birth.

13. Check whether the patient has any allergies or previous adverse drug reactions (RPS and RCN, 2019). If you have concerns, discuss these with the prescriber before administering the medicine.

14. Administer the medicine.

15. Offer a drink of water to help the patient swallow the medicine if this is allowed, and ensure they have swallowed it.

16. Dispose of the medicine pot according to local policy.

17. Decontaminate your hands.

18. Immediately record that the medicine has been administered (RPS and RCN, 2019) (Fig 5).

19. If the patient refuses or is unable to take their medicine, this should be documented along with the reason for omission; the prescriber should also be informed. NT

References

Fig 3. Select medicine and dose

**Gliclazide**
40mg tablets
Text Lot number XXXXXX
Manufacturer date 09/05/2020
Expiry date 08/05/2022

Select the medicine and check the dose against the prescription chart and the expiry date on the packaging.

Fig 4. Check patient’s identity

Take the medicine and prescription to the patient and check the patient’s identity. Check their wristband according to local policy and ensure they state their name and date of birth, rather than simply confirming any details they are given.

Fig 5. Record medicine administration

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Year</strong></td>
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<tr>
<td>2020</td>
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Immediately record that the medicine has been administered according to local policy.