ADMINISTRATION OF MEDICINES WORKBOOK
FOR STUDENT MIDWIVES

Faculty of Health and Wellbeing
3 Year Midwifery Programme
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Introduction

In regard to the administration of drugs/medicines within your practice, the NMC state:-

"Advise on, prescribe, supply, dispense or administer medicines within the limits of your training and competence, the law, our guidance and other relevant policies, guidance and regulations" (NMC 2015)

This workbook should enable you to discuss the responsibilities of the midwife in relation to the administration of medicines Section 18 The Code (NMC 2015) the Standards for Medicines Management (NMC, 2010) and Section 3 of Practising as a Midwife in the UK (NMC 2017) and is designed to help with your study and knowledge in relation to your learning outcomes in pharmacological principles.

Throughout the workbook you are directed to work through activities which will enable you to meet the learning outcomes and meet the standards of proficiency you are expected to achieve in the assessment of practice in the clinical placement. It will allow you to explore issues around safe drug administration which you can then put into practice on your clinical placement with supervision and guidance by your mentor.

The workbook is compulsory and is formatively assessed. It can be used for discussion with your placement mentors and/or your personal tutor if you feel you require guidance in some areas. It should be handed in with all your assessment documentation at the end of each year.

You should read the following prior to starting your workbook:-


- Nursing and Midwifery Council (2010) Standards for medicines management, Nursing and Midwifery Council, London (N.B. The references have been updated in 2015 to reflect The Code but the standards are unchanged from 2010)

You should supplement your reading from the suggested texts listed at the end of this book and any other relevant literature. You will find links within the NMC guidance which you may find useful and your placement areas will have their own policies and guidelines which may contain additional references. Please also bear in mind the content of the Essential Skills Clusters and how these relate to the administration of medicines.

Learning outcomes
You will be able to explain:

2.1.5 Pharmacological principals in relation to Midwifery practice

2.3.8 Administer safely a range of permitted drugs

**Standards of Proficiency**

- Observes and participates in the administration of drugs, using a variety of methods, in accordance with local policy and Standards for Medicines Management (NMC, 2010).

- Observes and participates in the maintenance of treatments via the intravenous route.

- Observes and participates in the completion of records pertaining to drug administration.

- Observes and participates in the safe custody of drugs in accordance with statutory guidance and local policy.

- Is familiar with local format of professional records e.g. Care records, prescription chart

- Observes and participates in discussions with women about their choices for analgesia in labour.
Year 1
Year 1

It is expected that you will have already become familiar with the NMC documents Standards for the Administration of Medicines (2010) and The Code (2015).

Activity 1

1. What is a medicine?

2. What is 'medicines management'?

3. What do you understand from these documents about the implications for a midwife’s practice?

4. What do you understand from these documents about how and when a Student Midwife can be involved in the administration of medicines?
5. What do you understand about the Medicines Act Exemptions?

6. What might a Midwife administer under this act?

7. What do you understand by the term "Patient Group Directive (PGD)"?

8. Does your Trust have a PGD in place? What drugs will you find on here?

9. What do you understand by the term "prescription"?

10. Is a drug chart the same as a prescription? Explain your answer.

11. Compare how drugs might be prescribed and administered in community and hospital settings
12. What resources would you access to acquire more information in relation to a specific drug when considering the suitability, dosage, route and side effects?

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Activity 2
Drug Ordering and Storage

The qualified midwife is the custodian and distributor of a vast range of powerful medications, with a responsibility to ensure that they are ordered, stored and dispensed safely. To fulfil this role, the midwife must be familiar with the legal requirements pertaining to classes of drugs as well as local policies and procedures. This section of the workbook will serve as an introduction to those policies and procedures designed to provide for the safe custody of drugs.

As in all things, policies and procedures relating to drugs change over time and therefore the midwife’s responsibility is to constantly up-date herself with respect to these changes in order to maintain safe practice. You will need to access national and local Trust Code of Practice to answer the following questions:

1. What are the three classes of product listed in the Medicines Act of 1968? Give an example of each.

2. The Misuse of Drugs Act 1971 (amended 2015) relates to C……… D………

4. Describe the procedure for the ordering, transport and receipt of controlled drugs.

5. Describe the requirements for the safe storage of the following medicines:
   a. General Sales List Medicines
   b. Pharmacy Medicines
   c. Prescription only Medicines
   d. Controlled drugs
   e. Intravenous fluids

6. What is the procedure if a discrepancy is found in the stock level of a controlled drug?

7. Who has access to the controlled drug cupboard?

8. What procedures should be followed in the following circumstances?
   a. Controlled drugs need to be returned to a patient.

   b. Controlled drugs need to be returned to the pharmacy.
c. You only require half the amount from a controlled drug ampoule.

9. Controlled drugs need to be transferred with a patient to another ward. What is the procedure?

10. With regard to all drugs which of the following are the registered midwife and the registered nurse not allowed to do?
   a. Prescribe.
   b. Take responsibility for drug storage.
   c. Decide into which type of cupboard drugs are stored.
   d. Administer drugs to patients.
   e. Delegate administration to a healthcare support worker.
   f. Dispose of drugs on the ward.

11. Describe the circumstances when a midwife can leave tablets in a medicine pot by the client’s / patient’s bed.

12. Where would you store the following?
   a. Insulin.
   b. Penicillin for injection.
   c. Chlorhexidine.
   d. Intravenous fluids.
13. You need to keep a temporary stock of potassium chloride on the ward. Where would you store it?

14. Sally Smith is a 25 year old primigravida who is admitted to your ward for elective caesarean section the following day. She hands you a small bag saying: "These are the tablets I take." What do you do with them?

15. Identify the drug keys that have to be kept on the person of a member of staff. Which members of staff are allowed to keep them?

16. The drug keys go missing and cannot be traced. What happens next?

17. Clare Jones is transferred to the postnatal ward with her newborn baby girl. Her partner, Robert, complains to you that he is suffering from a headache and asks you for a couple of paracetamol. What should the registered midwife do?

18. What services does the ward pharmacist provide?
19. What procedures are used for the ordering of medicines in your local maternity unit?

20. How are all medicines transported to the ward?

21. Who may keep the keys of a client’s / patient’s own self-administration medicine locker?

22. You are asked to obtain a drug from the refrigerator. Do you need a key and why?

23. You overhear a student midwife ask the registered midwife: “Can I have the medicines cupboard keys to put this antiseptic solution away?” What mistake has the student midwife made?

Mentor name...........................................................................

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Activity 3

The absorption, distribution, metabolism and excretion of drugs are known as pharmacokinetics.

1. Explain absorption of drugs

2. Explain distribution of drugs.

3. Explain metabolism of drugs

4. Explain excretion of drugs
5. Compare how pharmacokinetics occurs differently in the mother, the fetus and the neonate.

6. Name some drugs which may pass via the placenta into the fetal circulation and what effects they have on the fetus.

7. Identify factors which might affect the absorption of a drug.

8. Identify factors which can interfere with the metabolism of a drug.

9. Do you think maternal size matters in drug metabolism?

10. What are the signs and symptoms of anaphylaxis and how would you manage a pregnant woman experiencing an anaphylactic reaction.
11. Are there any drugs which are more likely to produce anaphylaxis?

Mentor name...........................................................................

Mentor signature......................................................................

Activity 4

1. Describe how you would safely administer oral drugs to a woman. Consider any contraindications.

2. Provide specific examples of different oral preparations available for women.

3. Look at the side effects they may have for the woman.
4. Describe how you would safely administer oral drugs to a neonate. Consider any contraindications.

5. Provide specific examples of different oral preparations available for neonates.

6. Look at the side effects they may have for the baby.

7. Discuss your understanding of the terms 'licensed' and 'unlicensed' in relation to the safe administration of medicines.

8. Are there specific guidelines for the administration of medicines to children and young people?
9. What advice would you give to a woman administering medication to her baby?

Mentor name...........................................................................................................

Mentor signature....................................................................................................

Activity 5

1. Describe how you would safely administer intramuscular drugs. Does this differ between mother and baby?

2. Describe how you would administer an intramuscular injection.

3. Give examples of medicines administered via this route. Discuss the relevance to the mother and/or baby's care, considering side effects and contraindications.
4. Describe how you would administer a subcutaneous injection.

5. Give examples of medicines administered via this route. Discuss the relevance to the mother and/or baby's care, considering side effects and contraindications.

6. What medicine might you commonly see administered via an intra-dermal injection? What is the advantage of this route of administration?

7. In the clinical area ask your mentor to witness the safe administration of an IM (intramuscular) and a SC (subcutaneous) injection. Explain your reasons for administration; provide evidence of calculations and the relevant site area.

Mentor name...........................................................................................................

Mentor signature....................................................................................................
Activity 6

1. What medications maybe administered to a woman per vagina? Discuss the midwife's role and responsibility in the administration of such medicines.

2. What medications may be administered per rectum? When might you consider this route of administration?

Mentor name…………………………………………………………

Mentor Signature……………………………………………………
Activity 7

1. Why might medicines be administered intravenously?

2. Describe the procedure for administering intravenous (IV) drugs/medicines and fluids.

3. Name some drugs/medications that may be administered via this route.

4. Discuss with your mentor how you would calculate an infusion rate with a syringe driver.
5. Discuss with your mentor how you would use an infusion pump to correctly administer an IV drug

Mentor name: 

Mentor Signature: 

Activity 8

1. What is 'gas and air'?

2. Explain the responsibilities of the Midwife when administering this drug.

3. Discuss how you would assess the use of nitrous oxide during labour and birth giving consideration to any contraindications and side effects for both mother and fetus.

4. Describe how you would explain to a woman how to use nitrous oxide effectively.

5. With your mentor, participate in educating a woman you are caring for in labour about how to use nitrous oxide.

6. With your mentor, participate in assessing the effects of nitrous oxide for a woman in your care.
Mentor name..............................................................................

Mentor Signature..........................................................................
Activity 9

Epidural analgesia is available in most obstetric units.

1. Epidurals and spinals are variously described as analgesia and anaesthesia. Can you suggest why this may be?

2. Compare the advantages and disadvantages of using epidural analgesia in childbirth, looking at contraindications and side effects of the use of epidural analgesia.

3. Provide examples of drugs used in epidural analgesia and discuss their side effects.

4. Describe the different methods of administering epidural analgesia (conventional vs 'mobile') with reference to the administration, drugs used and the effects for women.
5. Explain the following:-
   a. how an epidural is sited
   b. how an epidural is topped - up
   c. how the epidural cannula is safely removed

6. Describe the differences between epidural and spinal analgesia including where they may be most appropriately used.

Mentor name…………………………………………

Mentor Signature…………………………………………
Activity 10

Describe how TENS (transcutaneous electrical nerve stimulation) works as an analgesic and when it might be used?

Mentor name

Mentor Signature
Activity 11

1. Name a variety of medications that may be contraindicated in breastfeeding and those that are safe for the mother to take whilst breastfeeding. Pay particular attention to those medicines commonly used by pregnant and lactating women.

2. A postnatal woman is being investigated for a suspected pulmonary embolus. She is breastfeeding and has been advised to express before the investigations to create a store of milk for her baby. For 24 hours following the investigations she is advised to express and discard her breast milk. Thinking about the drugs she may be given and how they are metabolised and excreted, can you explain this advice?

Mentor name..................................................................................

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Activity 12

1. Reflect on a time when you administered a medicine to a woman or baby that you have recently cared for. Some examples for discussion are:-

   a. Why the medication was used?

   b. Consent and advice/choice.

   c. Contraindications and side effects.

   d. What is/are the methods of administration?
2. Use the knowledge and information you have learned from working through this book, and your experiences in practice, to discuss pain in pregnancy, birth and postnatally. Think about the advice you give to women; consider their choices and the self-administration of drugs. Reflect on potential implications for women from vulnerable groups. Think about how pain may be experienced by the neonate and how it might be assessed and managed.

Completion of Year 1

Mentor name.................................................................

Mentors signature......................................................

Tutor name.................................................................

Tutor signature..........................................................
Year 2
Year 2

Activity 1

1. Name and describe the different drugs administered for induction and augmentation of labour.

2. Discuss with your mentor how these different drugs are administered and what dosages are used and why.

Mentor name

Mentor signature
Activity 2

1. What drugs are used in the active management of the third stage?

2. Name the drugs which might be administered during a postpartum haemorrhage, considering any contraindications and side effects.

3. Discuss with your mentor the drug dosages and methods of administration for these drugs.

4. Discuss with your mentor who might make the decision to administer certain drugs to treat post-partum haemorrhage.
5. Find out the type of drug, dosage and its administration route for the third stage of labour in your Home Trust and compare these with your companion Trust practices/guidelines.

Mentor name............................................................................................................

Mentor signature........................................................................................................
Activity 3

1. Provide examples of the drugs commonly administered at an adult cardiac arrest

2. Discuss examples of the dosages and methods of administration

Mentor name..............................................................

Mentor Signature..........................................................
Activity 4

1. Name some drugs used in the management of pre-eclampsia.

2. Consider the methods of administration, contraindications and side effects of these drugs and anything which may determine the choice of drug(s).

3. Name the drugs/medication prescribed by a Doctor that you may administer to a woman with eclampsia.

4. What would be the most important sequence of these drugs?

5. Describe how you would administer these drugs.
6. Discuss with your mentor the sequence and importance of each of these drugs.

7. Explore the chemical interactions of certain drugs given to treat eclampsia and what, if any, cautions should be considered when administering them.

8. Discuss the possible side effects of these drugs.

Mentor name..................................................................................

Mentor signature..........................................................................

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Activity 5

1. Donor breast milk may be advised for premature babies in some neonatal units in preference to formula. It is given as a prescribed 'medicine'. Discuss some reasons for this.

Mentor name..............................................................
Mentor Signature...................................................

Completion of Year 2

Mentor name..............................................................
Mentors signature...................................................
Tutor name..............................................................
Tutors signature.....................................................
Year 3
Year 3
Activity 1

1. Reflect on the use of anti-D throughout pregnancy and the puerperium.

2. Consider how it is prescribed and administer in the following situations:-
   a. Antenatal prophylaxis
   b. Antenatal sensitising events
   c. Women who are isoimmunised and pregnant including considerations for the fetus and neonate
   d. Routine post birth treatment
   e. Women who are sensitised following birth
Activity 2

1. Analyse alternative therapies available to childbearing women and discuss the responsibilities a Midwife has regarding their use.
2. Considering the standards set out by the NMC, what should the Midwife always check before administering any medicine?

3. What is the role and responsibility of the Midwife with regard to the documentation of drug administration? Consider different forms of documents pertaining to drugs.
Completion of Year 3

Mentor name.................................................................

Mentor signature...........................................................

Tutor name........................................................................

Tutor signature.................................................................
References


Recommended Reading


NICE. (2010). CG53 Donor Breast Milk Banks, National Institute for Health and Care Excellence [online], Available at https://www.nice.org.uk/guidance/CG93


Appendix - 'NEVER and ALWAYS: IV'. Guidance for student midwives and Registered Practitioners
NEVER administer any drug unless you are directly supervised by a Registered Midwife at all stages of the process

NEVER administer drugs to anybody unless you have been involved in checking them

NEVER administer any drug until a client's allergy status has been checked

NEVER administer or dispense a drug under a Patient group Directive [PGD]

NEVER administer any drug intravenously

NEVER flush an intravenous cannula

NEVER prepare any drug for another person to administer intravenously

NEVER regulate any intravenous infusion unless you are directly supervised by a Registered Midwife

NEVER leave medicines unattended

NEVER sign a prescription sheet to say a medication has been administered unless you have witnessed this

ALWAYS follow the NMC standards and local policies when checking and administering any medicine [remember that oxygen is a drug too]

ALWAYS ensure a Registered Midwife countersigns your signature on nursing records and prescription sheets

ALWAYS find out about the medicines you are giving:
   • What type of drug is it and what is the normal dose?
   • Why is this person being given this drug?
   • What is the best way to take the medication?
   • How will you know if it is having the desired effect?
   • What are the side effects and contraindications?
   • What are the nursing implications of this drug?

ALWAYS educate the patient/service user about the drugs they are prescribed
   • Do they know what the medication is and why it has been prescribed?
   • Do they know the best way to take this medication and can they do this?
   • Discuss their motivation and commitment to adhering to their treatment
   • Discuss how they should monitor themselves to assess for positive effects and side effects
NEVER connect a giving set to an intravenous cannula [requires flushing and is IV administration and so RM only]

NEVER flush or insert anything into an intravenous cannula [this is IV administration and so RM only]

NEVER regulate the rate of any intravenous infusion without being supervised

NEVER disconnect any infusion from an intravenous cannula [requires flushing] and so RM only

NEVER insert an intravenous cannula without being supervised

NEVER remove a central intravenous catheter, Hickman line or intra-arterial device [RM only]

ALWAYS ensure that you have been observed removing a peripheral intravenous cannula, deemed competent and have documented this in your clinical skills document before removing them with minimal supervision

ALWAYS ensure you are DIRECTLY supervised when priming an IV giving set [provided Trust policy allows you to do this]

ALWAYS ensure you are DIRECTLY supervised when regulating infusion rate of an intravenous infusion as the rate MUST be checked by an RM

ALWAYS ensure you are DIRECTLY supervised when changing a bag of intravenous fluid [Administration of medicines]

ALWAYS ensure you document appropriately on Intravenous fluids prescription, you are directly supervised when doing this and this is countersigned by the RM supervising you

ALWAYS ensure that you document IV fluid on the patient’s fluid balance chart, according to Trust policy

ALWAYS monitor the intravenous cannula site and report/document this according to Trust policy

ALWAYS monitor the patient for complications and report/document according to Trust policy