

Introduction to pharmacology and medicines management

Part 1

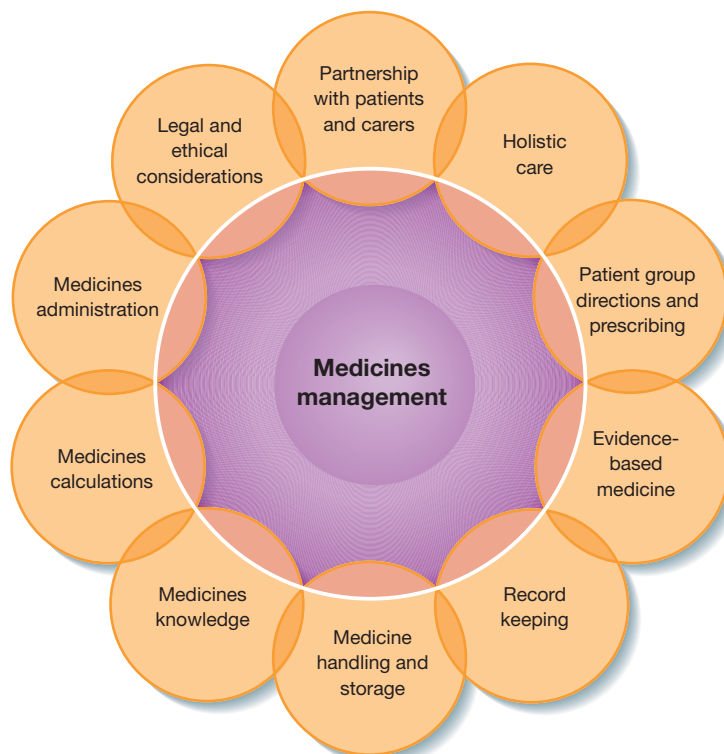
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Why is managing medicines important in nursing?

Figure 1.1 An overlapping Venn diagram illustrating the Nursing and Midwifery Council's elements of the medicines management skills cluster



Medicines management and nursing

Nursing is a multifaceted profession. A wide variety of knowledge and skills is required to become a safe and effective nurse in modern healthcare practice. The essential skills clusters (ESCs) of the Nursing and Midwifery Council (NMC) define and illustrate the essential skills that are to be developed by the pre-registration nurse to make that nurse fit for registration. The NMC has developed five clusters of knowledge and skills related to nursing competence:

- Care, compassion and communication.
- Organisational aspects of care.
- Infection prevention and control.
- Nutrition and fluid management.
- Medicines management.

This book will focus on the medicines management cluster and explore the important medicines-related knowledge required by a nurse. Whenever possible, the ESC will be referenced so that you may consider your knowledge and skill development in that area of medicines management as you work through the book.

Defining medicines management

The Audit Commission report, 'A Spoonful of Sugar: Medicines Management in NHS Hospitals' (2001), was designed to highlight the importance of the effective use of medication as a part of the nurse's role. While nurses' involvement with medicines management varies according to the context of care (e.g. community based, hospital based), the report highlights that up to '7,000 individual doses are administered daily in a "typical" hospital; and up to 40 per cent of nurses' time is spent administering medicines' (<http://www.eprescribingtoolkit.com/wp-content/uploads/2013/11/nrspoonfulsugar1.pdf>, point 11, p.9, last accessed 6 August, 2015).

The report defined medicines management as:

Medicines management in hospitals encompasses the entire way that medicines are selected, procured, delivered, prescribed, administered and reviewed to optimise the contribution that medicines make to producing informed and desired outcomes of patient care.

(www.eprescribingtoolkit.com/wp-content/uploads/2013/11/nrspoonfulsugar1.pdf, Box A, p.5, last accessed 6 August, 2015)

This definition illustrates that managing medicines is not just the responsibility of pharmacists and doctors. It is the collective responsibility of those who work for a healthcare organisation. When working in the NHS, it is easy to find examples of nurses who undertake every facet of medicines management (Figure 1.1). Nurses commonly prescribe, dispense, administer and review patient medication on a day-to-day basis.

The report continues by identifying the main reasons why medicines management needs to continually improve. Medication errors are unacceptably common, the efficacy of medicines is increasing, the costs of medicines are rising and the administration of medicines is becoming more complex. In addition, there is a need to review medicines management across whole health economies as the distinction between primary and secondary care becomes increasingly blurred.

Managing medicines is more than just clinical pharmacology. Clinical pharmacological knowledge is an essential element of safe and efficacious patient care along with the other core skills.

Figure 1.1 is not hierarchical but attempts to illustrate the interconnected nature of the ESCs that make up the medicines management process. Understanding how medicines work (their fundamental pharmacology) is significant knowledge in, for example, medicines administration. Understanding fundamental pharmacokinetics (Chapters 6 and 7) and fundamental pharmacodynamics (Chapters 10 and 11) allow the nurse undertaking medication administration to explain the dose of medication prescribed, its clinical indication, its likely beneficial effects and any potentially important adverse effects such as side effects (Chapter 48) and drug interactions (Chapter 47).

Traditionally, doctors prescribe, pharmacists dispense and nurses administer medication. Modern healthcare practice incorporates increasingly diverse means of supplying medicine: there are growing numbers of prescribers from a range of professional backgrounds (nurses, pharmacists and physiotherapists) and additional ways for patients to access medication – for example, patient group directions (PGDs), which are written instructions for the supply or administration of medicines to groups of patients according to a set of predetermined criteria. The competent nurse needs to understand their role in supporting these mechanisms of medicine supply and in facilitating patient access to increasingly complex treatments as part of evidence-based interventions.

Economic predictions of the cost of medicines in the UK reached a figure in excess of £15 billion by 2015. A proportion of these medicines are established interventions for frequently occurring conditions that reflect the general ill health of the nation. However, some of the costs relate to newer pharmacotherapeutic innovations. Many medications currently used are aimed at preventing the serious consequences of untreated pathophysiological states (e.g. treating hypertension to prevent the cardiovascular consequences of the condition). This presents the NHS with a challenging future with regard to medicines selection and use. Increasingly, medicines use in practice is guided by nationally generated evidence such as National Institute for Health and Care Excellence (NICE) guidelines and technology appraisals. Royal Colleges and collectives such as the Faculty of Sexual and Reproductive Health also produce useful guidance with regard to medicines management. More and more, these guidelines are forming the fundamental basis for medicines choice in practice. Their aim is to ensure the equitable treatment of patients, and that the benefits to patients are optimised and the risks minimised.

The philosophy of managing medicines is increasingly attempting to engage patients in medication choice. Much of the guidance that relates, for example, to medicines choice in mental health aims to put the patient at the centre when selecting pharmacotherapies. In so doing, the aspiration is that adherence (the extent to which patients take medication as prescribed by healthcare professionals) will be increased.

Providing truly holistic care in nursing practice means appreciating both the art and the science of managing medicines.