

#### Note

Health and social care practice and knowledge are constantly changing and developing as new research and treatments, changes in procedures, drugs and equipment become available.

The authors, editor and publishers have, as far as is possible, taken care to confirm that the information complies with the latest standards of practice and legislation.

# Fundamental Aspects of Gastrointestinal Nursing

edited by

Carol L. Cox, Martin J. Steggall and Alison M. Coutts



Quay Books Division, MA Healthcare Ltd, St Jude's Church, Dulwich Road, London SE24  $0\mathrm{PB}$ 

British Library Cataloguing-in-Publication Data A catalogue record is available for this book

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ISBN-10: 1 85642 426 X ISBN-13: 978 1 85642 426 4

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Printed by Mimeo, Huntingdon, Cambridgeshire

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This book is dedicated to Karen Elizabeth Knowlton, loving daughter and nurse who died on 20 April 2010 of acute pancreatitis, intra-abdominal abscesses and sepsis.

### **Foreword**

Since the advent of stoma nursing over 30 years ago, the development of nursing roles in gastroenterology clinical practice has widened significantly. This book explores the fundamental aspects of nursing patients who have gastrointestinal problems. It is targeted primarily toward the student nurse or the nurse who is preparing to work for the first time in a clinical area that manages gastrointestinal problems. Clinical nursing practice is advancing, and a key element of skilled clinical practice is advocacy. Today's nurses can now broaden their ability to advocate for the needs of patients with gastrointestinal problems: essential skills, given the stigma and embarrassment that surround many of these problems.

Each chapter provides the nurse with a clear description of the gastrointestinal disease, the assessment and diagnostic pathway of the patient and a practical and clear delineation of the clinical skills and knowledge required to care holistically for the patient. The book brings together an impressive group of academics and clinical practitioners, all experts in their field, to create a practical and relevant text. After reading this book nurses will have advanced their knowledge in this field of nursing and will be assured that the care they provide is appropriately prioritised and built around the needs of the patient. This is the first book of its kind – it fills an educational gap and is sure to inform, inspire and motivate the future generation of clinical nurse specialists in gastroenterology.

Theresa Porrett, PhD, MSc, RN
Gastrointestinal Nurse Consultant, Homerton University Hospital NHS
Foundation Trust, London
Honorary Reader, Department of Applied Biological Sciences, City
University, London

## **Preface**

This text has been written for the student nurse and aspiring gastrointestinal nurse who wishes to launch their career in gastrointestinal practice as well as for nurses who want to inform their thinking about gastrointestinal disorders and their nursing management. Throughout, perspectives on practice emerge that will promote the formation of new thinking in relation to the fundamental aspects of gastrointestinal nursing. In each chapter aspects of practice are presented to assist in the development, implementation and evaluation of gastrointestinal nursing practice.

In Chapter 1 the foundation for considering nursing care associated with a variety of gastrointestinal disorders is described. It reflects on the context in which care is provided and the professional role of the nurse. It provides a viewpoint on accountability and managing risk associated with the complexities of gastrointestinal nursing and concludes by acknowledging that gastrointestinal nursing does not exist in isolation. It exists within an environment in which it is integral to, and forms an essential part of, the multidisciplinary team responsible for the care of patients who have gastrointestinal disease and disorders.

Chapter 2 articulates the anatomy and physiology of the gastrointestinal tract. It provides background knowledge for the chapters that follow so that the aspiring nurse as well as the practising nurse or allied health professional can understand the complexities of diseases and disorders within the practice of gastrointestinal care.

Chapter 3 discusses nutrition, including the components of a healthy diet. It indicates that constituents such as proteins, lipids, carbohydrates, minerals and vitamins are essential elements that should be balanced in a healthy diet. Malnutrition, dehydration, screening and assessment of nutritional status, food poisoning and its causes and prevention are discussed. Consideration is also given to the issues of food poverty, food security and the politics of food.

Chapter 4 relates to complaints of the upper gastrointestinal tract. Conditions of the oesophagus, stomach and duodenum, and cancer of the upper gastrointestinal tract are discussed. At the conclusion of the chapter knowledge of the various upper gastrointestinal complaints will be improved. By reading the chapter,

student and practising nurses will have a greater understanding of the management options available and the diagnostic tests that patients with upper gastrointestinal symptoms may undergo. Finally, the lifestyle changes that some patients with upper gastrointestinal complaints may find beneficial are presented.

Chapter 5 involves consideration of constipation, diarrhoea, wind and bloating, rectal pain and bleeding, mesenteric ischaemia, perforation, appendicitis, occult gastrointestinal (GI) bleeding, intestinal obstruction, intra-abdominal abscesses and pancreatitis. Each condition is defined in association with its epidemiology and pathophysiology. Its assessment, diagnosis and associated care planning with nursing interventions are also discussed. At the conclusion of the chapter, key points are presented to assist the student or practising nurse in caring for patients with lower GI complaints.

Chapter 6 reflects on tumours of the gastrointestinal tract. The epidemiology, pathophysiology, aetiology, signs and symptoms, diagnosis and management of gastrointestinal tumours provide the background for the provision of nursing care. The nursing process, including diagnosis and care planning as well as implementation of various interventions, are discussed to assist the student and practising nurse in the provision of care to patients with gastrointestinal tumours.

Chapter 7 addresses malabsorption syndrome. It is indicated that malabsorption is not a diagnosis but a range of syndromes that occur when nutrients are not absorbed from within the gastrointestinal tract. Pathophysiology, including inflammation and infection, structural abnormalities, insufficient digestive agents and impaired transport, forms the foundation knowledge for appropriate nursing care. Assessment, diagnosis, care planning and nursing interventions conclude the chapter to assist the student or practising nurse or allied health professional in the provision of care.

Chapter 8 explores the chronic disorder of inflammatory bowel disease, which typically presents in early adulthood. It provides a fundamental understanding of inflammatory bowel disease that will enable the student or practising nurse to assess, plan and deliver immediate care for this patient group. It also focuses on the long-term support required for the person with a chronic debilitating illness.

Chapter 9 considers a range of procedures used in imaging of the gastrointestinal tract. It gives a brief description of each procedure, along with patient preparation and aftercare. It is noted that the gastrointestinal tract can be difficult to image well, as it does not show up clearly on images. Various factors considering this conundrum are discussed. The use of contrast agents and good bowel preparation are described to show how much of this problem can be overcome.

Chapter 10 explores a range of conditions that cannot be neatly categorised as arising within a part of the gastrointestinal tract, but for which they have significant implications. Diseases addressed include coeliac disease, anorexia nervosa, reactive arthritis, gastrointestinal anthrax and trichinosis. Epidemiology, pathophysiology, assessment, diagnosis and treatment, including the provision of nursing care, are described in association with each disease.

The authors who have contributed to this book are experts in the field of gastrointestinal nursing practice. They have written each chapter with the intention of providing knowledge that will promote skill development in gastrointestinal nursing practice. We think you will enjoy reading this text.

Carol L. Cox, Martin J. Steggall and Alison M. Coutts

#### Acknowledgement

Special thanks are expressed to Mariann Baulf for her advisory capacity in Chapter 10: Other diseases.

# **Contributors**

#### Daniel Apau, MSc, BSc, ENB 100, RGN

Lecturer, Advanced Practice, School of Health Sciences, City University London (Chapter 6)

#### Warren Chapman, MSc Advanced Practice (Nursing), RN

JAG accredited upper and lower GI Endoscopist Nurse Consultant, Endoscopy Unit, City Hospital, Sandwell and West Birmingham Hospitals NHS Trust, Birmingham (Chapters 4 and 10)

#### Alison M. Coutts, MSc, BSc, PGCEA, RGN

Senior Lecturer Applied Biological Sciences, School of Health Sciences, City University London

(Chapters 3 and 7)

#### Carol L. Cox, PhD, MSc, MA Ed, PG Dip Ed, BSc (Hons), RN, FHEA

Professor of Nursing, Advanced Clinical Practice, Department of Applied Biological Sciences, School of Health Sciences, City University London (Chapters 1 and 5)

#### Jennifer C. Edie, MEd, TDCR, DMU

Senior Lecturer, Radiography, School of Health Sciences, City University London (Chapter 9)

#### Martin J. Steggall, PhD, MSc, BSc (Hons), RN (Adult), FHEA

Associate Dean, Pre-registration Undergraduate Nursing and Midwifery, School of Health Sciences, City University London (Chapter 2)

#### Contributors

#### Julia Williams, MEd, BSc (Hons), Dip D/N, RGN

Senior Lecturer Burdett Institute of Gastrointestinal Nursing, Burdett Institute of Gastrointestinal Nursing with King's College and St. Mark's Hospital, Harrow, London

(Chapter 8)

# Introduction to the fundamental aspects of gastrointestinal nursing

Carol L. Cox

#### Introduction

The practice of gastrointestinal nursing is both a science and an art. It requires specialised knowledge and skills to provide holistic care to patients and to ensure positive patient experiences in both health and illness. Practice as a gastrointestinal nurse occurs in a variety of environments. Gastrointestinal nurses may find themselves practising in an outpatient clinic, ward or palliative care unit as well as working in patients' homes as nurse specialists. The purpose of this book is to articulate the fundamental aspects of nursing patients who have gastrointestinal disorders. It is targeted primarily toward the student nurse or nurse who is preparing to work in a clinical environment that manages gastrointestinal disorders for the first time. However, it also has specific relevance for practice nurses working in general practice surgeries and district and health visiting nurses who need to recognise gastrointestinal disorders when managing their patient caseloads. It also has relevance for allied health professionals practising within primary and secondary care who wish to gain fundamental knowledge about gastrointestinal disorders.

Providing holistic care to patients with gastrointestinal disorders requires an understanding of basic human needs and the ability to grasp patients' understanding of their health and illness within the context of their cultural background. Nursing theories and models of care and models like the Health Belief Model (Becker, 1974) are essential knowledge that impart a basis and rationale for practice. They also render a focus for nursing care. The patient's physical, intellectual, psychosocial, cultural, ethnic, spiritual and environmental factors must all be taken into account

when promoting wellness, preventing illness and fostering the development of coping mechanisms (Watson, 1999, 2008). In addition, an understanding of the attitudes and values that influence human behaviour and the ethical dimensions of nursing practice (Nursing and Midwifery Council (NMC), 2008) are essential components of the nurse's toolkit in the management of patient care.

#### **Activity**

Reflect on the models of care that you have learned about as a student at university. Which ones have influenced your world view about practice?

This chapter establishes the foundation for considering nursing care associated with a variety of gastrointestinal disorders. It considers the context in which care is provided and the professional role of the nurse. It provides a viewpoint on accountability and managing risk associated with the complexities of gastrointestinal nursing and concludes by acknowledging that gastrointestinal nursing does not exist in isolation. Gastrointestinal nursing has broadened within all areas of its specialism and exists within an environment in which it is integral and forms an essential part of the multidisciplinary team responsible for the care of patients that have gastrointestinal disease and disorders.

#### Context of care and professionalism

The context in which nursing care is provided is undergoing significant change in the National Health Service (NHS) and throughout the global health economy (Cox, 2011; Cox and Hall, 2007). The changing context requires an entirely new level of professionalism. Professionalism can be defined as 'the conduct, aims, or qualities that characterise or mark a profession or a professional person' (Merriam-Webster, 2003, p. 991). In assuming the professional role, the nurse conforms to the technical and ethical standards of nursing, exhibiting a courteous, conscientious and generally businesslike manner in the workplace (NMC, 2008). Within the context of a busy clinic or ward maintaining such behaviour can be fraught with difficulties. It requires having a cool head when it may appear everyone about the nurse is losing theirs.

According to Brehm *et al.* (2006) the concept of professionalism is multifaceted. Professionalism may be divided into three components or categories: professional parameters, professional behaviours and professional responsibilities (Bossers *et al.*, 1999). Professional parameters include legal and ethical issues, whilst

professional behaviours are related to discipline-related knowledge and skills: relationships with patients and colleagues in which collaboration and collegiality become essential components and an acceptable appearance and attitude. Professional responsibilities relate to a responsibility to the nursing profession, to oneself, patients, employers and the community. Nurses must develop the full spectrum of characteristics, attitudes and behaviours, including a lifelong commitment to professionalism if they are to be regarded as a professional.

#### Activity

Describe what the Nursing and Midwifery Council states in the code (NMC, 2008) regarding confidentiality, collaboration, professional boundaries and acting with integrity.

#### Accountability and managing risk

Part of professionalism is being accountable for interventions undertaken by the nurse. Gastrointestinal diseases and disorders require a variety of interventions that can lead to serious consequences for patients when the organisation in which the nurse works has not put in place the correct systems and processes to prevent incidents from happening, when procedures have not been followed (generally due to poor observation) or when a nurse disregards protocol (generally due to lack of judgement). Serious untoward incidents (also known as SUIs) are now termed 'never events' by the Department of Health (DoH, 2011a):

'Never events' are very serious, largely preventable patient safety incidents that should not occur if the relevant preventative measures have been put in place. (DoH, 2011a, p. 1)

Gastrointestinal nurses should know that for an incident to be identified as a 'never event' it must fulfil the following criteria:

- The incident has clear potential for or has caused severe harm/death.
- There is evidence of occurrence in the past (i.e. it is a known source of risk).
- There is existing national guidance and/or national safety recommendations on how the event can be prevented and support for implementation.

- The event is largely preventable if the guidance is implemented.
- Occurrence can be easily defined, identified and continually measured (DoH, 2011b, p. 4).

Examples of various types of incident that can occur include: perforation of the oesophagus during endoscopic dilatation of oesophageal strictures; excessive restriction of the stomach during bariatric surgery; poor siting of a stoma; theft of prescription forms (FP10s); delays of biopsy results; and lost referral of patients who have been diagnosed with gastrointestinal tumours.

The Department of Health (DoH, 2011b) has published 25 'never events' that should be regarded as unacceptable in the health service. These are:

- 1. Wrong site surgery (existing)
- 2. Wrong implant/prosthesis (new)
- 3. Retained foreign object post-operation (existing)
- 4. Wrongly prepared high-risk injectable medication (new)
- 5. Maladministration of potassium-containing solutions (modified)
- 6. Wrong route administration of chemotherapy (existing)
- 7. Wrong route administration of oral/enteral treatment (new)
- 8. Intravenous administration of epidural medication (new)
- 9. Maladministration of insulin (new)
- 10. Overdose of midazolam during conscious sedation (new)
- 11. Opioid overdose of an opioid-naïve patient (new)
- 12. Inappropriate administration of daily oral methotrexate (new)
- 13. Suicide using non-collapsible rails (existing)
- 14. Escape of a transferred prisoner (existing)
- 15. Falls from unrestricted windows (new)
- 16. Entrapment in bedrails (new)
- 17. Transfusion of ABO-incompatible blood components (new)
- 18. Transplantation of ABO or HLA-incompatible organs (new)
- 19. Misplaced naso- or orogastric tubes (modified)
- 20. Wrong gas administered (new)
- 21. Failure to monitor and respond to oxygen saturation (new)
- 22. Air embolism (new)
- 23. Misidentification of patients (new)
- 24. Severe scalding of patients (new)
- 25. Maternal death due to post partum haemorrhage after elective Caesarean section (modified)

(DoH, 2011, pp. 18-32)