

Third Edition

# Physical Assessment for Nurses and Healthcare Professionals

Edited by  
Carol Lynn Cox



WILEY Blackwell



Physical Assessment for

# **Nurses and Healthcare Professionals**



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Third Edition

EDITED BY

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# Foreword

Underpinning the appropriate delivery of healthcare is the Physical Assessment. This structured physical examination allows the healthcare professional to obtain a comprehensive assessment of the patient and is critically important in that it leads to clinical decisions which are crucial for the patients' care.

This volume, *Physical Assessment for Nurses and Healthcare Professionals*, provides a clear and easy-to-use guide to achieving an excellent physical assessment. It is specifically intended for those embarking on a career in healthcare and contains the techniques used by specialist/advanced practitioners.

In this book the need for a comprehensive and holistic approach to the Physical Assessment is excellently presented by Professor Cox. Professor Cox shows how important it is to develop a rapport with the patient in order to carefully assess their perceptions and how this relationship must be established from the very first meeting when information is exchanged between the healthcare professional and the patient. Fundamental to gaining this perspective is to listen. The importance of guiding the healthcare practitioner to engage in active listening cannot be underestimated and this is reflected in the fact that not being heard is an issue which is often raised as a point of criticism of healthcare professionals by patients and their families.

Careful observation and reports of subjective symptoms are the window through which healthcare professionals gain knowledge of their patients. Following on from the opening chapters this volume is structured to enable the healthcare professional to learn how to systematically gather information before moving on to an initial diagnosis and further investigations. The tools of inspection, palpation, percussion, and auscultation are key to this assessment and excellently laid out in the chapters covering the examination of the different organs of the body, different age groups, and some specialist topics. Professor Cox has also helpfully included in the appendix a number of the widely used standardised instruments to assess such areas as disability, activities of daily living, reading, and mental state.

It is key for healthcare professionals to be able to communicate the outcomes of their Physical Assessment to their professional colleagues. In the final chapter Professor Cox demonstrates her experience and understanding of the world of healthcare when she talks about the importance of this communication between professionals and how the Physical Assessment can bring together disparate professional views which will underpin the diagnostic process.

Professor Cox is a consummate professional who has been an educator for most of her career with a focus on clinical practice and the patient experience. She couples her educational activity with an extensive research record on nursing practice. In *Physical Assessment for Nurses and Healthcare Professionals*, Professor Cox has created an invaluable guide that will not only support practitioners as they enter into a clinical career in healthcare but which can be used as an ongoing reference book to support their careers as they move into advanced practice.

Professor Stanton Newman



# Preface

Over the past two to three decades, many changes have been seen in the roles of healthcare professionals. Significant changes have been seen in the allied health professions, nursing, and midwifery. It is common practice now to see the healthcare professional functioning as an independent practitioner with specialist/advanced practice qualifications. For example, to list but a few, it is not uncommon to find audiologists, nurses, midwives occupational therapists, opticians, physiotherapists, and radiotherapists with master's and doctoral degrees diagnosing and treating patients. These practitioners are expected to know how to provide expert holistic health-oriented care for culturally diverse populations. Specialist/advanced practice health professionals view the patient as an individual with physical as well as emotional, psychological, intellectual, social, cultural, and spiritual needs. A comprehensive assessment of the patient is the foundation upon which healthcare decisions are made. The best way to develop assessment skills is to learn them systematically. The systematic approach involves taking a full health history, conducting a physical examination, and reviewing diagnostic tests/laboratory data. Use of advanced assessment skills are essential in clinical decision making that leads to the formulation of a differential diagnosis and final diagnosis.

This text for healthcare professionals is based on Turner and Blackwood's *Lecture Notes on Clinical Skills* that was written for medical students. It is intended to be used as a reference book that can be reviewed near the patient in the clinical setting. In general, the pages are arranged with simple instructions on the left, with important aspects requiring action marked with a bullet (●). Subsidiary lists are marked with a dash (–). On the right are brief details of clinical situations and diseases that are relevant to abnormal findings. In this edition, colour photographs of assessment techniques have been added as well as case studies to assist healthcare practitioners in their assessment of the patient.

Turner and Blackwood's *Lecture Notes on Clinical Skills* has been used in the Oxford Clinical Medical School for over 40 years and is viewed as an essential guide for medical students globally. It should be noted that although some doctors may use slightly different techniques in taking a history and physical examination, it is recommended that healthcare practitioners embarking on a career as specialist/advanced practitioners use the techniques recommended in this text because they provide a sound approach for developing and employing clinical decision making.

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Figures appearing on pp. 36, 37, 41, 49 (Figure 3.1), 52 (Figure 3.2), 53 (Figure 3.3), 54, 55 (Figure 3.4), 56 (Figure 3.5), 69 (Figure 3.11), 75 (Figures 4.1 and 4.2), 76 (Figure 4.3), 77 (Figures 4.4 and 4.5), 78 (Figure 4.6), 81 (Figure 4.7), 82 (Figure 4.9) and 83 (Figure 4.10) are reproduced with permission of City University from *Advanced Practice: Physical Assessment* (1997), Carol Lynn Cox, Professor, City University London, St Bartholomew School of Nursing and Midwifery, ISBN 1900804255, Reprinted 2002.

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# Introduction

## The First Approach

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### General Principles

It is important to understand that for the purposes of examination, assessment, and diagnosis, doctors are framing their approach to the patient from the perspective of the medical model. However, you must recognise that as an allied healthcare practitioner, you are employing the medical model within your frame of practice. Therefore, to be wholistic, the approach incorporates all aspects of your particular discipline (e.g. audiology, nursing, midwifery, physiotherapy, occupational therapy, radiography, respiratory therapy, speech therapy).

### General Objectives

When you approach a patient there are four initial objectives you should consider:

- Obtain a professional rapport with the patient and gain their confidence.
- Obtain all relevant information that allows assessment of the illness and provisional diagnoses.
- Obtain general information regarding the patient and their background, social situation, and problems. In particular, it is necessary to find out how the illness has affected the patient, their family, friends, colleagues, and life.
  - A wholistic assessment of the patient is of utmost importance.
- Understand the patient's own ideas about their problems, major concerns, and expectations of the hospital admission, outpatient, or general practice consultation.

Remember medicine is just as much about worry as disease. Whatever the illness, whether chest infection or cancer, anxiety about what may happen is often uppermost in the patient's mind (Clark 1999; Japp and Robertson 2013; NHS Wales 2010).

## Listen Attentively (Engage in Active Listening.)

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Engage in active listening

The following notes provide a guide as to how the healthcare practitioner obtains the necessary information.

### Specific Objectives

In taking a history or conducting a physical examination there are several complementary aims:

- Obtain all possible information about a patient and the illness (a database) from both a subjective and objective perspective.
- Consider all possible differential diagnoses related to the patient and the illness.
- Formulate the diagnoses from the patient's subjective, objective physical examination and investigative tests (e.g. laboratory, radiologic, and other).
- Solve the problem as to the diagnoses (Bickley and Szilagyi 2013; Japp and Robertson 2013; Jarvis 2015).

### Analytical Approach

For each symptom or sign you need to think of a differential diagnosis and of other relevant information (from the history, physical examination, and/or investigative tests) that will be needed to support or refute possible diagnoses. A good history, physical examination, and investigation include these two facets and can be viewed as either positive (support) or negative (refute) findings. To achieve a formal diagnosis, following differential diagnosis, critical thinking/clinical decision making is used to examine positive and negative findings. Healthcare practitioners frequently find that using the first two components of the Subjective, Objective, Assessment, and Plan (SOAP) (Clark 1999) format can help them formulate their diagnosis. You should never approach the patient with just a set series of rote questions. Frequently in preassessment clinics, ambulatory services (outpatient) clinics, or general practice settings, standard assessment forms within an electronic patient record (EPR) are used as a guide to history taking. However, there are some instances in which paper records are employed. These tools provide the necessary basis for a later, more inquisitive approach that should develop as knowledge about the patient's problem is acquired. Key to the process of achieving a diagnosis and formulating a plan of care is

listening carefully to the patient, taking time, not assuming a diagnosis when the patient initially expresses their chief complaint, and understanding your own values, attitudes, and beliefs as they relate to diverse patient populations (Japp and Robertson 2013).



Focus on the patient

The 'subjective' and objective components of the SOAP format provide a basis for diagnosis. Within the subjective component, the patient's perspective of the problem/illness is stated in their own words. This is often listed as the patient's chief complaint. In addition, the patient's 'subjective' view of their health history (e.g. childhood diseases and immunisations) as well as family history, present medications, how and when the patient takes the medications, and chronological ordering of sequelae leading to the presenting problem are documented. The objective component consists of your physical examination and investigative tests. Assessment involves the formulation of a diagnosis from the history, physical examination, and investigative tests. Plan involves the development of the plan of care for the patient as well as where, when, how, and by whom the plan will be implemented (Bickley and Szilagyi 2013).

## Self-Reliance – Getting Started

**You must take your own history, make your own examination, and write your own clinical records.** After a month or two you should be sufficiently proficient that your notes can become part of the final medical record. You should add a summary including your assessment of the problem list, provisional diagnoses, and preliminary investigations. Initially when developing your assessment/examination skills these will be incomplete and occasionally incorrect. Nevertheless, the exercise will help to inculcate an enquiring approach and to highlight areas in which further questioning, investigation, or study/reading is needed.

## What Is Important When You Start?

**At the basis of all practice is clinical competence.** No amount of knowledge will make up for poor technique.

Over the first few weeks it is essential to learn the basics of history taking and physical examination. This involves:

- how to relate to patients
- how to take a good history efficiently, knowing which question to ask next and avoiding leading questions

- how to examine patients in a logical manner, in a set routine that will mean you will not miss an unexpected sign

You will be surprised how often healthcare practitioners can fail an exam, not because of lack of knowledge but because they have not mastered elementary clinical skills. These notes are written to try and help you to identify what is important and to help relate findings to common clinical situations.

There is nothing inherently difficult about history taking and physical examination. You will quickly become clinically competent if you:

- apply yourself
- initially learn the skills that are appropriate for each situation

## Common Sense

Common sense is the cornerstone of good practice.

- Always be aware of the patient's needs.
- Always evaluate what important information is needed:
  - to obtain the diagnosis
  - to provide appropriate treatment
  - to ensure continuity of care at home.

Many mistakes are made by being sidetracked by aspects that are not important. Remain focused on the patient.

## Learning

Your clinical skills and knowledge can soon develop with good organisation.

- **Take advantage of seeing as many patients** in acute care (hospital and ambulatory clinics) and in primary care (the community) as possible. It is particularly helpful to be present when patients are being admitted as emergencies or are being seen in an ambulatory clinic or general practice setting for the first time.
- **Obtain a wide experience of clinical diseases**, how they affect patients, and how they are managed.
  - The more patients you can clerk yourself, the sooner you will become proficient and the more you will learn about patients and their diseases.

## Building Up Knowledge

At first history taking and physical assessment seem like a huge subject and each fact you learn seems to be an isolated piece of information. How will you ever be able to learn what is required? You will find after a few months that the information related to each system interrelates with other systems. The pieces of the jigsaw puzzle begin to fit together and then your confidence will increase. Although you will need to learn many facts, it is equally important to acquire the attitude of questioning, reasoning, and knowing when and where to go to seek additional information.

- Choose a medium-sized textbook in which you can read about each disease you see or each problem you encounter.
  - Attaching knowledge to individual patients is a great help in acquiring and remembering facts. To practice history taking and physical assessment/examination without a textbook is like a sailor without a chart, whereas to study books rather than patients is like a sailor who does not go to sea.