

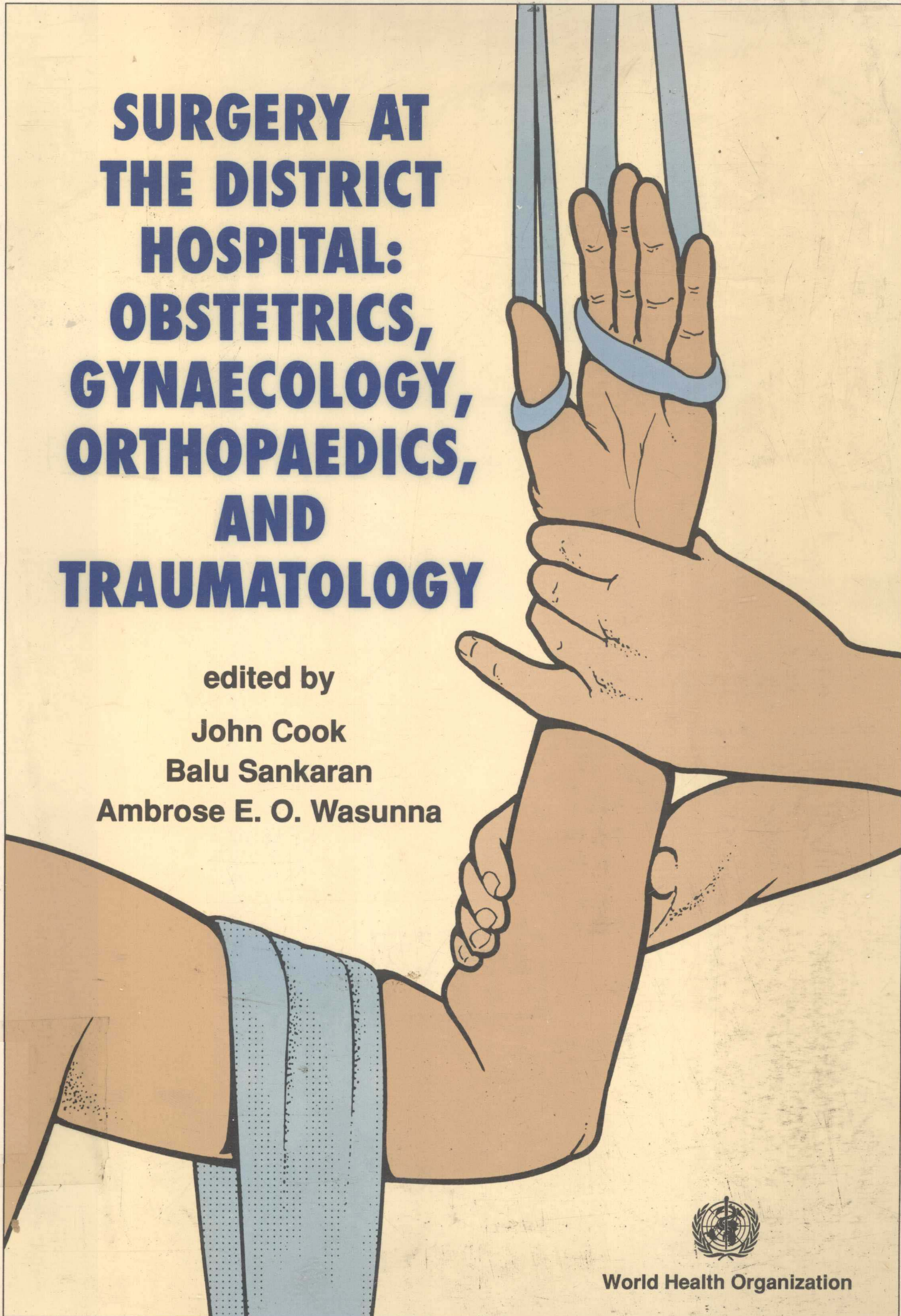
SURGERY AT THE DISTRICT HOSPITAL: OBSTETRICS, GYNAECOLOGY, ORTHOPAEDICS, AND TRAUMATOLOGY

edited by

John Cook

Balu Sankaran

Ambrose E. O. Wasunna



World Health Organization

Surgery at the district hospital: obstetrics, gynaecology, orthopaedics, and traumatology

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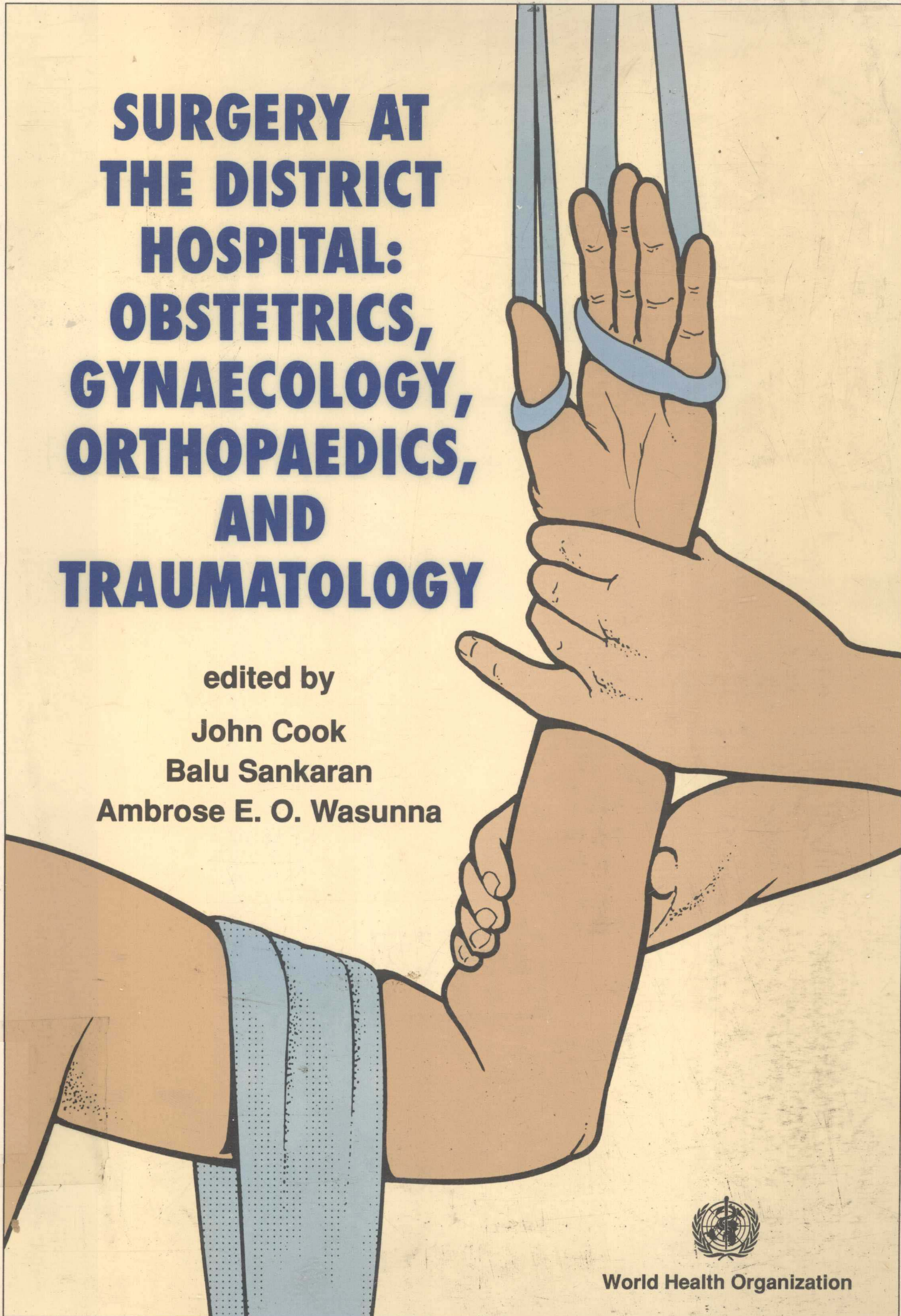
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This handbook is one of three published by the World Health Organization for the guidance of doctors providing and anaesthetic services in small hospitals that are subject to constraints on personnel, equipment, and drugs and where access to specialist services is limited. It has been prepared for the medical officer who does not necessarily have a formal surgical training, but nevertheless has experience, gained under supervision, of all the relevant techniques.

The text, complemented by numerous detailed illustrations, is split into two main parts – obstetrics and gynaecology, and orthopaedics and traumatology. The first of these describes obstetric procedures considered essential for treating the major complications of pregnancy and childbirth and for preventing maternal death, as well as various gynaecological procedures appropriate to the district hospital. The second part covers both basic orthopaedic techniques, such as traction and plaster application, and the management of specific fractures, dislocations, and other injuries, including burns. Simple but standard surgical techniques have been selected wherever possible, and procedures that require specialist skills or that could add unnecessarily to the doctor's workload have been avoided. Essential surgical instruments, equipment, and materials for the district hospital are listed in the annexes.

Also available:

Dobson, M.B. *Anaesthesia at the district hospital* (1988)
“...an excellent, accurate, basic manual...” – *Anaesthesia*

Cook, J. et al., ed. *General surgery at the district hospital* (1988)
“...an invaluable practical guide for doctors working in remote areas...”
– *British journal of clinical practice*

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Preface

This handbook is one of three¹ published by the World Health Organization for the guidance of doctors providing surgical and anaesthetic services in small district hospitals (hospitals of first referral) with limited access to specialist services. The advice offered has been deliberately restricted to procedures that may need to be carried out by a young doctor with limited experience in anaesthesia, surgery, or obstetrics, using the facilities that can reasonably be expected in such hospitals. Wherever possible, the drugs, equipment, and radiodiagnostic and laboratory procedures described conform with WHO and UNICEF recommendations.

Although the handbooks contain detailed descriptions and illustrations, the advice they offer is no substitute for practical experience. The reader is expected to have been exposed to all the relevant techniques during undergraduate or early postgraduate education. When necessary the text indicates which patients should be referred for specialized care at a higher level, as it is important to developing health services that young doctors and their superiors understand the limitations of practice at the district hospital.

It has, of course, been necessary to be selective in deciding what to include in the handbooks, but it is hoped that any important omissions will be revealed during field testing. WHO would also be pleased to receive comments and suggestions regarding the handbooks and experience with their use. Such comments would be of considerable value in the preparation of any future editions of the books. Finally, it is hoped that the handbooks will fulfil their purpose—to help doctors working at the front line of surgery throughout the world.

The three handbooks have been prepared in collaboration with the following organizations:

- Christian Medical Commission
- International College of Surgeons
- International Council of Nurses
- International Federation of Gynaecology and Obstetrics
- International Federation of Surgical Colleges
- International Society of Burn Injuries
- International Society of Orthopaedic Surgery and Traumatology
- League of Red Cross and Red Crescent Societies
- World Federation of Societies of Anaesthesiologists
- World Orthopaedic Concern.

¹ Also available: *Anaesthesia at the district hospital* and *General surgery at the district hospital*.

Acknowledgements

The traumatology and orthopaedics section of this handbook has been prepared in collaboration with the International Society for Orthopaedic Surgery and Traumatology (SICOT), which reviewed and endorsed the draft manuscript and illustrations. The International Society for Burn Injuries reviewed and endorsed the draft manuscript and illustrations for the chapter on burns.

The editors would like to acknowledge the valuable suggestions received from: Professor J.A. Boswick, Professor of Surgery and Chief, Hand Surgery Service, University of Colorado School of Medicine, Denver, CO, USA; Dr J.C. Cobey, Chairman, Health Volunteers Overseas, Washington, DC, USA; Dr A. Trias, Orthopaedic Surgeon, Barcelona, Spain; and Mr J.N. Wilson, formerly President, World Orthopaedic Concern, and Consultant Orthopaedic Surgeon, Royal National Orthopaedic Hospital, London, England.

Acknowledgements are also due to Churchill Livingstone, Edinburgh, for permission to adapt drawings from Rintoul, R.F., ed. *Farquharson's textbook of operative surgery* (6th edition, 1978) for Figures 21.3H and 23.3K; from Powell, M. *Orthopaedic nursing and rehabilitation* (9th edition, 1986) for Figures 19.2C and 24.1E; and from Wilson, J.N., ed. *Watson-Jones fractures and joint injuries* (6th edition, 1982) for Figures 15.2D and 19.1A, B.

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Introductory notes

This handbook describes a limited number of surgical procedures. They have been chosen as appropriate for the doctor who does not have a formal surgical training, but who nevertheless has experience, gained under supervision, of all the relevant techniques. With the exception of tubal ligation and the insertion of intrauterine devices (IUDs), which may be an important part of national family planning programmes, the procedures included are considered essential for saving life, alleviating pain, preventing the development of serious complications, or stabilizing a patient's condition pending referral. Operations that require specialist skills or that could add unnecessarily to the doctor's workload have been avoided, and simple but standard surgical techniques have been selected whenever possible. Nevertheless, certain procedures that may appear technically difficult (for example subtotal hysterectomy and burr-hole craniotomy) are included because they may offer the best chance of saving a patient's life.

The handbook is split into two main sections—obstetrics and gynaecology, and orthopaedics and traumatology—and covers the more specialized topics not included in Cook, J. et al., ed. *General surgery at the district hospital* (Geneva, WHO, 1988). The reader is referred to the book on general surgery for a discussion of basic surgical principles and techniques, fluid and electrolyte therapy, blood transfusion, and the management of shock and to the list inside the back cover of the present book for details of other WHO publications of related interest. Details of anaesthetic techniques suitable for use at the district hospital are given in Dobson, M.B. *Anaesthesia at the district hospital* (Geneva, WHO, 1988).

Obstetrics and gynaecology

The obstetric procedures described here are those that are essential at the district hospital for treating the major complications of pregnancy and childbirth and for preventing maternal death. Although most normal deliveries are conducted by midwives or traditional birth attendants rather than by medical officers, a description of normal labour and delivery has been included as a basis for recognizing complications. The gynaecology section of the book provides details not only of general gynaecological procedures but also of female sterilization and IUD insertion, and includes a chapter on