

Chapter 1

Introduction

The transition from medical school to being a junior doctor, and then a practicing surgeon is challenging. It requires knowledge, clinical skills and technical dexterity but also the ability to efficiently function in the surgical workplace and be a reliable team member. Being a surgeon is not just a profession but a way of life.

Medical school and postgraduate training often provide clinical and technical knowledge that are essential in formulating a clinical diagnosis, initiating medical treatment, and planning or carrying out invasive surgical procedures. However, surgery may be viewed not just as another medical specialty, but as an apprenticeship, that requires the acquisition, application, and constant refinement of lifelong skills. Surgery doesn't get taught simply through books, but has to be seen and experienced, over and over again.

This book presents some well-known career skills to help improve your day to day surgical performance, development and progression. The generic guidance presented in this book may be of use to aspiring surgeons, no matter their surgical subspecialty choice and no matter where they practice.

Professionalism is central in our day to day performance, guiding our interactions with patients, other doctors, or non-medical staff. The chapter on professionalism explores some of the behaviours that may help improve one's conduct.

Effective communication is necessary in transmitting and receiving information as well as developing and maintaining functional relationships. The first part of the communication chapter discusses basic concepts of communication and ways in which one may improve their communication skills. The second part focuses on how to communicate to patients surgical treatment options and the processes of shared decision making and informed consent.

The ability to organise a surgical theatre list and achieve efficient theatre utilisation is an inherent part of surgical practise. It involves planning the content and order of a surgical list, taking into account, amongst others, clinical priorities, safety factors, and available resources. Hence, a chapter is devoted discussing how to construct a theatre list, followed by ways in which theatre time utilisation may be enhanced.

Acquiring, improving and maintaining technical surgical skills in the era of working hours restriction is a highly demanding task, hence training opportunities must be maximised and thoroughly utilised. The chapter on surgical technical skills discusses how to plan for a surgical procedure, along with ways of developing surgical motor skills.

Surgeons often practise under dynamic, constantly changing conditions. A clear understanding of the context in which one practises is essential in facilitating decision making and improving performance. Appreciating the process of situation awareness and recognising the factors that may assist or impair a surgeon from reaching that state are important skills to develop and are discussed in the subsequent chapter.

As surgeons we are often faced with a constant need of making decisions. Being aware of how we reach such decisions and recognising the potential limitations of our decision making are important skills to develop. The chapter on decision making discusses intuitive and analytical decision processes, and explores the various biases in making decisions. It also discusses some of the factors that may influence our decision to offer surgery, especially in the absence of strong scientific evidence.

Surgeons are often called upon to lead or manage, through formal or informal roles, and these are important skills in surgical practise. The chapter on leadership describes various leadership styles, discusses the challenges a surgeon leader may face, and presents both desirable and undesirable leadership behaviours for the surgeon leader. The need to distinguish between leading and holding leadership titles or posts is emphasised.

Surgical research may be considered as the process through which we can discover new information to improve our understanding and management of surgical conditions. The surgeon has a central role in identifying areas in which further research is needed, in carrying out surgical research and implementing its findings. The chapter on surgical research discusses the challenges faced in setting up and running clinical surgical studies as well as incorporating their findings in day to day practise. Advice is given on how to deal with such challenges, and also on how to contribute to the assessment of research as part of a Journal Club.

Audit is the process through which we can compare our surgical practise to a pre-defined ideal to help identify strengths and deficiencies, reflect, and further improve. The chapter on surgical audit describes the audit cycle and discusses the role of the surgical logbook, mortality and morbidity meetings, and national databases in assessing surgical outcomes.

The subsequent two chapters explore safety in surgery and discuss what to do when things go wrong. As surgeons we aim to improve our patients' condition but without causing harm. Understanding the factors that may lead to errors and harmful events, as well as the system processes and individuals' behaviours that may promote safety, are important skills to develop and are discussed. Nevertheless, despite all good intentions, it may be difficult, if not impossible, to achieve absolute safety, and on occasions adverse events will occur. Ways of dealing with an adverse event, exploring and understanding its root causes are presented. Particular refer-

ence is made to the process of evaluating clusters of uncommon, yet recognised, surgical complications.

The next chapter discusses how to prepare for postgraduate surgical interviews, along with potential questions and scenarios. Factors that may be considered in choosing a surgical specialty or sub-specialty are also given. Finally, the last chapter explores some aspects of a surgeon's world of emotions, with advice on how to deal with these.

As a Consultant Surgeon in Trauma and Orthopaedics who has done all my undergraduate and postgraduate training in the United Kingdom, the career skills presented in this book originate from personal experiences, the teaching and "wisdoms" of my senior trainers and from supervising and mentoring multiple junior surgeons.

Much of what is presented is commonly available knowledge, or is based on critical evaluation of the published literature, and every attempt has been made to acknowledge and reference its origins as warranted.

Some may not fully agree with what is presented, some may have opposite views, but that is understandable and acceptable. Nevertheless, I hope the reader will gain and benefit from what is said and incorporate some of the advice given in their surgical career.

Career Skills for Surgeons

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