
Sexually Transmitted Infections and Sexually Transmitted Diseases

Gerd Gross • Stephen K. Tyring
(Editors)

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 Springer

Editors

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Foreword

“Medicine, to produce health, has to examine disease, and music, to create harmony, must investigate discord.” Plutarch (AD 46–120), Translation by John Dryden (1631–1700).

Strictly speaking a foreword or preface are introductory remarks, especially by another than the author of the book. Dear reader, please excuse this once, the foreword from a contributor to this work. This field of medicine which examines pathology, clinical studies, sociology, diagnosis, prevention and treatment of an aspect of one of the results of humanity, the erotic or sexual life, has been much studied. But its passage ensues. Thus in the nature of endeavours of mankind, the study of sexually transmitted infections and sexually transmitted diseases will need to continue. This work the result of five years labour by two editors from two continents has resulted in sixty-three chapters, the products of many more minds cooperating and writing about the essentials of studies, research and clinical observation of the subject to instruct the reader who wishes to learn more about sexually transmitted infections and sexually transmitted diseases.

By the time one is asked to write a foreword, realisation dawns of the rapid passage of professional life. It seems not long ago but in fact it was almost fifty years when as a medical student at Charing Cross Hospital, London, who realised he did not know how to make a Gram stain, a prerequisite in the bacteriology final exams in those days, he ventured into the department for venereal diseases where not only did he learn how to pass his practical, but learned about those the same age as himself who were treated with devotion, respect and the best contemporary knowledge of the subject. This time the summer of 1964 made me want to study sexually transmitted diseases for my career. Little did I know then what a wonderful journey it would be for the rest of my life. Dear reader, especially for those at the start of their professional journeys, I hope aspects of this book will also make you think you would like to help others by devoting some of your energy and intellect to adding to the corpus of knowledge about sexually transmitted infections.

Since then so much has been added to sexually transmitted infections. Syphilis had been studied for five hundred years. We thought it would become a rare disease. We realise now we were mistaken and it weaves into all the other sexually transmitted infections. Antibiotic resistance in gonorrhoea has increased as would be expected but applied research into effective chemotherapy has lagged. Knowledge of Chlamydia

trachomatis at that time only known to a few is now an everyday matter, but it affects the fertility of so many young people. The diagnosis of microbial infection has been enormously furthered by techniques of applied DNA hybridisation. We had no cure and little understanding of the effects of genital herpes. There is still so much to be done in that field. We were beginning to understand the complexity of human genital papilloma virus infection. We were at the start of its relationship in some aspects to cervical and ano-genital neoplasia. The vaccine was many years away. In the 1970s, the sexual aspects of hepatitis B and then later the other hepatitises were established. A visit to San Francisco in 1975 was enough to show me how public health medicine took as a matter of serious concern, enteric diseases transmitted through sexual contact in men who had sex with men.

Then AIDS came to the Western World. For those of us in the field at the time we saw for the first time in the post-antibiotic era our fellow humans terribly suffering from a disease which at the start we did not know the cause. We saw ambulant patients, in my country mostly previously healthy men and later women and infants, visibly failing in health in front of us before dying. For all of us deep into our specialty, we saw dying patients, friends, loved ones, colleagues, for AIDS spared very few infected with the human immunodeficiency virus (HIV) in its early years. No specialty can work in isolation. The epidemic of HIV brought in extra magnificent and welcome minds and manpower into sexually transmitted infections. It introduced much needed governmental, international aid and private finance for prevention, and applied research. It rapidly brought the might of the pharmaceutical industry to manufacture within a comparatively short time highly active anti-retroviral therapy. Yet in that field so much more still needs to be done. I have travelled much to continents outside the West to see what devastating effects HIV/AIDS has on developing countries not only in the loss to human life but to the structure of countries and their social and economic well-being. So much still needs to be done.

Our knowledge of prevention of sexually transmitted infections is still in its infancy. There is far more to be done in the field of the development of immunisation to prevent sexually transmitted infections. In nineteenth century Europe there was a concept of immunisation for syphilis. This has not yet been achieved.

A glory of this work has been German–American cooperation in medical science. This follows a long and hallowed tradition in Europe and America. In the nineteenth century post-graduate students flocked to Vienna and Berlin to learn from the great men of medicine in those times. One such was the great William Osler, though born in Canada and making his career as a professor at Johns Hopkins and Oxford. In Vienna they would learn dermatology still a basic specialty of sexually transmitted infections from masters such as Hebra, Sigmund, Neumann and Kaposi. In Berlin the pupil would learn from the giants of general medicine and pathology such as Traube, Frerichs, Johannes Muller and Rudolph Virchow. It was not only in medicine that this cooperation flourished. Bismarck was much influenced by various friendships with American intellectuals of his day. Even the catastrophe of 1933 meant that American medical science would be enriched by refugees from Germany and Austria. However we must not forget this work is truly international from some of the best minds in the subject from around the world.

The editors Gerd Gross and Stephen Tyring are to be congratulated in seeing their concept reaching fulfilment. It is not an easy task to shepherd the contributors of a post-graduate medical comprehensive multi-authorship book towards finalisation of

their copy in not too long a time. It is a happy achievement for all authors in such a book to have written their allotted chapters to the best of their ability. One so much hopes this book will encourage and assist towards knowledge of sexually transmitted infections and sexually transmitted diseases.

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Preface

Sexually transmitted diseases (STDs), previously known as venereal diseases, have been a topic of major concern for centuries as they are considered very important risk factors for morbidity and mortality both in poor and in industrialised countries.

Great steps have been made during the last two centuries to combat STDs. The introduction of penicillin was a major breakthrough in the treatment of syphilis. In the late twentieth century HIV was documented as the cause of AIDS, and the association between genotypes of HPV and genitoanal cancer was documented. These events paved the way to the production of many classes of antiretroviral drugs and to the development of prophylactic HPV vaccines.

We now have a far better understanding of numerous sexually transmitted infections. Recent developments in diagnostic techniques not only have permitted more accurate diagnosis but also have widely improved our understanding of the natural history of STDs. It is only through such understanding that the feasibility of specific therapies and preventive methods can be determined, but much remains to be learned regarding STDs.

When planning this text an important consideration was to identify the audience to whom it is directed. It should be of value to the widest audience of physicians and scientists interested in sexually transmitted infections and STDs. However it is not intended only for clinicians and laboratory scientists. It is not a compendium of diseases and information about how they should be treated. Rather it attempts a synthesis of these areas, discussing the clinical, diagnostic, epidemiologic, pharmacologic, molecular biologic and immunologic interrelationships of pathogenic agents, antibiotics, antifungals, antivirals and disease.

The book is intended for those who will most need it in the coming years: the medical student and resident who are interested in infectious diseases, the clinician who diagnoses and treats STDs and the microbiologist who will advance new developments in the field.

We hope that the text will be of interest to readers who are concerned in any way with patients suffering from STDs and associated public health problems, e.g. physicians, nurses, counsellors, students, laboratory personnel, public health workers and politicians. It is also intended for the research scientist who hopefully will be encouraged to do further work in the field of STDs and sexually transmitted infections.

In order to reach such a wide and diverse audience, all aspects of sexually transmitted infections and STDs are covered in this text. We are grateful to the contributors from all parts of the world with their different backgrounds and recognised expertise compiling this manifold book.

There are many instances of overlap in the book, but this is not considered to be undesirable. In many instances it is done for completeness and emphasis. The reader will notice that the individual chapters vary somewhat in terms of length, organization and style. These variations arise from the differing natures of the topics being discussed. We have decided to maintain these differences, since the state of the art varies widely from one area to another.

This book not only covers diagnosis and treatment, but also emphasizes prevention. Education is the cornerstone of prevention and is the goal of this book. Recently the first vaccines to prevent STDs, i.e. for hepatitis B and HPVs, have been added to the list of preventative interventions ranging from condoms to abstinence. It is anticipated that vaccines to prevent other STDs will be added to this list in the future. Education regarding both prevention and treatment should result in better control of STDs. We hope that the book will contribute to increased awareness and knowledge of sexually transmitted infections and STDs emphasizing their important role in human medicine.

April 2011

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The Editors

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