Respiratory disorders account for a major burden of disease morbidity and mortality in Africa and the developing world, including South Africa. Asthma, for example, is said to be one of the commonest chronic diseases worldwide, with approximately 300 million individuals affected and the prevalence has increased by as much as 50% in the past decade. Pneumonia is the commonest infectious cause of death in both developed and developing countries and the HIV epidemic has been associated with substantial increases in hospital admission, particularly for infectious diseases including tuberculosis and lower respiratory tract infections. In South Africa, both asthma and lower respiratory tract infections feature in the top 20 causes of premature mortality burden in the country. However there have also been a number of significant advances in various respiratory diseases that have lead to a better understanding of many aspects of disease pathogenesis, as well as improved diagnosis, treatment and prevention of these different conditions.

In this edition of the South African Family Practice Journal, which is a “Chest Medicine” Issue, a number of Pulmonologists have been invited to write articles pertinent to their areas of interest in the field of respiratory diseases. The first article reviews the topic of the “primary atypical pneumonias”, a subject which has received relatively little research attention in South Africa. The article is written by Dr Andrew Black, a senior specialist, and newly qualified Pulmonologist, working at the Chris Hani Baragwanath Hospital, in Johannesburg. He has an interest in respiratory tract infections. Dr Black is currently undertaking a research project towards his Masters degree, aimed at investigating the value of sputum induction for the diagnosis of pulmonary tuberculosis in sputum smear-negative adults suspected of having such infections.

The second article describes an approach to chest pain, its diagnosis and management in General Practice. It is written by Dr John Opolot, another newly qualified Pulmonologist, working at the Helen Joseph Hospital in Johannesburg. Dr Opolot is also completing his Masters degree, investigating metabolic changes in patients with active pulmonary tuberculosis.

The next two articles cover the topic of asthma. The first is a review article by Professor Elvis Irusen, a senior Pulmonologist, who is director of the Lung Unit at the University of Stellenbosch and Tygerberg Hospital. Dr Irusen spent time at the Brompton Hospital in the United Kingdom, doing research in the unit of Professor Peter Barnes, a doyen of respiratory medicine in the world. Professor Irusen’s research investigated the topic of steroid response and resistance in asthma, and he has a number of important publications emanating from his work.

The other article is written by Professor Robin Green, a senior paediatric Pulmonologist previously in Private Practice, who is currently Director of Paediatric Pulmonology at the Pretoria Academic Hospital and University of Pretoria. Professor Green has for a long while had a keen interest in cost effective management of respiratory disorders, including both allergic rhinitis and asthma. His PhD degree was awarded on the basis of a thesis covering very similar topics.

The last article discusses the indications and limitations of office spirometry. It is written by Dr Jo Ann Richards, the third of our newly qualified Pulmonologists, working at Chris Hani Baragwanath Hospital. Spirometry is an important tool used in the diagnosis, evaluation and management of respiratory disorders. It is an essential part of equipment of all practicing Pulmonologists, but is also becoming widely used in General Practice. Although it is a very accurate and essential tool for respiratory disease management, correct performance of the test, using appropriate equipment, is essential to ensure validity. The various applications and limitations are well described by Dr Richards.

While respiratory diseases play a major role in the clinical practice of Pulmonologists in South Africa, it is gratifying to see that many of the newly qualified specialists as well as some of the more senior members in Pulmonology, often leaders in the Academic Units, are undertaking active research into many of these conditions.

Prof Charles Feldman, MBCh, PhD, FRCP, FCP(SA) Head: Pulmonology, Faculty of Health Sciences, Wits Medical School

REFERENCES