Minutes of the Eleventh Ordinary Meeting

Held on Tuesday 28th March 2017

'The Changing Face of Medicine'
Professor Parveen Kumar, Professor of Medicine and Education, St Bartholomew's Hospital, London. Former President, BMA and the RSM

Professor P Kumar and Mr D Machin

Professor Parveen Kumar gave an overview of how society, medicines and the practice of medicine has changed over the years. She started her talk by showing pictures of the 18th century buildings of her Hospital, St Bartholomew's in London, and the brand new buildings at the London hospital, developed with funding from a Private Finance Initiative. Whatever one's thoughts might be about borrowing money with a PFI, it demonstrated that the delivery of modern medicine costs money.

She then compared our perception of the trusted 18th century physician, equipped with his small pharmacological armamentarium, which was cheap, harmless and largely ineffective. She contrasted him, (most doctors were men then) with the modern UK doctor who has a large number of often complex therapies, which may be effective, are very expensive but can be harmful. And today, the patients expects autonomy and will question their doctor's advice.

Diseases and their treatments come and go, to be replaced by more effective therapies. For example, peptic ulceration used to be treated by vagotomy and pyloroplasty. It is now treated medically, with therapy to eradicate its cause, the bacteria helicobacter pylori, and the surgical operation has become obsolete. Myocardial infarction used to be treated with prolonged bedrest, ineffectively. Nowadays, treatment is more effective, with, antithrombotic agents, revascularisation and mobilisation.

Patients in Britain have also changed in their attitudes towards medicine and doctors. Because of easy access to medical information through television and internet search engines, they are now much better informed and much less deferential towards doctors. They want to be involved in the way they are treated and expect the best treatment available. The best treatment may be expensive and unaffordable when the government budget for the healthcare has fallen from 8.8% of the GDP in 2009 to 7.5% in 2014.

The demography of the British population has changed radically. More of us are living into old age. In 1996, 16% of the population was aged over 65. It is estimated that by 2035, 29% of us will be aged over 65. This has three financial consequences. Firstly, the proportion of the number of people in work and providing incomes that can be taxed, declines. Secondly, the proportion of people claiming pensions, increases. Thirdly, because, currently, in Britain 55% of the health budget is spent on people aged over 65, this demand for expenditure will increase.

Some illnesses are associated with lifestyle. This is not a new phenomenon, as attested by William Hogarth's 18th century portraits of London life. Nowadays, cheap alcohol, smoking, food and drink (both high in calories) plus a sedentary lifestyle are contributory to many illnesses. Environmental pollution is not a new phenomenon either. Typhoid and cholera were common diseases in London and other big cities until William Bazalgette designed and constructed sewers in the 1860's. The clean air act of 1960 was in response to London's smogs, which were caused by coal burning in home fires, factories and steam engines.

In many parts of the world, there is still lack of the infrastructures to support public health. Two thirds of the world's population live without access to drainage of soiled water. One third live without access to clean drinking water. The burning of coal or wood on open fires at home, for cooking and for heating, still cause much illness and accidents such as burns and injury and lung damage through the inhalation of fumes.

Nowadays, environmental pollution from homes and from industry is caused by atmospheric carbon dioxide and nitrogen oxides, which also contribute to global warming. Most, but not all, governments now acknowledge global warming to be a major environmental threat and to the supply of food. A one degree centigrade rise in atmospheric temperature will contribute to a diminution of the world's annual wheat production by 1 million tons. Also melting polar ice raises the sea level, which threatens many densely populated coastal areas.

While some people have become extremely rich and may suffer from diseases of excess, others have become extremely poor. There is an increasing divide between the world's rich and the world's poor. World wide, there is a refugee crisis like as not seen since the end of World War 2. Hundreds of thousands of people leave their home countries to try to gain access to Western Europe or North America or Australia, to escape extreme poverty or to flee from war or tyranny in the Middle East, Asia, Africa and South and Central America. Meanwhile, the world population has risen from 2 Billion in 1927 to 7.4 Billion in 2017 and will rise to a projected 11 Billion in 2100.

With poverty, old diseases such as tuberculosis, HIV and new diseases such as Ebola and Chikungunya thrive. However, in countries with civil wars, for example in parts of Nigeria, South Sudan, Iraq, Syria and Afghanistan, many people are facing frank starvation, which itself is used as a weapon of war.

In the fight for survival, women have often suffered unfairly in comparison to men. The maternal mortality rate shows one of the starkest contrasts between rich and poor countries; this ranges from 9 maternal deaths per 100,000 births in the UK in 2012 and 400 maternal deaths per 100,000 births in Afghanistan. In some countries, young girls are still forced to undergo female genital mutilation, a barbaric operation which blights a woman's sex life and her experience at childbirth. However and in contrast, in Sri Lanka, the implementation of simple measures, such as delivery by domiciliary midwives over the past 15 years, has improved the outlook in maternity care there. Education for women is essential to allow them to become financially independent of men and capable of controlling their lifestyles.

Professor Kumar has been involved in a number of Medical Societies over the years. She was a founding non-executive director of the National Institute for Clinical Excellence (NICE). She commended NICE in getting general public acceptance of the concept of clinical and cost effectiveness of drugs following assessing the efficacy and value of therapies. Her presidency of the RSM led to her to visit Liberia, where extreme poverty and civil war had totally disabled a thriving community. Unfortunately, its recovery was dealt a further blow by the outbreak of Ebola. Her visit to Liberia also made her question whether western medical teaching was appropriate for Liberian medical problems. She also saw the need for expert guidance in agriculture so that crops that thrive in Liberia could be used to feed the population.

Her joint editorial role in Kumar and Clark's Textbook of Clinical Medicine has seen the book evolve over a number of editions keeping up with the fast evolving changes in medicine. This textbook is now used in most medical schools across the world. Other smaller handbooks have evolved such as the hand book of medical management and therapeutics which is used as the practical vade-mecum to help the doctor at the bedside.

Professor Kumar concluded her talk by looking to the future. Many medical procedures, previously in the exclusive domain of doctors are now delivered by other professionals, such as midwives, practice nurses, pharmacists, physiotherapists and occupational therapists. Although, these professionals may be less expensive to employ than doctors, each profession requires training schemes, registration and assessment.

The very rapid progress in technology including changes in communication through the internet and smart phones effects the patient's expectations and how doctors learn about medical advances and learn to apply them. E-learning is used to train doctors and to update them. Telemedicine directed from a central site can be used to make diagnosis and to direct medical care in peripheral or distant sites.

The doctor in the first world will have to learn about medicine in this fast changing scenario. There may be a tendency for a hospital doctor to become a super-specialist and general physicians and general surgeons may find it harder to acquire general experience and to practice as generalists. However, there will always be a need for a doctor to listen to the patient, to make a differential diagnosis and to advise and administer treatment. The outlook for the patient and the doctor in the third world, however, is rather different.

Dr J S Sprigge