

Fighting Infection

The Lord Soulsby of Swaffham Prior



The Science and Technology Select Committee of the House of Lords has a remit “to examine science and technology”. The Science and Technology Committee in the Commons is structured differently and scrutinises the Office of Science and Technology and enquiries are short, topical and political. They seek to make immediate impact and receive good media coverage.

Lords Committees consider matters at length, witnesses receive questions in advance and evidence sessions focus on gaining high quality information. Reports are widely respected, as Lords members often have relevant expertise, and so it was with the sub-committee of the Lords on “Fighting Infection”; five are medically qualified Peers; a veterinarian, one with nursing qualifications, a Patron of the Chronic Diseases Research Foundation, a former member of a Hospital NHS Trust, as well as Peers with experience of research and University administration. Three are Fellows of the Academy of Medical Sciences and two are Fellows of the Royal Society, a powerful array of knowledge. Two technical advisers were appointed to cover scientific and hospital issues.

The Science and Technology Committee works through two sub-committees and ours started with a Seminar, organised by the Academy of Medical Sciences, highlighting the issues to be addressed by the enquiry. The importance of infectious diseases, their detection and prevention had slipped from the main agenda of health concerns in the United Kingdom and

world wide. The Surgeon General of the United States stated erroneously to the US Congress in 1969, “It is time to close the book on infectious diseases and to declare the war against pestilence over.”

Sixty per cent of ill health in the UK is now due to infectious agents, ranging from the common cold to meningitis, pneumonia, food poisoning and AIDS to mention a few. The “magic bullets” of antibiotics have lost their power as witnessed by the progressive increase in infections unresponsive to antibiotics, such as MRSA in hospitals. There is a sea of exotic infections whose entry into the UK could occur at any time, such as Ebola virus, SARS, malaria, multi-drug resistant TB, West Nile Fever and the avian flu now raging in the Far East. The massive global movement of people, animals and foodstuffs makes surveillance difficult but essential. For example, some 64 million passengers pass through Heathrow Airport every year; each could potentially and inadvertently carry an infectious exotic agent.

The enquiry also received a document from the Chief Medical Officer “Getting Ahead of the Curve”. This presented plans for the future of health delivery in several areas and to ensure the House of Lords enquiry was not reiterating what was stated therein, a meeting with Ministry of Health officials confirmed the need for an enquiry into prevention and control of infectious diseases. It was a solid base for the enquiry.

The call for evidence specifically excluded the more social or political

issues of MMR vaccination and sexually transmitted infections, though with regard to vaccination, the more of the human herd who are vaccinated, the greater the security against infection. The call for evidence produced an avalanche of responses which form a valuable part of the enquiry; they are available as hard copy, on the web, and included in a CD ROM which accompanies the sub-committee’s Report. They provide an important source of information to those interested in infectious disease control and prevention in the UK.

The technical advisers and Committee Clerks, who are remarkable individuals, sift the evidence and are able to address a very wide range of topics and summarise a mass of information with both clarity and superb scholarship

Scheduling oral evidence brings together individuals and organisations with related written submissions. For example, those dealing with vaccine research and development are placed together. Usually two groups of individuals, each of two to four people, are questioned at each session lasting approximately two hours. The sessions are open to the public and often televised. A transcript of evidence is taken and published as part of the overall enquiry. Public attendance varies with much depending on the individuals or groups invited to give evidence. The public are not allowed to intervene and ushers keep an eye on anyone liable to cause disruption.

Invited witnesses receive questions to be asked prior to meeting the sub-

committee. The Chairman also allocates these questions to an appropriate member of the Committee of Enquiry, reflecting their interest and competence, before the witnesses enter. The witnesses are advised that additional questions may be asked, as supplements to their replies, and these usually form the major part of the evidence sessions. Witnesses may also listen to the evidence presented by others during the session. The acoustics are poor in some of the rooms of the Committee Corridor of the House of Lords and it is occasionally necessary for witnesses to be asked to speak up for the benefit of Committee members and transcript recorders.

An important witness, from the Department of Health in our case, was a Minister who was well briefed and responded well to questions; civil servants from the department are seen separately and they too were well briefed.

It is usual for a Committee of Enquiry to visit institutions with an interest in the enquiry topic. We visited Birmingham, where over a three-day period, input was received from a wide range of health professionals representing regional interests rather than those with a London focus. These included hospital-based inspections, environmental health issues, water quality and meat hygiene to mention a few. We had been alerted previously to a decline in the numbers of environmental health inspectors, these being front-line health personnel, though there may be unwillingness to communicate infectious disease matters to this important specialist group. We also heard evidence on safety of bottled water which may accumulate substantial amounts of micro-organisms if stored in a non-refrigerated place. Tap water is probably safer than the carbonated spring water so frequently offered in restaurants.

A visit to the World Health Organisation, Geneva is a "must" for information on the global situation for infectious disease. We were not disappointed and Dr Bruntland the Director-General attended our meetings

with the Head of Infectious Diseases, demonstrating power of strong leadership at WHO. In critical health situations WHO depends on the ability of member countries to supply experts to assist in investigation and control. One of our recommendations is that the UK should ensure the ability to respond effectively to requests for assistance from bodies such as WHO. We also visited the WHO centre dealing with the health of immigrants that can pose a major problem to Western countries, such as tuberculosis, especially multi-drug resistant TB, that is an increasing problem, frequently accompanied by HIV infection. Thus three infections, HIV, TB and malaria, constitute important threats to immigrant communities in the UK.

Visits to the Centers for Disease Control in Atlanta, the Institute of Medicine and the National Institutes of Health in Washington DC were particularly important. We were updated with the concerns of health control officers in the USA by Dr Julie Gerberding, Director of CDC, where TB is high on their agenda. Hospital facilities with isolation procedures for TB are much in advance of ours. We were particularly impressed by the Harlem Hospital in New York, where many destitute patients of immigrant origin undergo prolonged and unpleasant treatments for drug resistant TB with enthusiasm and actively recruit others to the programme.

West Nile Virus, transmitted by mosquitoes, is now widespread in the USA with ill health and mortality in horses and humans, which was first noted by veterinarians when increases in crow mortality led to detailed investigation. The virus was also detected in migratory birds in the British Isles but no human cases have been reported – yet! It is well established in horses in the Camargue in France, indicating the importance of collaboration between human and animal health authorities.

In the House of Lords, the Report was taking shape and chapters were being circulated for comment, when the SARS (Severe Acute Respiratory Syndrome) emergency as if on cue

became an international problem, in which the Health Protection Agency played a critical role in providing personnel. We have much to learn from this epidemic, especially the origin and spread of SARS, and the needs for surveillance and reporting of infections that arise in China, for example.

Preparation for pandemics requires judgement, especially for vaccine research, and the provision of adequate doses of vaccine. Supplementary vaccines are required from Europe to immunise those susceptible to the influenza pandemic in the USA. The UK vaccine capability is not strong and supplies may be required from overseas in the event of a pandemic.

The Report was agreed by the full sub-committee, approved for publication by the Science and Technology Committee, with inclusion of a topical illustration of hand washing reflecting the title "Fighting Infection". It was sent to the Government and simultaneously launched at a well attended Press Conference in a Committee Room in the House of Lords. Radio and television interviews followed the questioning by science and medical reporters of the major broadsheets and the specialist medical journals and newspapers. Television interviews arranged for the following day were abruptly cancelled as news emerged about the death of a man who had apparently taken his own life – Dr David Kelly.

The Government's response to the Report was relatively quick and supportive. Several new bodies will be set up to deal with existing and emerging infections and an Inspector of Microbiology created to oversee diagnostic facilities. The Health Protection Agency was particularly supportive and a Bill to establish this Agency will come before the House of Lords in 2004. A debate in the Lords, led by the Chairman of the Sub-Committee, which took place on a Monday evening (summarised on pages 38-39), was the final stage of the Report and attracted good support, with the proviso that the Committee may return to a number of issues contained therein at a later date.