

**Minutes of the Derby Medical Society, Wednesday 18th March 2026
Derby Medical School Lecture Theatre**

Medical Supply Chains: Environmental destruction, sweatshops and child labour.

Prof Mahmood Bhutta DPhil FRCS Chair in ENT at Brighton and Sussex Medical School

Apologies: None Received

This, the eighth meeting of the season, was preceded by the AGM (see separate minutes).

Professor Judd welcomed everyone and introduced the speaker, Prof Mahmood Bhutta, Consultant Otologist in Brighton. His PhD at Oxford University was researching the molecular basis of chronic otitis media. He went on to lead the largest global study on otitis media genetics. He is an expert in Global Health and is Consultant to the WHO Programme for Prevention of Deafness and Hearing Loss and has worked in many low resource settings. In 2024 he was awarded the President's Medal from the Royal College of Physicians and Surgeons of Glasgow for leadership in sustainability and ethical medical supply chains. He founded the Medical Fair and Ethical Trade Group at the BMA, tackling labour exploitation in global medical supply chains, is advisor on sustainable healthcare and ethical and chaired the first national report on sustainable surgery and later the 2023 national Green Surgery report.

Prof Bhutta explained he has had a longstanding interest in 'green issues' and this would be the focus of his lecture. His work on this topic includes: 2008 in the BMJ 'Wanted: a green NHS'; Report on Green Surgery in 2023; establishing the Green Healthcare hub to promote decarbonising the NHS. The medical waste generated each year is 156000tonnes, mainly from hospitals, most of which is incinerated. Behind this exponential increase is purchase of single use items accounting for 68% of carbon emissions. He gave the example of cataract surgery in the UK which produces 182kg CO₂. However with reuse of equipment and improved efficiency this can be significantly reduced and gave the example of India where such surgery produces 6 kg CO₂ and has lower infection rates. He demonstrated how the surgical approach alters CO₂ burden with laparoscopic and robotic surgery highest because of single use equipment.

Prof Bhutta expanded on the role of microeconomics with interactions and overlap of economic drivers, perceived risk of infection and the human/physical resource for reuse. He gave examples of how infection control teams can misrepresent infection risk and drive single use behaviours. In gave a personal example of this with operating room hats and the move away from reusable drapes/gowns in the 'throw away' culture. So called 'yellow washing' is widespread. Reduced capacity for sterilisation and fragmented final responsibility compound the problems. Institutional variation is huge. Use of single use wipes, aprons, gloves, blood pressure cuffs and plastic bottles for babies are major contributors to the NHS carbon footprint. The options to decrease carbon footprint alter plastics use are: reduce (best); reuse (potential reduction of 30-50%); recycle (poor impact of 3-4%).

There is increasing concern of the impact of microplastics, commonly used in healthcare products and medical equipment, on the environment and public health. In addition some of

the damaging 'forever chemicals' enter the ecosystem via healthcare products such as PFAS's on single use gowns and drapes and this is avoidable with reusable products.

Prof Bhutta explained that as if this wasn't bad enough, behind NHS outsourcing the production of plastic products lies significant abuse of workers rights, sweatshops and child labour. He used of throwaway plastic gloves as an example. NHS use amounts to 20million gloves per day (60% of which is inappropriate). The major supplier, Malaysia, uses migrant workers in forced labour. Further examples given included child labour in Pakistan to produce single use surgical metal instruments and forced labour in China to produce disposable gowns. Video clips were shown demonstrating the poor living conditions and lack of regard for worker safety. The 'throw away' culture not only wastes money, but harms the environment and human dignity. Furthermore, the built in obsolescence to new and high tech equipment is wasteful and unnecessary and often is purely for financial gains big companies.

Prof Bhutta concluded by indicating how change can implemented. Levers to changing macroeconomics can be legal, national but also institutional and individual. The Government policy paper, Design for Life roadmap, sets out how to transition away from avoidable single use medical technology. National guidance on infection control approach could have a big impact. Legal case against major corporations in the US have already forced reparations.

The following link is to a Youtube video presentation given by Prof Bhutta and will give an opportunity to explore some of the issues further (https://www.youtube.com/watch?app=desktop&v=lw7E_hryB58).

There was a lively Q&A session followed by a vote of thanks from Prof Judd.

36 guests and members signed the register.