

Institution: University of Kent
Unit of Assessment: D30 History
Title of case study: Medical Ethics and the Legal Dimension of Britain's Biological and Chemical Warfare Programme, 1945-1989
<p>1. Summary of the impact (indicative maximum 100 words)</p> <p>This case study relates to policy making and cultural life. Ulf Schmidt's international recognised excellence in the field of the history of medical ethics led him to:</p> <ul style="list-style-type: none"> • Play a pivotal role in shaping the mediation, compensation and reconciliation processes between Her Majesty's Government (HMG) and the Porton Down Veterans Support Group (PDVSG). • Enhance public understanding of the history of medical ethics through the 'War and Medicine' exhibition at the Wellcome Collection, Wellcome Trust, London (November 2008-February 2009), later shown at the German Hygiene Museum, Dresden (April to August 2009) and the Canadian War Museum Ottawa (May to November 2011). <p>Schmidt provided expert testimony in the high profile legal case brought against HMG for the Ministry of Defence's failure to seek informed consent for medical experimentation on service personnel at Porton Down; his work materially assisted over 700 veterans to £10m in compensation awards and resulted in a public apology from HMG to Porton Down veterans. The exhibition attracted 185,000 visitors in the UK, Germany and Canada and achieved positive critical comment, revealing the reach and significance of the impact.</p>
<p>2. Underpinning research (indicative maximum 500 words)</p> <p>The research was carried out by Ulf Schmidt (Lecturer 2001-2005; Senior Lecturer 2005-2007; Professor since 2007) and his research associate (Dr David Willcox, PhD 2004). The work resulted from, and extended, Schmidt's Wellcome-funded work on medical ethics and the Nuremberg Code (Schmidt 2004).</p> <p>Key findings were derived from extensive archival research at The National Archives, Kew; the National Archives and Records Administration, Washington D.C.; the Churchill Archives Centre, Cambridge; the Imperial War Museum; Liddell Hart Centre for Military Archives; King's College London; the Medical Research Council; the Library and Archives Canada, Ottawa; University of Sussex; University of Brighton; and the Wellcome Trust, London, to name but a few.</p> <p>To further research focussed on Porton Down, Britain's chemical and biological warfare establishment since the First World War, Schmidt oversaw the creation of a database containing over 1500 entries relating to key documents as well as an archive containing witness statements, court transcripts, oral history testimony, film and photographs. From this research, Schmidt revealed that:</p> <ul style="list-style-type: none"> • The Nuremberg Trials forcefully reminded the world that the issue of informed consent was crucial to ethical conduct in medical science. This recognition was given formal status in international codes of medical ethics, especially in the so-called Nuremberg Code (1947) and the World Medical Associations' Declaration of Helsinki (1964). • Despite this, scientists working at Porton Down between c.1940-1965 routinely carried out experiments which contravened these codes of medical ethics. <p>In particular, Schmidt's research discovered and determined that:</p> <ul style="list-style-type: none"> • Porton's nerve agent experiments were by far one of the largest nerve agent trials ever performed, involving over 1,500 subjects. Almost 400 subjects were exposed to Sarin. • Experiments were unusual in the magnitude of the risks. An increasing number of subjects were exposed to increasing dosages of Sarin, known to be highly toxic and potentially lethal. • Porton's scientists carried out a series of dangerous experiments on service personnel 'volunteers', which demanded, given the nature of the trials, that the highest degree of safety and the most rigorous standards of research ethics known at the time should have applied.

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- None of the evidence indicated that any of the experimental subjects was ever informed about the specific objective of the experiments.
- Section 10 of the Crown Proceedings Act 1947 could not protect the Crown from legal liability.

A key case emerged from this research:

- On 6 May 1953, the Leading Aircraftman Ronald Maddison died at Porton Down after being exposed to 200mg of the nerve agent Sarin. The original inquest (verdict of 'misadventure') in 1953 was held in secret for reasons of 'national security'.
- Maddison's death was an accident waiting to happen which resulted from an inadequate level of disclosure and an understatement of risks, despite the fact that there was widespread consensus in the UK that the Nuremberg Code should govern these types of experiments.

The outputs from this research were published in items 1-5 listed in Section 3 below.

3. References to the research (indicative maximum of six references)

Peer reviewed publications

1. Ulf Schmidt, *Justice at Nuremberg: Leo Alexander and the Nazi Doctors' Trial* (Basingstoke: Palgrave Macmillan, 2004)
2. Ulf Schmidt, 'Cold War at Porton Down: Informed Consent in Britain's Biological and Chemical Warfare Experiments', *Cambridge Quarterly for Healthcare Ethics*, Vol. 15, No. 4, 2006, 366-380, DOI: <http://dx.doi.org/10.1017/S0963180106060488>
3. Ulf Schmidt, 'Medical Ethics and Human Experimentation at Porton Down: Informed Consent in Britain's Biological and Chemical Warfare Experiments', pp. 283-313 in Ulf Schmidt and Andreas Frewer (eds), *History and Theory of Human Experimentation. The Declaration of Helsinki and Modern Medical Ethics*, (Stuttgart: Franz Steiner, 2007).
4. Ulf Schmidt, 'Justifying Chemical Warfare': REF2 Output 3 (EP-31119)
5. Ulf Schmidt, 'Accidents and Experiments': REF2 Output 4 (EP-31122)

Research grants

- 1997: Three-Year Wellcome Trust Fellowship Award on 'Medical Ethics and Post-War Justice: Dr Leo Alexander and the Nuremberg Medical Trial, 1930 – 1950' (No. 052912): £83,8K.
- 2004 Three Year Wellcome Trust Project Grant on 'Cold War at Porton Down: Medical Ethics and the Legal Dimension of Britain's Biological and Chemical Warfare Programme, 1945-1989' (No. 073435): £189K.

Schmidt's meticulous research and approach has received outstanding reviews from, among others, [Professor Dan Stone](#) (Royal Holloway) in the *Times Higher Education Supplement*, [Professor Michael Hau \(Monash University\) in German History](#), and [Sir Ian Kershaw](#), who called Schmidt's recent full-length study on Karl Brandt an 'excellent biography' which 'casts significant new light on how a cultured, intelligent and idealistic doctor could so fervently believe in the principles of Nazi inhumanity that down to his execution he saw nothing wrong in eliminating the sick and infirm in the interests of a more healthy Volkskörper'.

4. Details of the impact (indicative maximum 750 words)

Schmidt's association with the PDVSG commenced before the REF assessment period and culminated in 2010. It came about on the recommendation of the Maddison family's lawyer, Alan Care, who had read Schmidt's work on the Nuremberg Trials. Schmidt's input was driven both by his pre-existing knowledge of the wider context of medical ethics and his direct, and on-going, research into the precise nature of procedures at Porton Down. The following outcomes were therefore intimately linked to Schmidt's research and publications.

To ensure that the final outcome is fully understood the following summary of the pre-2008 impact is necessary [See also 5.1]:

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- On 10 May 2004, Gerwyn Samuals QC, acting on behalf of Maddison's family, read the Treasury Solicitor letters, which Schmidt had discovered, into the court transcript during the Maddison Inquest. The letters thereby became 'public documents' (Court Transcript Day 4).
- Schmidt was then appointed as the principal expert witnesses to evaluate the history of informed consent. On 15 November 2004, after a sixty-four day trial, then the longest inquest in UK legal history (prior to the inquest into the death of Diana, Princess of Wales), the jury ruled that Maddison was 'unlawfully killed', and that the cause of death was a chemical warfare agent in a non-therapeutic experiment.
- On 20 December 2004, the MoD Minister Ivor Caplin stated in the House of Commons that the MoD would pay compensation to the Maddison family and apologise. In May 2006, after accepting that Ronald Maddison was 'unlawfully killed by reason of gross negligence' the MoD settled the Maddison claim for £100,000.
- In January 2005, the MoD waived Section 10(2) of the Crown Proceedings Act 1947 as defence against claims by Maddison's family. The MoD's decision opened up the possibility for a multi-party action (MPA) by 359 Porton Down veterans to claim compensation from the MoD, which led to a Second Adjournment debate on Porton Down in the Commons (Hansard, Westminster Hall, 22/2/2005, Column 32WH, Porton Down)
- In 2007, Schmidt informed the UK Ombudsman about his findings and called on all parties to seek a negotiated solution (correspondence with UK Ombudsman, 25/9/2007).
- In December 2007/January 2008, Schmidt's research helped to shape, mediate and inform the discussions between the MoD and the PDVSG over compensation claims. According to the PDVSG and the senior lawyer representing the Porton veterans, during the process Schmidt 'made a substantial contribution as to the thorny issues of liability, ethics and consent and his evidence, advice and recommendations were seminal'. [5.2; 5.3]
- Following two mediation meetings on 21 December 2007 and 11 January 2008, both of which were informed by Schmidt's research, HMG and the PDVSG reached an amicable settlement about claims that Porton veterans had suffered ill-health as a result of Cold War experiments, that some of them may have been 'duped' to participate, and that the risks involved may not have been properly explained to them.

Schmidt's contribution then culminated between January 2008 and 2010 when he continued his activity on behalf of the PDVSG helping them to capitalise on the MoD's altered stance. The full **reach** and **significance** of Schmidt's impact can be seen in the fact that:

- On 31 January 2008, the Parliamentary Under-Secretary of State for Defence (Derek Twigg) announced a £3 million settlement scheme for the Porton Down veterans, and gave a public apology in the House of Commons: '*... The Government accept that there were aspects of the trials where there may have been shortcomings and where, in particular, the life or health of participants may have been put at risk. The Government sincerely apologise to those who may have been affected*'. [5.4]
- The statement marked a key milestone and end product in the decade-long campaign by the PDVSG that non-therapeutic human trials in which they had taken part had been unethical, and that they warranted an apology and financial compensation. It demonstrated that Professor Schmidt's contributions had, after many incremental steps, led to a major beneficial impact for a distinctive societal group.
- The scheme worked as follows: In 2008, the MoD settled a total of 360 Porton claims at a total cost of £4.7 million, including legal costs. Over the next two years, a total of ca. 470 new Porton claims were submitted to the MoD. [5.5]
- In December 2008, the MoD settled a tranche of 130 claims at a total cost of £3.87 million, including legal costs. [5.5: 2008/09] Of 152 new Porton Down claims received in 2008, the MoD settled almost all within the year. [5.5: 2010/11]
- In April 2009, the MoD settled a second tranche of 141 claims at a total cost of £1.39 million, including legal costs. [5.5: 2010/11]
- In 2010, the MoD settled a third tranche of 18 claims at a total cost of £165,661, including legal costs. [5.5: 2010/11] The campaign to seek justice for the Porton veterans had finally

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come to a successful conclusion.

- From 2008-2010, HMG paid a total of over £10 million in compensation (including legal costs) to the Porton Down veterans. [5.5]

Schmidt's vital contribution was fully acknowledged by the chairman of the PDVSG who stated that he had 'made a substantial contribution to the issues of liability, ethics and informed consent and his advice and recommendations were seminal'. [5.2]

Enhancing public understanding of the history of medical ethics at the Wellcome Collection

In 2008-2009, Schmidt contributed to the '[War & Medicine](#)' exhibition and took part in an associated panel discussion, '[A Doctor's Duty](#)', aimed at the wider public. Schmidt led on the subject of human experimentation, particularly in relation to medical war crimes committed by German doctors during the Second World War. He also helped to organise a section of the exhibition on the history of chemical warfare and Porton Down, which included a display of one of the original Treasury Solicitor letters from 1953. From April to August 2009, the exhibition was also shown at the [German Hygiene Museum](#), Dresden, and from May to November 2011 at the [Canadian War Museum](#), Ottawa.

Reach

In the UK, the exhibit attracted 35,000 visitors over its 12-week run. During the last days, Wellcome Collection saw up to 2,000 visitors per day. In Germany, it received 50,000 visitors, and in Canada 100,000 visitors. The Canadian War Museum saw a 33% increase in visitor numbers. [5.6] 'A Doctor's Duty' panel discussion on 15 January 2009 was attended by 73 people. [5.7]

Significance

The feedback for the exhibition was universally positive. Reviews and feature-length articles were published by a wide variety of titles including BBC online, *Big Issue*, *British Medical Journal*, *BMA News Reviews*, *Dow Jones Equities Wire*, *Financial Times*, *Guardian*, *Health Service Journal*, *Lancet*, Ministry of Defence online, *Officer*, *Socialist Worker*, *Sunday Telegraph*, *Time Out*, *The Times*, *TNT Magazine* and the *Weekend Journal*. [5.8] The *Sunday Telegraph* stated 'anyone with an interest in the past, and its relationship to the present, will find it enthralling' (21 December 2008) and the *Financial Times* labelled it 'provocative, eclectic, intelligently curated... it is well worth the excursion' (20 December 2008). [5.8] 'A Doctor's Duty' panel discussion was equally well-received. Audience member comments noted that 'the choice of speakers was excellent' and praised 'the speakers' insights and their excellent answers to difficult questions'. [5.7]

Schmidt's research has therefore significantly enhanced the lives of Porton Down veterans and their families, as well as enhancing public understanding of medical ethics.

5. Sources to corroborate the impact (indicative maximum of 10 references)

Information relating to the Porton Down Case:

1. ["Chronology of Porton Down Litigation"](#)
2. PDVSG: Statement by First Chairman of PDVSG, 30 November 2011
3. Thompson Snell & Passmore: Statement by Senior Litigation Executive, 24 November 2011
4. [Hansard, 31 January 2008](#), Column 21WS: Porton Down Veterans
5. Ministry of Defence, Claims, Annual Reports, [2008/9](#) and [2010/11](#)

Information on the 'War and Medicine' exhibition and 'A Doctor's Duty' panel discussion:

6. Correspondence with James Peto, Senior Curator, Wellcome Collection, regarding visitor numbers, February 2009 and November 2011
7. Correspondence with Rosie Tooby, Events Officer, Wellcome Collection regarding public attendance and feedback on 'A Doctor's Duty' panel discussion, January 2009
8. Wellcome Collection: [Media coverage of 'War and Medicine'](#)