NCBI Bookshelf. A service of the National Library of Medicine, National Institutes of Health.

Wilson D. The Making of British Bioethics. Manchester (UK): Manchester University Press; 2014.

Chapter 1   Ethics 'by and for professions': the origins and endurance of club regulation

Doctors and scientists successfully argued that they should be left to determine their own conduct during the nineteenth and much of the twentieth centuries, in a form of self-governance that Michael Moran terms 'club regulation'.[1] They portrayed medical and scientific ethics as internal concerns in this period – produced 'by and for' colleagues and mainly concerned with limiting intra-professional conflicts.[2] This view of ethics functioned as what Harold Perkin calls a 'strategy of closure'.[3] It helped doctors and scientists consolidate their professional expertise by delineating boundaries, excluding unqualified groups and positioning themselves as the only people capable of providing an essential service to government and the public.

This, of course, is not a new insight and several historians have shown how members of professions set their own standards so as to exclude others.[4] In looking to explain why professions such as medicine gained control of their own practices and codes of conduct, these studies adopt a largely internalist view, focusing on the professions in question and portraying them as blocs or monopolies. When they look to external factors to explain club regulation, historians generally chart how notions of professional self-governance resonated with the *laissez-faire* ideals of nineteenth-century politicians. But this does not tell the whole story. As the sociologist Andrew Abbott argues, professions do not emerge or evolve in isolation and we need to move from 'an individualistic to a systemic view of professions'.[5] Abbott endorses a more relational model, in which the acquisition of professional authority involves mediating jurisdictional claims between different professions.

In following Abbott, we see that the history of club regulation hinges on the *interdependence* of professions. We cannot fully account for the emergence and strength of club regulation without studying the 'hands-off' approach that other professionals adopted when they considered medical and scientific practices. This is especially true of those professions and academic fields that later constituted bioethics, such as law, philosophy and theology. On the rare occasions that individuals from these fields did engage with science or medicine in the nineteenth and early twentieth centuries, they sought to consolidate the authority of doctors and scientists.

This stance persisted into the 1960s, despite a growing 'backlash against professional society'.[6] Criticism of medical research came instead from professional 'whistleblowers' such as Maurice Pappworth, who broke with club regulation when he publicly rebuked doctors for experimenting on patients without consent and, crucially, demanded that outsiders should play a role in formulating and administering a new statutory code for medical research. These factors have led some to claim that Pappworth is a significant figure in 'the birth of British bioethics'.[7] But while his work attracted public attention, it ultimately had little impact on the continuing support for club regulation among doctors, politicians and other professions. Despite Pappworth's best efforts, outside involvement was dismissed as 'quite impracticable' and doctors were left, as before, to determine their own conduct and ethical standards.

Enshrining club regulation: medical and scientific ethics as professional concerns

The emergence of club regulation in medicine and other professions resulted from social and economic changes during the nineteenth century. Before this, doctors and other professionals operated under a system of 'lay patronage', in which their actions were determined by a relatively small band of aristocratic and wealthy clients.[8] Ivan Waddington argues that lay patronage fostered a model 'not of colleague control, but of client control', in which the patient's superior social status allowed them to dictate their own needs 'and the manner in which those needs are to be met'.[9] As Roy Porter states, this ensured that 'for authority and status, reward and advancement, doctors looked not to collective professional paths to glory, but to the personal favour of grandees'.[10]

Lay patronage also meant that medical practitioners showed greater loyalty to their clients than to their colleagues, and that the 'solidarity of the occupational group was relatively under-developed'.[11] As part of a thriving 'medical marketplace', orthodox practitioners such as physicians, surgeons and apothecaries competed for patients with each other and with a variety of alternative healthcare providers, such as homeopathists, mesmerists and bone-setters.[12] In a period marked by high consumer choice and 'low professionalisation', when distinctions between 'regular and irregular' practitioners were unclear and a new division between general practitioners and hospital consultants threatened the old tripartite structure of medicine, disputes between physicians were commonplace.[13]

These disputes and rivalries, which hinged on arguments over competition and the new division of labour, led some physicians to write professional codes of ethics during the late eighteenth and early nineteenth centuries.[14] Their guidelines notably differed from previous recommendations for medical practitioners, which were indistinguishable from the general 'advice to gentlemen' published in conduct manuals.[15] While these early modern codes focused on individual manners and conduct, especially in client–patron relations, newer guidelines such as Thomas Percival's 1803 *Medical Ethics* dwelt far more on smoothing relations between practitioners in order to forestall professional conflict. Percival's code is notable for introducing the term 'medical ethics', but it is perhaps more significant in another respect.[16] In order to restrict the power of lay hospital governors, who physicians believed were interfering in running the Manchester Infirmary, Percival's *Medical Ethics* stressed the collective autonomy of medical practitioners and the need for 'collaborative self-regulation'.[17] To Percival, 'medical ethics' denoted a set of professional, not public, concerns.

Percival's view of medical ethics was adopted by a later generation of reformers who sought from the 1820s to portray medicine as a discrete and socially valuable profession. These reformers dwelt less on notions of gentlemanly virtue and more on their possession of specialist knowledge and authority.[18] They promoted their 'scientific' training in anatomy, chemistry and pathology, and argued that they alone possessed the expertise to care for the changing 'social body' created by industrialisation and urbanisation.[19] Calling for government restrictions on alternative practitioners, whose services were popular among the urban population, they argued that their reward for combating diseases such as cholera should be freedom to practise without outside interference. Physicians exploited the social capital they gained through public health measures by arguing that the state should restrict care of the population 'to those with recognised qualifications, talents and abilities', and these arguments were later helped by advances in anaesthetics and germ theory.[20] Codes and associations that bore the term 'medical ethics' were integral to this reforming campaign, helping to strengthen professional unity, consolidating expertise *vis-à-vis* the public and politicians and excluding unorthodox practitioners. This meant that when doctors established regional associations such as the Manchester Medico-Ethical Society, they functioned as 'a trade union in disguise'.[21]

Arguments for professional self-control resonated with Victorian politicians who espoused *laissez-faire* ideals of liberal self-governance.[22] Political support for medical reform was also strengthened by the fact that orthodox doctors, like many other professionals, became increasingly central to the machinery of a growing Victorian state from the mid nineteenth century onwards.[23] In an era when professional expertise was 'inextricably linked to the formal political apparatus of rule', doctors worked as Poor Law officers, factory medical inspectors or prison doctors, and were later central to the administration of the 1853 Compulsory Vaccination Act and the 1864 Contagious Diseases Act.[24] The demand for medical expertise, in turn, led politicians to recruit doctors into the expanding civil service. The first Chief Medical Officer (CMO) was appointed in 1855 and was soon supported by a team of medically qualified civil servants. In addition to providing expert advice, these civil servants furthered professional interests by ensuring that the state directed funds to medical programmes without compromising the independence of doctors.[25]

With doctors increasingly central to government policy, and politicians committed to notions of self-governance, it was no surprise that the 1858 Medical Act recognised medicine as a unitary and autonomous profession. The Medical Act distinguished orthodox from alternative practitioners by requiring the creation of a register of qualified doctors (though it did not forbid alternative practitioners from practising). It also granted doctors a significant degree of 'self-governing authority' by leaving them in charge of the new General Medical Council (GMC) that controlled registration, education and discipline.[26] Politicians then withdrew from the issue of medical regulation and only intervened on the rare occasions when doctors requested it themselves.[27]

Although politicians granted the GMC formal disciplinary powers, it did not issue a binding set of ethical guidelines. Registered doctors were given no written guidance on professional conduct until 1883, when the GMC began to issue a series of 'warning notices'.[28] These arose from disciplinary rulings and specified conduct that the GMC considered unacceptable enough to warrant the removal of a doctor from the medical register. By the turn of the twentieth century, the warning notices encompassed improper or fraudulent acquisition of qualifications, advertising or canvassing, sexual misconduct such as committing adultery with patients, publishing indecent work, abortion, drunkenness and improperly disclosing confidential patient information.[29] The twenty-four members of the GMC who were eligible to reach these decisions were all medically qualified, reaffirming that medical ethics was seen as a solely professional matter.[30]

The reluctance to issue binding ethical guidelines was mirrored by the British Medical Association (BMA), which represented the interests of doctors after its formation in 1836.[31] During the 1850s the BMA appointed two ethics committees and instructed them to produce similar codes to the American Medical Association, which had produced an

1847 set of guidelines based on Percival's *Medical Ethics*.[32] Neither group actually met or produced a code, but Jukes de Styrap, a member of the second BMA committee and chair of the Shropshire medico-ethical association, updated Percival's guidelines to produce his own *Code of Medical Ethics* in 1878. Like Percival, de Styrap aimed 'to promote harmony and prevent disputes within the profession'.[33] His main ethical precept, the so-called 'Golden Rule', drew on the biblical injunction to 'do unto others as you would have them do unto you' – although this applied to a doctor's relations with their colleagues far more than it did to their patients.[34] De Styrap viewed the Golden Rule as vital to establishing a 'generous *esprit de corps*' and stressed it should be every doctor's aim to 'raise our profession, not only by our scientific labours, and the careful and accurate study of disease and its remedies, but by our feeling of brotherhood and mutual support – so that the public may respect us as a body at unity within itself'.[35]

As this quote indicates, the stress on professional relationships did not mean that writers on medical ethics ignored the interests of patients and the public. For de Styrap, the professional and the public interest were firmly linked, and patients were best served by a unified medical profession that avoided 'public rancour', refrained from activities such as advertising and was clearly distinguished from 'tradesmen and quacks'.[36] By highlighting their 'scientific' training and professional authority, de Styrap also stressed that patients were best served by leaving decisions to doctors, since they alone possessed the expertise to evaluate the benefits or drawbacks of specific procedures.

This view of medical ethics persisted well into the twentieth century. The only writers on the subject were doctors such as Robert Saundby, who continued to argue that medical professionals were the best judges of a patient's interests.[37] It was also evident in new committees and survived reforms that admitted laypeople to the GMC. In 1902 the BMA underwent reform that resulted in the creation of a Central Ethical Committee (CEC), following tensions between doctors and mutual aid societies, who provided healthcare in return for members' contributions and were eventually organised under government control by the 1911 National Health Insurance Act.[38] The CEC was established to issue guidance to local BMA branches, and to draw up reports or sets of rules for difficult issues. Its creation notably was 'the first time doctors in Britain had a national body to examine questions of conduct without resorting to extremes of hearings before the GMC'.[39]

But while it was new a body, the CEC embodied the traditional view that medical ethics was produced 'by and for' doctors.[40] Its meetings focused on advertising, contract disputes and confidentiality, and its members were drawn from the senior ranks of the medical profession. This ethos also persisted in the GMC, despite the appointment of the former politician Sir Edward Young as its first layman following a public outcry at the treatment of F. W. Axham, who was removed from the medical register for working with the osteopath Sir Herbert Barker. Young and successive lay members were generally the only non-doctors on the GMC and exerted little, if any, influence over its decision-making.[41]

Yet we should not presume that relations between doctors and patients were completely paternalistic. They were certainly not as one-sided as is implied by some historical accounts, particularly those written by bioethicists. We need to see these participant histories as rhetorical efforts to differentiate bioethics from 'old' and problematic styles of medical ethics and, having done so, to 'open up a space for intervention and reform of unsatisfactory relationships'.[42] During the late nineteenth and early twentieth century, in a partially regulated 'medical marketplace', patients were certainly free to select doctors for private practice and mutual aid schemes. Jukes de Styrap reminded readers of this in his third edition of *Medical Ethics*, where he claimed that 'the right of a patient to change or to discard his doctor is unquestionable'.[43] This principle also applied in National Insurance schemes from 1911 onwards, which incorporated provisions for 'free choice of doctor' at the BMA's insistence.[44]

But this measure of autonomy and the emphasis on professional expertise did not guarantee public trust. The connections between orthodox doctors and the Poor Law authorities ensured that many working-class people viewed them with suspicion following the 1858 Medical Act, and continued to rely on alternative therapies when they fell ill. Alternative practitioners played on this by claiming that 'orthodox medicine was a tyrannical system of state-sanctioned interference with the lives and health of an oppressed people'.[45] These suspicions found expression in the anti-vaccination movement, in which supporters of alternative medicine joined with large sections of the working and middle classes to argue that the 1853 Compulsory Vaccination Act infringed on an individual's right to govern their own homes and families.[46]

Doctors also faced resistance thanks to their association with the 1864 Contagious Diseases Act, which permitted compulsory examination of any suspected prostitute, and their detention in 'lock' hospitals should they be infected.[47] Feminist and socialist reformers argued that these Acts represented state-sanctioned infringement upon the bodies and rights of working-class women. Many of these campaigners also opposed the increase in vivisection from the 1870s,

linking the plights of defenceless animals and women, and portraying medical researchers as indifferent to the suffering they caused to those less fortunate.[48] While these movements differed in some respects, they all resisted the growing authority of doctors and scientists, and criticised the fact that politicians increasingly gave them licence to 'dictate morality and personal behaviour'.[49]

But this ultimately had little impact on state support for medical or scientific expertise. Indeed, the political response to these popular movements effectively consolidated club regulation. When the government convened a Royal Commission on Vaccination in 1889, for example, they filled it 'with eminent medical practitioners who almost unanimously supported vaccination'.[50] In 1896 the Commission proposed the introduction of a conscientious objection clause that significantly weakened the anti-vaccination movement, since individuals could now simply 'opt out' by obtaining an exemption certificate.[51]

The government's 1875 Royal Commission on Vivisection also increased professional authority in the biological sciences, albeit less directly. This Commission was more balanced between scientists, representatives from the Royal Society for the Protection of Animals (RSPCA) and individuals 'uncommitted to either side'.[52] Its composition reflected how researchers in fields such as physiology lacked a 'meaningful professional identity' in the 1870s, with less political influence than doctors or campaign groups such as the RSPCA.[53] But their response to the Commission's recommendations, which underpinned the 1876 Cruelty to Animals Act, galvanised biological scientists into acting as a more coherent and influential body from the 1880s onwards. The Cruelty to Animals Act angered many biologists by ruling that Home Office officials should decide whether or not to issue licences permitting animal experiments.[54] Figures such as Richard Owen, who had previously opposed vivisection for teaching purposes, now condemned politicians for undermining 'the expertise and thus authority of his profession'.[55] Like doctors before them, biologists formed groups to endorse self-regulation, such as the Association for the Advancement of Medicine by Research (AAMR).

Members of the AAMR, which united physiologists, botanists and zoologists, argued that they were 'better judges than an average person in matters of research and its moral aspects, "because they possessed the additional knowledge indispensible to form a correct judgement"'.[56] Their efforts were certainly influential. In 1883 the government decided the AAMR should review all licence applications before they were passed to the Home Office, which led to a significant increase in licence approvals.[57] Professional control over animal experiments increased further after 1913, when a second Royal Commission, now weighted in favour of scientists, recommended that a new advisory body should consider licence applications. Members of this Home Office advisory committee were selected by the Home Secretary from a list of names submitted by solely professional bodies such as the Royal Society and the Royal Colleges of Physicians and Surgeons. From 1913 to the late 1970s, the advisory committee always consisted of ten scientists and one lawyer.[58] Perhaps unsurprisingly, it approved the vast majority of licence applications and played a major role in encouraging the growth of biological disciplines such as pathology, pharmacology and bacteriology.[59]

Biologists also benefited from increasing control over how the government distributed funding for research. In 1913, following concerns over infant mortality raised by a Royal Commission on Tuberculosis, the government formed a Medical Research Committee that was administered under the 1911 National Insurance Act. Although the committee was expected to focus on tuberculosis, it soon became dominated by Cambridge physiologists who helped 'establish a presence within government for the elites of British science and education'.[60] In its early years, and following its reconstitution as the Medical Research Council (MRC) in 1919, these influential scientists were able to distribute money without political interference, using it to free biological sciences from clinical concerns and encourage research into basic problems.[61]

The interwar period also saw a decline in organised public opposition to medical or scientific authority. Conscientious objection clauses effectively killed off the anti-vaccination movement, while the anti-vivisection cause was dealt a blow after scientists argued that new drugs such as Salvarsan proved the value of animal experiments. At the same time, although conventional treatments were expensive and often ineffective, orthodox medicine gradually won public acceptance.[62] With increasing state investment and declining public opposition, some doctors and biological scientists promoted their expertise with greater confidence during the 1920s and 1930s. They not only objected to involving laypeople in professional debates, but now asserted a 'far more comprehensive authority [in] determining the shape of things to come'.[63] A new generation of 'public' biologists such as Julian Huxley, Conrad Waddington and J. B. S. Haldane used popular outlets such as newspapers, magazines, radio and science-fiction stories to assert that human progress could only be ensured by giving them a greater say in social and even moral affairs.[64]

Calls for greater professional influence over social and moral issues permeated the eugenics movement, in which scientists and doctors sought to counter evolutionary 'degeneration' by controlling the reproduction of supposedly inferior groups.[65] They were also evident in works such as Conrad Waddington's *Science and Ethics*, which originally appeared as an essay in *Nature* and argued that biologists with knowledge of evolution and the human mind could make a decisive contribution 'to the study of ethics'.[66] Waddington claimed that biologists were in a better position to study ethics than philosophers or theologians, since they possessed the expertise to reposition notions such as 'good' as 'facts of the kind with which science deals'.[67] He outlined how scientists could define ethical principles as 'actual psychological principles derived from experience', and could also demonstrate how 'the real good cannot be other than that which has been effective, namely that which is exemplified in the course of evolution'.[68]

Not everyone welcomed these incursions into social and moral affairs. Some scientists maintained that they simply studied natural phenomena and argued it was not their place to assert their work's relevance to 'questions of personal or corporate morality'.[69] This view proved attractive to many 'because it protected the freedom of scientists to pursue their work without fear of external controls'.[70] Criticism also came from a small but high-profile group of elite critics, such as F. R. Leavis and Hilaire Belloc, who extolled traditional ways of life and equated science with moral and political decline. Lamenting the waning influence of 'humanist' scholars, they argued that scientists had narrow expertise and were ill-equipped to discuss matters outside their specialism. For them, 'questions concerning both the ends of scientific applications and the desirability of progress, were to the humanist's mind not for the scientist *qua* scientist to answer'.[71] Yet this criticism again hinged on the belief that professionals should stay within their bounds of expertise. Critics such as Leavis and Belloc accepted the judgements of scientists '*in their own sphere*', and did not believe that outsiders should determine scientific or medical conduct.[72]

Perhaps the only advocate of external involvement with medicine or science in this period was the playwright George Bernard Shaw, who remained a committed anti-vivisectionist and supporter of alternative medicine until his death in 1950. In his 1909 play *The Doctor's Dilemma* and a series of later essays, Shaw argued that doctors were motivated by profit and 'professional trade interest' rather than a concern for patients and the public.[73] This, he concluded, led to a 'dogmatic' exclusion of alternative therapies and ensured that 'what is called scientific progressive medicine is thus seen to be largely dictated by the hygiene of the pocket'.[74] Shaw was not criticising professional authority *per se* here. He advocated professional expertise providing it was harnessed for the greater social good, as evidenced by his support for the eugenics movement and membership of the socialist Fabian Society, which 'embraced a scientistic form of politics'.[75] This desire for socially useful expertise led Shaw to propose reforms that he believed would foster a more 'disinterested' and trustworthy medical profession. These included establishing a 'state medical service' and, notably, reconstituting the GMC so that it included 'a majority of laymen'.[76] Shaw argued that this latter measure was vital since 'all trade union experience shows that the doors of a trade or profession must not be guarded, either for entrance or exit, by the members inside'.[77] In contrast to de Styrap and others, who believed they were mutually enforcing, Shaw concluded that the 'protection of the laity' and 'the progress of science' were incompatible with club regulation.[78]

Despite Shaw's profile, doctors and politicians overwhelmingly rejected any form of outside involvement. Following the Second World War, for example, the BMA and the *British Medical Journal* often portrayed Nazi medical crimes as a direct result of outside interference.[79] When Clement Attlee's Labour government sought to implement its 1946 National Health Service Act, doctors agreed to reform on the condition that 'there should be as little scrutiny as possible of their privileged clinical position or research practices'.[80] Politicians were wary of challenging a profession that had a high standing in the eyes of the public, and gave doctors a significant degree of autonomy when they established the NHS in 1948.[81] This agreement ensured that while the state allocated resources for the care of the population in the NHS, doctors retained control over their own practices and how resources were allocated.[82]

As before, this control encompassed clinical treatment and medical research. Doctors presumed that citizens would support biomedical research and contribute to medical progress by willingly offering their bodies in exchange for the 'protection against deprivation, ignorance and disease' they received from the welfare state.[83] There was little discussion of whether patient consent was needed for research, or whether doctors required any outside supervision. With the creation of the NHS boosting public trust, the doctor was widely perceived not only 'as an expert but also a gentleman whose inherent integrity and good character prevent him or her from any wrongdoing'.[84]

So while Shaw's vision of a 'state medical service' was realised in his lifetime, he did not get his wish for greater outside involvement in setting standards for doctors. Club regulation also persisted in science, despite the arguments of Marxist scientists such as J. D. Bernal. In his 1939 book *The Social Function of Science*, Bernal had claimed that *laissez-faire* attitudes were not conducive to scientific progress and argued that the solution lay in central planning of [85]

science, 'as is already occurring in the Soviet Union'.[85] Although Bernal received support from left-wing scientists such as Joseph Needham, many others argued that scientific progress could only be guaranteed by giving researchers the freedom to make their own decisions and regulate their own conduct.[86] Figures such as the émigré chemist Michael Polanyi, who co-founded a Society for Freedom in Science in 1940, maintained that science could only thrive in a liberal society and free from outside interference.[87] These arguments were strengthened following the Second World War, when it became clear that Soviet efforts to control genetics involved the arrest and execution of scientists opposed to Trofim Lysenko, who fraudulently claimed to have perfected a way of increasing crop yields and transmitting acquired characteristics to later generations.[88] Supporters of scientific freedom argued that the collapse of Soviet genetics and agriculture proved just how harmful external interference was for science.

Support for club regulation was strengthened further during the 1950s, thanks to advances in biological and medical research such as the development of effective anti-tuberculosis drugs, open-heart surgery, kidney transplantation and the discovery of DNA's helical structure. These successful projects involved no external planning and were all 'developed through the single-minded efforts of a few dedicated individual scientists and doctors'.[89] At a time when professions were highly regarded, this research further increased public confidence in science and medicine.[90] Celebratory media coverage portrayed doctors and scientists as pioneering figures who were central to a 'new Elizabethan era' of progress and discovery.[91] When 'science and expertise were synonymous', both in public and in government, the future of club regulation seemed more assured than ever.[92]

Compounding club regulation: other professions and 'doctor knows best'

Historians have thus far explained the growth of club regulation by detailing how the professional desire for autonomy mapped on to the *laissez-faire* attitude of politicians, and examining how the expertise of doctors and scientists became central to government policy from the mid nineteenth century onwards. But we cannot fully account for club regulation without also examining attitudes in other professions. As we shall see, medical and scientific ethics were also seen as professional concerns thanks to the overwhelmingly 'hands-off' approach in the fields that later constituted bioethics, such as law, philosophy and theology.

This stance partly reflected the broad support for technical expertise during the nineteenth and twentieth centuries; but it also reflected factors that were specific to each of these fields. This was certainly the case in law, where *laissez-faire* attitudes to medicine were most evident. From the eighteenth century onwards it was extremely rare for the courts to adjudicate in medical malpractice cases. This was largely because the legal system adapted itself to the rules of the market and, in doing so, 'became unwilling to interfere with the freedom of trade'.[93] This stance was compounded in the nineteenth century when lawyers, like doctors, reorganised themselves to 'control competition in the new markets opened up by industrialism'.[94] They exploited statute and common laws to establish monopolies and rebuilt their governing institutions, such as the Inns of Court and the Law Society, to organise training and discipline with a high degree of autonomy from the state. One bastion of club regulation was hardly likely to interfere with the affairs of another, especially after the 1858 Medical Act formally entrusted doctors with the power to regulate themselves.

In the rare instances when the courts did consider medical practices, they sought not to challenge but to strengthen medical authority. Abortion was the only operative procedure governed by law during the nineteenth century, with the 1861 Offences Against the Person Act specifying that any attempt to induce miscarriage was punishable by life imprisonment. But this was less about regulating doctors, who were free to perform an abortion if they believed it would save a woman's life, and more about prohibiting the activities of 'backstreet' abortionists who offered competing systems of healthcare.[95] While doctors believed that the law should 'interfere as little as possible with clinical practice', they nevertheless supported legislation to 'retain medical control of abortion and to exclude the "racketeer who has brought such discredit upon our profession"'.[96]

The decisions from two 1950s medical negligence cases demonstrate how lawyers and judges continued to believe that 'the medical profession should be held in special regard and interfered with by the law as little as possible'.[97] The first, *Hatcher* v. *Black*, arose in 1954 after a patient claimed that they were not informed about possible nerve damage in thyroid surgery. Ruling in favour of the doctors, the judge, Alfred Denning, argued that 'we should be doing a disservice to the community at large if we were to impose liability on hospitals and doctors for everything that goes wrong'. Denning warned that giving courts the power to decide what constituted negligent behaviour would lead to 'defensive medicine', where doctors thought 'more of their own safety than of the good of their patients'.[98] This, he predicted, would stifle innovation, cost lives and ultimately harm public confidence in the NHS.

The second case, *Bolam* v. *Friern Hospital Management Committee*, arose in 1957 when a patient sued doctors for injuries that arose after they failed to restrain him during electroconvulsive therapy.[99] Here, as in *Denning*, the courts ruled in favour of the doctors rather than the patient. Their decision hinged not on the possibility of 'defensive medicine' but on the argument that the patient's treatment conformed to standard medical practices. This ruling became known as the '*Bolam* test' and was applied to all subsequent medical negligence claims.[100] As the lawyer Margaret Brazier notes, by deciding that medical conduct should be judged according to professional norms, and not the expectations of patients or the public, the *Bolam* test affirmed that 'the underlying trend in the English courts was that "doctor knows best"'.[101]

While philosophers took a similarly 'hands-off' stance, they did so for different reasons. During the eighteenth and nineteenth centuries, work on ethics had formed a major component of philosophy. British philosophers such as David Hume, Jeremy Bentham and John Stuart Mill claimed that acts should be guided by notions of sympathy, natural or individual rights and the utilitarian faith in increasing the happiness of the greatest number of people; and some of these ideas, especially Hume's work on sympathy, influenced codes of medical ethics *circa* 1800.[102] During the early twentieth century, however, philosophers abandoned work on ethics and refused to state how things ought to be. This shift involved a rejection of the previous belief that notions such as 'good' or 'right' could be objectively determined, which John Dewey had encapsulated when he defined ethics as 'the science that deals with conduct, in so far as this is concerned as right or wrong, good or bad'.[103]

In his 1903 book *Principia Ethica*, the Cambridge philosopher G. E. Moore argued that ethics was not a science since 'good' and 'right' were indefinable categories that could not be empirically verified.[104] Moore coined the term 'naturalistic fallacy' to describe the seemingly mistaken belief that a certain action could be objectively shown to be 'good' in the same way that, say, blood could be shown to flow around the body.[105] He argued that while we may recognise that something is intrinsically good, just as we recognise something is yellow, we cannot then *prove* it really was 'good' in order to specify what kinds of actions we should perform.

Moore's argument underpinned the redefinition of philosophy as a more objective field that was free of any political, nationalistic or religious bias.[106] Following *Principia Ethica*, philosophers adopted an approach that Bertrand Russell called 'modern analytical empiricism', which centred solely on clarifying the properties of logical or moral propositions. Russell argued that this method distanced philosophy from the doctrinaire and incommensurable notions of 'good' that had been disastrously employed during the First World War, and gave it the objective 'quality of science … by which I mean the habit of basing our beliefs upon observations and inferences as impersonal, and as much divested of local and temperamental bias, as is possible for human beings'.[107] Rather than challenge science, then, prominent philosophers such as Russell and Ludwig Wittgenstein sought to emulate it. They viewed philosophy as a 'disinterested search for truth', and believed that anyone who made a normative statement was committing 'a kind of treachery'.[108]

This position was reaffirmed by the young Alfred J. Ayer, whose 1936 book *Language, Truth and Logic* was widely credited with having 'a huge influence on people's notion of what ethics is all about'.[109] Ayer took Moore and Russell's stance to its logical conclusion when he endorsed a highly subjectivist view of ethics, claiming that moral statements were 'simply expressions of emotion that can be neither true nor false'.[110] Since philosophers only studied verifiable and 'genuine propositions', he argued, 'a strictly philosophical treatise on ethics should therefore make no ethical pronouncements'.[111] What was more, Ayer also believed that since ethical statements were unverifiable expressions 'with no objective validity', and since there was 'no relevant empirical test' to resolve competing claims, it was misleading for a philosopher or anyone else to 'set themselves up as arbiters of right and wrong'.[112]

As he increasingly became a 'public intellectual' and appeared on television and the radio from the 1950s, Ayer found himself in the ironic position where 'the authority of his public role rested on his professional identity as a philosopher, but his declared philosophical position was that philosophy could have little to say on issues that were of public interest'.[113] Ayer made this clear in his 1965 *Philosophical Essays*, when he stated that 'to analyse moral judgements is not itself to moralise' and warned that members of the public would be disappointed if 'they mistakenly look to the philosopher as a champion of virtue'.[114] Over fifty years after *Principia Ethica* had been published, Ayer ensured that this austere view of ethics remained paradigmatic. As Mary Warnock outlined in 1960, it 'seemed as if there were no other virtue in a moral philosopher except that he should avoid the naturalistic fallacy'.[115] Moral philosophy had become defined, she argued, by 'the refusal of philosophers in England to commit themselves to moral opinions'.[116]

This gave scientists and doctors freedom to discuss ethics in their own fields and more generally. On the rare occasions that philosophers responded to the ethical work of scientists or doctors, they simply affirmed why they avoided

normative issues. For instance, when Conrad Waddington told Ludwig Wittgenstein that he was writing *Science and Ethics*, the horrified philosopher replied that it was 'a terrible business – just terrible! You can at best stammer when you talk of it.'[117] C. E. M. Joad was the only philosopher who responded to Waddington's essay, in the journal *Nature*, yet this was only to criticise him for presuming that notions such as 'good' could be objectively measured.[118] And when the CIBA Foundation convened a 1963 symposium on 'Man and His Future', which examined whether biological research might 'reshape traditional grounds for ethical beliefs', there were no philosophers in attendance.[119]

Religious figures, on the other hand, were more prepared to discuss science and medicine. While no philosophers or lawyers attended the 'Man and His Future' symposium, the predominantly scientific audience was joined by the Revd H. C. Trowell, curate of Stratford-Sub-Castle, who discussed food allocation and family planning in the developing world.[120] Theologians and the clergy were also second only to scientists and doctors in responding to *Science and Ethics*. In line with the complexity that had long characterised relations between religion and science, attitudes here were less uniform than in law or philosophy. Some religious figures opposed what they saw as Waddington's attempts to portray science as a secular religion. The Dean of St Paul's Cathedral, for example, claimed that *Science and Ethics* was a 'disastrous error' and asserted that morality came 'from a Source deeper and more intimate than the course of evolution'.[121] Others, meanwhile, claimed that science and religion could not conflict because 'they were quite separate provinces'.[122] This position was endorsed by philosophers such as Ayer, who claimed in *Language, Truth and Logic* that 'there was no logical ground for antagonism between religion and natural science', because 'since religious utterances are not genuine propositions at all, they cannot stand in logical opposition to the propositions of science'.[123]

But a significant proportion also sought to assimilate religious and scientific worldviews. This had been a longstanding tactic within the Church of England, especially in efforts to reconcile religion and evolutionary theories, and the tendency increased after the 1920s when modernising figures such as William Temple, later Archbishop of Canterbury, argued that theologians needed to engage with contemporary issues to ensure they were not 'isolated from the mainstream of public life'.[124] This belief led to greater discussions of how Christian faith related to political, economic and scientific concerns, and was evident when Ernest Barnes, the Bishop of Birmingham and a former mathematician, wrote to *Nature* expressing his 'fundamental agreement' with *Science and Ethics*. There was no reason, Barnes argued, why evolutionary and ethical progress could not both be seen as evidence of God's 'progressive revelation of Himself'.[125]

From the late 1930s onwards many clergy and Christian intellectuals believed this 'synthesis' could be achieved by working with doctors, scientists and others to discuss common concerns, and endorsed collaboration in small interdisciplinary groups.[126] In 1938, for example, the ecumenist J. H. Oldham co-founded the 'Moot' group with Anglican clergymen such as Alec Vidler and Daniel T. Jenkins, Christian intellectuals such as the poet T. S. Eliot, the sociologist Karl Mannheim and the educationalist Walter Moberly.[127] The Moot group discussed a wide range of issues, including relations between science and religion, and sought to ensure that Christian values were at the forefront of postwar social reconstruction. Despite its illustrious background, however, the Moot's emphasis on elite leadership was unfashionable in the egalitarian welfare state and it disbanded after Mannheim died in 1947.[128]

While William Temple was not a member of Moot, his enthusiasm for interdisciplinary groups was evident shortly before his death in 1944, when he established the Churches' Council of Healing (CCH) 'to bring together the churches and the medical profession'.[129] Temple saw collaboration here as vital since the physical, mental and spiritual aspects of healing were 'so interdependent that successful treatment of disease in one was not possible without consideration of the others'.[130] He also argued that doctors stood to benefit from cooperating with theologians 'in the study and performance of their respective functions in the work of healing', as they would receive valuable help in assisting those patients who believed that 'religious ministrations will conduce to health and peace of mind'.[131]

The BMA initially questioned the 'propriety of the association of doctors with clergy as unqualified persons', and sought assurances that the CCH had no desire to 'overlap the realm of physical or psychiatric medicine' and was not advocating 'unscientific' methods such as faith healing.[132] But after meeting a deputation headed by the Bishop of Croydon, they claimed that there was 'no ethical reason to prevent medical practitioners co-operating with the clergy' and supported appointing BMA representatives as *ex officio* CCH members.[133] The BMA council also broadened this proposal and endorsed 'fuller co-operation', in which 'medicine and the Church working together should encourage a dynamic philosophy of health which would enable every citizen to find a way of life based on moral principle and a sound knowledge of the factors which promote health and well-being'.[134]

The BMA's belief that collaboration with theologians was 'necessary and desirable' might appear surprising, as club regulation was particularly strong in the late 1940s. But doctors were happy to collaborate because they believed that

religious figures ultimately strengthened their professional authority. This partly stemmed from a hope that they would reconcile doctors to the changing landscape of the new welfare state. In a letter to the *British Medical Journal*, which followed a report on the CCH, one doctor outlined how they and their colleagues feared being 'grossly overworked' in the new NHS because 'patients will be entitled to medical advice without a fee and will consult their doctor far more readily'.[135] These worries were also expressed by medical practitioners in early meetings of the Frontier Medical Group (FMG), which was co-founded by Christian doctors and some Moot clergymen, such as Daniel Jenkins and Alec Vidler.[136] The meetings prompted Jenkins to write a 1949 book on *The Doctor's Profession*, in which he claimed that the 'establishment of a National Health Service' forced doctors 'to reckon with even greater interest in [their] activities on the part of the community', but left them too overworked to fully consider ethical issues.[137] While Jenkins acknowledged that it was unusual for a book on medicine to 'be written not by a doctor but by a theologian', he argued that doctors were now simply 'too busy to write books of this kind'.[138]

Jenkins outlined how Christian doctors increasingly sought advice from theologians because the NHS placed new demands on 'an already overcrowded life'.[139] These concerns ensured that *The Doctor's Profession* was one of several books written for denominational audiences in the late 1940s, which aimed to show that it was possible 'to be a doctor and a good Christian' in the welfare state.[140] This trend increased during the 1950s, as Christian doctors 'demanded to know what their options were' in the face of growing public demand for contraceptives, an increase in artificial insemination and the questions raised by new artificial respirators about whether withdrawing treatment from 'hopeless' cases conflicted with the 'Christian's reverence for life'.[141]

At the same time, doctors also welcomed the input of theologians because they positioned themselves as ancillaries to the medical profession. They saw their job as to clarify religious views on particular issues, not to criticise doctors or influence decision-making. William Temple, for one, argued that theologians should elucidate general principles 'according to which precise policy might be formulated', and held that it was not for them to 'argue how principles should be put into practice'.[142] This stance was also clear in *The Doctor's Profession*, in which Jenkins provided no direct advice and stressed that it was 'clearly not the function of a book of this kind to pass judgement'.[143] Like philosophers and lawyers, Temple, Jenkins and other theologians ultimately believed that medical decisions were for doctors alone to make.

Criticising club regulation and 'the birth of bioethics'?

At the start of the 1960s no-one argued that scientists or doctors required any external supervision. But this was to change over the course of the decade, which witnessed the beginnings of what Harold Perkin calls a 'backlash against professional society'.[144] Scientists and doctors were no longer seen as 'the god-like functionaries, beyond questioning much less criticism, they had once been', and public debates increasingly centred on the drawbacks as much as the benefits of research.[145] While distrust of medical or scientific authority was nothing new, of course, it had previously come from specific campaign groups or elite critics such as George Bernard Shaw. But several linked factors ensured that it was far more widespread in the 1960s and arose from a broader social base than before. These included horror at the neonatal disabilities caused by the morning sickness drug Thalidomide, which came to light in 1962 and burst 'the bubble of postwar optimism' surrounding medical research.[146] At the same time, in their reports on Thalidomide and other issues, the media adopted a more critical 'watchdog' stance in which they focused on social and ethical issues instead of deferring to professional experts.[147]

Criticism also reflected the emergence of a 'new politics' in the 1960s and 1970s, in which concerns over class identity and economic security were replaced by an emphasis on human rights and individual autonomy.[148] Change was often driven by the activities of the many 'new social movements' that incorporated civil rights and libertarian ideologies to campaign on behalf of marginal groups.[149] These movements increasingly criticised professions as obstacles to empowerment, as unaccountable and self-serving power blocs. Some of the more radical ones drew inspiration from leftist academics such as the Austrian philosopher Ivan Illich, who claimed that medical control over definitions of health and illness fostered a 'debilitating' client mentality among patients and was itself a major threat to health.[150] This was certainly the case with the National Association for Mental Health, which rebranded itself as MIND under the leadership of the American lawyer Larry Gostin and began to expose professional misconduct and campaign for a 'rights-based' approach to mental illness.[151]

But the 'backlash against professional society' did not emanate solely from new social movements, a critical media or a disaffected public. Indeed, one of the earliest and strongest critiques of medicine, which contributed to public unease and influenced campaign groups, came from the medical 'whistleblower' Maurice Pappworth. Born Maurice Papperovitch in 1910, before his family changed their name in the 1930s, Pappworth claimed that anti-semitism

prevented him from obtaining consultant positions in London after he graduated from the University of Liverpool in 1932.[152] Rather than take a 'peripheral' hospital post, he decided to earn a living by tutoring junior doctors looking to pass the diploma that controlled entry to the Royal College of Physicians (RCP). It was here that Pappworth learned of questionable research practices, after his students told him that they were often expected to undertake experiments on NHS patients without their full knowledge or consent.[153] While informed consent had been prioritised as 'absolutely essential' by the Nuremberg Code that was drawn up during the Nazi medical trials, it was routinely ignored by researchers in Britain, the United States and elsewhere, who believed the guidelines were designed to prosecute 'barbarians' and did not apply to them.[154]

Pappworth was certainly not the first doctor to have misgivings about the lack of consent in medical research, but he was the first to go public. In line with club regulation, doctors had previously kept their views 'in house' and refused to openly criticise their colleagues. This was clear when Pappworth wrote letters to journals that published work which he found to be ethically dubious, but the editors refused to publish them.[155] Frustration with these rejections led Pappworth to break with protocol in 1962, when he published a short piece in the popular *Twentieth Century* magazine. His article drew on a sample of published studies to claim that researchers often exposed patients to risky experiments, including liver biopsies and withholding of insulin, without their 'full consent, after honest and detailed explanation of what was to be meted out to them'.[156]

After listing fourteen questionable experiments, Pappworth detailed how animal experiments 'were rigorously controlled and supervised' whereas 'doctors can indulge in human vivisection without let or hindrance'.[157] He argued that it was no longer sufficient to claim that 'only the clinician in charge could say what was right and proper and what safeguards were needed'.[158] But while he called for 'proper safeguards' to be introduced, Pappworth did not detail what changes he felt were needed, other than recommending that 'the investigator who is also the practising physician in control of the patient cannot be the person best qualified to judge objectively the risk involved in any experiment'.[159]

The *Twentieth Century* article was published in the same year that the public learned the full scale of the Thalidomide tragedy, and both played a significant role in generating disquiet over medical research. Pappworth's call for a 'battle to defend the rights of all patients against the whims and ambitions of some doctors' prompted the teacher Helen Hodgson to establish the Patients Association in January 1963.[160] The Patients Association was one of the earliest and most high-profile 'new social movements' concerned with healthcare, and regularly challenged medical paternalism in letters to newspapers and professional journals.[161] Like other new social movements, the Patients Association emphasised individual autonomy and claimed that patients had a fundamental right to choose whether or not they were subjected to research.[162] It also, notably, demanded greater public involvement in the development of regulatory guidelines for clinical research. In a 1963 letter to the *British Medical Journal*, Hodgson warned that patients 'would not be willing for much longer to submit blindly their health and their lives to any arbitrary code of ethics in which they have no say'.[163]

Pappworth's work also caused unrest among doctors, who believed that he should have confined his critique to the medical community.[164] Many tried to dissuade him from making further public claims, warning that he would seriously undermine people's faith in medicine. One senior doctor summarised these views in a letter to Pappworth several years later, when he claimed that 'in common with many people, I disliked your tactics as much as I approved of your message'.[165] But despite the attempts of other doctors, Pappworth went ahead and published a longer book, entitled *Human Guinea Pigs*, in 1967.

Human Guinea Pigs was similar to Pappworth's earlier article in many respects, providing a long list of British and American experiments that had been undertaken without valid consent, carried no therapeutic benefit and were often dangerous. But it also differed thanks to a long final chapter that set out proposed legal changes and, notably, endorsed outside involvement in the development and enforcement of new guidelines. At the outset of the book Pappworth explained why he had contravened one of the main tenets of club regulation and encouraged 'discussion outside professional circles'.[166] Drawing on his own experiences, he argued that 'little heed has been paid by the experimenters themselves to the occasional voices raised in protest against these practices, and there has been, on the part of editors of professional journals, some censorship of the expression of protest – presumably for fear of offending some of their readers'.[167] The only way to adequately 'stir the consciences of doctors', Pappworth concluded, was to 'enlighten the public about what is going on in such experiments'.[168]

But Pappworth also publicised his work because he believed, like Hodgson, that 'the medical profession must no longer be allowed to ignore the problems or assert, as they often do, that this is a matter to be solved by doctors

themselves'. He instead claimed that ethical issues in clinical research could only be solved 'by frank discussion among informed people, lay as well as medical'.[169] While Pappworth advocated 'frank discussion', he also called for new and legally binding guidelines for clinical research. 'After careful thought over many years', he wrote, 'I have reluctantly come to the conclusion that the voluntary system of safeguarding patients' rights has failed and new legislative procedures are absolutely necessary.'[170]

Pappworth saw outside involvement as vital here. He argued that in order to fully protect patients, 'who are at present exposed to dangers and indignity', it was essential that 'our laws do not place the entire authority to decide what is permissible and what is not in the hands of a professional class'.[171] He recommended that Parliament should formulate an Act that established 'consultation committees', which would review all research applications and 'judge objectively … whether or not any proposed experiment is legally and ethically justifiable'.[172] Pappworth proposed that every regional hospital board should include a 'consultation committee' that was answerable to the GMC and Parliament. Although he did not specify how many members they should have, he stressed that one 'must be a clinician who is not involved in research, and there should be at least one lay member, preferably but not necessarily a lawyer'.[173]

By endorsing lay involvement in deciding whether research was 'ethically justifiable', Pappworth was clear in his belief that medical ethics should no longer be a matter for doctors alone. This has led some to claim that his work was a critical moment in 'the birth of British bioethics'.[174] But this is far from the case. Pappworth's arguments had little, if any, impact on the continuing support for club regulation among doctors, politicians and other professions. While all these groups agreed that aspects of clinical research were problematic, they maintained that responsibility for implementing reforms should continue to rest with the medical profession.

Writing in the *Times Literary Supplement*, for example, the renowned geriatrician Lord Basil Amulree stated that Pappworth had been 'right to draw attention to this disquieting trend in medicine' and acknowledged that it was 'surely undesirable to carry out any experiment on patients without their consent'. But Amulree disagreed with Pappworth in his firm insistence that 'it is the members of the profession itself … who can do most to ensure that this undesirable and unethical form of experimentation ceases to be practised'.[175] Involving outsiders in developing guidelines, he argued, would simply ensure that they were 'difficult to draft and equally difficult to enforce'.

The *Lancet*, too, claimed that the best way to protect patients was by ensuring that 'the difficult and important decisions that research doctors have to make must be kept under constant review by other doctors'. Implementing Pappworth's recommendations, it continued, would 'only lead to another ineffectual code of vague ethics'.[176] And in a review for *World Medicine*, the doctor and epidemiologist Charles Fletcher, who was a longstanding critic of Pappworth, pointedly dismissed his calls for lay involvement as a 'quite impracticable' measure that 'could not seriously have been proposed by anyone engaged in medical research'.[177]

Parliament also continued to endorse *laissez-faire* attitudes to regulation. The vast majority of politicians echoed Amulree, Fletcher and other doctors by rejecting outside involvement in clinical research. Members of Harold Wilson's Labour government, which had promised to turn scientific innovation into economic and material prosperity when it won the 1964 election, were reluctant to interfere with professional expertise and believed the best solution was for 'the medical profession to put its house in order'.[178] This was made clear during a Commons debate that followed the publication of *Human Guinea Pigs* in May 1967. The government's Minister for Health, Kenneth Robinson, rejected the Labour MP Joyce Butler's call for a public inquiry and claimed that hospital authorities and the MRC already provided researchers with 'comprehensive guidance'.[179] The government reiterated its position the following year, when the Ministry of Health rebuffed the Patients Association's demands for a public inquiry and claimed that ethical questions were 'for the profession to consider'.[180] In 1969 the Conservative MP Quintin Hogg, who had previously endorsed *laissez-faire* approaches as Minister for Science, told Pappworth that external regulation was highly unlikely as 'I do not myself think that Parliament is in the position in which positive legislation can be imposed without detriment to the freedom of the medical profession'.[181]

Pappworth's recommendations also found little support from other professions, who maintained their 'hands-off' stance into the 1960s despite the 'backlash against professional society'. Reviewing *Human Guinea Pigs* for the BBC's *Listener* magazine, the philosopher Bernard Williams said nothing about Pappworth's call for lay involvement and statutory regulation, and dwelt instead on whether the 'Golden Rule' was an appropriate ethical safeguard for research: that is, whether it was sufficient to argue that doctors should not submit patients to a procedure they would not be willing to undertake on themselves or their families.[182] In line with the *Bolam* test, lawyers also maintained that doctors should be left to determine their own conduct and standards of care. In a long letter to Pappworth, the lawyer Cecil Clothier dismissed his demands for 'full informed consent', since 'nobody in a hospital *ever* consents in the

sense you suggest'.[183] Clothier also claimed that legal guidelines would be overly restrictive, as notions of acceptable risks and safeguards differed between individual patients and specific research projects. He outlined how one patient might demand full information while another might not care, and stated that prioritising informed consent was inappropriate when a doctor was faced with an unconscious patient whose only chance of survival 'could include trying a newly-devised drug if nothing else had done any good'. These complications, Clothier argued, ensured that 'individual assessment' remained the best form of governance for doctors.[184]

Under no pressure to implement change, either from politicians or other professions, doctors largely ignored Pappworth's recommendations. This was clear in 1967 when an RCP committee, comprised solely of doctors, produced a short report that proposed the formation of research ethics committees (RECs) to review applications for projects 'where the subject, be he a patient or a normal person, cannot expect clinical benefit'.[185] The apparent similarity between this proposal and *Human Guinea Pigs* led Pappworth to claim that he had influenced the RCP.[186] But as one doctor informed him years later, the RCP's decision '*antedated*' your book' and was prompted by changing grant policies in the United States, where the Public Health Service (PHS) stated that it would only fund research if an applicant's institution had conducted a prior ethical review.[187] The RCP report clearly stated that RECs should be established at hospitals where researchers 'were in receipt' of or were likely to seek PHS money. They also predicted that RECs would assess proposals from British funding bodies once established, since 'it is unlikely they will feel they can sensibly confine their attentions solely to cases where research is sponsored by a foreign country'.[188]

The RCP committee's attitude to outside involvement highlights the extent to which doctors ignored Pappworth. In marked contrast to *Human Guinea Pigs*, it proposed that RECs should be composed of 'a group of doctors including those experienced in clinical investigation'.[189] When 'difficult ethical problems arise', it claimed, 'even the most experienced workers would often welcome the opinion and advice of their peers'. The RCP committee dismissed any outside involvement or formal regulation when it argued that it was

> of great importance that clinical investigation should be free to proceed without unnecessary interference and delay. Imposition of rigid or central bureaucratic controls would be likely to deter doctors from undertaking investigations, and if this were to happen, the rate of growth in medical knowledge would inevitably diminish with resultant delay in advances in medical care.[190]

The responses to a 1971 survey show that the vast majority of hospitals followed the RCP's proposals when they established RECs. Only one-fifth of those set up after 1967 included a lay member, who was generally the hospital or group secretary, and none included more than one.[191] If this were not testament enough to the continued strength of club regulation, it was officially endorsed by a government inquiry into the structure and function of the GMC, which had been established in 1972 following professional unrest at the decision to 'strike off' any doctor who did not pay a new annual retainer fee.[192] When the committee's report was published in 1975, it unanimously agreed that staffing the GMC predominantly with doctors safeguarded the public, since 'it is the essence of professional skill that it deals with matters unfamiliar to the layman'.[193] Despite Pappworth's efforts, and to his continued frustration, responsibility for deciding ethical issues continued to rest 'firmly on the shoulders of the medical profession'.[194]

Conclusion

This evidence undermines claims that Maurice Pappworth made a 'significant contribution to the development of medical research ethics' and that '*Human Guinea Pigs* is a major milestone on the journey towards the modern system of research ethics committee review'.[195] While Pappworth's work alerted the public to the ethical issues associated with clinical experiments, and contributed to a broader critique of professional expertise, it had little impact on the governance of medical research or treatment. Several writers have sought to explain Pappworth's lack of influence by claiming that his confrontational manner 'alienated most of his audience' and that he 'was not an authoritative figure in medical circles'.[196] These are certainly valid points. Journal editors and correspondents were often irritated by the strident tone of Pappworth's correspondence, while Cecil Clothier argued that he might have a more sympathetic audience if he moderated his 'candour'.[197] It is also clear that senior doctors often used Pappworth's lack of professional status to dismiss his work, with Charles Fletcher, for one, claiming that it was the product of an embittered outsider and would not have arisen from 'anyone engaged in medical research'.[198]

But while his manner and status did not help, I believe that Pappworth was mainly ignored because his calls for outside involvement conflicted with the longstanding and continued support for club regulation among doctors, politicians and other professions.[199] This makes it hard to portray him as a significant figure in 'the birth of British bioethics'.

Sections of *Human Guinea Pigs* certainly resemble later work in bioethics, not least its calls for patient empowerment and lay involvement, but portraying Pappworth as significant to the development of bioethics involves reading history backwards and reduces bioethics to little more than a public critique of medicine and science, which is far from the case. Bioethics is a multi-sited and interdisciplinary set of activities, and we cannot attribute its emergence to a single event or figure.

What is more, the fact remains that bioethics only became a recognised term and approach in Britain once politicians, doctors, lawyers, philosophers and others came to believe that external involvement with medicine and science benefited patients, professions and the public. This was clearly not the case in the 1960s, when they all agreed that doctors should retain 'jurisdictional control' over their own practices.[200] Instead of mistakenly trying to see Pappworth as influential to bioethics, then, we need to concentrate on the broad changes that led politicians, lawyers, philosophers and theologians to adopt a more 'hands-on' approach in decades to come.

Footnotes

1　Moran. British Regulatory State. pp. 38–66.

2　On ethics produced 'by and for professions', see Morrice Andrew AG. "Honour and Interests": Medical Ethics and the British Medical Association. In: Maehle Andreas-Holger, Geyer-Kordesch Johanna, editors. Historical and Philosophical Perspectives on Medical Ethics. Aldershot: Ashgate; 2002. pp. 11–37.(p. 12).

3　See Perkin Harold. The Rise of Professional Society: England Since 1800. London and New York: Routledge; 1990. p. 4.

4　For a recent example, see Brown Michael. Performing Medicine: Medical Culture and Identity in Provincial England, c. 1760–1850. Manchester: Manchester University Press; 2011. For an overview of historical work on professionalisation and expertise, see Burnham John C. How the Concept of a Profession Evolved in the Work of Historians of Medicine. Bulletin of the History of Medicine. 1996;Vol. 70:1–24. [PubMed: 8850068]

5　Abbott. The System of Professions. :2.

6　Perkin. The Rise of Professional Society. :472.

7　See, for example, McAdams Rachel. MSc thesis. University of Manchester; 2005. Human Guinea Pigs: Maurice Pappworth and the Birth of British Bioethics. Boyd. Discourses of Bioethics in the United Kingdom. :487.

8　Waddington Ivan. The Development of Medical Ethics – A Sociological Analysis. Medical History. 1975;Vol. 19:36–51. [PMC free article: PMC1081608] [PubMed: 1095851] (p. 37). See also Jewson Nicholas. The Disappearance of the Sick Man from Medical Cosmology. Sociology. 1976;Vol. 10:225–244. Waddington Ivan. Medical Knowledge and the Patronage System in Eighteenth Century England. Sociology. 1974;Vol. 8:369–385. See also Perkin. The Rise of Professional Society. pp. 117–118.

9　Waddington, 'Development of Medical Ethics', p. 37. For a detailed analysis of the social status of eighteenth-century medical practitioners, see Brown, *Performing Medicine*.

10　Porter Roy. Laymen, Doctors and Medical Knowledge in the Eighteenth Century: The Evidence of the *Gentleman's Magazine*. In: Porter Roy, editor. Patients and Practitioners: Lay Perceptions of Pre-Industrial Society. Cambridge: Cambridge University Press; 1985. pp. 283–315. (p. 287).

11　Waddington. Development of Medical Ethics. :37.

12　On the 'medical marketplace', see Jenner Mark, Wallis Patrick, editors. Medicine and the Marketplace in England and its Colonies, c.1450–c.1850. Basingstoke: Palgrave Macmillan; 2007. Porter Roy. Before the Fringe: "Quackery" and the Eighteenth Century Medical Market. In: Cooter Roger, editor. Studies in the History of Alternative Medicine. Basingstoke: Macmillan; 1988. pp. 1–27.

13　Porter. Before the Fringe. :3. See also Baker, et al. Introduction. :5. On challenges to the tripartite hierarchy posed by a new division between general practitioners and hospital consultants, see Waddington. Development of Medical Ethics. :41–42. Michael Brown has recently claimed that much literature on the 'medical marketplace' presents a misleading portrayal of medicine in the seventeenth and eighteenth centuries by focusing largely on competition and conflict. He argues that many historians have ignored how orthodox medical practitioners also acted cooperatively in this period and displayed 'collective identities or shared values'. See Brown. Performing Medicine. :5.

14　Baker, et al. Introduction. :7.

15　Fissell Mary E. Innocent and Honourable Bribes: Medical Manners in Eighteenth Century Britain. In: Baker, et al., editors. Codification

of Medical Morality. pp. 19–47.

16   Although several historians have noted how Percival's guidelines proved valuable for nineteenth-century medical reformers, John Pickstone details how they were very much a product of eighteenth-century Manchester. They were written to settle a dispute in the local Infirmary involving an increase in honorary staff and perceived lay interference, and drew on the prior tradition of gentlemanly advice and moralising. See Pickstone John. Thomas Percival and the Production of *Medical Ethics*. In: Baker, et al., editors. Codification of Medical Morality. pp. 161–178. On Percival's later influence, see Maehle Andreas-Holger. Medical Ethics and the Law. In: Jackson Mark, editor. The Oxford Handbook of the History of Medicine. Oxford: Oxford University Press; 2011. pp. 543–560.

17   Baker, et al. Introduction. :9.

18   Brown. Performing Medicine. :138–140. 150–183.

19   Perkin. The Rise of Professional Society. :117. See also Brown. Performing Medicine. :150–183. Lawrence Christopher. Medicine in the Making of Modern Britain, 1700–1920. London: Routledge; 1994. pp. 27–51. Pickstone John. The Professionalisation of Medicine in England and Europe: The State, the Market and Industrial Society. Journal of the Japanese Medical Society. 1979;Vol. 25(no. 4):550–521.

20   Brown. Performing Medicine. :195. Pickstone. The Professionalisation of Medicine. :526.

21   Pickstone. The Professionalisation of Medicine. :529.

22   Brown. Performing Medicine. :175. Moran. The British Regulatory State. :40–41.

23   Perkin. The Rise of Professional Society. :117. Lawrence. Medicine in the Making of Modern Britain. :55–57.

24   Rose. Government, Authority and Expertise in Advanced Liberalism. :285.

25   Sheard Sally. Quacks and Clerks: Historical and Contemporary Perspectives on the Structure and Function of the British Medical Civil Service. Social Policy and Administration. 2010;Vol. 44:193–207.

26   Brown. Performing Medicine. :226.

27   Moran. The British Regulatory State. :49.

28   Smith Russell G. The Development of Ethical Guidance for Medical Practitioners by the General Medical Council. Medical History. 1993;Vol. 37:56–67. [PMC free article: PMC1036667] [PubMed: 8421390] (p. 58).

29   The initial punishment for misconduct was permanent removal from the medical register, but temporary suspensions later become more common. See Maehle. Medical Ethics and the Law. :547. Smith. The Development of Ethical Guidance. :58–61.

30   Smith. The Development of Ethical Guidance. :57.

31   The BMA was originally known as the Provincial Medical and Surgical Association, before changing its name in 1856. See Lawrence. Medicine in the Making of Modern Britain. :77–78.

32   Morrice. Honour and Interests. :16.

33   Ibid, p. 16.

34   de Styrap Jukes. A Code of Medical Ethics: With General and Special Rules for the Guidance of the Faculty and the Public in the Complex Relations of Professional Life. London: Lewis; 1890. p. 14.

35   Ibid, pp. 16–17. Emphasis in original

36   For more detail, see Morrice. Medical Ethics and the British Medical Association. :24–25.

37   Saundby Robert. Medical Ethics, A Guide to Professional Conduct. London: Charles Griffin; 1907.

38   On 'friendly societies' and the 1911 Act, see Lawrence. Medicine in the Making of Modern Britain. :78–81.

39   Morrice. Medical Ethics and the British Medical Association. :19.

40   Ibid, pp. 19–24.

41   Smith. The Development of Ethical Guidance. :25–26.

42   Reubi David. The Human Capacity to Reflect and Decide: Bioethics and the Reconfiguration of the Research Subject in the British Biomedical Sciences. Social Studies of Science. 2012;Vol. 42:348–368. [PubMed: 23035387] (p. 356). See also McCullough Laurence

B. Was Bioethics Founded on Historical and Conceptual Mistakes about Medical Paternalism? Bioethics. 2011;Vol. 25:66–74. [PubMed: 21175709] For a history that McCullough claims overstates the paternalistic nature of doctor–patient relations in this period, see Katz Jay. The Silent World of Doctor and Patient. New York: The Free Press; 1984.

43   De Styrap. Medical Ethics. :46. Emphasis added.

44   Morrice. Medical Ethics and the British Medical Association. :30. See also Mold Alex. Patient Groups and the Construction of the Patient-Consumer in Britain: An Historical Overview. Journal of Social Policy. 2010;Vol. 39:505–521. 506–509. [PMC free article: PMC2925204] [PubMed: 20798768]

45   Durbach. Bodily Matters. :28.

46   Ibid, pp. 69–91.

47   Ibid, pp. 7–9.

48   See, for example, Kean Hilda. "The Smooth Cool Men of Science": The Feminist and Socialist Response to Vivisection. History Workshop Journal. 1995;Vol. 40:16–38. [PubMed: 11608961] On links between the anti-vivisection and anti-contagion movements, see Elston Mary Ann. Women and Vivisection in Edwardian England. In: Rupke Nikolaas, editor. Vivisection in Historical Perspective. London and New York: Routledge; 1990. pp. 259–295. Lansbury Coral. The Old Brown Dog: Women, Workers and Vivisection in Edwardian England. Madison, WI, and London: University of Wisconsin Press; 1985.

49   French. Antivivisection and Medical Science. :229. Elton. Women and Anti-Vivisection. :274.

50   Durbach. Bodily Matters. :177.

51   The first conscientious objection clause was added to the 1898 Vaccination Act, and exempted any parent who satisfied two petty justices or a police magistrate that they honestly believed vaccination would damage their child's health. This, however, proved difficult to implement thanks to uncertainty over what constituted an 'honest conscientious objection', and a revised 1907 Vaccination Act allowed any parent to get exemption without being questioned. See Ibid, pp. 171–97.

52   French. Antivivisection and Medical Science. :93.

53   Ibid, pp. 151–2. The Commission's more balanced composition also stemmed from the fact that Queen Victoria, a patron of the RSPCA, was 'strongly against' vivisection and had personally instructed Prime Minister Disraeli to convene an inquiry into the procedure. See Ibid, pp. 123–4; Harrison Brian. Animals and the State in Nineteenth Century England. English Historical Review. 1973;Vol. 88:786–820. (p. 791).

54   French. Antivivisection and Medical Science. :177–190.

55   See Rupke Nikolaas. Pro-Vivisection in England in the 1880s: Arguments and Motives. In: Rupke, editor. Vivisection in Historical Perspective. pp. 188–209. (p. 202).

56   Ibid, p. 204. Emphasis added.

57   French. Antivivisection and Medical Science. :208.

58   Details of the composition of the Home Office Advisory Committee are given in Sydney Littlewood (chair), Report of the Departmental Committee on Experiments on Animals. London: HMSO; 1965. p. 156. See also Ryder Richard. Victims of Science. 2nd edn. London: National Anti-Vivisection Society; 1983. p. 157.

59   French. Antivivisection and Medical Science. :215.

60   Edgerton David, Pickstone John. Science, Technology and Medicine in the United Kingdom, 1750–2000. 2009:1–35. (p. 19). Available online at: https://workspace.imperial.ac.uk/humanities/Public/files/Edgerton%20Files/edgerton_science_technology_medicine.pdf (accessed 7 February 2014).

61   Gummett John. Scientists in Whitehall. Manchester: Manchester University Press; 1980. For more on the MRC, see Austoker Joan, Bryder Linda, editors. Historical Perspectives on the Role of the MRC. Oxford: Oxford University Press; 1989. For specific examples of how the MRC used government money to encourage particular fields and approaches, see Bresalier Michael. Uses of a Pandemic: Forging the Identities of Influenza and Virus Research in Interwar Britain. Social History of Medicine. 2012;Vol. 25:400–424. Wilson Duncan. Tissue Culture in Science and Society: The Public Life of a Biological Technique in Twentieth Century Britain. Basingstoke: Palgrave Macmillan; 2011. pp. 8–27.

62   On interwar attitudes to orthodox medicine, see Pugh Martin. We Danced all Night: A Social History of Britain Between the Wars.

London: Vintage; 2009. pp. 37–42.

63   Mayer Anna K. A Combative Sense of Duty: Englishness and the Scientists. In: Lawrence Christopher, Mayer Anna K, editors. Regenerating England: Science, Medicine and Culture in Inter-War Britain. Amsterdam: Rodopi; 2000. pp. 67–107. [PubMed: 11142152] (p. 93).

64   See, for example, Huxley Julian. Science and Health. Listener. 1933 November 8;:706–708. Haldane JBS. Daedalus, Or Science and the Future. London: Kegan Paul, Trench, Trubner; 1924. For more background on these popularising activities, see Wilson, *Tissue Culture in Science and Society*; Bowler Peter J. Science for All: The Popularization of Science in Early Twentieth Century Britain. Chicago: University of Chicago Press; 2009.

65   Kevles Daniel. In the Name of Eugenics: Genetics and the Uses of Human Heredity. Cambridge, MA: Harvard University Press; 2004.

66   Waddington Conrad H. Science and Ethics. London: Unwin Brothers; 1942. p. 18.

67   Ibid, pp. 18–19.

68   Ibid, p. 18.

69   Brooke John Hedley. Science and Religion: Some Historical Perspectives. Cambridge: Cambridge University Press; 1991. p. 336.

70   Ibid.

71   Mayer. Combative Sense of Duty. :83. [PubMed: 11142152]

72   Ibid, p. 89. Emphasis in original.

73   Shaw George Bernard. Doctor's Delusions, Crude Criminology and Sham Education. London: Constable; 1932. p. 9.

74   Ibid, p. 10.

75   Edgerton, Pickstone Science, Technology and Medicine in the United Kingdom. :21.

76   Shaw. Doctor's Delusions. :46.

77   Ibid, p. 53.

78   Ibid.

79   Weindling Paul. Human Guinea Pigs and the Ethics of Experimentation: The BMJ's Correspondent at the Nuremberg Medical Trial. British Medical Journal. 1996;Vol. 313:1467. [PMC free article: PMC2352949] [PubMed: 8973237]

80   Ibid.

81   Perkin. The Rise of Professional Society. :346.

82   See Klein Rudolf. The New Politics of the NHS: From Creation to Reinvention. Oxford and New York: Radcliffe Publishing; 2010. , especially 'The Politics of Creation', pp. 1–21.

83   Reubi. The Human Capacity to Reflect and Decide. :353. [PubMed: 23035387] See also Miller Peter, Rose Nikolas. Governing the Present: Administering, Economic, Social and Personal Life. Oxford: Polity Press; 2008. Fontaine Phillipe. Blood, Politics and Social Science: Richard Titmuss and the Institute of Economic Affairs, 1957–1973. Isis. 2002;Vol. 93:401–434. [PubMed: 12592886]

84   Reubi. The Human Capacity to Reflect and Decide. :353–354. Hazelgrove Jenny. The Old Faith and the New Science: The Nuremberg Code and Human Experimentation Ethics in Britain, 1946–1973. Social History of Medicine. 2002;Vol. 15:109–135. 120–123. [PubMed: 12625329]

85   See Brown Andrew. J. D. Bernal: The Sage of Science. Oxford: Oxford University Press; 2005. pp. 158–164.

86   Brown. J. D. Bernal. :162–163. Werskey Gary. The Marxist Critique of Science: A History in Three Movements? Science as Culture. 2007;Vol. 16:397–461.

87   On Polanyi and the Society for Freedom in Science, see Werskey. The Marxist Critique of Science. :412–413.

88   Brown. J. D. Bernal. :300–306. Joravsky David. The Lysenko Affair. Chicago: University of Chicago Press; 1986.

89   Brown. J. D. Bernal. :163.

90   On welfare states and professional expertise, see Moran. The British Regulatory State. :60–61. Rose. Government, Authority and

Expertise in Advanced Liberalism. :292–294. On the welfare state and public support for professions, see Judt Tony. Ill Fares the Land. London: Allen Lane; 2010. Perkin. The Rise of Professional Society.

91   See, for example, Bud Robert. Penicillin and the New Elizabethans. British Journal for the History of Science. 1998;Vol. 31:305–333.

92   Fisher Elizabeth. Risk Regulation and Administrative Constitutionalism. Oxford: Hart Press; 2007. p. 66.

93   Baker, et al. Introduction. :4.

94   Moran. The British Regulatory State. :84.

95   Brookes Barbara. Abortion in England, 1900–1967. London: Croom Helm; 1988. p. 54.

96   Davis Gayle, Davidson Roger. "A Fifth Freedom" or "Hideous Atheistic Expediency"? The Medical Community and Abortion Law Reform in Scotland, c.1960–1970. Medical History. 2006;Vol. 50:29–48. 39–40. [PMC free article: PMC1369012] [PubMed: 16502870]

97   Davies Michael. Textbook on Medical Law. 2nd edn. London: Blackstone Press; 1998. p. 94. See also Brazier Margaret. Medicine, Patients and the Law. 3rd edn. Harmondsworth: Penguin; 2003.

98   Alfred Denning, quoted in Davies, *Textbook on Medical Law*, p. 95.

99   *Bolam v Friern Hospital Management Committee* [1957] 2 All Er 118. See also Price Kim. The Art of Medicine: Towards a History of Medical Negligence. Lancet. 2010;Vol. 375:192–193. [PubMed: 20109910]

100   See Brazier. Medicine, Patients and the Law. :102–103.

101   Ibid, pp. 102, 146–7.

102   MacIntyre Alasdair. A Short History of Ethics. London: Routledge; 2002. For an example of how moral philosophers influenced medical ethics, see McCullough Laurence B. Baker, et al., editors. John Gregory's Medical Ethics and Humean Sympathy. Codification of Medical Morality. :145–161.

103   Dewey John. Ethics. New York: Henry Holt; 1909. p. 1.

104   MacIntyre. Short History of Ethics. :242–245. Warnock Mary. Ethics since 1900. Oxford: Oxford University Press; 1960. pp. 18–26.

105   I have taken this analogy from Rogers Ben. A. J. Ayer: A Life. London: Chatto and Windus; 1999. p. 48.

106   On how philosophers promoted objectivity and the search for a 'neutral language' in this period, see Daston Lorraine, Galison Peter. Objectivity. New York: Zone Books; 2007. pp. 289–307.

107   Russell Bertrand. History of Western Philosophy. 4th edn. London: Routledge; 2008. pp. 743–744. See also Russell Bertrand. Sceptical Essays. London: Routledge; 2002. Rogers. A. J. Ayer. :80–89.

108   Russell. History of Western Philosophy. :743. Although Russell wrote books on science, marriage and politics, he believed they were not philosophy because they simply offered his own subjective views on a particular subject. They were, he argued, written 'as a human being who suffered from the state of the world and wished to find some way of improving it … [speaking] in plain terms to others who had similar feelings'. Philosophers such as Charles Pidgen have recently claimed, however, that these books do represent important contributions to moral philosophy and are 'no worse … than the moral and political writing of, say, Sartre, Nietzsche or Voltaire'. See Pidgen Charles R. Bertrand Russell: Moral Philosopher or Unphilosophical Moralist? In: Griffin Nicholas, editor. The Cambridge Companion to Bertrand Russell. Cambridge: Cambridge University Press; 2003. pp. 475–505. (p. 476).

109   Alastair Campbell, telephone interview with the author (May 2009).

110   Ayer AJ. Language, Truth and Logic. Harmondsworth: Penguin; 2001. p. 99.

111   Ibid.

112   Rogers. A. J. Ayer. :145. see also Ayer. Language, Truth and Logic. :103–104.

113   Collini Stefan. Absent Minds: A History of Intellectuals in Britain. Oxford: Oxford University Press; 2007. p. 398.

114   Ayer AJ. Philosophical Essays. London: Macmillan; 1965. pp. 246–247.

115   Warnock. Ethics since 1900. :31.

116   Ibid, p. 203.

117   Ludwig Wittgenstein, quoted in Waddington, *Science and Ethics*, p. 7.

118   C. E. M. Joad, in Ibid, pp. 26–9.

119   Francis Crick, quoted in Wolstenholme Gordon, editor. Man and His Future. London: J & A Churchill; 1963. p. 364. The CIBA Foundation was established in 1949 and funded by the CIBA chemical company. Its aim was to promote interdisciplinary collaboration in medical and chemical research. The 1963 meeting on 'Man and His Future' was the first of a series of symposia dedicated to ethical issues in science and medicine. For more background, see Woodford Peter. The CIBA Foundation: An Analytical History, 1949–1974. Amsterdam: Elsevier; 1974.

120   Trowell HC. Wolstenholme, editor. Man and His Future. :63–66.

121   The Very Revd Matthews WR. Dean of St Paul's, in Waddington. Science and Ethics. :22–24.

122   Ibid, p. 37.

123   Ayer. Language, Truth and Logic. :110.

124   Clements Keith, editor. The Moot Papers: Faith, Freedom and Society. London: T&T Press; 2010. p. 8. See also Hastings Adrian. Temple, William (1881–1944). Oxford Dictionary of National Biography. http://www.oxforddnb.com/view/article/36454 (accessed 7 February2014). On religious efforts to accommodate evolutionary theories, see Brooke. Science and Religion. :275–320.

125   The Right Revd Barnes EW. Bishop of Birmingham, in Waddington. Science and Ethics. :20–22. (p. 22).

126   Clements. The Moot Papers. :6–8.

127   Grimley Matthew. 'Moot' (*act.* 1938–1947). Oxford Dictionary Oxford Dictionary. www.oxforddnb.com/view/theme/67745 (accessed 7 February 2014).

128   The politically diverse nature of its participants also ensured that the Moot failed to reach agreement on any concrete proposals, and it wound up shortly after Mannheim's death in 1947. See Grimley, 'Moot'.

129   Anon. Introduction. Bulletin of the Churches' Council of Healing. 1967;(no. 1):3–4. (p. 3). Held in the Ian Ramsey Papers at Durham Cathedral Archives (uncatalogued at time of writing). Henceforth Ramsey archives.

130   Anon. British Medical Association: Proceedings of Council. British Medical Journal. 1947;Vol. 1:103–114. (p. 112).

131   Ibid, p. 112.

132   Ibid, p. 105.

133   Ibid, p. 112.

134   Ibid.

135   Allerton George T. Working Hours in the NHS. British Medical Journal. 1947;Vol. 1:112.

136   The FMG held regular meetings in London and was part of the broader Christian Frontier Movement, which aimed to promote 'effective thought and action in relation to the life of Christians in secular society'. See Jenkins Daniel T. The Doctor's Profession. London: SCM Press; 1949. p. 7. See also Vidler Alec R. Scenes from a Clerical Life. London: Collins; 1977. pp. 133–135.

137   Jenkins. The Doctor's Profession. :9.

138   Ibid, p. 7.

139   Ibid, p. 123.

140   Ibid, p. 61. See also Father Bonnar Alphonsus. The Catholic Doctor. London: Burns & Oates; 1948.

141   Veatch Robert M. Disrupted Dialogue: Medical Ethics and the Collapse of Physician-Humanist Communication, 1770–1980. Oxford: Oxford University Press; 2005. p. 177. See also Jenkins. The Doctor's Profession. :58.

142   Hastings, 'Temple, William'.

143   Jenkins. The Doctor's Profession. :51.

144   Perkin. The Rise of Professional Society. :472–506. See also Mold. Patient Groups and the Construction of the Patient-Consumer. :510. [PMC free article: PMC2925204] [PubMed: 20798768]

145   Perkin. The Rise of Professional Society. :477.

146   Cooter. The Ethical Body. :458. For more on Thalidomide, see Timmermanns Stefan, Leiter Valerie. The Redemption of Thalidomide: Standardizing the Risk of Birth Defects. Social Studies of Science. 2000;Vol. 30:41–71. [PubMed: 11624679]

147   On changing media attitudes in the 1960s, see Nathoo Ayesha. Hearts Exposed: Transplants and the Media in 1960s Britain. Basingstoke: Palgrave Macmillan; 2009. pp. 86–102. Gregory Jane, Miller Steve. Science in Public: Communication, Culture and Credibility. Cambridge, MA: Perseus Publishing; 1998. pp. 44–45.

148   See, for examples, Sandbrooke Dominic. White Heat: A History of Britain in the Swinging Sixties. London: Little, Brown; 2006. pp. 491–515. Marwick Arthur. The Sixties: Cultural Revolution in Britain, France, Italy and the United States c.1958–1974. Oxford: Oxford University Press; 1998.

149   Mold. Patient Groups and the Construction of the Patient-Consumer. :511. [PMC free article: PMC2925204] [PubMed: 20798768] See also Crossley Nick. Making Sense of Social Movements. Buckingham: Open University Press; 2002.

150   See, for example, Illich Ivan, editor. Disabling Professions. London: Marion Boyars; 1977. Illich Ivan. Limits to Medicine, Medical Nemesis: The Expropriation of Health. Harmondsworth: Penguin; 1975.

151   Crossley Nick. Contesting Psychiatry: Social Movements in Mental Health. Oxford: Routledge; 2006.

152   Lock Stephen. Pappworth [formerly Papperovitch], Maurice Henry (1910–1994). Oxford Dictionary of National Biography. www.oxforddnb.com/view/article/55242 (accessed 7 February 2014). Rachel McAdams notes that while some London hospitals did have a reputation for anti-semitism in this period, there was also a shortage of clinical positions in the 1940s thanks to a surplus of qualified doctors returning from the war and the creation of the NHS. See McAdams, 'Human Guinea Pigs'.

153   Hazelgrove. The Old Faith and the New Science. :118. [PubMed: 12625329]

154   On medical disregard for the Nuremberg Code, see Ibid, pp. 111–18; Noortje Jacobs, 'Which Principles, Doctor? The Early Crystallization of Clinical Research Ethics in the Netherlands, 1947–1955, MA thesis, University of Utrecht, 2012; Dixon-Woods Mary, Ashcroft Richard E. Regulation and the Social Licence for Medical Research. Medical Health Care and Philosophy. 2008;Vol. 11:381–391. [PubMed: 18633729] Katz Jay. The Consent Principle of the Nuremberg Code: Its Significance Then and Now. In: Annas George J, editor. The Nazi Doctors and the Nuremberg Code. Oxford: Oxford University Press; 1992. pp. 227–240. For a detailed study of why informed consent was prioritised in the Code, see Weindling Paul. The Origins of Informed Consent: The International Scientific Commission on Medical War Crimes, and the Nuremberg Code. Bulletin of the History of Medicine. 2001;Vol. 75:37–71. [PubMed: 11420451]

155   Lock, 'Pappworth, Maurice Henry'.

156   Pappworth Maurice H. Human Guinea Pigs: A Warning. Twentieth Century. 1962–63;Vol. 171:66–75. (p. 67).

157   Ibid, p. 72.

158   Ibid, p. 71.

159   Ibid, p. 74.

160   Ibid, p. 75.

161   Mold. Patient Groups and the Construction of the Patient-Consumer. :510. [PMC free article: PMC2925204] [PubMed: 20798768] Hazelgrove. The Old Faith and the New Science. :120. [PubMed: 12625329]

162   Mold. Patient Groups and the Construction of the Patient-Consumer. :511. [PMC free article: PMC2925204] [PubMed: 20798768] See also Crossley. Making Sense of Social Movements.

163   Hodgson Helen. Medical Ethics and Controlled Trials. British Medical Journal. 1963;Vol. 1:1339–1340. (p. 1340). See also Hazelgrove. The Old Faith and the New Science. :128. [PubMed: 12625329]

164   Hazelgrove. The Old Faith and the New Science. :120. [PubMed: 12625329]

165   Sir Francis Avery Jones to Maurice H. Pappworth, 30 November 1973. Wellcome archives, Maurice Henry Pappworth papers: PP/MHP/C/5.

166   Pappworth Maurice H. Human Guinea Pigs: Experiments on Man. London: Routledge and Kegan Paul; 1967. p. x

167   Ibid, p. 3.

168   Ibid, p. 5.

169   Ibid, p. ix.

170   Ibid, p. 200.

171   Ibid, p. 204.

172   Ibid, p. 208.

173   Ibid.

174   McAdams, 'Human Guinea Pigs'; Boyd, 'The Discourses of Medical Ethics in the United Kingdom', p. 487.

175   Amulree Lord Basil. Doctors and Patients. The Times Literary Supplement. 1967 June 8;:506.

176   Anon. Responsibilities of Research. Lancet. 1967;Vol. 289:1144.

177   Charles Fletcher, cited in Anon. Controversy: Human Guinea Pigs. World Medicine. 1967 June 6;:86–87. (p. 87).

178   Dixon-Woods, Ashcroft Regulation and the Social Licence for Research. :382. On Wilson's Labour government, see Sandbrooke. White Heat.

179   Kenneth Robinson, MP, quoted in Parliamentary Debates: House of Commons. 1967 May 31;Vol. 747 col. 35.

180   Cited in Hedgecoe. A Form of Practical Machinery. :342. [PMC free article: PMC2706061] [PubMed: 19584956]

181   The Rt Hon. Quintin Hogg QC to Maurice H. Pappworth, 22 January 1969. Wellcome archives PP/MHP/C/5. On Hogg's endorsement of self-regulation in science, see Gummett. Scientists in Whitehall. :41.

182   Williams Bernard. What Doctors Were Supposed to Know. Listener. 1967 June 15;:795. Williams was dubious about applying the 'Golden Rule' to clinical research, arguing that while a doctor may reasonably presume that their family or friends would consent to a procedure, 'the unhappy patient, beneath his nervous consent', may not.

183   Cecil Clothier to Maurice Pappworth, 29 March 1978. Wellcome archives PP/MHP/C/5. Emphasis in original.

184   Ibid.

185   Sir Max Rosenheim (chair), Report of the Committee on the Supervision of the Ethics of Clinical Investigation in Institutions. London: Royal College of Physicians; 1967. p. 1. Wellcome archives PP/MHP/C/5.

186   See, for example, Pappworth Maurice. "Human Guinea Pigs" – a History. British Medical Journal. 1990;Vol. 301:1456–1460. [PMC free article: PMC1679859] [PubMed: 2279175] See also Hazelgrove. The Old Faith and the New Science. :130. [PubMed: 12625329]

187   Desmond Laurence to Maurice H. Pappworth, 10 May 1990. Emphasis in original. Wellcome archives PP/MHP/C/5. Several historians have also noted how the RCP was motivated by changes in US funding. See Hedgecoe 'A Form of Practical Machinery'; Hazelgrove, 'The Old Faith and the New Science'. On the origins of the PHS policy, see Stark Laura. Behind Closed Doors: IRBs and the Making of Ethical Research. Chicago and London: University of Chicago Press; 2012.

188   Rosenheim. Report of the Committee on the Supervision of the Ethics of Clinical Investigation in Institutions. :2.

189   Ibid, p. 1.

190   Ibid.

191   As Hedgecoe notes, of the 126 hospitals that formed ethics committees, only 25 contained a lay member. Of the 30 committees formed in non-teaching hospitals, 6 had a lay member. See Hedgecoe. A Form of Practical Machinery. :344. [PMC free article: PMC2706061] [PubMed: 19584956]

192   For more background, see Moran. British Regulatory State. :82–83.

193   Anon. Merrison Committee: Report of Inquiry. British Medical Journal. 1975;Vol. 2:183–188. (p. 188).

194   Hedgecoe. A Form of Practical Machinery. :338. [PMC free article: PMC2706061] [PubMed: 19584956]

195   Gaw Allan. Searching for Pappworth. South African Medical Journal. 2011;Vol. 101(no. 9):608. [PubMed: 21920170] See also Pappworth. "Human Guinea Pigs" – A History. [PMC free article: PMC1679859] [PubMed: 2279175]

196   Lock, 'Pappworth, Maurice Henry'; Hazelgrove. The Old Faith and the New Science. :118. [PubMed: 12625329]

197   Clothier to Pappworth, 29 March 1978. Wellcome archives PP/MHP/C/5.

198   Anon. Controversy: Human Guinea Pigs. :87. See also McAdams. Human Guinea Pigs.

199   In this sense Pappworth was at odds with the American whistleblower Henry Beecher, who shared his interest in exposing unethical research but is widely acknowledged as being far more influential. We can partly explain their differing fortunes by examining their contrasting attitudes to club regulation. While Beecher's position as research professor at Harvard gave him more authority than Pappworth, and while he was also a more conciliatory figure, he importantly claimed that responsibility for improving ethical standards should rest with doctors alone. For more on Beecher, see Rothman. Strangers at the Bedside. :70–85. On his support for self-regulation, see Nathoo. Hearts Exposed. :159. Fox, Swazey Observing Bioethics. :45.

200   Abbott. System of Professions. :5.