J Parkhouse
MD MA Oxon FFARCS DA

Born in 1927, James Parkhouse graduated in 1950, obtained the DA in 1952 and MD in 1955. He became a consultant anaesthetist at the United Oxford Hospitals in 1958 and professor of anaesthetics at the University of Manitoba, Winnipeg, and chief anaesthetist at Winnipeg General Hospital in 1967. In 1969 he returned to the UK and became Postgraduate Dean at Sheffield University; in 1970 he became professor of anaesthesia in Manchester, then professor of postgraduate medical education in Newcastle and was later appointed director of the Medical Careers Research group (1984-89).

James Parkhouse became an adviser to the WHO on medical education and president of the medical education section of the Royal Society of Medicine.

He wrote several books - Anaesthetics (New Look) 1965, Medical Manpower in Britain 1979, Specialized Medical Education in the European Region (EURO Reports and Studies) with J-P Menu 1989 and Doctors' Careers: Aims and Experiences of Medical Graduates 1991.

Although trained as an anaesthetist, 45% of James Parkhouse's publications are on the subject of medical education, career choices and medical administration.

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1 Newcastle School of Medicine 1834-1984” A Sesquicentennial Scrapbook, by Gordon Dale and F.J.W. Miller. (ISBN 0 947678 00 X) 85655729
His publishing career has spanned 47 years (1957-2004), the early subjects of a distinctly clinical nature; his educational expedition started in 1971.

**Anaesthetic studies**

There are over 50 publications that are clinically orientated - four describing clinical cases, many reports on analgesics, pain assessment and management, and a further set of papers on a wide variety of clinical topics.

**1957-1959**

The first three publications were in 1957. At this time, he was still a trainee. Bronchography under ether anaesthesia is, obviously, the description of a procedure that is no longer necessary using a drug no longer used [1]. The second [2], an article in the British Medical Journal, was about general anaesthesia as an aid to therapeutic hypothermia. To have a publication in the BMJ is quite an achievement for a trainee. The patient described had a head injury and high temperature of 101°F (38.3°C). To maintain hypothermia they used N₂O, ice bags, chlorpromazine and levorphanol. When the patient awoke they shivered and were re-anaesthetised for 24hrs and kept at 30.8°C-32.8°C. Again, on awakening the patient shivered but was kept cool for 12 days. A good outcome occurred eventually.

The third publication [3], and a very thoughtful one, was an essay for a registrar’s prize, published in the British Journal of Anaesthesia (another accomplishment for a trainee). It discussed the problem of choice of anaesthetic, about the transition from single drug anaesthesia to the use of multiple agents with specific effects. Waxing philosophical he said “There is no single answer to any anaesthetic problem...” and quoted Proust, “*Medicine is not an exact science*.”
He describes the ritual surrounding the start of an anaesthetic as being like a bullfighter about to subdue a bull. [I like that]

The 'record card' he says is better than 'mere clinical impression' and a series of record cards becomes the literature. The literature then provides probabilities of events taking place but he says this is different to 'likelihood' in clinical practice. To make it clear he describes how the condition of an individual patient may make the likelihood of an adverse event greater or lesser than the 'probability'.

He believed that "...there is much to be said for settling down to a broadly acceptable and fairly conservative set of standards for routine anaesthetic practice." He continued to suggest that if "...he should wish to do something more exciting, a central organising body should supply him with a practicable and useful project for investigation..." - an essay worth reading.

In 1958 he became a consultant, publications were restarted in 1959. Of interest is the one entitled "A restatement of anaesthetic principles", this was co-authored with B R Simpson[6]. Again, he looks critically at changing anaesthetic practice and makes some suggestions for simplification. The bottom line is perhaps a little too simple and the views are now very dated.

In brief, there had been a move from single agent anaesthesia to multiple agent anaesthesia with drugs with specific effects, and the dosages of the drugs were now "virtually innocuous". He considered that with this great progress "it was time to assess how much of our inheritance is superfluous, outdated, and needlessly unscientific." He decries the lack of quantitative knowledge about tidal volumes with various breathing circuits, levels of carbon dioxide – "There is much glib talk of hyperventilation and hypoventilation, and much discussion of blood CO$_2$ levels, but little reliable data from which cause and effect can be correlated." He reinforces the idea
of using being conversant with a single technique so that changes in patient’s condition are then far more readily appreciated. He then moved on to choice of drugs (nitrous oxide being nontoxic, ether having an evil reputation – because of high dosage used). He says that "When muscle relaxants are available, so that the quantities of general anaesthetic can be kept to a minimum, it is probably of rather small significance which agent is chosen." He went on to describe the hazards of using compressed gases and suggested that air was easily available, "containing enough oxygen for our requirements." Gas cylinders caused all sorts of problems!

The final section is entitled "Advantages of air" and goes into detail about the occurrence of cyanosis and high CO₂ levels (twice normal levels "will not result in serious harm"). Cyanosis is suggested as the indicator for increasing ventilation.

The bottom line was..."It would seem that the quantitative administration of volatile liquid anaesthetic agents in air, through a non-return system, is the logical method of anaesthesia for the present day." These are meta-papers...an overview...thinking through problems in a logical, hopefully well-informed, way. Unfortunately, to quote Sherlock Holmes "I had come to an entirely erroneous conclusion, which shows, my dear Watson, how dangerous it always is to reason from insufficient data."

1960 – 1970

Publications of interest include those on the place of nurses in anaesthesia, the effects of nitrous oxide, thermal vasomotor responses, polymers, placebos, and the assessment of pain and analgesics; a wide spectrum of subjects.

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ii The Speckled Band, Sir Arthur Conan Doyle
Nurses in anaesthesia [7, 8]: it is interesting that both of these papers are in non-UK publications (South African and Canadian); even in the 21st century the concept of non-medical anaesthetists is a hot topic in many countries – UK, Australia, New Zealand to name three.

The studies of nitrous oxide are of interest...around this time the ‘Liverpool technique’ of anaesthesia (the result of the work of Cecil Gray) was common but was often ‘just’ a mixture of nitrous oxide, oxygen, hyperventilation and some opiate (often quite small doses – personal recollection as a novice under tuition) [9-11].

Thermoregulation - [12]: Polymers – a seemingly odd topic – but at that time the routine tracheal tube was made of red rubber; it was satisfactory for the relatively short exposure during surgery but was a real problem for prolonged intubation such as required in intensive care units [13].

Placebos and their place in research, another ‘hot’ topic; it would now be very unusual for an ethics committee to allow the use of a placebo in a clinical trial [14, 15].

And finally, in this clinically orientated period of his academic pursuits, – pain and the assessment of analgesics [16-24], the last few papers taking us up to 1975.

Associated with these publications are articles on recording data, analysing data and methodology [21, 25, 26].
Medical training, education and careers.

The first paper on this type of topic was in 1965 [27], “Anaesthetics training today”.

The publications did not only pertain to anaesthesia: “Allocation of preregistration posts”, “Promotion in the National Health Service and the effect of change”, “Future prospects for British graduates and the health service” and “Do we need more doctors or not?” [24, 28-30] are just a sample.

In 1977 there was the first publication on medical manpower [31], this was followed in 1978 by a series “Medical manpower in Britain” 1 – 5, [32-34] and these were followed a year later by “Medical manpower two years on” [35].

There are 47 further publications on a wide range of medical education/ training/career choices and, if you are truly interested in medical ‘politics’ regarding this era, then I suggest you go to the articles directly online...they are listed below.

However the titles of some are very intriguing and so they are discussed below.

“The journey and the arrival” [36]. This was the title of the Frederick Hewitt lecture given in the Royal College of Surgeons in 1979. He describes anaesthetic training as “...a journey, with an ill-defined beginning and towards an identifiable end.” and “Any rigidly planned programme of training that assumes a common starting point of knowledge, experience or attitude, is certain to fail.” He, Parkhouse, addressed Hewitt’s treatise that “...it would be of great advantage, not only to the public but to the profession, to have a constant stream of experienced anaesthetists issuing from our great centres of education.” It would appear an interest in

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iii Frederick Hewitt (1857-1916) took up anaesthesia after developing visual problems. His reputation was such that he was appointed as anaesthetist to two kings. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2238538/?page=1
anaesthetics as a career often started early... in the pre-registration year about 5% of respondents indicated anaesthesia as their preferred choice but this varied tremendously between centres and from year to year – there seeming to be no relationship between ‘interest’ and the type of ‘teaching’, once the choice had been made very few left the specialty.

In this 1979 lecture he said “By any logical form of analysis it is clear that we have too many registrars and too few senior registrars and consultants. Taking a broader view, we have too many anaesthetists who are loosely called trainees and not enough in career grades of various kinds.” But, it was a very changeable situation...”The curious feature of this situation is that whereas three years ago there were vacant senior registrar posts in many regions and great difficulty in finding suitable applicants, there is now a superabundance of good candidates throughout the country.” He commented on the difficulty of predicting workload requirements - they now had ‘quality’ anaesthetists but how many did they need; how many was enough? The number of surgical procedures in hospitals per 1000 population in the catchment area varied greatly (35-100/1000) and the ratio of anaesthetists to population was also very varied. Figures were not given.

He followed this with many figures and workforce diagrams. He finished on a cheerful note...with reference to a Canadian surgeon iv. "Recruitment depends most on the morale and enthusiasm of anaesthetists." And... “I am more and more impressed by the difference that enthusiasm and persistence can make, in spite of the difficulties that all of us share. We need to travel hopefully, for as Montaigne put it: ‘The value of life lies not in the length of days, but in the use we make of them’.”

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Five years later...“What do young doctors think of their training and themselves?” [37]. This is interesting in the way in which the range of personalities and insight were displayed. “Many respondents found it more difficult to answer questions about their own level of competence...than to deal with less personal questions about under-graduate or postgraduate training.”

There were “...very wide differences of view about the purpose of training, the need for lifelong learning, and perhaps the impropriety or unwisdom of admitting imperfection. Responses ranged from the view that anyone who did not feel fully competent at the end of postgraduate training should be shot, to the more common feeling that only an insufferably arrogant person would claim to have no professional weaknesses or deficiencies.”

“Manpower: compendium of deliberate mistakes.”[38], 1986. This is a good read...a voice of exasperation and frustration about government, the General Medical Council, the DHSS and their changes to the organisation of hospital training, career structures and the health system. “...voices of those to whom the exigencies of the system deny free, open speech deserve to be heard. This may sound an extreme comment: "The hospital service is full of petty bureaucrats, inconsiderate, and often vicious people. I feel that the majority of these medical and nursing staff are [sic] more concerned with their own egos than patient care." I have read too many like it from my respondents to feel complacent or comfortable.”

And ... “…Also, we should recognise that a system as complex and elastic as the NHS needs a few cushions - well fashioned and not just hiding shoddiness under cheap embroidery”. Altogether, there is a lot more talking to do and it has to be done quickly. To restore the morale of the service and get

\[ ^\text{v} \text{ I bet his wife did needlework, as well as being a research associate.} \]
away from the awful disenchantment with hospital careers that so many young doctors have we need something better than a panic response to a self-induced crisis.”

“The views of doctors on management and administration” [39]. Another two years and we have a 14 page article on doctors and management.

The components of effectiveness in management, it was suggested, should be taught in medical school and onwards in a series of stages: (i) awareness; (ii) ability; (iii) accountability; (iv) advanced management. Relevance and importance were noted to be more evident in some specialties than others and it becomes more consciously important when doctors become consultants (or principals in general practice). There were differences in attitude, “... administration [is] a waste of time and ...[they felt] that it would be better left to professional administrators and non-medical managers” to those who could “...see grave dangers if doctors [did] not participate actively in health service management.”

“If high-level general management is to be taken seriously in the NHS there is a strong case to be made for professionally organized, intensive selection boards which could be arranged over a four or five-day period at venues such as the White Hartvi. As a prelude to this, for those who feel that they may be interested or suitable, secondment should be possible from a clinical appointment either to attend an introductory course on general

vi http://www.whitehart.net/the-hotel/ The White Hart Hotel is located conveniently at the foot of Cold Bath Road in Harrogate. It is somewhat unusual in not having undergone a transformation of name in 250 years of history. The name "White Hart" is ancient and comes from the time when large tracts of England were covered with forests, owned by the King and used for the Royal Hunt. The advantages of being in management!
management or to become involved in a real-life NHS management situation where the sense of 'sink or swim' is useful as a test of motivation and as preparation for a rigorous selection procedure."

Postal questionnaires with about an 80% return rate gave some insight into the position of women in the medical workforce.

It was reported that “...the great majority of the women in the 1974 [graduation] cohort were content, at [that time], with their work.” It was suggested that this 1974 cohort was an 'in between' cohort: “...a reflection of women in society as a whole, of which they are a part: very nearly all working, but half part-time, satisfied at present with their work yet not achieving their full career potential.”

The later 1983 cohort seemed far more confident, women were nearly 50 per cent of that cohort.

The replies reflected a great variety of attitudes. Common factors were: “...the feeling of the need to 'achieve a balance', domestic and career.”
"Responsibility for the family: a wish to support her husband's career, the need to have work that can be coped with as part of life, not to waste medical training, feeling not part of the traditional male medical establishment, and a desire for patient contact."

It was acknowledged that there was some potential bias towards unfavourable comments because of the structure of the questions. However, Parkhouse and Parkhouse thought there were significant differences between their results and those of Isobel Allen's study. Their respondents were more optimistic, had a lower emphasis on 'patronage' and very few respondents felt thoroughly disillusioned with medicine.
They surmised that what was needed to give career ‘fulfilment’ to these highly intelligent and very well-trained doctors depended on personality at least as much as intellect.

Comparisons with women in other professions\(^\text{vii}\) did not suggest that women doctors were relatively disadvantaged and that male doctors had many of the same grumblings as women.

These problems still exist today (2014) and not only are there problems for individual female practitioners but also for workforce strategists.


Finally we come to the end-of-career scenario. The 1974 graduates were then about 50 years old and were asked about their future plans. Continuing to work until retirement age (65 years in the UK) was the plan for 15%; 20% said it was probable. Oddly, only 45% of those intending to retire early had made financial provision for this.

The reasons for early retirement included work-related pressure, increase leisure time, job dissatisfaction, disillusionment with the NHS, and wanting a healthy retirement. These problems were considered surmountable if there were more flexible working patterns, a reduced workload, improved staffing levels, preservation of pension rights for part-time working, fewer NHS administrative changes, and greater professional freedom.

It was thought that early retirement could really upset medical workforce planning and that policies needed to change, “...from the extremes of either full-time employment or total retirement.”

This work just about covers everything from the ‘newborn’ house-surgeon/house-physician to those about to exit the system. To the medical sociologist of the future I’m sure his work will be of great interest.

Books:

A new look at anaesthetics, with particular reference to specialised postgraduate education (New look at medicine... by James Parkhouse (1965)

Graduate medical education in the European region: Report on a capacity study (EURO ; 6301) by James Parkhouse (1974)

Specialist Medical Training in Britain: a Survey of the Hospital Specialities in 1975 by James Parkhouse and Robin A Darton (1979)

Medical Manpower in Britain by James Parkhouse (1979)

Doctors’ Careers: Aims and Experiences of Medical Graduates by James Parkhouse (4 Apr 1991)
Further snippets of information can be found from this source – accessed 31.10.13.

- Notice of appointment to chair of anaesthetics at Manchester, University of Manchester Gazette September 1970.
- Cutting Manchester University Medical Students Gazette 51. 1971, article about Parkhouse on occasion of his election to the chair.
- Cutting, note on Senate and Council’s message of thanks to Parkhouse, following his resignation from the chair of anaesthetics, University of Manchester Gazette May 1981.
References


37. Parkhouse, J. and M.G. Campbell, *What do young doctors think of their training and themselves?* British


116. Davidson, J.M., et al., *UK senior doctors' career destinations, job satisfaction, and future intentions:


140. Cole, W.J., J. Parkhouse, and Y.Y. Yousef, *Application of the extractive alkylation technique to the pentafluorobenzylation of morphine*. (a heroin


