Letter to the Editors

An alternative view of the role of clinical pharmacology

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Your recent editorial and Professor Aronson's personal views on 'clinical pharmacology from principles to practice' induced a strong attack of *déjà vu* [1, 2]. Both papers are interesting and very professional but they do raise a basic question. Of all the sub-disciplines in medicine, why do clinical pharmacologists continually debate their role and their function? This view is based on attendance at meetings over the last 30 years devoted to such topics as 'Whither clinical pharmacology?' My interest is due to the fact that I have been some sort of a clinical pharmacologist and have been fortunate to interact with notable impressive colleagues in the field, whom I will not embarrass by citing. However there seems to be a fundamental insecurity or uncertainty in this sub-discipline, which must be unique in that I have never heard cardiologists, radiologists, nephrologists or even surgeons holding debates as to what constitutes their discipline.

Having been a clinical pharmacologist in a North American university, my impression is that my estimable *clinical* colleagues never quite knew where I fitted in the academic context. Mostly they contacted me to ask about the dose of a chosen medication, but much less commonly to enquire: is this the appropriate medication?

A large university in northern Britain has not had a Professor of Clinical Pharmacology for 20 years since the previous Dean preferred clinical pharmacy as opposed to clinical pharmacology. The basis for this bias was never clear. More worryingly, at a joint Royal Society of Medicine/US academic meeting held in Washington in the early 80s, it emerged that 70% of US medical schools had no Professor of Clinical Pharmacology. The UK contribution at that joint meeting was most impressive.

The purpose of this letter is therefore to stimulate a debate on the sociological factors in the medical community which determine attitudes to the role of clinical pharmacologists. An issue not addressed in the manifesto paper [2] is the nature of the relationship between clinical pharmacology and pharmaceutical medicine, the latter having not been mentioned in the article. Pharmaceutical medicine is recognized as a speciality in its own right, having

achieved recognition as a Faculty under the auspices of the Royal Colleges of Physicians. Currently it is my understanding that clinical pharmacology, as a speciality in the UK, lacks such recognition and is merely a constituent part of various Faculties or Institutes. It is always difficult for an emerging speciality to establish itself when other larger, more historically-enshrined specialities hold the closely-related contested territories. Pharmaceutical medicine has been fortunate in being outside the main academic structure, so it could grow in a relatively uncontested space, where vested speciality interests were not already encamped.

Historically, clinical pharmacology in the UK has been, in my opinion, world class, but is this due to the individual leadership and stature of the present generation of UK clinical pharmacologists? Short of a strategic decision at the helm of the medical profession itself really to put the speciality on the map, the long-term future of clinical pharmacology, if it stays committed to the small but beautifully marked academic core model, may continue to decline. The intrinsic ambiguity as to the core nature of clinical pharmacology is reflected in the titles and contents of courses in clinical pharmacology offered by academic institutions in the UK and Europe (see Table 1). In general, the postgraduate courses are offered under a range of titles such as:

- experimental therapeutics
- pharmaceutical medicine
- medical science
- translational medicine and therapeutics.

Given this broad range of titles, it seems unlikely that Professor Aronson's comment that 'I strongly believe that one cannot be a fully fledged clinical pharmacologist unless equipped to practice clinical medicine', i.e. medically qualified, reflects the current reality. It would seem that many academic courses will turn out graduates in clinical pharmacology who are not 'fully fledged clinical pharmacologists'. The proposed extensional definition of clinical pharmacology (his Figure 1) which lists 18 specialized

Table 1

Academic institutes offering degrees in clinical pharmacology

Academic centre	Title of degree	Entry requirements
University of Oxford (Prof D Kerr, Department of Continuing Education)	MSc or short course in Experimental Therapeutics	Medical or science degree
University of Surrey (Prof N Toseland)	MSc in Clinical Pharmacology (part-time) Pharmaceutical Medicine module Diploma or Postgraduate Certificate	Medical or non-medical degree; 3 years postgraduate work experience
University of Aberdeen (Dr H Wallace)	MSc or Postgraduate Diploma	Medical, pharmacy/biological science
University of Glasgow (Dr HL Elliott)	MSc (med sci) MSc Clinical Pharmacology	Medicine, dentistry, related biological sciences Degree in medicine
London: Society of Apothecaries	Diploma in Clinical Pharmacology DCPSA	2 years in CPU
University of Newcastle (Dr S Thomas)	Diploma	Graduate in medicine/pharmacy
University of Cambridge (Prof M Brown)	Masters in Translational Medicine and Therapeutics	(?) Medical degree
University of Cardiff (Dr Harron)	Diploma in Pharmacological Medicine (2 years) Certificate in Human Pharmacology (1 year)	Medical degree Science degree
Hibernia College, Dublin	MSc in Pharmaceutical Medicine	Medical and scientist graduates
University of Dublin, Trinity College	Postgraduate diploma	Medical and scientist graduates
University Kragujevac, Belgrade, Serbia	MSc in Pharmaceutical Medicine	Physicians and non-physicians

topics in applied pharmacology is, in my opinion, well beyond the skills and knowledge of even the most eminent clinical pharmacologist.

Given the broad scope of clinical pharmacology and therapeutics, the editorial statement that 'enthusiasm and expertise in the rational use of medicines is more important to success than professional background' is surely more realistic (2003 curriculum paper) [3].

Perhaps a professionally designed attitudinal survey might clarify the basic attitudes of practising doctors towards the speciality of clinical pharmacology. My prejudice is that many medical institutions project an attitude that a deep knowledge of drugs and prescribing is much less prestigious and valued than the core topics of good skills in history taking, diagnostic investigations and differential diagnosis. I suspect Osler's view that 'most drugs are poisons' reflects an attitude which still pervades many institutions, and might explain some of the findings in the survey by O'Shaughnessy *et al.* [4].

There remain perhaps two questions for the future:

- why is the number of UK-based clinical pharmacologists declining?
- what advice would one give to a recently qualified medical doctor as to whether this is a career with a stable attractive career trajectory?

Competing interests

There are no competing interests to declare.

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- 3 Maxwell S, Walley T. Teaching safe and effective prescribing in UK medical schools: a core curriculum for tomorrow's doctors. *Br J Clin Pharmacol* 2003; 55: 496–503.
- 4 O'Shaughnessy L, Haq I, Maxwell SRJ, Llewelyn MJ. Teaching of clinical pharmacology and therapeutics in UK medical schools: current status in 2009. *Br J Clin Pharmacol* 2010; 70: 143–8.

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