Original Article

Should Medical Research Have a Place in Future Clinical Training?

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Abstract

Aim: To determine the attitudes of training grade (Senior House Officer – SHO, Specialist Registrar – SpR) and non-training grade doctors (both Staff Grade and senior or Consultant level) towards the place of research in the curriculum for junior doctors and also the pursuit of research by senior (but non-academic) clinicians. Materials and Methods: A survey of a range of doctors from differing grades (above) was sent to all doctors of the employing Trust (comprising most of the regional training scheme) with a number of fixed questions but also an opportunity to provide free-text responses. Percentages of the fixed responses were estimated and free-text responses were grouped into main themes and miscellaneous items. Results: Despite much criticism of the current protected research time for higher trainees in psychiatry in the UK and the anticipated abolition of this within the new training structure after August 2007, we found surprising and strong support for structured research training, experience and the opportunity to pursue this at senior level even for non-academic clinical consultants. Conclusions: Urgent review of the new training grade curriculum is needed with emphasis on how to address the research opportunities for trainees and seniors without compromising clinical, teaching and managerial obligations. A better use of such opportunities was strongly supported rather than the proposed abolition, which seems to be fast approaching.

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Introduction and Background

There is national and international concern about the plight of medical research. Both academic and clinical resources are under increasing strain and there has been a steady decline in graduates pursuing research careers.[1-3]

The reasons for the decline in medical graduates entering academic medicine or pursuing research within clinical posts are diverse. These may include financial reasons, the pressure of clinical service needs and challenges faced within academic medicine. However, it is well known that medical student experiences during undergraduate training are highly influential on their subsequent career choices and aspirations and there is no reason to think that students' exposure to and experience of research may be any less influential in helping their decision making. Few undergraduates get much direct experience of research however, and under current relatively traditional training structures many young doctors do not develop an interest in research until they are some years into postgraduate medical training. Many doctors in highly competitive specialties expect to take time out from accredited training – sometimes years – to pursue research (often leading to MPhil, MD or PhD awards) even if they have no long-term academic interest or plans but simply to improve their chances of getting into higher training or obtaining a consultant (Specialist) post after completing their training.

The training of doctors in the UK is undergoing an unprecedented and radical change. The first or Foundation Stage of Modernising Medical Careers (MMC) has already replaced the old Pre-registration House Officer stage while the main Specialist Training Grade is due to start in August 2007 and replace all old Senior House Officer (SHO) grades (with immediate effect) and Specialist Registrar (SpR) grades (phased over 3 years).[4] A limited programme of academic training will be available to a few "high flying" graduate students selected in the final year of undergraduate training.[4]

The principal measure of ability under MMC is the assessment of clinical competence.[4] The new curricula state that a level of knowledge and skill at research is

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expected by the completion of clinical training,[5] but no formal time for pursuing research will be incorporated into training schemes other than for the highly select academic posts. Young doctors who do not already have academic interests or aspirations before they qualify are therefore unlikely to get into such schemes if they only develop such an interest (as many do) after qualifying. The option of taking time out from training to pursue research would remain, but the incentive for doing so will be very different. No junior doctor will be under any pressure to do this to increase their chances of getting into higher training since MMC involves new and comprehensive "run-through" training grades, which automatically guarantee progression to higher training (assuming clinical competencies are achieved). Those doctors who initially desire to try research may also be dissuaded, since such a tactic would mean stalling their clinical career progression, and there may be difficulties in resuming higher training on the scheme of their choice even though they are guaranteed completion of "run-through" training in principle.

The Barts and Royal London Psychiatry training schemes across East London and The City are set to change along with all others. Trainees and their trainers have varying degrees of interest and experience in research and – like trainees and senior clinicians throughout the UK – are uncertain about where medical research will fit into their training and subsequent careers.

In the UK, psychiatry training differs from other specialties in the fact that research training is currently a mandatory part of every higher training (SpR) scheme with a total of 1 day per week ring-fenced for this.[5,6] Some trainees do also sandwich dedicated research times in between approved clinical training posts or schemes but probably less so than in many other specialties. The "research day" is not without its critics though and has been the subject of debate at previous Royal College of Psychiatrists Annual Tutors' Conferences. Trainees who are interested in research resent having to do this when they know it will have little direct bearing on their future wholly clinical career ambitions (and trainers may be equally sceptical especially given the clinical service pressures they face). Those with a genuine interest or ability, conversely, may find a single day insufficient to pursue any serious research project or higher degree but may find limited opportunities to obtain full-time research opportunities if they take a break from clinical training.

The new MMC Specialist Training (ST) grades will scrap the automatic Research Day for psychiatry higher trainees.

Aims

We performed a survey of trainee doctors (SHO and SpR), junior non-training grade doctors (Staff Grades) and senior doctors (Consultants – most if not all also trainers) to get a broad idea of their experience of research and attitudes towards this (regardless of their views on the new MMC training structures).

We also asked them to offer their individual opinions of how, if at all, to incorporate research training into the new MMC structures in future.

The overall aim is to determine what the future local research training strategy may be based on and the kind of support that this is likely to receive from medical staff.

Materials and Methods

A simple questionnaire was sent to all psychiatry trainees, non-training grade doctors and all consultant specialists (whether supervising trainees or not) across our Specialist Mental Health Trust (ELCMHT) which covers most of the Barts and Royal London psychiatry training programmes for basic (SHO) and higher (SpR) training. The questionnaire was kept deliberately short due to the plethora of surveys sent to doctors and an acute awareness of the risk of "survey fatigue". Trainees and trainers are also aware (and anxious) about the imminent and massive changes to the UK medical training programme which have no precedent in the UK (nor to a greater extent anywhere else in the world).[7]

Five key questions were asked (see Appendix 1 for questionnaire) but additional space was granted for free-text suggestions. Responses to set questions were simply tabulated (Tables 1 and 2) while free-text responses were initially listed with a view to identifying recurrent themes. When no new themes became apparent, a further review was due and it became clear that a number of themes should be grouped into umbrella themes and these are shown in Tables 2 and 3.

Results

Table 1. Doctors Contacted and Response Rates

No. of doctors contacted	232
Total replies	100
Percentage replies	43.10%
No. of consultants contacted	106
Consultant replies	28
Percentage replies	26.42%
No. of trainee doctors contacted	120
Trainee replies	68
Percentage replies	56.67%
Additional comments	53
Percentage	53%

Number of Staff Grade doctors contacted not recorded

Table 2. Doctors' Responses

Responses to questions: (See Appendix 1 for Questionnaire)					
	Strongly agree	**Partly agree**	**Neutral agree**	**Partly disagree**	**Strongly disagree**
1)	38	54	6	1	1
2)	89	9	0	1	1
3)	7	19	8	25	41
4)	62	21	6	3	8

d) Level of research interest/experience:

a)	Interest	72
b)	Plans	46
c)	Previous involvement	64
d)	Current involvement	43
e)	Presentation(s)	50
f)	Publications(s)	43
g)	Higher degree	28

Discussion

The Current UK Psychiatry Curriculum

As with all medical specialties in the UK, the curriculum is laid down by the relevant Royal College (in this case the Royal College of Psychiatrists).[5] The unique inclusion of a Research Day as part of higher training (SpR) programmes in psychiatry will be discontinued when SpRs cease to exist and are fully replaced by new MMC Specialist Trainee (ST) grades. Basic training (SHO) grades in all medical specialties will cease to exist on 1 August 2007, but existing SpRs will be gradually phased out over the next 3 years and steadily replaced in stages beginning in August 2007. No new SpRs in any specialty have been allowed to be appointed since December 2006. Therefore, the current curriculum will still apply to a relatively small and dwindling number of higher trainees over the next 3 years.

The Future Curriculum (Psychiatry and Others)

The removal of the protected "Research Day" from psychiatry higher training will bring psychiatry in line with other medical specialties. There will be no timetabled research activity except for highly selected academic posts which will be largely unavailable to any trainee who was not identified as a future "high flyer" at medical school. Problems with recruitment into MMC academic posts for existing SHOs are already very apparent, as the Medical Training Application Service (MTAS) has shown.

The option of taking a break from training to pursue research (assuming the opportunity arises) may still be present, but may present further difficulties in terms of returning to guaranteed training and other disincentives in the light of the new training structures.

Table 3. Most Common Themes from Free-text Responses

Overall theme	**Quote**	**Proportion of responses carrying theme (percentage)**
Compulsory research can be counterproductive	"compulsory involvement of trainee doctors results in the production of poor/mediocre research for the purpose of higher training/a job rather than because of genuine interest in the area of research. It means that excellent clinicians waste time doing poor research rather than reading good research to improve their clinical skills."	12.5%
A knowledge of research skills is important in training	"Teaching on research methodology should be an integral part of the clinical training during junior training."	47.9%
Opportunity for research needs support and structure	"Research should always be optional but strongly facilitated and encouraged"	41.66%
There is an essential link between good clinical care and research	"The opportunity to conduct studies (research) in a naturalistic setting and outcomes from such studies has a tremendous bearing/impact upon service delivery and patient care."	27.1%
Isolation of academic and clinical career paths at an early stage damaging to medical profession	"(I can not) see how the practice of "evidence based medicine" will be promoted by cutting off its practitioners from the science that is meant to inform it"	22.9%
Identity as a doctor not defined by research but by clinical work	"You can be a perfectly good clinician without the interest or aptitude for research."	14.6%
Research not currently facilitated within an NHS setting	"I believe that it is regrettable that practising consultant clinicians do not currently have time or resources to conduct research, since I believe they would come up with clinically relevant and practice based research."	10.4%

However, the new structures and curricula have largely been interpreted to mean that research will become a thing of the past except for specially selected academics. This is largely welcomed in terms of boosting trainee input to service provision: it ensures that more of the clinical work is covered at no extra cost and also gives trainees additional valuable clinical experience (and hopefully training opportunities).

But the results of our survey clearly also show that neither juniors nor seniors wish to see an end to research training and opportunities.

Local Responses

The responses of both training grade and senior doctors in our Trust have been very telling.

a) The majority consider themselves evidence-based practitioners.
b) The overwhelming majority see research as essential for the advancement of medicine.
c) Less strongly – but still significantly – the majority do not think research should all be left to academics.
d) Once again less strongly – but significantly – the majority feel all clinicians (trainees AND seniors) should have the opportunity to be involved in research.
e) Most declare an interest and around 50% have been involved in projects or had publications (this may be biased by the compulsory Research Day but it is interesting to note the number who have had NO involvement despite this programme – it is also notable that most are still interested despite this and indicates a need to improve on the compulsory Research Day).

Common Themes

The need for research was widely accepted but it was also widely held that this should be neither compulsory nor a "tick-box" approach to career progression.

It was also clear that a strong emphasis on clinical research was needed, that an appreciation of the need for research often comes after starting clinical training and that separate clinical and academic career paths would be damaging to medical advancement.

The difficulties of timing and resourcing research training were acknowledged and also the difficulties of getting publications and grants. The danger of letting less-skilled amateurs tackle research was also raised.

Limitations

First, this is only a survey. It covers only one particular Trust and speciality (but note that only psychiatry schemes currently incorporate compulsory research) and we did not receive a 100% response rate. However, despite the concerns surrounding MMC (or because of them?), the response was prompt and better than expected. But it may not be fully representative of local colleagues' views.

Conclusions

Local colleagues' views appear to be at odds with not only the new MMC structures and curricula but also with the common belief among senior trainees that both the clinical service and training will benefit from removing research time from training schemes.

There is a widely held view also that nothing can be done about this under MMC even if it were thought desirable (as suggested by our survey results) to reinstate research training opportunities for non-academics.

However, the new curriculum does list research knowledge and skill as a "competence" even though there is no detail provided on how to put this in place given the new training arrangements.[5] But it is crucial to note how the role of traditional educational bodies has changed and will continue to do so. Royal Colleges will continue to set curricula, Deaneries to deliver the training and the new national Postgraduate Medical Education and Training Board (PMETB) will be the body governing quality assurance, i.e., responsible for awarding accreditation. But employing NHS Trusts have already played a new and crucial role in determining appropriate services and manpower requirements across the UK as well as their own local needs, and they will play an increasingly crucial and powerful role in the training committees for the new training schemes. Current government plans are to encourage Trusts to apply for "Foundation" status, which will confer financial autonomy ultimately, but also make such Trusts directly accountable to local communities.

There is a huge potential scope for Trusts to influence training as well as manpower issues. But there is an equally huge scope for forward-thinking Trusts to respond to the long-term needs of their local communities as well as the wider public.[1,2]

In particular, the MMC and the MTAS recruitment processes have proceeded suddenly and massively but with huge organisational problems and widespread outcry from the UK doctors. This is far from unanimous but many juniors are distraught and fear for their future while many seniors share their anguish and are sceptical that the MMC can ever produce a satisfactory let alone high quality level of medical training in the UK. A significant (further) decline in research training is one of the many potential and serious flaws with the new system. However, in the light of political changes to the organisation of the NHS generally, it may still be that there is a huge and new opportunity for training generally and research in particular if doctors are able to positively influence their employing Trusts within the new training schemes. And concerns about medical

research apply to all specialties and, it seems, all countries – developed and developing. The changes to training and services in the UK are profound and are receiving bad press, conveying an alarming picture of disorganisation and pessimism to the rest of the world. But the opportunity is there if local communities, doctors and Trusts want to take it. Medical research is vital to the future of everyone and local strategies must be implemented to ensure this can happen and not be left exclusively to specialist academics. Our doctors want this. And our communities need it.

REFERENCES

1. Bell J on behalf of The Working Group Academy of Medical Sciences. Resuscitating clinical research in the United Kingdom. BMJ 2003; 327:1041.
2. Walmsley J. What funders and others can do to help save clinical academic medicine. BMJ 2004;329:806.
3. Tanne JH. US clinical research under threat. BMJ 1997;315:143-8.
4. A resource of information about "Modernising Medical Careers". Available at: http://www.mmc.nhs.uk/pages/resources/keydocuments 2007. Accessed April 2007.
5. A resource of information regarding the curriculum and MMC as it relates to psychiatry. Available at: http://www.rcpsych.ac.uk/training/curriculumpilotpack.aspx 2007. Accessed April 2007.
6. Herzberg J, Forrest A, Heard S. Modernising medical careers: an opportunity for psychiatry? Psychiatric Bull 2004;28:233.
7. Vasani SS, Velusani P, Rashid A, Ahluwalia G. Trainee doctors' opinion of Modernising Medical Careers: a questionnaire survey in the London Region. Med Educ 2006;40:1230.

Appendix 1

Research, Training and Our Futures

My current post: (tick as applies)

Foundation Trainee	☐	SHO	☐
SpR	☐	Consultant	☐
Academic	☐	Other, eg. Staff Grade etc	☐

Strongly agree	Partly agree	Mixed views or no views	Partly disagree	Strongly disagree
☐	☐	☐	☐	☐
1	2	3	4	5

1) I practice Evidence-based Medicine / Psychiatry

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

2) I think research is essential for the advance of medicine

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

3) I think research should be left to the academics

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

4) I think all trainees and clinicians should have the opportunity to do research

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

5) My research experience so far includes the following

a) Interest ☐
b) Plans ☐
c) Previous involvement ☐
d) Current involvement ☐
e) Presentation (s) (oral, poster etc.) ☐
f) Publication (s) ☐
g) Higher degree ☐
(Please tick any that apply)

Please note that under MMC proposals:

a) There will be a dedicated academic pathway with selected high flyers identified in the final year of medical school.

b) There is no planned process of entry to the academic training pathway at a later stage, but trainees may be able to take "time out" from training for a year or two to concentrate on research – it is unclear how easy it will be to re-enter subsequently.

So please give us your views on whether research should be compulsory, optional or absent from training curricula and / or subsequent clinical career plans and how long this might be supported in future

THANK YOU!