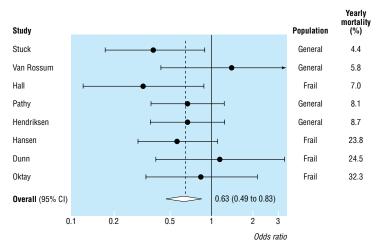
designed to examine effects in older people at low and high risk for admission to a nursing home.<sup>5</sup>

The analysis carried out by Elkan et al found no improvement in functional status, which is inconsistent with the rationale for home visits. How could mortality and admissions to a nursing home be reduced without an effect on functional status? Unfortunately, only four studies contributed to this analysis, confidence intervals were wide, and Elkan et al did not contact investigators to obtain additional data. Future reviewers should collaborate with original investigators to define the exact characteristics of interventions, obtain data on implementation and adherence, and standardise outcome measures and quality assessment. Several additional trials which have been published recently will increase the power of their analyses. The results are likely to generate useful hypotheses, which should be addressed in trials that are powered to examine effects across prespecified interventions and subgroups of elderly people. Trials and meta-analyses show that preventive home visits can work. The challenge now is to tease out which components of the intervention are effective and which populations are most likely to benefit.

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Meta-analysis of eight trials of effect of preventive home visits on admission to long term institutional care. Data taken from table 2. Elkan et al's classification of study population (general elderly population or frail elderly) and mortality in control groups are also shown

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# Attitudes and training of research fellows in surgery: national questionnaire survey

Choon S Seow, Nee B Teo, Christopher R Wilson, Karin A Oien

Traditionally, clinical research fellowships are occupied by junior trainees and are used as a stepping stone not only to an academic career but more commonly to the higher specialist training scheme. In the United Kingdom, clinical academic medicine is having difficulties in recruitment, especially to senior posts, and in academic surgery several professorial chairs remain vacant because of a shortage of suitable candidates.<sup>1</sup>

Analysis of research papers presented at surgical meetings over the past 20 years has shown a considerable reduction in the number of randomised clinical trials and a corresponding increase in the number of basic scientific projects.<sup>2</sup> Surgical research has recently been criticised for its poor quality and lack of evidence based "patient oriented research that matters." Training in research methods is important for surgeons conducting research, and a previous survey showed that this view is shared by consultant surgeons.<sup>4</sup> However, little is known about the surgical trainees in research fellowships or about their career aspirations.

The Calman report, *Hospital Doctors: Training for the Future*, recommended in 1993 that postgraduate train-

ing should be shorter and more structured, with research—and presumably research fellowships—being undertaken during the period of higher specialist training.<sup>5</sup>

We examined the views of research fellows towards research and investigated whether the recommendations of the Calman report on research and surgical training had been adhered to.

### Methods and results

In 1999, we asked all 53 professors of general surgery in the 24 academic departments of surgery in the United Kingdom for the names of their research fellows; 48 responded. An anonymous postal questionnaire survey was then sent to the 123 fellows identified; non-responders received a second distribution. The response rate was 74% (91/123). The table shows the training undertaken by surgical research fellows and their attitudes towards research.

In total, 64% (58/91; 95% confidence interval 53% to 74%) of the research fellows were experienced senior house officers before carrying out their research;

University Department of Surgery, Western Infirmary, Glasgow G11 6NT

Choon S Seow clinical research fellow Christopher R Wilson clinical lecturer

Department of Surgery, University of Liverpool, Liverpool L69 3GA Nee B Teo clinical research fellow continued over

BMJ 2001;323:725-6

Department of Medical Oncology, University of Glasgow, Glasgow G61 1BD Karin A Oien

cancer research campaign clinical research fellow

Correspondence to:

C S Seow. Department of Vascular Surgery, Gartnavel General Hospital, Glasgow G19 0VN c.seow@beatson.gla. ac.uk

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Training of surgical research fellows and their attitudes towards research. Results are numbers (percentages)

	Respondents (n=91)		Respondents (n=91)
Sex	· · ·	Working towards a higher degree?	, ,
Male	76 (84)	MS/MSx/ChM	13 (14)
Female	15 (16)	MD	60 (66)
Age (years)		phD	14 (15)
25-29	31 (34)	Undecided	1 (1)
30-34	49 (54)	No	3 (3)
35-39	10 (11)	Clinical commitment?	
>40	1 (1)	Yes	70 (77)
Postgraduate qualification		No	21 (23)
FRCS	77 (85)	Principal source of funding*	
MRCS or AFRCS	10 (11)	Internal (NHS trust)	30 (33)
Other	4 (4)	External:	
Post prior to research		Grant awarding institution/trust	31 (34)
Junior house officer	1 (1)	Private industry hospital	27 (30)
Senior house officer	58 (64)	Pharmaceutical company	5 (5)
Specialist registrar	29 (32)	Preferred duration of research	
Consultant	2 (2)	6-9 months	3 (3)
Other	1 (1)	12-18 months	43 (47)
Nature of research project		≥2 years	35 (38)
Solely laboratory based	39 (43)	No preference	10 (11)
Solely clinically oriented	16 (18)	Reasons for doing research	
Both	35 (38)	Career advancement only	54 (59)
Other	1 (1)	Pursuit of medical or scientific knowledge	6 (7)
Duration of research		Both	31 (34)
12-18 months	19 (21)	Interested in a career in academic surgery?	
2 years	63 (69)	Yes	38 (42)
≥3 years	9 (10)	No	24 (26)
		Undecided	29 (32)

<sup>\*</sup>Some respondents listed more than one source of principal funding.

32% (29/91; 22% to 42%) were specialist registrars during their period of higher specialist training. In all, 66% (60/91; 55% to 76%) were in their 30s or older. Surgical research has traditionally incorporated clinical studies into the surgical management of disease and the development and evaluation of surgical techniques. A total of 18% (16/91; 10% to 27%) of fellows were working on purely clinically oriented research, compared with 43% (39/91; 33% to 54%) for laboratory based projects and 38% (35/91; 28% to 49%) for studies comprising both elements.

During their research, 77% (70/91; 67% to 85%) of the respondents were required to undertake clinical duties including on-call rotas, outpatient clinics, and minor procedure lists and to assist in theatre, as well as teaching. Their duties varied but were often tied to their funding, for which major grant awarding bodies, hospital trusts, and private industry each provided one third.

## Comment

Most surgical fellows are undertaking research before obtaining their specialist registrar posts and for the sole purpose of career advancement; the research is more commonly laboratory based than clinical. The appropriateness of the timing of the research in a surgeon's career, the reason for doing it, and the nature of the research undertaken is questionable, particularly in view of the current debate on the quality of surgical research.

Two thirds of research fellowships are being undertaken before higher specialist training, against the recommendations of the Calman report. Owing to the lack of comparative data from the "pre-Calman" era,

we are unable to identify whether or not this represents a continuing trend or a change.

Our results reflect the motivation of the fellows in undertaking research. The high percentage of respondents having career advancement as their only aim may be related to the competition involved in obtaining a specialist registrar post, and presumably research enhances their curriculum vitae.

We thank all the academic professors of surgery and research fellows who participated in the study, Professor Primrose for the name list of professors in the academic departments, and Mr Jim Paul and Dr Keith Vass for their statistical advice.

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## **Endpiece**

#### A certainty

In vino veritas-I don't know-but in scribendo veritas—a certainty.

Anthony Powell, quoted in Martin Amis, Experience. London: Jonathan Cape, 2000