The Royal College of Physicians specialist registrar shift survey

Hugh M Mather, on behalf of the Royal College of Physicians Trainees Committee

A survey of all medical specialist registrars in the UK reveals that a large majority oppose shift working patterns because of their adverse impact on training and quality of life, and on continuity and quality of patient care. This conflicts with the current drive to switch virtually all trainees to shifts by 2004, to comply with the European Union Working Time Directive. More debate is urgently needed.

INTRODUCTION

The introduction of shift working patterns for all junior medical staff by 2004, and the abolition of traditional on-call rotas, is now considered to be inevitable to ensure compliance with the European Union Working Time Directive (EU WTD) (Pickersgill, 2001). Although the new 'banding' pay scales have given trainees a welcome pay rise, they have increased the pressures on trusts to introduce shifts as soon as possible, so that working patterns become 'legal' and expenditure on medical salaries is reduced.

These changes will undoubtedly have a profound impact on the entire fabric of hospital life and there is increasing concern about their effects on services and training. The consequences of switching all specialist registrars (SpRs) in acute medical specialties to shifts may be greater than with more junior grades because of their pivotal role in emergency medicine and because it will be more difficult to devise safe duty rosters, because of the smaller numbers of SpR.

Views on the merits of shift working patterns are divided. They may improve patient care, with less tired doctors delivering better treatment. Conversely, they may decrease both the continuity and quality of care, and reduce the quality of training. However, there has been little feedback from trainees themselves, many of whom have first-hand experience of shifts, and who are therefore best placed to assess their impact on service and training. Thus a questionnaire survey was undertaken, on behalf of the Royal College of Physicians (RCP) Trainees Committee, to obtain detailed feedback on shifts. It was circulated in March 2001 to all SpRs throughout UK (including Scotland) who held National Training Numbers, and whose specialty interest indicated that they were likely to participate in acute general medicine. These comprised those in cardiology, care of the elderly, diabetes and endocrinology, gastroenterology, renal medicine, respiratory medicine and rheumatology. A total of 1867 questionnaires were distributed and 970 returned, a response rate of 52%.

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RESULTS

The questionnaire is reproduced in *Figure 1*, with the percentage responses added. These results are largely self-explanatory. Forty per cent of respondents had personal experience of shift working patterns. There was a strong consensus that on-call rotas were preferable to shifts for continuity of care (92%), and for training (75%). A majority thought that on-call rotas were associated with better quality of patient care (53%), and quality of life of trainees (55%), although there was a significant minority who favoured shifts in both of these questions (15% and 23%), and many trainees were undecided. Nevertheless, 78% stated that they would currently prefer to work an on-call rota, with 11% favouring a shift system and 12% undecided.

Seventy per cent of respondents either 'opposed' or 'strongly opposed' the move to shifts, compared with only 13% who either 'welcomed' or 'strongly welcomed' this change. Thirty seven per cent strongly opposed the change whereas only 2% strongly welcomed it. Importantly, the proportion who opposed or strongly opposed the move to shifts was similarly high in those with or without personal experience of shifts (68% and 72%).

ANALYSIS OF FREE TEXT COMMENTS

A total of 456 respondents provided comments, although many were brief and others focussed on staffing issues – the relative merits of nurse practitioners, staff grade doctors or consultant involvement in acute care – rather than those of shifts. Their replies have been analyzed in detail, to rank the frequency of different responses. Some examples of their comments are shown in *Figure 2*.

The most frequently made point was the overwhelming need for more doctors, mentioned by 111 respondents. Many more SpRs and senior house officers (SHOs) were urgently required to reduce work intensity to an acceptable level, and to fuel future consultant expansion. Several stated that the lack of sufficient doctors was the fundamental problem, rather than the type of working pattern. The lack of continuity of patient care associated with shifts was mentioned by 88 respondents.

Eighty three referred to the adverse impact of shifts on their training and education, particularly in their specialty interest, and especially for those needing practical experience in procedures such as endoscopy or cardiac

catheterization. Forty five felt that shifts led to a reduced quality of patient care, primarily because of the associated lack of continuity of care and the decreased manpower available to cover ward duties. Forty four SpRs stated that SHO shifts, and protected rest periods for both house physicians (HPs) and SHOs, had led to a dramatic increase in their workload, because they were frequently the only staff providing continuity of care, and often had to provide SHO-level cover on the wards. This interfered with their specialist training, was an inappropriate use of their skills and was of little educational value.

The adverse impact of shifts on the quality of life of junior doctors was mentioned by 36 respondents, 32 referred to the reduction in time spent with their families, 29 to the adverse effect on their social lives, and 23 to the relative lack of free weekends, with shorter work-free periods, less 'quality time' and a feeling that they 'were never out of the hospital', despite the reduction in total hours. This was especially difficult for those on region-wide rotations who lived some distance from the hospital.

Twenty three SpRs stated that the introduction of shifts had, in their experience, led to an acute loss of morale. Twenty two felt that they produced a 'clock-watching' mentality, with lack of ownership and responsibility, and a short-term attitude to patient care, and 20 felt that shifts led to lack of team spirit and camaraderie. Twenty mentioned that the intensity of work on shifts was inevitably increased, because the same workload had to be covered by fewer doctors, paradoxically leading to increased tiredness despite the reduced hours, and 19 stated that shifts led to a reduction in job satisfaction. Fourteen emphasized the special problems which shifts posed for those with children, particularly in arranging childcare when on weeks of nights.

Although on-call rotas were generally preferred to shifts, it was emphasized by several respondents that the work intensity on on-call rotas was rapidly becoming unsustainable because of the rising acute workload, emphasizing the all-pervasive need for more doctors. Fourteen considered that on-call rotas would be satisfactory if more doctors could be employed to ensure adequate rest periods (particularly at night), 14 stressed the importance of reducing the frequency of 'takes' to 1 in 7 or 8 days (rather than 1 in 4 or 5), and 14 emphasized the importance of having the following day or afternoon off, with clinics and other duties cancelled.

On the other hand, 15 thought that shift rotas could work successfully if enough doctors were available, 10 emphasized the crucial importance of handover arrangements, with sufficient time allowed for this, and 5 emphasized the importance of well-organized shifts. Five stated that on-call rotas were ideal in smaller hospitals or where the work intensity had not become intolerable, but that in larger hospitals shift systems had become inevitable.

Several other points about shifts were raised in the free text comments. Sixteen respondents thought that they had led directly to decreased experience and 'de-skilling' of SHOs and house officers. Eight respondents referred to the prob-

Figure 1. Results of the Royal College of Physicians specialist registrar (SpR) shift questionnaire. GIM = general internal medicine; HP = house physician; SHO = senior house officer.

1.	Have you worked a traditional on-call rota on an acute firm?	Yes	99.7%				
	if Yes, was it when you were:	a HP	87%	SHO	95%	SpR	94%
2.	Have you worked a shift system on an acute medical firm?	Yes	40%				
	if Yes, was it when you were:	a HP	7%	SHO	26%	SpR	14%
	What type of shift was it?:	Partial	26%	Full	8%	Hybrid	12%
3.	Comparing shifts with on-call rotas (for GIM SpRs), which is best for:						
	Continuity of patient care?	Shifts	1%	On-call rotas	92%	Undecided	7%
	Quality of patient care?	Shifts	15%	On-call rotas	53%	Undecided	32%
	Your training?	Shifts	6%	On-call rotas	75%	Undecided	19%
	Your quality of life?	Shifts	23%	On-call rotas	55%	Undecided	22%
4.	Which is your current type of rota?	Shift	7%	On-call rota	78%	Not applicable	15%
5.	Which would you prefer (now)?	Shift	11%	On-call rota	78%	Undecided	12%
6.	Do you welcome or oppose the move to shifts for SpRs in acute medicine?						
	Strongly welcome 2%	Welcome 11%	Unsure 16%		Oppose 33%		Strongly oppose 37%
7.	Which of the following options do you support, to maintain safe acute services?						
	More staff grade or trust doctors?	Yes	63%	No	22%	Undecided	15%
	More nurse practitioners?	Yes	75%	No	13%	Undecided	11%
	Fewer acute hospitals?	Yes	10%	No	75%	Undecided	15%
	More consultants doing emergency work?	Yes	23%	No	59%	Undecided	18%
8.	Have you any other comments on shifts and/or staffing issues? Please write them on the back of this form. We urgently need your views.						

Shift working patterns...

...are particularly difficult for people with children, as for example, if you have to work a block of nights, then making adequate child care arrangements is extremely difficult if your partner is also a medic and thus has his/her own share of on calls to do.

...is destroying the fabric of our profession both academically and spiritually. We are professionals, not production line workers.

...destroy quality of personal, social and family life, destroys quality of training, and jeopardises patient care through lack of continuity of care. I speak from my experience ... more days being on call, less time and quality time at home with family, more physical stress as continual disruption of body clock and eating times, unable to provide good quality patient care as I didn't know my patients well.

...are frankly unsociable, and when working you often feel isolated, never part of a team and I am certain that there is minimal continuity and therefore diminishing levels of quality of patient care. I strongly believe shift work is a disaster. It is poor for patients and doctors... I have never met anyone who believes that shift systems are the answer.

...although they may improve patient care, every colleague that I have worked with who has worked in a partial shift system strongly disagrees with this view. Further, they have confirmed my concerns that shifts would adversely affect training, continuity of care, the sense of a patient being the responsibility of a particular team/firm, the job satisfaction and quality of life for juniors. Hence I am strongly opposed to changing to shift work.

Figure 2. Some quotes on shift working patterns from medical specialist registrars.

lems in arranging annual leave and study leave on shifts, particularly if partners were also on similar work patterns. Seven thought that the adverse effect of shifts on their own training would necessitate an increase in its length in order to gain adequate experience.

DISCUSSION

This study has shown that a large majority of SpRs in acute medical specialties are either opposed or strongly opposed to the proposed change to shifts, because of its deleterious effect on their training and their personal lives, as well as on many other aspects of their professional lives. The 40% of respondents who had personal experience of shifts were equally opposed to shifts as the remainder. There was also an overwhelming consensus on the adverse impact of shifts on continuity of care. The importance of this aspect of care has occasionally been questioned, but was amply evident from many of the respondents' vivid anecdotes. The evidence that shifts adversely affect quality of patient care is less robust, and requires confirmation in studies with hard endpoints such as mortality or length of patient stay, but it is difficult to ignore the consensus views of this large group of SpRs that quality of care is indeed reduced.

Thus the consensus view of SpRs in acute medical specialties is that they wish to remain on on-call rotas, because of the tangible benefits to their training and quality of life, as well as for patient care. Nevertheless, many colleagues emphasize that the workload intensity on on-call rotas in many hospitals is rapidly becoming intolerable, and that a massive increase in middle-grade staff is urgently needed to keep the work intensity on on-call rotas to within manageable proportions.

The widespread opposition to the introduction of shifts demonstrated in this survey is in direct conflict with the EU WTD, which will require virtually all trainees involved in acute medicine (and other acute specialties) to adopt shifts by 2004. There is urgent need for further debate over these issues.

This paper contributes to the debate by providing feedback from a large group of senior trainees on their first-hand experiences of shifts in hospitals throughout the UK. Their views deserve the highest priority in these deliberations. It would be interesting to gather views from trainees in other acute specialties. The 'blanket' imposition of these deeply unpopular working patterns in 2004 to comply with the EU WTD, against the wishes of trainees, might prove difficult if opposition were sufficiently widespread. HM

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Pickersgill T (2001) The European working time directive for doctors in training. *Br Med J* **323:** 1266

KEY POINTS

- A nationwide survey of 970 specialist registrars in acute medical specialties has shown that shift working patterns are deeply unpopular, with 70% opposing the move to shifts, and 78% expressing a preference for on-call rotas, with only 11% supporting shifts.
- A large majority thought that on-call rotas were preferable for continuity of patient care and training, and a majority also thought that they were better for quality of patient care and for trainee quality of life.
- These results conflict directly with the current drive to abolish on-call rotas, and to switch virtually all trainees in acute specialties to full shifts by 2004 in order to comply with the European Union Working Time Directive. More debate is urgently needed.

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