Does responsibility drive learning? Lessons from intern rotations in general practice

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Abstract

Background: The intern (or pre-registration) year has been criticised in the past for its emphasis on service delivery at the expense of educational achievement. It is hoped that new approaches to early postgraduate training such as the foundation programmes in the UK, will make clinical education more structured and effective. Intern placements in non-traditional settings such as general practice have been shown in the past to improve the quality of learning. Little is known however about which features of the general practice learning environment contribute most to the perception of improved learning.

Aims: This aim of this study was to examine the learning environment in general practice from the perspective of interns, (the learners), to determine the factors that contribute most to motivating effective learning in a general practice setting.

Methods: This study used a qualitative case study approach to explore the effects of two different learning environments, (general practice and hospital) on learner motivation amongst a small group of interns.

Results: We found that the biggest difference between the hospital and general practice learning environments was the increased individual responsibility for patient care experienced by interns in general practice. Greater responsibility was associated with greater motivation for learning.

Conclusions: Increased intern responsibility for patient care does appear to motivate learning. More work needs to be done on providing interns in hospital posts with greater patient responsibility within an effective supervisory structure.

Introduction

The intern year (also known as the pre-registration year) has traditionally been viewed as a rite of passage in which newly qualified doctors are thrown in at the deep end and expected to learn their trade. When the concept of an internship was first proposed by the Goodenough committee in 1944, the intention was that the intern year should be largely educational, with ample opportunities for personal study and supervision (Goodenough, 1944). However, within a few short years, the intern year had become essentially a service post and training hospitals came to depend upon the presence of interns to support busy clinical firms.

In the UK, the report Merrison, (1975) was the first of many critical studies to highlight deficiencies in intern training such as heavy clinical workloads, inappropriate administrative tasks, and a lack of educational structure (Dowling & Barrett 1991; Gillard et al. 1993; Moss 1999; Goldacre et al. 2003; Finucane & O’Dawd 2005). Negative reviews of intern training led in time to several innovations including intern placements in non traditional settings such as general practice, the publication of the ‘New Doctor’ by the General Medical Council (1997, 1998) and the launch of two-year foundation programmes in the UK in 2005 (NHS 2005). These changes to intern training represented a gradual shift from a traditional apprenticeship model toward a more structured clinical and professional induction to medical practice (Beard et al. 2005).

Practice points

- The intern year has been criticised in the past for its focus on service provision at the expense of training and the haphazard nature of the clinical training experience. It is hoped that new standardised and structured approaches to junior doctor training will provide a more consistent and effective learning experience.
- In addition to providing clear learning outcomes and an organisational structure for early postgraduate training it is also important to attend to factors that may positively influence learner motivation.
- One of the key benefits of general practice based junior doctor training is that learners are encouraged to take more individual responsibility for patient care in a structured supervisory environment. A sense of responsibility for one’s own actions in the context of patient care is a powerful motivator for learning.
- The motivating effects of providing junior doctors with appropriate responsibility within a suitable supervisory structure should be considered when planning junior doctor training in hospital settings.

The advent of the foundation programme in the UK is understandably dominating thinking at present as it represents a revolutionary shift in the approach to training newly qualified doctors (Higgins & Cavendish 2006). The current...
literature on the foundation programme is largely focused on
the foundation syllabus and models of assessment at the
expense perhaps of exploring the development of effective
clinical learning environments (Hays 2005). Yet it is the
environment in which junior doctors learn that is one of
the most important influences on their clinical and professional
development (Roff & McAleer 2001; Munthe 2003).

It was a perceived need to improve the clinical learning
environment that led to the establishment of the first intern
rotations in general practice in 1979 (Freeman & Coles 1982)
and in 1981 (Harris et al. 1985; Wilton 1995). A series of
evaluations of the many subsequent intern in general practice
rotations found that the clinical learning environment was
regarded by participating interns as superior to their hospital
training experiences (Harris et al. 1985; Wilton 1995; Parsons
& Gnegy 1998; Illing et al. 1999; Grant & Southgate 2000;
Williams et al. 2000). Key features of the learning environment
in general practice included better educational supervision;
a greater focus on consultation and communication skills;
more time to practice essential history taking and clinical
examinations skills and greater individual responsibility for the
management of patients (Wilton 1995; Illing et al. 1999;
Williams et al. 2001). However the many evaluations of intern
placements in general practice did not examine the effect that
greater responsibility for patient care as experienced in general
practice might have had on the interns motivation and
learning.

New models of early postgraduate training such as the
foundation programme place great emphasis on deliberate
approaches to the planning and delivery of early professional
development. However it is important that new approaches to
the early development of doctors should also consider the
importance of the relationship between learner autonomy
(responsibility) and the quality of subsequent learning.
In order to examine the relationship between responsibility for patient care in a particular learning environment and the
learners’ subsequent perceptions about the quality of learning,
a comparison between a relatively autonomous environment
e.g. a general practice intern rotation) and a more controlled
learning environment (e.g. a typical hospital internal attach-
ment) might provide some useful insights.

In Ireland, the intern year remains the established model
for training from medical school to full registration as a doctor. The Medical Council of Ireland published proposals
for reform of the intern year in Ireland in 2000, in response to
perceived deficiencies in Irish intern training. (Medical Council
of Ireland, 2000). Amongst the many changes proposed, it was
recommended that intern rotations should include attachments
outside of the traditional sites of medicine and surgery.
The first intern in general practice rotation in Ireland was
established in July 2004. The scheme included a 6 month
surgical internship in a university teaching hospital, a 3-month
attachment in elderly care medicine in a district general
hospital and a 3-month general practice attachment.
This paper uses data from a qualitative evaluation of a
new Irish GP intern rotation to examine the differences in
the clinical learning environments between general practice
and hospitals. In particular this evaluation explored the
relationship between learner perceptions of being responsible
for patient care and their subsequent learning.

Methods

This paper reports the findings of a qualitative evaluation
of intern in general practice which aimed to explore the
experiences and perceptions of key participants. The study
sample included all of the main contributors to a new intern in
general practice programme in Donegal during 2004–2005,
(i.e. the four interns, two general practice trainers, vocational
training programme director and hospital consultant).
Semi-structured interviews were used in keeping with
previous qualitative evaluations of intern in general practice
programmes (Parsons & Gneaz 1998; Illing et al. 1999;
Williams et al. 2001). Topic guides for the different participant
groupings were developed by the authors based on the
interview schedules used in a previous qualitative evaluation
(Williams et al. 2001). In keeping with the iterative nature of
qualitative research the topic guides were modified during
the process of data collection to address emerging themes
from early intern and trainer interviews. The interviews were
tape-recorded with participants’ permission and transcribed
verbatim.

The researchers included an academic general practitioner,
(PC) who designed the study and a research nurse (MM) who
carried out the interviews and was jointly responsible for the
data analysis. Neither researcher participated as either a
teacher or supervisor in the general practice intern
programme.

Interviews with interns took place on three occasions,
(a) before the start of the GP rotation, (b) at the end of the GP
rotation and (c) three months after the GP rotation. Qualitative
data analysis of the interviews was conducted manually
according to the precepts of framework analysis (Ritchie
& Spencer 1994). This involved examination of the interview
transcripts by the researcher and by the evaluation coordinator
to separately identify important themes and patterns in the
data. To increase the reliability of the analysis, themes and
interpretations were “member checked” by sending them to all
of the participants in the form of a draft report (Creswell 1998).
Changes suggested by participants were then included in
a final draft. The final draft report was subsequently reviewed
again by the participants and deemed to be a valid
representation of their views. The results section that follows
presents the findings that relate to the clinical learning
environment and the importance of responsibility in motivat-
ing learning.

Results

The learning environment

The interns in this study found that the learning environment
in general practice was very different from their hospital
internship experience. The interns in general practice felt more
autonomous and thought that they did more clinically
appropriate tasks than in the hospital setting.
'Essentially, so far I have had ample opportunity to see patients by myself (in general practice), take histories, do thorough examinations, make decisions by myself, and if needs be, discuss it with two excellent doctors' (Intern 1).

The interns very much valued the opportunities to practice what they felt were essential clinical skills.

‘you’re seeing patients, you’re taking histories, you’re doing examinations, you’re working but you’re learning. In hospital, you are not really getting the same learning chance’ (Intern 1).

One of the possible advantages that placement in general practice seems to offer therefore is the opportunity offered to consult alone, to practice core clinical skills and to make decisions with patients. Such direct responsibility for patient care does not appear to routinely happen in hospital based internships.

‘I actually made more decisions in many ways because I was seeing the patient on my own; my own consultation. I could make the decision and say, ‘I’ll follow that’, whereas, as an intern in hospital medicine, you’re always looking over your shoulder to someone else for guidance’ (Intern 3).

The relationship between the working environment and the learning environment appeared more blurred in general practice. It was as if interns were working and learning at the same time. They were not aware of learning and working simultaneously in a hospital setting.

‘Here my learning experience and my work are much more jumbled in together. They are coming together on the same train. In the hospital, you are working and you are trying to catch the learning train’ (Intern 1).

The main purpose of the hospital learning environment was clearly service delivery. The interns were an essential part of the service delivery process. In general practice on the other hand, the interns were genuinely supernumerary and were therefore free to pursue learning opportunities. Interestingly, the hospital consultant viewed the general practice rotations as an opportunity for interns to learn to perceive hospital patients in a more holistic way.

They, [the GP interns] have a more, holistic view and see patients in the hospital as part of the wider community and not just hospital patients (consultant).

Clinical supervision

The nature of clinical and educational supervision is another important aspect of any medical training learning environment. In this study the clinical supervision in general practice operated at two levels. There was the ad hoc supervision when an intern would seek a supervisor’s help with a patient during a consultation or when presenting a prescription for the trainer’s signature. There was also a more formal post hoc review of patients seen by the intern at the end of each surgery or at the end of the working day. The GP interns could appreciate the difference in the supervision and support offered in the two sites.

[Learning] is not where the real emphasis is in your internship, you’re kind of just trying to survive, whereas in general practice its teaching and education oriented, and you’ve a lot of support…that’s definitely part of the attraction of it (Intern 4).

Interestingly, the general practice computer system offered a third means of supervision. The GP trainers could remotely monitor the intern’s workload, prescribing and time management from their own computer. This allowed the trainer to intervene if an intern was falling behind as well as receive and send messages during consultations.

‘I can see what they prescribed, I can see what way they are seeing people, I can see everything here…’ (GP 2).

Responsibility

Within the context of being closely supervised the interns all felt they had a higher level of clinical responsibility within the general practice environment than in the hospital setting. For example, despite being told that interns were very much doctors in training, interns found that patients viewed them as trainee general practitioners thus increasing the interns’ sense of personal responsibility.

‘because I am sitting in there, doing a consultation and the patient is coming to me, they see me as a general practitioner; so I think more is expected of you from the patient point of view, you’re coming in to you for ten minutes and you’ve got to sort them out in that ten minutes and get them fixed up and take the right thing…so from a patient point of view you’re seen to have more responsibility and that’s good because it is responsibility in a sheltered environment’ (Intern 3).

The responsibility for individual patient care evident in general practice was not evident in the hospital environment.

‘The GP practice gets you to think about what you’re doing….it’s kind of the long term approach you’re taking rather than just get through your own shift [in hospital] and making sure the patient is okay the following morning so the consultant can make decisions what should be seen and what should be done’ (Intern 2).

The sense of patient responsibility in general practice appeared to be derived from how the interns were perceived as practising doctors by both patients and colleagues. The interns valued opportunities to take individual responsibility for patient care under guidance in general practice whereas they appear to be operating at the bottom of a decision making hierarchy in hospital, fulfilling a mainly administrative role. The only regular time when hospital based
interns enjoyed more autonomy was when they were ‘on call’. Being on duty at night increased interns’ sense of responsibility and motivated better learning:

‘On call is the only time you would get to think for yourself and deal with the patient problems but that’s only for seven hours a week’ (Intern 2).

Being ‘on call’ was characterised as ‘thinking on your feet’. The interns described being in general practice as feeling like they were continuously ‘on call’, having to make decisions for themselves and act autonomously under guidance. They felt that having more responsibility enhanced their learning

‘When you are out in the community, you have eight hours of on call thinking on your feet, the whole time seeing what plan could be used for a particular person …. It definitely would entice you to be a better doctor, to think more laterally rather than just do exactly what you’re told’ (Intern 2).

**Discussion**

The findings described in this paper are derived from a qualitative evaluation of an intern in general practice rotation involving four interns in a remote part of Ireland. As such, the generalisability of the study’s results to other settings should be treated with some caution. However the importance of considering how the working and learning environments relate to one another and in particular how autonomy and responsibility can motivate learning, should provide useful ‘food for thought’ for those who plan and implement clinical education.

In this study the interns clearly valued being motivated to learn by their increased responsibility for patient care in the general practice setting. There were several features that contributed to the interns’ sense of being more ‘responsible’ in general practice. For example the interns in this study noted that patients, (despite prior notification of the interns’ status) treated the interns as trainee general practitioners and that this increased the interns’ sense of being accountable. The importance of having a perceived role in the patient care process was also emphasised in previous evaluations (Williams et al. 2001; Illing et al. 2003). Advice and support from clinical supervisors in general practice did not usually lead to a transfer of decision making from the intern to the trainer. Rather the post hoc discussions about patients in general practice were used to ensure patient safety and to enhance the intern’s learning. This was contrasted by the interns with their hospital experience where they were clearly sited at the bottom of a decision making tree. Referral to a higher authority in hospital usually meant loss of direct responsibility for the decision making process. Just as in previous evaluations (Wilton 1995; Williams et al. 2001; Illing et al. 2003) hospital based interns perceived their role as being more concerned with supporting the operation of the clinical team rather than with assessing clinical problems and making therapeutic decisions.

It is interesting to contemplate why a sense of responsibility might motivate better learning. Motivation is often conceived as being either intrinsic or extrinsic (Ryan & Deci 2000). Intrinsic motivation refers to behaviours that are engaged in for internal reasons such as curiosity, interest and a personal desire for mastery rather than external motivations such as reward or punishment (Ryan & Deci 2000). High intrinsic motivation is strongly correlated with academic achievement and learning satisfaction (Bruning et al. 2004). One possible explanation for why interns in this study seemed to be more motivated by their training in general practice may be their stronger sense of personal responsibility for patient care. A sense of personal responsibility is essentially more of an intrinsic motivator than an external motivator.

Another well described perspective on motivation is the ‘goal orientation’ model in which motivation is derived from the perceived match between the task and the goal (Bruning et al. 2004). Learners are more motivated when they feel that the task helps them to achieve their goals. In this study we can assume that interns are motivated to become competent doctors and might therefore value learning experiences which help them to achieve that goal. Spending time taking histories, examining patients and making decisions is likely to be far more motivating than carrying out administrative tasks and the enactment of team orders.

Another aspect of goal orientation is the degree of perceived choice (or functional significance) that a learner has in pursuing a particular learning goal or behaviour (Bruning et al. 2004). An individual’s perception of a learning opportunity is an active construction that is influenced by factors such as the nature of the task, (is it understood, is it interesting, is it achievable?). Tasks that include problem solving and that encourage learners to self regulate and elaborate their problem solving strategies are more motivating than highly structured problems in which the regulation is external to the learner (Bruning et al. 2004). Thus a clinical learning environment that promotes learner autonomy, by facilitating learners to take personal responsibility as in the case of the general practice rotations, seems to be more motivating than a more controlling environment similar to that which applies in many hospital settings.

In this study the Interns working and learning environments were very different in general practice and in hospital. The hierarchical structure of hospital based teams could be viewed as necessarily more controlling. The prevalence of severely ill patients and the critical nature of much of the decision making may mandate a much more programmatic, top down approach in hospital settings. However, in this study, it is clear that such an approach led interns to feel less responsible for patient care and more burdened with what they felt was irrelevant administrative work. This contrasted with the general practice placements which offered interns a lot of personal freedom to choose investigative and
therapeutic options as well as take responsibility for patient follow up, within a supervisory framework.

Williams & Deci (1998) proposed a direct link between autonomous learning environments, motivation and learning outcomes. They showed that more autonomous learning environments facilitated better 'conceptual learning and psychological adjustment' in medical students as well as contributing to more humanistic health beliefs and behaviours. In this study we postulate that giving interns more responsibility for patient care increased their sense of learner autonomy and their motivation leading to better perceived learning outcomes.

Conclusion

The internship represents a process of immersion in different clinical cultures during which the junior doctor absorbs the norms and values of professional medical practice. Traditionally, learning was largely left to chance and was very dependent on the observational and reflective skills of the individual intern (Sinclair 1997). One of the common features of the many negative evaluations of the intern year was that interns frequently found themselves to be at the bottom of the medical hierarchy and it was difficult for them to influence change in their workloads and training (Dowling & Barrett 1991). The new foundation programmes that have been implemented in the UK represent a fundamental shift in junior doctor education toward a more programmatic and educationally consistent model. However despite the enthusiasm with which changes such as the foundation programmes are being espoused the tug of war between service and educational aspects of the junior doctor's work remains. The lesson from general practice based intern rotations is that granting junior doctors more responsibility and autonomy within an effective supervisory framework can add considerable motivation for learning (and reflection). The next step is to consider how junior doctors can be given greater responsibility for aspects of clinical care in hospital based settings so that they too can reap the motivational benefits.

Notes on contributors

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Appendix 1
Topic guide for intern interviews

General

What made you decide to apply for this post?
(future career choice, learning opportunities, job security, location etc)
What do you hope to gain from it?
(skills, insight into GP etc)
What concerns do you have about it?
(effects upon later hospital jobs, inc SHO level, own ability, 'newness' of the rotation, how other people might view it within medicine, etc)

Specific to GP attachment

How did/do you feel about doing the GP attachment
What would have been your preference?
Advantages
Disadvantages

Experience in general practice and hospital

What happens on a typical day?

Prompts:

- Number of patients on average seen
- Does trainer/consultant/registrar go through patients with you after you have seen them?

Prompts:

- Team interaction, interaction with patients
- Where and when did reviews take place

What is good about the way that the trainer/consultant reviews your patient care?
What could be better?

Prompts:

- Problems that cropped up during patient care review and what would/did you or your trainer/consultant/registrar do?

Reaction of other primary care team (PCT) members to intern
Any other issues

Learning environment in general practice and hospital

General practice based learning environment

Learning needs assessment:

- Was this done and educational plan completed: was it useful?
- feelings about being observed consulting with patients
- video taping of consultations
- anything else

Tutorials: are they happening? helpful?
Project work: how is it going?
Informal learning opportunities: are there any and are they utilised?
Formative assessments: have they happened?

Hospital based teaching

Learning needs assessment:

- Was this done and educational plan completed: was it useful?
- feelings about being observed consulting with patients
- video taping of consultations
- anything else

Elderly care ward rounds: are they happening? helpful?
Benefits of taking part in this?
Informal learning opportunities: are there any and are they utilised?
Formative assessments: have they happened?

Hospital based formal intern professional development programme

Benefits
Issues

GP Reg day release

Benefits
Issues

- What happens when scheme is on a break
- Anything else not yet mentioned which intern thinks is important?