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GP supervisors – an investigation into their motivations and teaching activities

Background

There is little empirical information on how general practitioner (GP) supervisors teach and the reasons for the variation in their teaching methods. Could the variation be due to differing motivations to teach?

Methods

Supervisors from one regional training provider who attended educational workshops in 2013 were surveyed. seeking information on their motivation to become and remain a supervisor, and the frequency of use of selected teaching activities.

Results

The majority of respondents cited intrinsic motivators, including enjoying teaching (84%), contribution to the profession and community (82%), adding variety (78%) and workforce/succession planning (69%), as reasons for becoming GP supervisors. The expected relationships between motivations and teaching activities were not found.

Discussion

Variation in teaching activities used by supervisors does not appear to be associated with differing motivations. Measuring the use of teaching activities is not a mechanism to determine a supervisor's commitment to teaching.

Keywords

education, medical; vocational education / graduate education

General practice supervisors have been described as the cornerstone of general practitioner (GP) training. 1 Despite this, little is known about what actually happens in registrar-supervisor interactions.2

GPs supervise or teach for a variety of intrinsic motivations, such as enjoyment of teaching, intellectual stimulation and feeling that they are assisting the profession, 3-6 and are less motivated by extrinsic factors including financial rewards.⁵ Supervisors may be motivated to accept registrars because they perceive this can reduce the supervisor's clinical load. Clinical overload is known to have a negative impact on the provision of adequate supervision.7,8

Regional training providers (RTPs) encourage supervisors to directly observe and video-record registrar consultations, develop and review registrar learning plans, provide face-to-face feedback on training progress and undertake audit activities such as random case analysis. 9,10 These activities are promoted by medical educators as highquality educational activities expected to optimise the registrar-supervisor learning environment. Despite the availability of these activities, even where there are clear guidelines about teaching activities or mandated activities, supervisors often do not use them. 11

Could it be that the differing motivations explain the variability in teaching activities undertaken by supervisors? This study seeks to enquire about the varying motivation of supervisors and the teaching activities they report, and to determine if there is a

relationship between them. Specifically, are supervisors who are motivated by a desire to reduce their clinical workload less likely to undertake the teaching activities promoted by medical educators as being of high quality?

Methods

A guestionnaire-based survey was conducted with GP supervisors from Beyond Medical Education, an RTP that includes regional, rural and remote practices in central and northwestern Victoria, and central and western New South Wales. A purposive sample of supervisors was obtained by surveying all supervisors attending an annual education workshop in 2013. The workshop was compulsory for one supervisor from every practice within the RTP. The sample included supervisors of registrars in their first and second general practice year.

The questionnaire was developed by consensus among the researchers and tested on two supervisors. Three fields were addressed in the questionnaire:

- 1. Supervisor background/practice characteristics included questions about practice location, location of primary medical degree and whether other learners such as medical students were present in the practice.
- 2. Supervisor motivation questions asked supervisors to respond, using a Likert scale, to a number of statements about motivation, extending from intrinsic motivation to workforce motivation. There was also provision for a free text response.
- 3. Supervisor teaching activities questions asked supervisors to select a frequency-ofuse of common teaching activities.

Descriptive analysis of the data was completed using SPSS version 21. Chi-square analysis was conducted to address relationships between motivation(s) to become a supervisor or continue to supervise, teaching activities and supervisor background/practice characteristics. Ethics approval was granted by the LaTrobe University Human Research Ethics Committee (approval no. FHEC13 020).

Results

A total of 93 supervisors attended workshops held during 2013 and 84 surveys were returned,

giving a response rate of 90%. There was very little missing data (1.2–4.8%) from 13 of the 27 questions. Supervisor background/practice characteristics of participating supervisors are summarised in *Table 1*.

Motivation to become and continuing to be a GP supervisor

The majority of respondents agreed or strongly agreed that their motivation for becoming and continuing to be a GP supervisor was because they enjoyed teaching (84%) and felt it was their

responsibility to contribute to the profession and the future healthcare of the community (82%). They also agreed or strongly agreed it added variety to the working week (78%) or were motivated to ensure there were enough doctors in their region/town or as part of succession planning (69%). A minority of respondents who agreed or strongly agreed were motivated to have a registrar to reduce their clinical load (20%), to bring income to the practice (18%), to reduce after-hours load (12%) or for the teaching payment (8%) (*Table 2*).

Table 3 lists the comments provided by respondents in a free-text question seeking 'any other reasons you have become or remain a supervisor?'

Frequency of conducting teaching activities

GP supervisors were asked to report on how frequently they perform teaching activities (*Table 4*). Respondents most commonly described using opportunistic clinical discussion (92.5% perform this weekly) and face-to-face teaching (60% perform this weekly), whereas all other teaching methods were performed less frequently, with development and review of registrars' learning plans the least frequent teaching activity reported (over one-quarter of respondents reported they never developed or reviewed a learning plan).

Relationship between supervisor background/ practice characteristics and supervisor motivation

There was a statistically significant association $(X^2 (2, n=84)=9.08, P<0.05, phi=0.33)$ between 'teaching medical students' and 'I am a supervisor because I believe it is my responsibility to contribute to the profession and the future health care of the community'.

Relationship between teaching activities used by supervisors and supervisor background/ practice characteristics

There was no statistically significant association found between supervisors' reported teaching activities and the location of their practice, the location of the supervisors' primary medical degree or whether they also taught medical students.

Table 1. Personal and practice background of participant supervisors (n = 84)						
Characteristic	Frequency, % (n)					
Gender						
Male	77.4% (65)					
Female	22.6% (19)					
Age						
<40years	10.7% (9)					
40-59 years	71.4% (60)					
≥60years	17.9% (15)					
Number of years as GP						
0–5 years	2.4% (2)					
6-10 years	10.7% (9)					
11–15 years	10.7% (9)					
≥16 years	76.2% (64)					
Number of GP supervisors in practice in	addition to participant					
0	16.7% (14)					
1	39.3% (33)					
2	17.8% (15)					
≥3	26.2% (22)					
Teach registrars in first 12 months of training (GPT1 and GPT2)	82.1% (69)					
Currently teach medical students	83.3% (70)					
Currently teach interns (Postgraduate Prevocational Placement Program)	13.1% (11)					
Location of primary medical degree						
Australia	70.2% (59)					
Other	28.6% (24)					
No response	1.2% (1)					
Practice location using Australian the Au Classification Areas (ASGC) system	stralian Standard Geographical					
RA2 – inner regional	52.4% (44)					
RA3 – outer regional	36.9% (31)					
RA4 – remote	8.3% (7)					
RA 5 – very remote	2.4% (2)					

Relationship between teaching activities and supervisor motivation

Three statistically significant associations were found. First, 'formal face-to-face teaching sessions' and 'I enjoy teaching' $(X^2 (4, n = 80) = 25.50,$ P < 0.001, phi = 0.57); second, 'direct observation of registrar consultations' and 'I enjoy teaching' (X2 (4, n = 81) = 11.44, P < 0.05, phi = 0.38); and third, 'face-to-face feedback on registrar performance' and participants reporting that they were motivated by 'registrars reduce my clinical load' (X^2 (4, n = 81) = 11.24, *P*<0.05, phi = 0.37).

Discussion

We found that GPs in Beyond Medical Education report that they become or continue to remain a supervisor for primarily intrinsic motivations including enjoyment of teaching, the variety provided by teaching and the desire to contribute to the profession and the ongoing health of supervisors' communities. This outcome concurs with previous research.4,12

Financial incentives were not reported as a strong motivator for GPs to supervise registrars, consistent with the findings of Laurence et al13 that registrar supervision is a cost-neutral exercise. The same study found teaching medical students to be a net financial cost to the practice and the significant association between 'teaching medical students' and 'I am a supervisor because I believe it is my responsibility to contribute to the profession and the future healthcare of the community' in our survey is consistent with the greater altruism associated with teaching medical students. Rural location has previously been found not to have an impact on motivation to teach. 14 The concern that busier, remote practices might fail to provide an adequate learning environment was raised by Wearne¹⁵ in a small pilot study in remote Northern Territory. In our study, albeit with fewer remote practices, teaching activities were not found to differ with location. No other literature regarding international medical graduate supervisors' motivations and teaching activities was found to compare with our findings.

The researchers had postulated an association between intrinsic motivation to teach (enjoy teaching, variety) or altruism (teaching medical students or responsibility to the profession and community) and the use of high-quality educational activities (directly observe and video record registrar consultations, develop and review registrar learning plans, provide face-to-face feedback on

training progress and undertake audit activities such as random case analysis). Of these, only direct observation of registrar consultations was found to be related to the enjoyment of teaching. Conversely, a relationship between motivation to reduce the supervisors' clinical load, and providing face-to-face feedback to registrars was found. It is possible that other confounders such as difficulty with RTP information management systems or registrar resistance to certain teaching activities influenced their use and subsequently the failure to find the postulated association. Registrar resistance to review of recorded consultations has been reported previously. 16 Nevertheless, the postulated relationship between motivation and teaching activities was not found.

Limitations of this study include that it only reviewed one RTP's supervisors, and may reflect the teaching activities promoted within it. Although workshop attendance was mandatory for one supervisor within each practice in the region, only 17% of the supervisors surveyed were solo supervisors. The more educationally minded or motivated supervisors within multi-supervisor practices may have been more likely to attend, biasing our results towards an overstatement of intrinsic and altruistic motivations.

Table 2. Motivation for becoming and continuing to be a GP supervisor (n = 84)									
I am a supervisor because	1 = strongly disagree % (n)	2 = disagree % (n)	3 = neither agree or disagree % (n)	4 = agree % (n)	5 = strongly agree % (n)	No answer % (n)			
I enjoy teaching	0% (0)	2.3% (2)	13.1% (11)	39.3% (33)	45.2% (38)	0% (0)			
Teaching adds variety to my working week	1.2% (1)	4.8% (4)	16.6% (14)	41.7% (35)	35.7% (30)	0% (0)			
I believe it is my responsibility to contribute to the profession and the future health care of the community	0% (0)	3.6% (3)	14.3% (12)	30.9% (26)	51.2% (43)	0% (0)			
Having a registrar reduces my clinical load	25.0% (21)	35.7% (30)	19.0% (16)	15.5% (13)	4.8% (4)	0% (0)			
Having a registrar reduces my after hours load	34.5% (29)	34.5% (29)	16.7% (14)	10.7% (9)	1.2% (1)	2.4% (2)			
The teaching payment supplements my income	38.1% (32)	36.9% (31)	16.7% (14)	5.9% (5)	2.4% (2)	0% (0)			
The registrar brings income to the practice	22.6% (19)	25.0% (21)	32.1% (27)	13.1% (11)	4.8% (4)	2.4% (2)			
I want to ensure there are enough doctors in my region or town or as part of succession planning	3.6% (3)	7.1% (6)	20.2% (17)	40.5% (34)	28.6% (24)	0% (0)			

Table 3. Other motivations to become or remain a supervisor

Personal benefit

Maintain currency of knowledge

'It stimulates me to maintain currency of my medical knowledge'

'Teaching makes me keep up-to-date clinically'

'It helps me to upskill myself and keep myself up-to-date'

'It provides great reason/stimulates/challenges to remain up-to-date (ie improves my clinical practice)'

'I learn from the GP registrar – adult education is lifelong and registrars are a ready source of recent knowledge'

"Teaching and supervising registrars helps updating my clinical skills and knowledge as well"

"To learn from registrars. To retain discipline in my practice"

'Keeps me up-to-date'

Relationship

'I enjoy the interaction with the registrars'

'I enjoy having a professional colleague'

'I love a mentoring process and have a passion for GP'

• Pride

'There is a certain pride in being a supervisor'

Challenge

'Become new supervisor as a new challenge'

• Own skill/personal development

'I think it helps me to be a better GP and more well balanced person.'

Professional responsibilities

'Ethically, morally – it is in the original Hippocratic oath'

'I was a trainee/registrar myself'

'Ongoing commitment to rural general practice survival'

'I love (to) give my knowledge and experience to registrars to make them into wonderful GPs'

'A feeling of obligation – when I was trained we were taught that one should pass on our knowledge'

Workforce responsibilities

'Requested by practice'

'To promote my town as a viable teaching centre as a subsidiary of Base Hospital'

'Otherwise would be a solo practice'

'Supervisor since 1979 - routine. Has brought 3+ doctors to the practice'

'Contribute to the teamwork of our general practice'

Table 4. Supervisors' frequency of use of teaching activities (n = 84)									
Teaching activity	At least weekly % (n)	At least monthly % (n)	At least 3 monthly % (n)	At least every 6 month term % (n)	Never % (n)				
Formal face-to-face teaching	60% (48)	25% (20)	8.8% (7)	3.8% (3)	2.5% (2)				
Opportunistic clinical discussion	92.5% (74)	7.5% (6)	0% (0)	0% (0)	0% (0)				
Direct observation of registrar consultation	6.2% (5)	27.2% (22)	30.9% (25)	19.8% (16)	16% (13)				
Review of recorded consultation	13.9% (11)	24.1% (19)	24.1% (19)	15.2% (12)	22.8%(18)				
Observation of a registrar clinical procedure	13.8% (11)	26.3% (21)	33.8% (27)	15% (12)	11.3% (9)				
Random case analysis	18.5% (15)	27.2% (22)	21% (17)	12.3% (10)	21% (17)				
Face to face feedback	28.4% (23)	24.7% (20)	28.4% (23)	14.8% (12)	3.7% (3)				
Development of a registrar learning plan	3.7% (3)	21% (17)	14.8% (12)	30.9% (25)	29.6% (24)				
Review of a registrar learning plan	4.9% (4)	17.3% (14)	24.7% (20)	25.9% (21)	27.2% (22)				

Our study included supervisors of registrars in both their first and second year of training. Teaching activities such as face-to-face teaching would be expected to be less frequent in the second teaching year. Finally, there is likely to be a difference between what supervisors report doing and what they actually do.

This study does not confirm the hypothesis that supervisors motivated by the need to reduce their clinical workload are less likely to undertake the teaching activities promoted by medical educators as being of high quality. Measuring the use of teaching activities is probably a poor means of determining the strength of commitment to teaching.

The finding that there was no statistically significant association between practice location and either motivations for teaching or teaching activities would support the view that a greater distribution of training into regional and remote practices does not result in a reduction in the quality of training.

Our study shows that supervisors report positively about their role. In a climate of increasing demand for GP teachers, further study into why GPs choose not to be supervisors is warranted, as is the development of programs to recruit more GP supervisors to the Australian General Practice Training Program, highlighting the personal benefits supervision offers.

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