What Training Do Foundation Doctors Feel They Require to Develop as Clinical Teachers?

Hannah Pierce¹, Alex Kermack², Vikki Foley¹

¹School of Medicine, Keele University, Keele, UK
²University Hospital Southampton NHS Foundation Trust, Southampton, UK; School of Human Development and Health, Faculty of Medicine, University of Southampton, Southampton, UK

Correspondence: Hannah Pierce, School of Medicine, Keele University, Keele, UK.

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Abstract

Purpose
To explore the teaching that foundation doctors at the University Hospital of North Midlands undertake and what training they believe is necessary to develop as clinical educators.

Methods
A mixed methods approach consisting of questionnaires and focus group discussions (FGDs), following an explanatory sequential design. FGD data was thematically analysed.

Results
Thirty-four responses to the questionnaire were analysed. 97% respondents felt that teaching was an important part of their job role. The amount of time spent teaching each week varied from no time to more than two hours, and on average 25% of this teaching occurred outside of clinical hours.

Foundation doctors enjoy teaching and want to help others. Challenges described were lack of time, shortage of opportunities and others’ perceptions of their ability to teach. Foundation doctors requested tailored training and formalised feedback to facilitate their development as teachers.

Conclusion
This study has shown that foundation doctors undertake a significant amount of teaching and there is a clear desire for additional training. These doctors utilise different teaching methods to their seniors and therefore any training should focus on ad hoc sessions, ward supervision and bedside teaching. Local trusts, medical schools and the UK foundation programme could do more to support foundation doctors’ development as educators by giving them protected time and formalised feedback opportunities. Foundation doctors could be an untapped resource to support the medical school expansion plan in educating the increased numbers of medical students over the coming years.

Keywords: junior doctors, medical education, training

1. Introduction

The General Medical Council (GMC) are clear that doctors have a responsibility to contribute to the teaching and training of other doctors and healthcare professionals (General Medical Council, 2023). Furthermore, “Outcomes for graduates” (General Medical Council, 2020) outlines that doctors are expected to function effectively as mentors and teachers from graduation.

Dandavino et al (Dandavino M et al., 2007) suggest that; ‘exposure to teaching principles, skills and techniques should be in a sequential manner during the education of a physician, starting at medical school and continuing throughout postgraduate education and into practice’. One online survey found that 82% of 22 UK medical schools offered teaching skills training (Shariq et al., 2013) and 12 UK medical schools currently offer an intercalated degree in medical education (Hull York Medical School, 2023). The main barriers to implementing teaching skills courses seem to be staffing limitations, insufficient time and lack of student engagement (Shariq et al., 2013) alongside competition with other
educational demands (Soriano RP et al., 2010). In practice, training medical students how to teach is considerably varied. Current evidence has identified three styles of teaching programmes: peer teaching, workshops and outreach programmes (Liljedahl & Stenfors-Hayes, 2015). Near-peer teaching is the most common method utilised with formal teacher training woven into the programme, although the extent or content of this training is not further outlined. Near-peer teaching is when a trainee who is one or more years senior provides teaching to another trainee on the same level of medical education training (Bulte C et al., 2007). Benefits of this type of teaching are reaped by both the tutors and their students. Junior students appreciated the non-threatening teaching environment created by the near-peer tutors and regarded them as positive role models. Feedback from the senior students showed that they had been able to consolidate their knowledge and had more desire to be involved in future teaching (Nelson AJ et al., 2013). Near-peer teaching has been shown to improve junior doctor performance in their teaching assessments (Oluwaseun Anyiam et al., 2018).

Following graduation, UK doctors enter the foundation programme for the first two years of their practice. These two years consist of six 4-month placements in different medical and surgical specialties where they gain a breath of clinical and non-clinical skills before entering specialist training in their chosen field. One element of their non-clinical curriculum is the development of their teaching skills. In their first year, doctors are expected to deliver formal teaching sessions using an appropriate teaching method (UK Foundation Programme, 2021). In their second year, they are expected to deliver teaching in the clinical setting, provide feedback to other healthcare workers and expand their teaching repertoire in other settings and using other techniques (UK Foundation Programme, 2021). Each foundation doctor must complete one supervised learning event each year that focuses on an episode of teaching. It is clear that foundation doctors are receptive to further training in teaching skills with 96% of respondents to a survey of fifty-six foundation year one doctors stating that they would have liked a training course prior to teaching (Al-Hourani et al., 2015). 90% of those surveyed requested training on session planning, giving a lecture and teaching a skill. A further survey of foundation doctors found that time was a significant barrier to providing more teaching (Gill et al., 2008) with only 10% of junior doctors being able to teach during their allocated work hours (Qureshi et al., 2013). More opportunities for foundation doctors to overcome time constraints and formally participate in medical education are being developed. This includes the introduction of dedicated teaching placements during their two years of foundation training (Qureshi, 2015). There has also been an increase in the number of teaching qualifications and courses available to healthcare professionals in recent years. However, there is currently no published evidence available on how many doctors have undertaken such courses (Board of Medical Education, 2006).

The landscape for education of medical students is going to become more challenging over the coming years as the Medical Schools Council call for the expansion of medical school places to be increased by 5000 making a total of 14500 graduating doctors per year as part of the UK’s medical workforce plan (Medical Schools Council, 2021). Therefore, understanding the current teaching practices occurring on NHS wards is going to be more critical to enable sufficient and effective teaching of increasing numbers of medical students.

Research in this area is in its infancy. It is not known how much teaching foundation doctors regularly undertake, what teaching strategies they commonly utilise and whether this teaching occurs within clinical hours. The aim of this study is to better understand the teaching activities of foundation doctors, and ascertain, from their perspectives, their training and learning needs to develop as clinical educators. This is done with the goal of informing future teacher training initiatives targeted towards foundation doctors.

2. Methods

An explanatory sequential mixed methods design utilising two data collection methods; a paper-based questionnaire and focus group discussions (FGDs) were used. The questionnaire results informed the development of the FGD topic guide. The FGDs were transcribed verbatim and thematically analysed following Braun and Clarke’s (Braun & Clarke, 2006) guidance.

Ethical approval for this study was granted by Keele University ethics committee (ERP060715). Informed consent was taken from all participants using an information sheet and consent form. Self-administered paper questionnaires were disseminated at University Hospital North Midlands (UHNMe) foundation doctor monthly teaching days. The inclusion criteria for the study were therefore any foundation doctor working at UHNMe able to attend the local trust teaching day. The exclusion criteria were any person not in foundation training at UHNMe. The questionnaire was developed by the author, a clinician, and a non-clinical educator to address the gaps in evidence highlighted by the review of literature. The questionnaire comprised of basic demographical information, eight Likert/multiple choice questions and three free text response questions (Appendix 1).

2.1 FGDs

The free text responses from the questionnaires covered a range of themes that required further in-depth exploration. To triangulate the data collected via the questionnaire, FGDs were undertaken. It was felt that discussion between group
participants would help to determine what training foundation doctors feel they need to become better clinical educators, to generate ideas regarding appropriate training and to come to a consensus of what training would suit the majority of doctors. Doctors who had completed the questionnaire were invited to participate. FGDs utilised a semi-structured topic guide which was generated following analysis of the questionnaire free text responses (Appendix 2).

Two focus groups were conducted, one for year one foundation doctors and the other for year two doctors. There were five participants in the foundation year one group and six participants in the foundation year two group. FGDs were video recorded with an audio recording as back up (Rudestam & Newton, 2015). The recordings from both groups were then transcribed verbatim and thematically analysed by the author.

2.2 Data Analysis

Quantitative data was recorded in Microsoft Excel 2010. Answers to the free text questions were also collated and recorded on a Microsoft Word 2010 to easily identify recurrent themes.

FGD data was transcribed and imported into NVivo to aid with thematic analysis. Inductive codes were derived by the author through thorough reading of both transcripts. Initial codes were generated from the foundation year one transcript and applied to the foundation year two transcript as new codes were concurrently identified. These codes were then reviewed and collated into themes.

3. Results

3.1 Questionnaire Results

34 doctors responded to the questionnaire of which 16 were foundation year one doctors and 18 were foundation year two doctors. Seven respondents chose not to give their medical school. 70% (19/27) of respondents were graduates from Keele Medical School which is the University closest to the trust. The other eight respondents to this question came from a relatively equal spread of six different UK medical schools.

97% (33/34) agreed that teaching was an important part of their role as a doctor and 39% (21/34) respondents felt prepared for their teaching role. 65% (22/34) of the foundation doctors had received some form of teacher training and two respondents had undertaken postgraduate qualifications in medical education.

94% of the doctors taught each week. 35% of respondents spent less than 30 minutes teaching each week and 32% taught between 30-60 minutes each week. If these figures are used to calculate a rough estimate of the amount of teaching hours provided to students by foundation doctors each week, this would equal 25 hours each week by this group of 34 doctors.

When asked when this teaching occurs, the most common response (38%) was an approximate split of 75% during clinical hours and the remaining 25% outside of hours.

The type of teaching undertaken by foundation doctors was evenly spread between small group teaching (91%), bedside teaching (74%) and ward supervision (82%) with a smaller proportion giving lectures (44%).

Foundation doctors felt encouraged to teach for several reasons. A frequent answer was enjoyment of teaching: ‘I enjoy helping people to learn in fun ways’. Another common statement was recognition that it helps the tutor’s knowledge as well as the students: ‘[teaching] challenges me and makes me learn’. Aside from these, it was also noted that they themselves had received teaching when they were students and felt an obligation to return the favour: ‘the fact that I found teaching from doctors at medical school invaluable’. The final reason given was that teaching was a required part of the foundation programme curriculum. Interestingly, the biggest concern about teaching was lacking experience or fearing that their knowledge is incorrect: ‘I worry about giving poor/wrong knowledge’ and ‘Sometimes I worry that the students will ask me a question I don’t know the answer to’. Other concerns included a lack of dedicated time for teaching, lack of formal training and lack of opportunities.

3.2 Focus Group Results

Three themes were generated from analysis of focus group data. The first theme pertained to the primary drivers for foundation doctor teaching being their enjoyment and desire to give back to their profession. The second theme concerned the challenges they encountered trying to teach which centred on the conflict with their clinical commitments and their own and others’ perceptions of their teaching capabilities. The final theme demonstrated their perceived development needs, where they outlined their desire for more tailored support including focused training, opportunities to teach and appropriate constructive feedback (Figure 1).
3.2.1 Foundation Doctors Are Primarily Driven to Teach by Enjoyment and the Desire to Give Back

Foundation doctors are keen to teach and are driven by the enjoyment they feel when participating in teaching activities. A further driving force behind their involvement in teaching others is a strong desire to give back.

‘I think ... you can obviously get a buzz from doing teaching because you feel like you are actually helping ... and making a difference long term.’

There was a recognition amongst the doctors that teaching was a part of their curriculum however, this was not as strong a motivator as the previous elements.

‘It goes towards my portfolio, great I’m happy with that.’

The doctors demonstrated a desire to be recognised for the contribution they were making in providing teaching to medical students. They described frustrations that performing the minimum amount of required teaching gained the same recognition as actively participating in regular teaching and felt that this imbalance resulted in a lack of incentive to teach.

3.2.2 Challenges to Foundation Doctor Teaching Include Conflict with Clinical Activities and Their Own and Others’ Perceptions of Capabilities

The foundation doctors faced significant challenges trying to incorporate teaching into their working lives. They agreed that a lack of time was a major contributor and a strong desire for protected teaching time was discussed.

‘Time is probably the main thing, if we had allocated time during rotations to teach then obviously you are going to have the sort of feasibility to do formal teaching rather than just that ad-hoc teaching.’

Perceptions of the foundation doctor job role was a further challenge discussed, with the belief that teaching was not part of their specified role despite it being a part of the training curriculum.

‘I like teaching but then you have to prioritise what we are being paid to do and actually that’s not necessarily teaching, like it’s a teaching hospital and we have to teach as part of our curriculum but it’s not part of our sort of job role as far as I’m aware.’

Another identified barrier was lack of opportunity or awareness of opportunities to teach. There was a feeling of being ignored or under-utilised by consultants and by the medical school who could do more to encourage their foundation doctors to teach.

‘[the medical school] at the start of the year...could ask if anyone’s interested in doing communication skills sessions and wants to volunteer for them.’
The foundation doctors also voiced anxieties about their own confidence in teaching and not wanting to have a negative impact on the student’s knowledge or attitudes.

‘if you’re not… hot on that topic yourself and your confidence to teach them, you are potentially making the students worse because you are teaching them bad habits.’

3.2.3 Junior Doctors Want Tailored Support Including Focused Training, More Opportunities to Teach and Appropriate, Constructive Feedback

There was a strong desire among the foundation doctors for training to meet their specific development needs and availability around their clinical commitments. They spoke about the role ‘Teach the Teachers’ courses could play in developing their teaching skills.

‘Teach the teacher I think is a really good baseline to actually start thinking about different ways of teaching and how best to communicate information.’

However, the difficulties foundation doctors have in attending such structured courses was also mentioned. Other ideas discussed by the doctors regarding training involved incorporation into their mandatory teaching days, using study leave time and e-learning training.

‘So, you have 15 days a year extra, five each rotation, you could easily take half a day’s study leave to do teaching with the medical school couldn’t you?’

Several key topics were mentioned regarding what content the doctors wanted included in any training. The doctors recognised that a large part of their teaching role is giving feedback to students on clinical skills within the ward environment. They therefore felt that teaching on this would be beneficial. The doctors also wanted content on how best to teach under time limitations or in ad hoc situations. They understood that this type of teaching makes up much of their practice and therefore want help in improving this area of their skills. Suggestions included critiquing a clinical skill, teaching a topic in 5 minutes or how to quickly assess a student’s prior knowledge.

‘We don’t know when we are going to get time on the wards but we might get five minutes, ten minutes, half an hour… it might be worth knowing how to best utilise those sorts of time limitations.’

A further discussion was had on the importance of receiving feedback as a part of their teaching development. The doctors wanted constructive feedback on their teaching and they wanted this feedback from tutors with a background in medical education. They valued this form of feedback from other educators over student’s feedback due to the understanding that student feedback is affected more by social influences, such as not wanting to upset their tutor. The doctors also suggested developing formalised drop-in sessions to make this style of feedback easier to obtain from a tutor with an interest in medical education.

4. Discussion

4.1 Interpretation

Teaching is felt to be a core element of being a foundation doctor as demonstrated by almost all the doctors in this study saying that they felt it was an important part of their role. The doctors enjoyed teaching and this motivated them in finding time to do it, more so than it being a curriculum item. This study did not quantify the percentage of doctors that enjoyed teaching, but it is a sentiment supported by Qureshi et al (Qureshi et al., 2013) with 96% of their respondents enjoying their teaching role.

The style of teaching delivered by foundation doctors included small group teaching, bedside teaching and ward supervision with a smaller proportion delivering lecture-based sessions. The doctors felt that the teaching they gave was usually informal and ad hoc in nature. The doctors desired bespoke training on how best to teach under time limitations. Suggestions for this type of content included how to critique a skill and how to teach a topic in 5 minutes. For example, the ‘5-minute moment’ which gives a simple framework to help organise material and provide a structure for time limited teaching (Chi, 2016). The participants also felt that a large proportion of their teaching time was spent giving feedback to students on their performance of skills or practical procedures, this was an element they highlighted as wanting more training on in future. A survey of consultants and junior doctors regarding desired topics for consultant teacher training also included giving feedback constructively. However, other topics that ranked highly for consultants were different to those for foundation doctors and included keeping up to date as a teacher, building a good educational climate and assessing the trainee’s learning needs (Wall & McAleer, 2001). This highlights the need for specialised training for foundation doctors that is tailored to their specific needs.

The foundation doctors identified several challenges to their teaching through both the questionnaire and FGDs. As found by previous studies (Below et al., 2018; Gill et al., 2008; Qureshi et al., 2013) the most common obstacle discussed by the doctors was lacking time to teach. As the need for service provision increases due to the added pressures felt
throughout the NHS, the time available for training reduces. NHS organisations were perceived by junior doctors to not value teaching due to lack of provision of dedicated teaching time and prioritisation of limited resources towards patient care (Charlotte Hayden et al., 2021). It would appear that this strain is also felt by senior clinicians with 69% of consultants in a survey stating that other clinical activities take priority over teaching and 95% saying they did not have enough time to teach (Darragh et al., 2015). A similar study of junior doctors in Sweden, found that a positive educational workplace culture and support from colleagues and staff was important in facilitating junior tutorship (Below et al., 2018). To overcome these challenges, the foundation doctors in this study desired protected teaching time within their clinician hours. This could be in the form of protected slots within their rotas or having the ability to utilise some of their study leave allowances for teaching purposes. These recommendations would require support from individual departments within employing trusts and the wider UK foundation programme.

Similar to other studies of junior doctors providing tutorship (Below et al., 2018), foundation doctors recognised the importance of receiving feedback to improve their teaching and desired this feedback to ideally be given by individuals with a background in medical education. They felt this would enable them to learn more about incorporating educational theory into their sessions and broaden their own knowledge in medical education. This is similar to an innovation designed by the University of Edinburgh who offer a clinical educator programme. This programme enables a clinician to work with an educationalist to identify areas of their teaching for development before partaking in a process of observation and feedback to enable reflective and reflexive learning (Morris & Swanwick, 2018).

4.2 Strengths and limitations
Strengths of this study include its mixed methods approach and sequential design meaning that FGD data built on the results from the questionnaire. Its limitations include being a one site study and utilising convenience sampling open to selection bias. Over 50% of respondents also attended the same medical school which could bias the data particularly regarding previous teacher training exposure.

4.3 Recommendations
Training foundation doctors to be teachers is the joint responsibility of medical schools, local trusts, and the foundation programme. The medical school has the best access to educationalists who could provide constructive training opportunities. The schools also have a vested interest in improving the quality of the teaching given to their students and should do this through harnessing the foundation doctor’s enjoyment of teaching and desire to give back to those who have helped them. The local trusts and foundation programme require their doctors to gain skills in teaching. These organisations should therefore open communication channels with medical schools to review current educational programmes and improve access to tailored training initiatives for their foundation doctors.

5. Conclusion
This study has shown that foundation doctors undertake a significant amount of teaching both inside and outside of their working hours and there is a clear desire within this cohort of doctors for additional training. These doctors utilise different teaching methods to their seniors and therefore any training should focus on these methods such as ad hoc sessions, ward supervision, bedside and small group teaching. In addition, local employing trusts, medical schools and the UK foundation programme could do more to support foundation doctors’ development as educators by giving them protected time and formalised feedback opportunities. Foundation doctors could be an untapped resource to support the medical school expansion plan in educating the increased numbers of medical students over the coming years.

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HP & VF designed the study. HP undertook data collection and analysis. All authors drafted the article and approved the final version.

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