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Bedside teaching – insights into the medical student experience and likely impact on future role as clinical teacher

Catherine Uhomoibhi¹ and Angela Kearns^{2*} 

Abstract

Background Medical students and doctors are rarely taught how to be educators, but are expected to perform the role of clinical teacher once qualified (Kloek AT, Van Zijl ACM, ten Cate OTJ, Perspect Med Educ. 5:325–331, 2016). Qureshi (Perspect Med Edu 3:69–72, 2014) suggests that development of teaching skills should be incorporated into the undergraduate medical curriculum, while Charnell et al. (Br J Med Pract. 11:a1103, 2018) advocate providing training after graduation and as an integrated part of an induction programme. No such strategies currently exist for our graduates, and there is a lack of opinion regarding their expectations and ability to deliver bedside teaching.

Methods This qualitative study sought to explore the varied experiences of medical students with regards to bedside teaching, and the influence such encounters may have on their future potential role as educators. In-depth interviews were conducted with fourteen final year medical students to gain a detailed understanding. Thematic analysis was conducted to organise the data into themes and sub-themes.

Results Medical students identified a range of affirmative and challenging aspects regarding their undergraduate experiences. All recognized important practices necessary to meet individual learning needs and highlighted the positive impact such experiences would have on their future role as educators. Students preferred receiving constructive feedback as opposed to positive or no feedback at all, and all acknowledged a sense of responsibility towards being a future educator.

Conclusion The findings of this study suggest that while medical students recognise the role of doctors as clinical educators, and strive to fulfil this responsibility based on their own undergraduate experiences, training in the art of clinical teaching would be of benefit to all.

Keywords Medical students, Undergraduate education, Clinical teacher, Bedside teaching

Introduction

Clinical bedside teaching, which involves student interactions with real patients, significantly shapes medical students' experiences, influencing their skills, attitudes and approaches to future professional practice. The benefits have long been established, especially in relation to the integration of communication skills, clinical skills, history taking and professionalism through role-modelling [1, 2]. Medical training has traditionally followed an apprenticeship model, which can be limited by teacher characteristics, patient population, and the possibility of

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learners being asked to perform tasks they may not have been adequately prepared for [3]. More recently undergraduate education has evolved into a more structured and outcome-based style through a competency-based model [4]. Patient bedside teaching can be delivered using a variety of models, which are rooted in different learning theories. It may utilise scaffolding to adapt teaching to the learners' levels of experience [5] or cognitive load theory through the selection of certain aspects of the patient's case according to the learning objectives [6]. Other techniques include doctor shadowing or role-modelling, which uses learning by observation [7], in addition to the opportunity for a more reflective approach with case based learning/discussion [8].

Bedside teaching for University of Galway medical students is an unbiased mixture of weekly formal and informal sessions. Unscheduled bedside teaching opportunities arise in the outpatient setting, on the ward rounds, and when shadowing the team as they engage in procedures and general patient care. These sessions take place at the different affiliated clinical sites, which include Mayo University Hospital, Galway University Hospital, Sligo University Hospital, Portlincula University Hospital, Merlin Park University Hospital, Roscommon University Hospital and Letterkenny University Hospital. By witnessing and partaking in patient care in a wide variety of settings, students learn to bridge the gap between textbook learning and the application of core principles and treatment guidelines in a real-world setting.

The Irish Medical Council [9] recognises the importance of clinical teaching for future safe patient care, and encourages all doctors to participate as an important component of medical professionalism. However, without proper instruction, clinical teaching sessions can often be of variable quality, unpredictable, pitched at the wrong level and involve approaches such as humiliation or intimidation [10]. Despite the expectation, doctors generally have less time for teaching due to high patient loads and staff shortages [11, 12]. Burgess et al. [13], have recommended that clinical educators should conduct structured sessions with set teaching goals and time limits, but many doctors have no formal instruction on how to realistically achieve this at the bedside, and are often unfamiliar with strategies to engage learners, the clinical curriculum and assessment methods. The education of medical students has rarely focused on them being clinical teachers themselves, and yet they are expected to perform this role competently once qualified [14]. Schooling medical students in the art of teaching has clear benefits, according to Meyer et al. [15], including advancing their own learning and setting the scene for a professional identity founded in education. This was echoed by Kumar et al. [16], and ter Brugge et al. [17], who recognised the

significant role that teaching plays in the development of the future clinician, their career development and progression. Formal clinical education courses exist in Ireland for doctors and allied health care professionals, but they are expensive and time consuming, making them less attractive for busy doctors with significant clinical commitments.

In an effort to create a future generation of effective clinical teachers, Qureshi [2] suggests that development of teaching skills should be incorporated into the undergraduate medical curriculum, while Charnell et al. [18] advocates providing training after graduation and as an integrated part of an induction programme. Other studies show that a significant proportion of physicians, particularly those early in their careers, would have liked some education training before commencing teaching within a program [19]. Ter Brugge et al. [17] reported that only 25% of Dutch medical graduates felt prepared by their medical school for a teaching role, and recommended the development of a peer teaching programme in the curriculum to enhance undergraduate teaching skills. No such strategies currently exist for our graduates, and there is a general lack of opinion from graduates and students regarding their expectations of and ability to deliver bedside teaching in the clinical environment.

Being physicians and clinical educators ourselves, it is our understanding that the roles of 'clinician' and 'teacher' to the next generation of doctors in our work are intrinsically linked. However, it can be difficult to fulfil both roles adequately in the context of a challenging hospital environment with many competing interests both in and out of work. From our interactions with other colleagues, we are aware that not every doctor shares the same desire or capacity to teach. We are also cognisant of the additional pressures and challenges faced by female medical students in a traditionally male-dominated field that can impact their learning experiences and desire to be involved in clinical teaching at a later stage.

Much of the current literature draws attention to the benefits of bedside teaching, and the expectation for doctors to be productive teachers within a demanding clinical setting. What is less well documented, is what student opinion is concerning fulfilment of individual learning needs during bedside teaching, and whether their own experiences impact their confidence and abilities to be successful educators during their medical careers. The purpose of this research was to explore the knowledge, attitudes and planned behaviours of medical students regarding future bedside teaching sessions, and the influence this may have on how they plan to carry out teaching sessions once qualified. It is estimated that this study will help to bridge the gap between the learning needs of the students at bedside teaching and their own teaching

capabilities. It is also anticipated that such knowledge will enhance the notion that all medical teachers are role models, who not only have a responsibility to transform medical students into safe doctors, but have a duty to inspire a future generation of effective clinical teachers.

Methodology

Ethical approval was obtained from University of Galway College of Medicine, Nursing and Health Sciences Research Ethics Committee. All University of Galway final year medical students based at Mayo University Hospital during the study period (March and April 2020), were initially invited via email to take part in the study. A snowball sampling approach was used, where initial participants were asked to endorse interest to their peers who could also add to the study. This was necessary to gain sufficient numbers due to the students' varying schedules whilst on clinical rotations. Final year medical students were deemed to be best placed to provide insights regarding their bedside teaching encounters, having had the most recent and most substantial experience as learners, after five years of medical school.

An information sheet indicating the purpose of the research was provided and confidentiality was guaranteed. Following recruitment, written consent was obtained from each of the fourteen participants prior to conducting interviews. In-depth semi-structured one-on-one interviews with the medical students were carried out using an interview guide with open-ended questioning (Appendix 1). The decision to conduct interviews was considered appropriate for this study as the depth of meaning in relation to bedside teaching was important, and this project was primarily focused on gaining insight and understanding [20]. The interview questions concerned bedside-teaching experiences at the seven affiliated university teaching hospitals, and were conducted by just one of the researchers throughout, which further provided consistency across the different one-to-one interviews. Confidential interviews were audio-recorded to facilitate subsequent transcription and analysis of results. Face validity was the chosen method to ensure that the interview questionnaire created by the authors was appropriate for the purpose of the research.

A qualitative social constructivist approach [21], was used in order to gain direct and unbiased opinions from the study participants. This methodology was considered to be the most appropriate for our study, as it emphasizes the role of learning through social interactions, with phenomenology permitting the exploration of the subjective lived experience as encountered by the individual [22]. Thematic analysis of the data was initially carried out by both researchers independently. This process was conducted through gaining familiarity with the data, coding

appealing facts, collating the codes into potential themes and creating a thematic map [23]. This allowed for both researchers together to collaboratively refine the specifics of each theme and sub-theme, and to ensure that all related back to the objectives of the research. Students recounting their personal learning experiences in the first person were utilised through the use of open-ended interview questions, which enabled the incorporation of direct participant quotations in the final write-up [20]. Although both researchers were qualified clinicians, one researcher currently held a formal academic tutor role through the university, and the other participated in informal bedside teaching as a clinician working in one of the affiliated hospitals. This provided researchers with prior insight into both forms of clinical teaching made available to medical students.

Results

Fourteen final year undergraduate medical students (8 male, 6 female) were interviewed with none of the participants withdrawing consent during or after the research process. Three main themes were identified from the data which were intertwined with the proposed aims of the study (Fig. 1). The themes and associated subthemes are outlined below (Tables 1, 2 and 3).

Discussion

The results of this study highlight a wide range of experiences, both positive and negative, with clinical bedside teaching. They depict a generally favourable view by medical students towards clinical bedside teaching and the desire to become clinical educators in the future. Key insights from this study are as follows:

Personal motivation for being a future clinical teacher

Our research illustrates how medical students recognise a variety of personal benefits to combining the future roles of both doctor and teacher. Previously echoed in the literature [24, 25], our participants reported a sense of fulfilment and altruism as key motivators to helping learners learn. Many enter medical training with a strong desire to help others and to contribute positively to society. Teaching in Medicine permits this desire to be extended beyond patient care and towards educating those who will care for patients in the future.

These factors coupled with a reported obligation to teach junior colleagues, convey an element of gratitude for the positive undergraduate learning experiences they themselves encountered, and many identified teaching as a form of recompense for their own training. Other contributors highlighted their intention to cultivate an inclusive and supportive learning environment in order to inspire and motivate all future

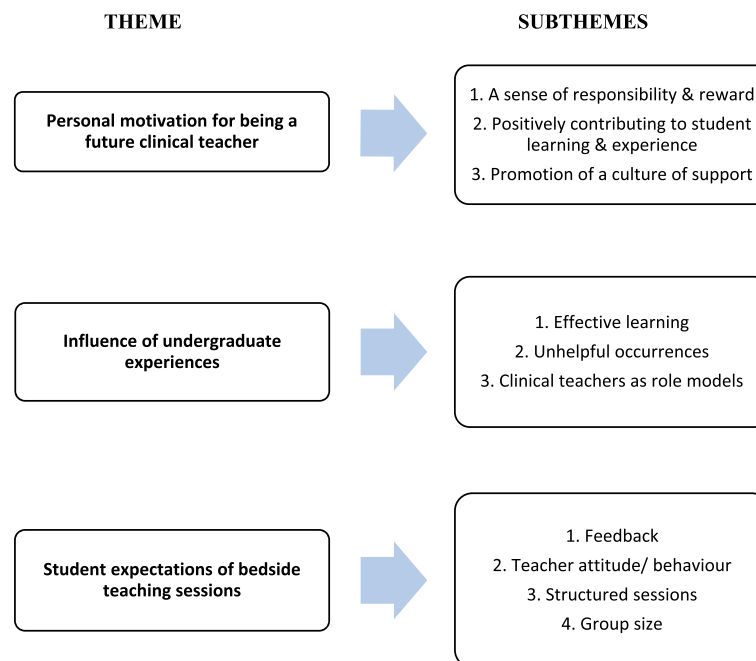


Fig. 1 Theme and subthemes

learners, clearly recognising the importance of creating a psychologically safe atmosphere to maximise enjoyment in learning [26]. Not surprisingly, Von Below et al. [27] indicate that Junior doctors are appropriate and effective clinical teachers, as they are often viewed as amenable and empathic, and have a tendency to best understand the learning needs of medical students, having recently been in that position themselves. Studies have revealed that professional education as a career goal is less attractive to students and young doctors, due to a lack of recognition and challenging metrics of professional success [28]. Nevertheless, a number of motivational factors have been described for students to participate in clinical education such as improving their personal learning as physicians, the desire to contribute to the future generations of medical practitioners, and an understanding that teaching is a core aspect of a physician's identity [28]. In response to an open-ended question regarding the most important aspects for training physicians to teach in the clinical environment, three broad themes emerged from a study by Nothman et al. [29], systemic factors, reward and recognition, and plans with clear goals and objectives. While not clearly defined, the phrase 'systemic factors' indicates resources and support from the physician's organization, institution, and/or environment, things that are not directly under the individual physician's control [28].

Influence of undergraduate experiences on role as future clinical teacher

This study clarifies how experiences as an undergraduate can inspire medical student confidence and motivation to be a future clinical teacher, particularly if clinical interactions were constructive and supportive. It is important to note that not all doctors are capable teachers even when armed with excellent medical knowledge, as some engage in inappropriate behaviours and teach by humiliation. Colebrander [30] reminds us that such practices still persist and many participants in this study reported witnessing or being subjected to intimidating teaching styles. Such encounters inevitably served as a valuable lesson for our participants on how not to teach, ensuring a determination to do better when they themselves are in the role of clinical teacher. Learning is an active process and for an effective teaching session to progress, the learning needs of the students must always be taken into account [31]. Learners learn more successfully when new knowledge and skills are applicable to real life situations, and when they are provided with opportunities to enhance their practical skills and develop critical thinking through active learning [31]. Many participants recalled accounts of enjoyable learning experiences, where they were able to hone their history-taking and clinical skills under Lecturer supervision, and enhance their critical thinking through reflection on the case encountered. During such learning events, knowledge was consolidated and

Table 1 Subthemes and descriptive examples of Theme 1 – *Personal motivation for being a future clinical teacher*

Theme	Subthemes	Definition of subthemes and descriptive examples
Personal motivation for being a future clinical teacher	A sense of responsibility and reward	Many participants mentioned a sense of responsibility to teach students similar to the way that doctors taught them when they were students, in addition to the personal rewards: <i>"It's very much where the people who have gone ahead of you, who are experienced in the profession, that they would then teach the younger people coming through and teach different tips and tricks like any other trade"</i> (P2) <i>"It's personally rewarding when you feel like you're educating the next group and then another part would be whenever you teach something, you reinforce it in your own learning and you get to know something better by them asking you questions. It makes you think of things in different ways, it's also good for your own development and learning of a topic"</i> (P2) <i>"I think it's important to give back because there's all these people throughout my medical education that gave their time freely to me, so I think it's important to give back to the younger generations and help them"</i> (P6)
	Positively contributing to student learning & experience	Participants revealed a desire to contribute to the education of the younger medical students in an effort to help prepare them for the many challenges ahead of them in Medicine: <i>"I've never always been the smartest or the genius in the room or in the group, or in a bed side, and I felt sometimes left behind, whereas I've had experiences with teachers, to them it didn't matter that one person shone, but that everybody got it, and everybody came up to that standard where they could be safe doctors."</i> (P1) <i>"I want to become the kind of tutor that makes students feel comfortable, and makes the learning environment safe and not stressful, because I have often found bedside tutorials to be sort of daunting... You don't know what you're going into and don't know what you will be get asked... So I want to be the tutor that makes students feel like they can actually learn anything"</i> (P14)
	Promotion of a culture of support for students	From their personal experiences as medical students, participants appreciated those teachers who were supportive of them regardless of their rank in the class, and were determined to act in a similar role for their future students: <i>"I'd really like to be a part of our culture of courage, culture that motivates, that promotes healthy learning, that promotes learning and growing, not just knowing everything today, but continually growing, continually improving, and I really like to just journey with students who may not be the stars, but just to be there for them and teach them..."</i> (P1)

applicable to the real life clinical setting, and their future role as doctors.

Many participants cited being impressed by excellent teachers, whom they considered to be role models. Such figures inspire and motivate those working with them to grow and develop in order to achieve

their full potential [32]. Sharif et al. [33] inform us that great teachers have an abundance of knowledge, are well organised, and provide timely and appropriate feedback, but it is their enthusiasm, encouragement, support and ability to listen that truly defines them. In addition, providing a positive learning environment,

Table 2 Subthemes and descriptive examples of Theme 2 – *Influence of undergraduate experiences on role as future clinical teacher*

Theme	Subthemes	Definition of subthemes and descriptive examples
Influence of undergraduate experiences on role as future clinical teacher	Effective learning	According to participants learning must be applicable and relevant to their future role as doctors: <i>"If the patient had a murmur she would get every single one of us to listen to it and make sure that we heard it, ... The kind of stuff that you hear about, you read about in books, but you might not necessarily understand, and she made sure that every person in the group understood what it was before she moved on to the next thing, which I found very good"</i> (P3) <i>"I remember doing an abdominal exam, she would be literally there with you, making sure that you palpated it correctly"</i>(P7) <i>"I just felt that it was kind of my first time seeing a patient like that on the wards, and I just felt it was very good. There was a lot of signs to look out for and how you could approach it and just be more comprehensive. I went in knowing very little but came out having a very good knowledge..."</i>(P8)
	Unhelpful occurrences at clinical teaching sessions	Several participants described the experience of being subjected to inappropriate and poor clinical teacher behaviour: <i>"All of us just felt so embarrassed because he made comments such as "how on earth do you not know this... this is first year anatomy, this is absolutely ridiculous. Who is your tutor?" And then you start to feel really, really... just terrible about yourself. I don't think that I learned even though he did teach and he did know the information himself, but you just felt talked down to. sometimes people have a lot of knowledge in their head but not all doctors can teach"</i> (P1) <i>"I think I remember one bedside tutorial where it was with a consultant and the patient was there, and he was very harsh on the students and it got to the point where the patient got very awkward because he started to feel bad for the students. There was just not a nice vibe surrounding it as a whole because even the patient realized it was not very nice and his co-operation started to get less"</i> (P10) <i>"It was a group of about 6 or 7 of us and we didn't get much hands-on experience. He would also throw random questions at people, so everyone was on edge. And if they got the question wrong, they were embarrassed. You end up focusing more on not messing up, as opposed to learning, so as not to embarrass yourself..."</i> (P12)
	Clinical teachers as Role Models	Many participants identified positive attributes in their clinical teachers: <i>"Your tutors who are also doctors, they show different ways of communicating to the real patient, different ways of reaching the patient, of asking them to do certain things"</i> (P1) <i>"...a lot of the people as students, you'd look up to are the people that take the time to spend with you and to teach you, especially the consultants"</i> (P6) <i>"So I think a good clinical educator will definitely affect how a student perceives him/herself as a doctor"</i> (P11) <i>"Having really good educators, doctors or tutors. You would leave a tutorial thinking 'God, I'd like to be like them. I'd like to have that likability, confidence and knowledge'. And not even just knowledge, but the ability to impart that knowledge to others. It's very impressive. When you leave a tutorial like that, it is quite inspiring. The great tutorials stand out to this day"</i> (P12)

having a steady awareness of the curriculum and an ability to incorporate the learning needs of the students, feature readily as essential characteristics for role models in medical education [34, 35]. Several participants were aware of the enjoyment and contentment

experienced by doctors in their role as teacher, and were conscious of the ease of learning from such individuals. This led to many participants being inspired to consider their own potential contribution to medical education in the future, in order to facilitate the

Table 3 Subthemes and descriptive examples of Theme 3 – *Student expectations of bedside teaching sessions*

Theme	Subthemes	Definition of subthemes and descriptive examples
Student expectations of bedside teaching sessions	Feedback	According to participants learners need to know where they are going wrong and how to improve their performances <i>"...the only thing worse than bad feedback is no feedback..."</i> (P5) <i>"I didn't learn anything. I just, you know, was winging it, getting by, but in an exam you need someone to be like 'no that's why you do this'..."</i> (P7) <i>"The reason it was a good bedside tutorial experience was because when he came back into the room, we went over the history, the exam, the management plan, and then we went through what we were missing at the bedside with the patient, what could have been more important to ask, and what signs or symptoms we didn't see or recognize. So it kind of consolidated the learning all together, and we realized the mistakes we made, and he helped us to improve it, so that the next time we see a patient like that, we have a better approach to it and better understanding."</i> (P9) <i>"The feedback is usually the most important part. Just bringing you to a patient, doing an exam and not getting any feedback is not particularly helpful..... I think it's important not to sugar-coat things too much either- to tell you what you did well, what you didn't do well, and what you need to improve on, and not anything personal or extreme like 'you're really poor' or 'this is not acceptable'. Instead, just saying things like 'You need to improve this for when you're working'. I think that's the most important type of feedback"</i> (P10)
	Teacher attitude/ behaviour	Participants mentioned that learning is maximised when they are in a safe learning environment <i>"...they have an encouraging attitude, they're willing for everybody to learn"</i> (P1) <i>"Someone that can communicate well with patients. If a patient trusts the educator and knows what the main goal of this is, and why they're helping, and can explain clearly to the patient the benefit of this, the patient interacts well with the students too, and I suppose being kind, and someone you can trust as well so that there is confidentiality there"</i> (P4) <i>"She was a really encouraging. She'd say, 'Good what could that be a sign of?' So it wasn't just kind of encouraging, it wasn't a dead pan stare, and she was saying.... 'Okay, good. Now we will move on to this'"</i> (P5) <i>"Patience, because the student will get things wrong or may be slow or not know certain answers. You can't expect them to be perfect"</i> (P12) <i>"I think they should be just nice if someone messes up or doesn't know, and just kinda move on and not embarrass the student or focus on them. Or if they can tell that someone is shy and they don't want to answer, then maybe stay away from them"</i> (P14)
	Structured sessions	Participants preferred organized teaching sessions with a clear purpose, defined teaching points and relevant learning outcomes: <i>"...a tutor needs to take enough preparation to be like 'this is the topic we're doing, this is what I want to ask, these are the things you should be looking for'.....and has examined the patient in advance, that they haven't just gone to the Nurses station saying 'can I have a Resp patient' because then they're as lost as the people that don't know the diagnosis. And they don't know where they're going"</i> (P5) <i>"One tutor, she had like five or six names every time, so if one was gone she knew another one, she knew the story with all of them so we were never left high and dry, whereas another tutor, never had any one prepared, and would be like 'students find people for the student thing' and then that one patient would be gone or something, and then it would be like a car crash"</i> (P7) <i>"I think it's important to go in knowing what you want the students to learn, some learning outcomes, all that kind of stuff, and generally, the poorer ones I've have tended to kind of struggle to get... to communicate what they want the students to know."</i>(P6)
	Group size	All participants preferred smaller groups of students as larger groups were repeatedly viewed as being a major barrier to learning <i>"Sometimes performance anxiety kicks in in bigger groups.....sometimes the patient themselves get performance anxiety, they don't give a good history if they're nervous or self-conscious"</i> (P4) <i>"There were too many students, I think that limited the scope of improving your knowledge and asking questions with the patient. We couldn't really conduct it appropriately, so it wasn't really beneficial for us"</i> (P9) <i>"So if there could be a way to keep it in smaller groups so everyone gets a chance"</i>(P13) <i>"If you have a small size like three or four, and you can really go in depth then and get to know what each person's strength and weaknesses are, whether they're with communication, whether it's confident, whether it's knowledge, when it's practical skills, 'cause all those can be tested and evaluated in a bedside teacher"</i> (P1) <i>"I think smaller numbers works better, and that's why sometimes if we went in twos or threes I felt it was just a better learning experience because you were asked more questions, you got to do more of the exam and obviously that's kind of more beneficial in terms of the examinations"</i> (P8)

development of future competent doctors delivering safe patient care.

Student expectations of bedside teaching sessions

In addition to the various attributes of effective teachers, the ability to provide feedback was consistently favoured by medical students in order to exact improvement in their performance [36, 37]. Such sentiments were reiterated by our participants who preferred constructive feedback-in-action, that was readily provided at each clinical teaching session. Some participants placed a greater value on teachers who made corrections with a focus, not just on formal assessments, but on the learners working effectively and competently as future doctors. Burgess et al. [13] remind us that feedback has the greatest effect on student behaviour when it is based on direct observation and is immediate. In addition to helpful comments, participants appreciated being treated with respect by kind, patient, compassionate teachers, who excelled in providing encouragement to allow learners to grow into their future professional roles. Participants had very clear expectations of their teachers, preferring structured organised sessions with clear learning objectives, yet it is interesting that they cited time pressures as one of the main barriers to their own teaching intentions once working as doctors. In an effort to address this, teaching hospitals will need to invest in practical solutions such as protected teaching times for practicing doctors involved in education. Group size also featured as a concern for many participants. Wong and Chan [38] reported that bedside teaching was most effective with smaller groups, reflecting the consensus of the participants of this study. Smaller group size was desired by our participants, as it facilitated discussion, involvement in clinical examination and provided an enhanced opportunity to receive feedback in a low-key manner.

Limitations

Study limitations include the small sample size used ($n=14$). Hennink & Kaiser [39] suggest that data saturation can be achieved with a narrow range of between nine and seventeen interviews in Qualitative research. Open-ended questions were used during the interview process, but these cannot completely prevent all biases related to researcher-participant factors.

Conclusions

This study demonstrates that medical students are highly motivated to take on the role of clinical educators in their professional practice, largely influenced by their own undergraduate learning experiences at the bedside. They are aware of the attributes and practices necessary for effective bedside teaching, and the benefits it provides

in medical education. This study presents a student voice emphasizing that they utilise the hidden curriculum to be skilful clinicians for the patients they will care for, in addition to being valuable teachers for the students they will educate and mentor. The findings of this study also suggest that while medical students recognise the role of doctors as clinical educators and strive to fulfil this responsibility based on their own undergraduate experiences, training in the art of clinical teaching would be of benefit to all.

Appendix 1

Questionnaire/ interview guide

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1. What do you know about the role of a doctor as an educator?
 2. What experience do you have with bedside tutorials so far?
 3. How do you prepare in advance of a bedside tutorial?
 4. How have bedside tutorials been of benefit to you?
 5. Do you know of any barriers to bedside tutorials?
 6. Tell me about a good bedside tutorial experience and why was it good?
 7. Tell me about a poor bedside tutorial experience and why was it poor?
 8. What experience have you had with feedback – giving or receiving it?
 9. Are there differing dynamics depending on the grade of the clinical teacher e.g. Consultant, Registrar, SHO, Intern, clinical Lecturer?
 10. What qualities should a good clinical educator have?
 11. Can you see a future role for yourself as a clinical educator? What has influenced this? How might you prepare for this? What might prevent you from doing this?
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Authors' contributions

The authors contributed to this research as follows: Dr. Angela Kearns created the research proposal, applied for Ethics approval and revised the initial drafts of the write-up. Dr. Catherine Uhomoibhi carried out the interviews, transcribed the interviews and performed thematic analysis on the collected data. Both authors conducted the write-up including the results and conclusions and both approve the final submission. Both authors agree to be accountable for their contributions and to ensure that questions related to the accuracy or integrity of any part of the work, even ones in which the author was not personally involved, are appropriately investigated, resolved, and the resolution documented in the literature.

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Data availability

No datasets were generated or analysed during the current study.

Declarations

Ethics approval and consent to participate

Ethics approval was attained from University of Galway College of Medicine, Nursing and Health Sciences Research Ethics Committee.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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