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by Ray Samuriwo , Alison Bullock, Katie Webb, Lynn Monrouxe

"*Nurses whisper.*' Identities in nurses' patient safety narratives of nurse-trainee doctors' interactions"

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Abstract

Context: Nurses are integral to patient safety, but little is known about their constructions of identity in relation to their dyadic interactions with trainee doctors about patient safety and competence during the trajectory of a medical career.

Aim: We sought to examine how identities are constructed by experienced nurses in their narratives of patient safety encounters with trainee doctors.

Methods: Our qualitative study gathered narrative data through semi-structured interviews with nurses of different professional standing (n=20). Purposive sampling was used to recruit the first eight participants, with the remainder recruited through theoretical sampling. Audio recordings were transcribed verbatim and analysed inductively through a social constructionist framework and deductively using a competence framework.

Results: We classified seven identities that participants constructed in their narratives of dyadic interactions with trainee doctors in relation to patient safety: nurses as *teacher*, *guardian of patient-wellbeing*, *provider of emotional support*, *provider of general support*, *expert advisor*, *navigator*, and *team-player*. These identities related to the two key roles of nurses as educators and as practitioners. As they narrated these dyadic interactions, participants constructed identities that positioned trainee doctors in character tropes, suggesting gaps in professional competence: nurses as *provider of general support* was commonly narrated in the context of perceived deficits of personal or functional capabilities and nurses as *team-player* was mainly associated with concerns (or reassurances) around ethical capabilities.

Discussion and Conclusion: We shed light on the identities that experienced nurses construct in their narratives of interactions with trainee doctors to ensure patient safety, and to facilitate learning in practice about key tenets of medical competence. Nurses' work in ensuring patient safety and support trainee doctors' professional development merits greater formal recognition and legitimation.

Competing Interests: None

Introduction

Nurses are key actors in healthcare organisation and delivery, who influence the quality and safety of patient care. [1-8] Indeed, accounts of nurses directly intervening to ensure patient safety when they identify shortcomings in medical care have been referred to in studies of trainee doctors' transitions in their career trajectory.[9-12] Moreover, some trainee surgeons recognise how nurses in specialist and extended roles support them to develop their competence.[13] There are also a few reports of specialist nurses teaching senior doctors specific skills, or nurses facilitating trainee doctors' development of their professional identity and competence in relation to patient safety.[14, 15] Taken together, this suggests that nurses support the development of trainee doctors' learning in practice as part of their work within interprofessional teams. Through their interactions with trainee doctors, nurses define and locate themselves vis-a-vis trainee doctors at an interpersonal level which influences how they construct their respective identities and identification in the workplace.[16] This interpersonal level of identity is important as it focuses on role-relationships that influence behavioural obligations and expectations within the dyad.[16, 17] This study seeks to provide a deeper understanding of how nurses construct their own and trainee doctor's professional identities during dyadic trainee doctor-nurse interactions through their narratives of patient safety.

Influences on how professional identities in healthcare are constructed have attracted a great deal of interest.[18-23] Recently, thoughts have turned to the question of how physician identities are influenced within interprofessional interactions, including those with nurses.[24-26] Indeed, trainee doctors often narrate professional identity dilemmas as they come to terms with their roles and responsibilities in relation to patient care.[21, 27] Nurses are reported to provide informal interprofessional education and support to trainee doctors, enabling them to navigate the professional identity-related quandaries they encounter as they develop their professional competence.[9, 26, 28, 29] Evidence from different contexts therefore suggests that nurses and other healthcare professionals facilitate trainee doctors' learning in practice, which is integral to their development of professional identities as competent practitioners.[24-26, 30, 31]

While there are studies examining the roles of nurses in the formation of trainee doctors' professional identities and competence, these primarily come from the perspective of trainee doctors. Furthermore, the roles of nurses are highlighted as an aside rather than being the focus of study, or come from wider interprofessional narratives relating to medical students and clinicians from different disciplines. [24-26, 28, 29] Thus, relatively little is known about how nurses themselves frame the support they provide to newly qualified doctors as trainees develop their professional competence. We address this gap in the wider literature by analysing nurses' narratives of patient safety, focusing on how they construct the nurse-trainee doctor interactions and how they position themselves and trainees within this dyadic role relationship. The importance of such an exploration is that by doing so we can open up a discussion between nurses and junior doctors in an interprofessional educational space towards facilitating a greater understanding of various ways in which nurses and junior doctors can support one another towards better patient safety outcomes.

Theoretical framework

Our study is undertaken within a constructionist paradigm.[32, 33] Within this paradigm, our understandings of our worlds are not constructed by way of a cognitive structure or self-theory, but rather they are co-constructed through language, objects and social action. In other words, identity is constructed through narrative which juxtaposes the self to other(s), often through the use of character tropes or stereotypes.[35] Specifically, by virtue of how we narrate ourselves within an event, this impacts on how others are positioned (e.g. if I construct myself as a *hero*, 'others' present are likely to be positioned as *perpetrators* and *victims*).[36] We have agency in the telling of our stories and choose how to position ourselves when narrating events. We show the world as

we wish to show it, using discursive practices such as metaphors, character tropes (e.g., particular traits and behaviours, identity stereotypes) and plotlines as we narrate.[37] And within this approach, which is underpinned by Vygotsky's work, while knowledge is first developed through social, interpersonal and joint action, it is then subsequently appropriated into our psychology.[38] Thus, the influence of our constructions of self and others on our behaviours is contextually mediated.[34, 38]

Alongside our social constructionist framework, our study also draws on Cheetham and Chivers' competency framework.[44, 45] Here, competence can be conceptualised in relation to cognitive, functional, personal and ethical capabilities. We draw on this framework as a way of classifying the different domains of trainee doctors' competences at play during nurses' narratives of patient safety events. In classifying these dimensions, we aim to understand the different contexts in which nurses narrate their patient safety actions. Again, drawing on Vygotsky's work,[38] these contexts can be understood in terms of zones of proximal development where the "performances of an unskilled actor are interpreted by a more skilled actor as attempts at some well-defined skilled activity".[34, p.617]

Aim and research questions

Using a combination of inductive and deductive analysis, both considered within a social constructionism framework, we identify (inductively) the various ways in which nurses position themselves and trainee doctors by constructing relational identities within patient safety narratives. In this study we define trainee doctors as individuals who have passed their undergraduate medical degree in the past two years. We also delineate (deductively) the various contexts in which this happens in relation to different aspects of trainee doctors' professional competences. In doing so we address the following research questions:

RQ1: How do nurses construct their own and trainee doctors' identities in their narratives of patient safety events?

RQ2: In what areas of trainee doctor competence do nurses intervene?

Our objective is to classify the range of relational identities constructed by nurses through their narratives of dyadic interactions with trainee doctors, and the range of situations in which nurses identify their facilitation of the development of trainee doctors' professional competence in patient safety situations.

Methods

Study context and participants

We undertook a qualitative narrative interview study. Our study context comprised two Welsh healthcare organisations providing acute patient care across 19 hospitals in which nurses of different professional standing interact with trainee doctors. We recruited a diverse range of ward-based nurses and nurses in extended roles from six hospitals, including three large urban secondary hospitals and three smaller community hospitals. Of the 20 participants, 18 (90%) identified as female, pseudonyms have been used for all participants to maintain confidentiality (Table 1). In terms of seniority, all bar three held a senior or extended role above staff nurse and 15 had at least 14 years' experience; the average number of years' experience in nursing was 21 years.

Table 1: Participant characteristics (n=20) by specialty

Pseudonym	Experience (years)
General Medicine	
Charlene* (APN)	26
Hannah* (SSN)	25
Esther (SN)	16
Margaret (SN)	3
Specialist Medicine	
Pamela* (CN)	39
Julia* (CN)	33
Debra* (NP)	36
Oriana* (SLN)	20
Gwen* (LN)	17
Irene* (DLN)	18
Specialist & General Medicine	
Nathan (SSN)	30
Valerie (SSN)	14
Ann (SSN)	7
Sophie*(SSN)	7
Claire (SN)	6
Acute & Specialist Medicine	
Wallace (APN)	6
Surgery	
Tracy*(NS)	36
Specialist Surgery	
Miranda* (NS)	18
Brenda* (APN)	24
Ffion* (SLN)	37

Note: CN = Consultant Nurse; NS = Nurse Specialist; NP = Nurse Practitioner; APN = Advanced Nurse Practitioner; LN= Lead Nurse; DN = Deputy Nurse Lead; SN = Staff Nurse; SSN = Senior Staff Nurse *indicates participants who provided a longitudinal narrative

Recruitment and sampling

This study was granted ethical approval by the Cardiff University School of Healthcare Sciences Research Governance and Ethical Approval committee. Research Governance approval was granted by the Welsh Healthcare Organisations in which the study was undertaken. Study details were emailed by the Research and Development office in each organisation to potential participants. Nurses interested in taking part contacted the lead researcher (RS) to arrange an interview. We used a purposive sampling approach to recruit nurses who had experience of working alongside trainee doctors in clinical practice. Using this approach, we recruited eight nurses in acute medical and surgical wards. After this, theoretical sampling was adopted to recruit participants in line with insights and themes identified from the provisional analysis.[46] The initial purposive sample of ward-based nurses directed us to recruit more senior nurses and nurses with extended roles because of the part that they were said to play in the development of trainee doctors' professional competence.

Data collection

All participants were interviewed individually using a semi-structured narrative method. Our interview schedule was predicated on a prior review of relevant literature. All interviews were conducted by RS and lasted between 45-70 minutes. All participants provided their written informed consent. The interview encouraged participants to freely express their views and experiences and to recall specific memorable incidents.[47-49] To mitigate concerns of privacy and confidentiality, interviews were conducted in a private room away from the ward. All interviews were recorded digitally, anonymised and transcribed verbatim.

Data analysis

Focusing on participants' narrative accounts of their dyadic interactions with trainee doctors we identified their constructions of the identities they narrated for themselves and how they positioned trainee doctors with whom they interacted. We then mapped the support provided by participants to the specific professional capabilities outlined in the Cheetham and Chivers' conceptual framework of professional competence (see Table 2).[44, 45]

Our approach was iterative with analysis commencing at the onset of data collection. This allowed theoretical and conceptual insights to be developed and tested. Initial data analysis of two interviews was carried out independently by two researchers (RS and LVM). The thematic framework was discussed by other members of the research team (AB and KW). Initial coding and analysis of all subsequent interviews was undertaken by RS, using Nvivo.11. This was further discussed with the research team and additional analysis was performed independently by AB, KW, and LVM. Finally, all researchers came together to agree on our conclusive coding framework.

Reflexivity

A reflexive approach was adopted throughout data collection, analysis and manuscript writing to maintain an awareness of our impact on this study and to enhance its credibility and transferability.[32, 50-52] During discussions we reminded ourselves of the nature of the data collected (narratives *of* events, rather than events themselves), exploring the impact of our differing perspectives on our analysis and interpretation of the data. We considered the extent to which the lead researcher's (RS) previous career as a Clinical Academic nurse (now in Academia) added an emic perspective to data collection, analysis and interpretation, including that participants would have felt more at ease sharing their narrative with him. Our research team further comprised experienced academic medical educators with disparate but interrelated intellectual outlooks underpinned by the humanities and social sciences (RS), education (AB, LVM), and psychology (KW, LVM).

Table 2: Cheetham and Chivers' framework of professional competence

Capability	Core elements	Health service examples
Cognitive (knowledge)	• <u>Tacit/practical</u>: knowing in action, linked to specific functional or personal competencies • <u>Technical/theoretical</u>: underlying knowledge base • <u>Procedural</u>: knowing how, what, who, when • <u>Contextual</u>: knowledge about the organisation, profession	• Knowledge of the operation of equipment • Knowledge of anatomy, physiology, pharmacology, signs and symptoms • Treatment and discharge procedures, NHS procedures • Knowledge of treatment facilities, hospital and ward geography
Functional	• <u>Occupation specific</u>: profession specific tasks • <u>Organisational process</u>: planning, monitoring, implementing, delegating, evaluating • <u>Cerebral</u>: literacy, numeracy, IT literacy, diagnosis, evaluating • <u>Psychomotor</u>: manual dexterity, practical skills	• Patient examination, medical reporting • Treatment planning, monitoring • Diagnosis, prescribing • Taking blood, suturing, wound dressing
Personal (behavioural)	• <u>Social/vocational</u> • <u>Intraprofessional</u>	• self-confidence, thinking-on-feet, calmness, control of emotions, interpersonal listening, task-centredness, stamina, presentation • collegiality, sensitivity to peers, conformity to professional norms
Ethical (values)	• <u>Personal</u>: social/moral sensitivity, adherence to: law, religion, personal moral code • <u>Professional</u>: adherence to professional codes, self-regulation, environmental sensitivity, client (patient centredness, ethical judgement	• Abiding by social and moral expectations • Respecting patient confidentiality, maintaining patient safety

Results

All participants were able to describe patient-safety events involving trainee doctors during clinical practice, sometimes these were specific to one occasion, at other times these were general incident narratives (e.g. *"it happens all the time…"*). We classified seven key nurse identities narrated: Nurses as *teacher*, *guardian of patient-wellbeing*, *provider of emotional support*, *provider of general support*, *expert advisor*, *navigator*, and *team-player*. These identities related to the two key roles of nurses as educators and as practitioners. As participants narrated their patient safety stories, alongside their own identities, we identified a range of character tropes to which trainee doctors were positioned. These character tropes represented trainee doctors as particular kinds of people in relation to nurses' actions within their patient safety narratives. We structure our findings thematically by outlining the ways in which we identified nurses narrating themselves, alongside their positioning of trainee doctors, and the deficiencies in professional capabilities they addressed.

Educator role

Nurse as *teacher*: The most commonly constructed identity within nurse-trainee doctor patient safety narratives was nurse-as-teacher (Table 3, Excerpts 1-4). This *teacher* identity was constructed as a nurse who nurtures and guides medical trainees, providing information and explaining actions and processes through words such as *"teach"*, *"inform"*, *nurture"* and *"support"*. Sometimes this comprised informal, ad hoc, processes occurring in situ (e.g. on wards, during trainees' patient care), but also narrated as being more formalised and planned (e.g. teaching trainee doctors to their specialism). Sometimes they asserted identities as expert practitioner and mentor, overseeing trainee doctors' learning of the craft of medicine in the workplace. Here, nurses were narrated as expert practitioners and tutors in response to their own and trainee doctors' identification of a deficit in trainee doctors' knowledge or skills.

Within these narratives, trainee doctors are often positioned as *willing apprentices* when teaching occurs in a focused educational activity (Table 3, Excerpts 1 & 2). For example, Brenda (Table 3, Excerpt 1) positions herself as a skilled educator, using a form of Socratic questioning as she guides the trainee *"jollying them along in the right direction to make the right decision"*. As she tells her story, she positions the trainee as a *willing apprentice*, taking the initiative to call up the nurse and invite her to *"come and support me"*. Here we can see Brenda narrating trainee doctors readily identifying their own need to develop aspects of their cognitive and functional capabilities.

Trainee doctors were also positioned as *naïve practitioners* when teaching occurs whilst trainee doctors are providing patient care (Table 3, Excerpts 3 & 4). For example, Rachel (Table 3, Excerpt 4) narrates a teaching moment focusing on processes and procedures for discharge dependent upon patient needs. In doing so she narrates her reported talk,[53, 54] gently informing the trainee of the timeline for the procedure *"well actually, you know…"*. In asserting this, she comments that trainees are *"sometimes not alive to that"*, again, suggesting a degree of *naivety*.

Nurse as *expert advisor*: Related to their educator role, we also identified the nurse-as-expert-advisor. Here, participants narrated this identity specifically in response to trainee doctors' actively seeking their help to address a gap in their knowledge of the patient, medical practice, or professional capabilities. Interestingly, in our data, nurses never narrated themselves as being the instigator of offering 'advice' – as such, in these narratives, trainees were invariably constructed as *advice seekers*. For example, in both Pamela and Claire's narratives (Table 3, Excerpts 5 & 6) it is the trainee who needs to make the first move: *"if they want advice…we can give it to them…we're on the other end of a phone…"*

Nurse as *navigator*: Another identity related to their educator role is that of nurse-as-navigator (Table 3, Excerpts 7-9). Here, rather than focussing directly on patient care, teaching comprises

assisting trainee doctors to navigate their ways around the wards: where to find key resources and materials to deliver patient care in a safe and timely manner, enabling them to fit in with the culture of the ward itself, and working out how certain consultants want things to be done. In these narratives, trainees are positioned as being *lost*, and in need or orientation. For example, Valerie (Excerpt 8) talks about how she shows *"them where things are and orient[s] them"*, and Ann (Excerpt 9) tells us how, because trainee doctors don't know how their specific consultant likes things done, they *"use us to guide them"*. Interestingly this is narrated within a respectful and reciprocal relationship involving trust. Given the above, the nurse-as-navigator identity appears to mainly address issues around cognitive (contextual) knowledge and personal (intraprofessional) behaviours.

Nurse as *provider of general support*: Finally, within their educator role we identified the nurse-as-provider-of-general-support (Table 3, Excerpts 10-12). This was narrated mainly during stories of unsolicited, informal interaction. This identity was constructed as a general offering of themselves to the trainees, and in the hope that trainees were aware that they are available for them. For example, Wallace (Table 3, Excerpt 10) talks about how he specifically goes into the doctors' mess with the intention of offering support. In doing so he positions the doctors as requiring nurturing, facilitating both their personal and functional capabilities. Likewise, both Sophie and Tracy (Table 3, Excerpts 11 & 12) similarly position *trainee doctors as one to nurture*, when they proclaim their eagerness to support anyone who asks for their help. In terms of the specific capabilities related to the nurse-as-provider-of-general-support identity, the general support offered comprises informal help and practical support to facilitate learning. As such it primarily relates to trainees' functional capabilities.

Practitioner role

Nurse as *guardian of patient-wellbeing*: The second most commonly narrated identity during these dyadic interactions was identified as nurse-as-guardian-of-patient-wellbeing (Table 3, Excerpts 13-18). Participants narrated a range of contexts in which they assumed this identity, specifically as a response to trainee doctors' prescribing, diagnoses, development of treatment plans, emergency situations and breaking bad news. Across these narratives, trainee doctors were positioned in a variety of ways. Thus, participants frequently represented themselves as being assertive, assuming an overall responsibility for patient-safety within the team and endeavouring to protect patients from harm by trainee doctors. Sometimes this assertiveness comprised gently informing trainee doctors of their errors. For example, Ann constructs herself as *guardian of wellbeing*, with the trainee doctor as a *naïve practitioner* (Table 3, Excerpt 13), when she tells us how 'we nurses whisper...' when they notice junior doctors incorrectly prescribing. Furthermore, in their reported talk of themselves,[53, 54] participants occasionally narrated a lightness of touch. For example, Wallace (Table 3, Excerpt 14) told us '*I...just make subtle suggestions......"shall we pop up some fluids"...*': the word 'pop' is a colloquialism that is often used in medical settings amongst healthcare professionals to maintain a calm focus on urgent action at a critical juncture in patient care, by somewhat playing down relatively serious events.

However, sometimes participants' narratives revealed a sense of annoyance as they explicitly narrated negative emotions (Table 3, Excerpt 15: '*Sometimes you do get a bit angry in the relationship*'). In this example, rather than constructing the trainee doctor as *naïve*, they were positioned as being *doctor-centred*. Interestingly, in Margaret's narrative of a situation where she couldn't get the doctor to attend, she tells us that the patient died, albeit not due to the trainees (in)action. But in telling us this, she is emphasising the seriousness of her situation and her strong sense of person responsibility *"I feel that the patient is my main priority"* and *"it's on your head isn't it"*, rather than the doctor's head. Not only do these statements represent a strong sense of guardianship and patient-centredness, but they also position the trainee doctor in

opposition (i.e. trainee as *doctor-centred*), suggesting a deficiency in their cognitive (procedural) knowledge, specifically knowing *when* to act.

Trainee doctors were also positioned as the *incompetent novice* in relation to nurses as *guardians*. For example, in Charlene's narrative the trainee prescribed an entire bottle of Gaviscon (Table 3, Excerpt 16). Again, highlighting deficiency in procedural knowledge (specifically *how*) she positions the trainee as an *incompetent novice* through the use of sarcasm within reported talk:[54] *'do you want us to give the whole bottle? Or do you want us to give 10-20ml?'*. The difference between the *incompetent novice* and the *naïve practitioner*, appears to be that the former has connotations around deficiencies where they *ought* to know better, whereas the latter alludes to procedural complexities or around interactional nuances due to their level of training.

Finally, trainees were positioned as *disrespectful.* For example, Julia (Table 3, Excerpt 17) narrated an event where she asked how trainee doctors might feel about being challenged for not using sanitising gel on entering a ward, one of the trainees responded using extremely offensive language. Additionally, Sophie (Table 3, Excerpt 18) narrated a common situation discussed by our participants whereby trainee doctors are dismissive of nurses' knowledge, sometimes blanking nurses and not listening to them. Such situations in which trainees were positioned as being disrespectful and argumentative related to discordant views about the mandate, license, or jurisdiction of nurses to intercede in the medical care of patients, and so were primarily related to the position of nurse-as-guardian-of-patient-wellbeing.

Nurse as *provider of emotional support*: Within their practitioner role, we also identified the nurse-as-provider-of-emotional-support*,* particularly in narratives around trainee doctors encountering challenges or dilemmas in clinical practice. As such, participants recounted how they generally offer emotional support to trainee doctors to develop their personal capabilities when dealing with psychologically taxing situations and stressful experiences, such as the death of a patient. For example, both Ann and Brenda (Table 3, Excerpts 19 and 20) narrated events in which trainee doctors were coping with the death of a patient, and in doing so they positioned the trainee doctors as *human* (with emotions)*.* This positioning of trainee doctors as *human* recognises the stage in which trainees are at in their professional trajectory: "… *but overall, some of them look like frightened lambs, which you can't blame them for really, because one minute you're at university and the next minute you're completely responsible*" (Ann, SSN). Thus, nurses highlighted that they were, like everyone else, giving trainee doctors permission to be upset and providing reassurance.

Nurse as *team-player*: The final way in which we identified participants positioned themselves was as team-players. This identity depicts interactions in which the nurse-trainee doctor dyads recognise the value of each other's' expertise, have mutual respect and willingly work together. For example, Ffion (Table 3, Excerpt 21) talks about there being a mutual understanding between doctors and nurses, and how it takes time to develop the trust required. Ann (Table 3, Excerpt 22) talks about how the best doctors view nurses and doctors as equal, working together for the best interests of patient care and safety (see also Gwen, Table 3, Excerpt 23, who speaks of everyone working "*together for the benefit and for the service of the patients*"). For all narratives in which we identified nurse-as-team-player, trainee doctors were positioned as *willing colleagues*, with confidence in the abilities of nurses working "*together on an equal footing*" (Pamela, CN).

Table 3: Illustrations of narrated identities*

Identities	Illustration [and trainee doctor's character tropes]
Teacher *Description: A nurse who educates trainee doctors, giving information and explaining actions and processes. Sometimes informal, on the ward, other times is more formal as an expert practitioner.*	**Excerpt 1:** [Trainee doctor as willing apprentice] **They will ring me and say** *'can you come and support me? I've got somebody who's not very well and I'm not sure what's going on.'* I go there and ask them *'have you thought of this instead of that?'* Then they say *'perhaps it's a PE (Pulmonary Embolism) or an aneurysm because they've had surgery'*, my role is about jollying them along in the right direction to make the right decision. **Brenda (ANP)** [Cognitive/Functional capability] **Excerpt 2:** [Trainee doctor as willing apprentice] We do in-service training. So, we do informal training like if I was on the ward and I was siting a stoma, **I'd ask if somebody wanted to come along with me to do with that**, but also we do twice a year formal in-service training. **Tracy (NS)** [Cognitive/Functional capability] **Excerpt 3:** [Trainee doctor as naïve practitioner] Relatives had been called in, in the middle of a Sunday, and they presumed something was going wrong because we called them in. **He said to them that the patient had gone, and they said** *'gone where?'*. Afterwards, I said to the doctor *'you need to be very clear to these people, you need to actually say to them that he's died, in those words because people won't listen until you say they have died, that is what they are waiting for'*. **Lorraine (ANP)** [Personal/Ethical capability] **Excerpt 4:** [Trainee doctor as naïve practitioner] The junior doctors' abilities with regards to discharging patients are very variable. A lot of the time they just make a lot of assumptions, like if you've got a complex discharge and you have to get packages of care into place and things like this. They're often **either unaware of it or they think it's already been done by some sort of magic** and they'll sometimes sort of say *'oh, so and so, yes we can discharge them tomorrow'*, and I say, *'well actually, you know, this person is on a Dosette box. It's going to take forty-eight hours to organise or they need to get a package of care in situ. So the patients can't go home just yet'*. And they're often... well not often, **sometimes not alive to that**. That can be a problem sometimes. **Rachel (SSN)** [Cognitive/Procedural capability]
Expert Advisor *Description: A nurse who offers advice, often in response to a request for advice from a doctor*	**Excerpt 5:** [Trainee doctor as advice seeker] With the doctor rotations and new doctors that come in, yeah, we do provide education for them, so they know what our referral criteria for cardiac patients is. **If they want advice on referring patients**, we can give it to them... **We're at the end of a phone which they understand and will ring for advice.** Pamela (CN) [Ethical/Cognitive capability] **Excerpt 6:** [Trainee doctor as advice seeker] **If they look to us for any advice or if they're not sure about something** we will support them and try and advise them. Like if they're new... **they might not be sure of the dose of the drug.** Claire (SN) [Ethical/Cognitive capability]
Navigator *Description: A nurse who offers directions to equipment, kit or orientates them to locations.*	**Excerpt 7:** [Trainee doctor as lost] If they need help, **we just show him or her where the containers for blood are, where the needles are and just show them around the ward really.** Esther (SN) [Cognitive capability] **Excerpt 8:** [Trainee doctor as lost] We expect junior doctors to make sure that patients are properly assessed and are able to outline the basic treatment plan. If they've already been from somewhere, they normally know anyway the basic treatment. **You just show them where things are and orient them.** Some doctors who are new here are quite senior and they tend to ask us as well about that the policies for this ward, yeah. You have to give them support. **Valerie (SSN)** [Cognitive/Personal capability] **Excerpt 9:** [Trainee doctor as lost] They're not familiar with the way certain consultants want things done, **so they'll use us to guide them...** Obviously ultimately they are the doctor and we respect that in them, but they also have to

Identities	Illustration [and trainee doctor's character tropes]
	trust us and take our opinions on board. And the doctors that take our opinions on board tend to have a better relationship. **Ann (SSN)** [Cognitive/Personal capability]
Provider of general support *Description: A nurse who shows interest in the trainee doctor, providing informal help and practical support to help them learn*	**Excerpt 10:** [Trainee doctor as one to nurture] I go to the doctors' mess when I am on-call and quite often sit there with the trainee doctors and the more senior doctors talking about the issues across the medical unit. … I tend to **have a chat with them and sort of relax a bit and see if there's anything… they need help with.** **Wallace (ANP)** [Personal/Functional capability] **Excerpt 11:** [Trainee doctor as one to nurture] **We'll support any doctor** and if they want help with anything, if they ask, you know, **we'll help them. Sophie (SSN)** [Functional capability] **Excerpt 12:** [Trainee doctor as one to nurture] As long as they (trainee doctor) know, you know, that we're here and available. **We're not just here for nurses or the patients, we are here for them as well** say, you know, if they want it. **Tracy (NS)** [Personal/Functional capability]
Guardian of patient wellbeing *Description: The nurse who assumes responsibility and endeavours to protect/ safeguard the patient.*	**Excerpt 13:** [Trainee doctor as naïve practitioner] **We nurses whisper to them the correct drug for the patient if they have an allergy.** We tell them when they prescribe wrongly. No one is perfect, so we tell them **Ann (SSN)** [Cognitive Capability] **Excerpt 14:** [Trainee doctor as naïve practitioner] If the patient is clearly deteriorating in front of me, **then I would just make subtle suggestions (to them) as we go along** like, '*shall we pop some fluids up*'… or '*… do you think that looks like such and such*?'. **Wallace (ANP)** [Cognitive/Functional capability] **Excerpt 15:** [Trainee doctor as doctor-centred] She was very poorly, and she was just continuously bleeding, and they wouldn't come down to see her. And then he eventually came down, and was like '*oh, we'll do this tomorrow*'…, and I was like '*well I've already done this blood test, I did tell you this morning, you know.*' But it's quite difficult sometimes. **Sometimes you do get a bit angry in the relationship. I feel that the patient is my main priority** … I think she [the patient] died in the end basically from it. It wasn't the doctor's fault … It is difficult when someone is poorly and you can't get the doctors to come down … if you stop it's your head isn't it. **Margaret (SN)** [Cognitive/Procedural capability] **Excerpt 16:** [Trainee doctor as incompetent novice] We had a trainee doctor who was asked to prescribe an antacid and on the PRN side of the chart [PRN, or pro re nata: when required] **and they wrote up 'Gaviscon 500ml PRN'.** No nurse is going to give a whole bottle (of Gaviscon 500ml), so I said '*do you want us to give the whole bottle? Or do you want us to give 10-20ml?*'… to me that is basic (knowledge)…but on the acute wards **they've got a heck of a lot of junior doctors who don't know how to prescribe even basic things like paracetamol**… they ask (the nurses) '*what dose do I give*?'. **Charlene (ANP)** [Cognitive capability] **Excerpt 17:** [Trainee doctor as disrespectful] I asked the junior doctors about being challenged about not using the (disinfectant hand) gel on entering the ward, **one of them piped up '*I'd tell them to fuck off*'** **Julia (CN)** [Ethical capability] **Excerpt 18:** [Trainee doctor as disrespectful] We've had a couple that won't listen to you as in, '*you're a nurse, I'm a doctor*'. I've had a couple of instances where it's like, you know, '*please, we don't do it like that here*'…**and you get blanked because they're doctors and you're nurses.** You do get that now and again, **especially in the start**, but they do kind of warm to us in the end, but you do get a few occasions where, yeah, '*you don't know anything, you're a nurse*'. **Sophie (SSN)** [Ethical capability]
Provider of emotional support	**Excerpt 19:** [Trainee doctor as human] I took him aside, gave him a cup of tea and said, '*you're only human… the death of a patient affects us all. If you don't cry*

Identities	Illustration [and trainee doctor's character tropes]
Description: A nurse who offers emotional support to those in need, for example, in the context of a patient death	*once over a patient, then you're not human* so *don't beat yourself up over it'*. **Ann (SSN)** [Personal capability] **Excerpt 20:** [Trainee doctor as human] We had a patient who deteriorated quite badly … it happened really, really quickly. … The doctor I had at the time **was really upset about that** .… I took him aside actually because he was really quite upset by the whole incident, and I was just trying to reassure him it was quite normal, **we're human at the end of the da**y. It was just a case of sitting with him and telling him we couldn't have done anything more. **Brenda (ANP)** [Personal capability]
Team-Player *Description: An individual who recognises the value of others' expertise, respects them and willingly works with colleagues as part of a team.*	**Excerpt 21:** [Trainee doctor as willing colleague] There is a **mutual understanding of roles** … There is a **real depth of their trust in my practice** which takes time to grow and cultivate, but because I have been working for all four of them, and we have had a very stable team for a long time, **that trust is there**. **Ffion (SLN)** [Ethical capability] **Excerpt 22:** [Trainee doctor as willing colleague] Doctors who tend to do better are those who take the nurses' opinions on board. My main thing is for them to utilise nurses. **To work as a team with nurses.** Don't see us as a separate entity, **see us as a member of the same team** because we're all out to do the same thing, act in the best interests of the patient and ensure the safest environments. **Ann (SSN)** [Ethical capability] **Excerpt 23:** [Trainee doctor as willing colleague] So, it is not... *'that's my job, that's your job'*. **We are all together for the benefit and for the service of the patients.** **Gwen (LN)** [Ethical capability]

*Note: The key aspect of the narrative related to the positioning of trainee doctors is bolded

Longitudinal relationships

During our one-to-one interviews, some participants provided a series of longitudinal narratives, in which they made reference to encountering the same individual at different points in time. Here, while they began talking about junior doctors who were two years' post-graduation, participants spoke about how their relationships with these doctors evolved as they gained more experience until the doctors became Registrars (i.e. eight years post graduate, just before they became Consultants). These longitudinal narratives provide an illustration of the fluidity in how identities are accessed and enacted during dyadic interactions. We use a longitudinal narrative provided by Miranda to illustrate the performance of these (see Table 4). Here, Miranda talks about her interactions with a specific doctor who is a year away from being a consultant and whom she first met as a *"very junior doctor"* (line 1), highlighting nurse identities within both educator and practitioner roles.

Enfolding this longitudinal extract, Miranda narrates the idea of 'growth' and maturation in relation to trainee doctor development (lines 2, 3 & 11). She positions the trainee as *an eager apprentice,* seeking her advice as his career progress *"the questions they ask change from 'asking you-asking you' to 'telling you-asking you'"* (lines 4-5). Miranda then segues into positioning herself as nurse-as-expert-advisor (lines 5-6), before switching to nurse-as-provider-of-general support; thus developing the trainee's personal and cognitive capabilities. Interestingly, Miranda switches pronouns from '*him'* to '*they'*, indicating that while this is a narrative about a particular person (him), she suggests it is true of all trainee doctors (they).

Miranda's narrative (lines 8-15) highlights how nurses can function as team-players working in partnership with trainee doctors as *willing colleagues* with mutual respect, and appreciation where the expertise of the other is valued in the context of a longitudinal narrative of a career trajectory. Here she assertively enacts the identity of nurse-as-provider-of-emotional-support recognising their personhood and orienting their sense of responsibility (line 12-13) and as nurse-as-teacher (line 13-14) . In this example, Miranda constructs a role in which she helps to develop the trainee doctor's personal capabilities in dealing with psychologically taxing situations, by shaping behaviour and skills through crossing identities in that moment to support them and their understanding of their identity as a group member.

Table 4: Dyadic interactions and identity through longitudinal narrative – Miranda

1	One of the Registrars started working with me as a very junior doctor, came back here as a
2	CT, and now he is a year away from being a Consultant. He has grown in confidence and been
3	to different hospitals. Even though they grow, they'll still ask for your advice as CT1s, CT2s
4	and Registrars. The questions they ask change from 'asking you-asking you' to 'telling you-
5	asking you'. What I mean is earlier in their career they ask questions like, *"is this otitis externa*
6	(an ear infection)?" Whereas now they ask, *"is this otitis externa, what do you think*?" So, they're
7	'telling you-asking you'. They don't really want an answer. They just want a nod of (approval) …
8	… I've got a brilliant Registrar working with me at the moment. When he was a junior doctor,
9	I remember him saying how nervous he was. I said to him, *"you will grow into it, every junior*
10	*doctor is nervous"*. He's come back as a Registrar after about five years and he reminded me
11	about this conversation. He said that he was so scared when he first came here as a junior
12	doctor because he felt like the buck stopped with him, but I told him, *"the buck* (for patient
13	care) *does not stop with you, it stops with the Consultant. The buck only stops with you if*
14	*you don't get whatever help or advice that you need"*. He's said that he has never forgotten
15	that I said that to him, and I was really chuffed

Discussion

Summary of key findings

This study sought to examine how nurses respectively position themselves and trainee doctors' identities within patient safety related narratives, and to identify trainees' professional competences that are at stake in relation to patient safety and learning in practice, and when nurses intervene. Our findings suggest that nurses construct themselves as key actors, ensuring patient safety and supporting trainee doctors through difficult clinical scenarios. We identified and classified seven core identities linked to nurses' roles a educators (*teacher, expert advisor, navigator, provider of general support*) and practitioners (*guardians of patient-wellbeing, provider of emotional support, team-player*) narrated across dyadic interactions with trainee doctors, ensuring patient safety. Each of these nurse identities was identified in juxtaposition to specific trainee doctor character tropes and general gaps in professional competence. Thus, within participants' narratives, trainee doctors were positioned in character tropes (e.g. *willing apprentice, naïve practitioner, advice seeker, incompetent novice*) characterising them as people with particular needs, traits and behaviours. Interestingly, the manner in which trainee doctors' identities were positioned frequently reflected a particular relational component (e.g. *nurse as expert advisor* with *trainee as advice seeker*; *nurse as navigator* with *trainee as lost*), indicating a regular action-response pattern; although occasionally a wide range of trainee positions were narrated to a specific nurse identity (e.g. in response to nurses as *guardians of wellbeing*). Finally, the reported relational shift in the longitudinal nature of nurse-trainee doctor dyadic interactions demonstrate a range of ways in which interprofessional relations can be strengthened during patient safety related events.

In terms of trainee doctors' capabilities (cognitive, functional, personal and ethical), we also identified trends. For example, nurses as *provider of general support* was commonly narrated in the context of a perceived deficit of personal and/or functional capabilities; and nurses as *team-player* was mainly associated with concerns (or reassurances) around ethical capabilities. These findings add to prior research on trainee doctors' preparedness for practice[28, 29], by classifying the different domains of trainee doctors' competences at play during nurses' narratives of patient safety events. We also extend wider health professions education literature about nurses' contribution to trainee doctors' informal learning, which is integral to the development of a professional identity as a safe and competent clinician.[24-26, 30, 31]

Comparisons with the existing literature

In terms of identities, our findings resonate with a few of the clinician identities previously reported in healthcare students' and clinicians' narratives.[22, 24, 36] For example, drawing on longitudinal audio-recorded interactions of supervisory encounters, reflections and interview data, Brown et al. mapped out four key relational identities of General Practice doctors and their trainees ranging from *junior learner-expert clinician* to *lead clinician-advisor*.[22] This finding resonates with our *'asking you-asking you'* to *'telling you-asking you'* trajectory as identified in our longitudinal findings. In another study, Rees et al. interviewed a range of healthcare students and clinicians from medicine, midwifery, nursing, occupational therapy, paramedicine and physiotherapy.[24] Consistent with our findings, they evidenced a range of clinician identities including *teacher*, *expert* and *team-worker,* within narratives around interprofessional encounters. Furthermore, Monrouxe and Rees analysed medical students' narratives of professionalism dilemmas, reporting students' constructions of doctors' identities as *teacher* within their narratives of resistance, with nurses being constructed as *neglectful caregivers* but also *avengers* (being more passionate in their actions than *advocates*).[36] Furthermore, nurses' identities were constructed as *caregivers* within their narratives of regret but as '*shadow*' *caregivers* (with an over-eagerness to heal and continuing a medical procedure against the patients' will) during narratives of patient advocacy.[36]

Indeed, such identity construction serves multiple purposes, as we narrate ourselves in relation to others, we are motivated to portray ourselves in a positive light.[16, 34-37, 53, 55] This maintains our positive sense of self. Indeed, in our participants' narratives of patient safety situations, nurses predominately constructed themselves as having agency and in a positive way, even when narrating *trainees as disrespectful* (e.g. *"they do kind of warm to you in the end"*). This differs from Monrouxe and Rees's study in that, despite medical students often constructing themselves as *hero*, *advocate*, *avenger* and *caregiver,* they also commonly positioned themselves as *reluctant apprentice, slave, victim* and *coward*.[36] That the nurses in our study narrated a predominately positive position for themselves within the nurse-trainee dyad suggests a degree of strength and power in their respective roles, unlike that of the novice medical students. What this points to is the inherent nature of identities as dynamic, emergent and constructed through network of individual, relational and institutional factors.[20, 35] Indeed, the discrete and longitudinal nature of the dyadic interactions between nurses and trainee doctors reported in our paper further underscores the fluid nature of relational identities.

A common professional identity identified within participants' narratives, was that of *guardian of patient wellbeing*; assuming responsibility for the quality and safety of patient care. This is aptly illustrated in the participants' narratives about effecting rescues when they discerned shortcomings in a trainee doctor's ability that could have a deleterious impact on the patient's safety and wellbeing. A variety of different studies have highlighted the key part that nurses play in patient safety by effecting rescues or intervening directly to prevent errors or omissions that cause or contribute to events that harm patients. [56-58] Ward-based and specialist nurses have been reported to act in different ways to effect patient safety rescues in clinical practice. [56-59]

As guardian of patient wellbeing, this identity was said to require the nurse to be assertive in their interactions with trainee doctors, which was not always perceived as welcome. The reported assertiveness of nurses in their interactions with doctors in relation to patient safety has been identified in other studies.[9, 10] Hughes reported that nurses often offered advice to doctors on aspects of medical practice in a measured and diplomatic way but were more forthright in their views and directly intervened when they felt the patient's safety was at risk.[9] In a variety of ethnographic studies, Allen observed nurses often discreetly prompting the doctor to consider information or factors that they may have otherwise overlooked to make the most appropriate holistic decision(s) about patient care. [3] The evidence from these studies supports our finding that nurses 'whisper' to trainee doctors in what they construct as their primary identity of guardian of patient wellbeing to ensure patient safety in clinical practice.[3, 9]

The identity of nurse as *teacher* was also common in our data and reported to be primarily enacted to facilitate trainee doctors' informal learning in practice. Although, there is some evidence, that nurses' contribution to trainee doctors' learning may be limited because they prefer to seek support from senior doctors, other studies support our findings that nurses are integral to learning support during early clinical practice, albeit in an ad hoc manner.[12, 26, 29, 31] However, Burford et al.'s interviews with trainee doctors suggested that interactions between nurses and trainees, especially in relation to informal learning in practice, are often mediated by nurses relative lack of power in professional healthcare hierarchies. [26] However, our findings from the perspective of nurses challenge this notion: while issues relating to professional status suffuse their dyadic constructions, this is not always in terms of the 'normative structural hierarchy' of doctors. Indeed, in our study, nurses constructions of their relative power-relations with trainee doctors frequently placed nurses in a powerful position (e.g. nurse as *teacher*, trainee as *naïve practitioner*; nurse as *navigator*, trainee as *lost*) or on equal terms (e.g. nurse as *team-player*, trainee as *willing colleague*). Evidence from a variety of contexts indicates that nurses support for trainee doctors' practice-based learning facilitates trainee doctors' understanding of the contribution of different healthcare professionals, including themselves, to patient care. [24-26, 30]

Strengths and limitations

In interpreting our findings, we note that our results are predicated on interviews with a purposive sample of nurses (and later theoretical sample). Despite this, our sample has a preponderance of nurses in specialist roles as these were the people who came forward for interviews. As such, the extent to which our findings are representative of nurses more widely is yet to be established. However, the transferability of our results is enhanced by the finding that the participants recounted similar narratives despite being nurses of different professional standing working in a variety of specialisms across different geographical and clinical settings. The narratives set out by participants were a reflection of the world from the specific vantage point that they chose to show and assert. Our focus was on the nurses' perspective in this study, so the extent to which the sentiments expressed reflect the trainee doctors' identities is unknown. That said, our study brings rare attention to the nurses' perceptions about their interactions with trainee doctors and highlights the identities that they enact, inhabit, or accomplish to support the development of trainee doctors' professional competence, whilst ensuring patient safety. Our findings are also consistent with, and extend the wider literature on the development of professional competence, interprofessional collaboration in healthcare, and the nature and organisation of nursing work. This gives rise to contested professional boundaries with regards to license, jurisdiction, mandate and power in relation to patient care.

Implications for educational practice and research

Our study has revealed a range of identity positions that reveal the ad hoc, unofficial, and sometimes invisible nature of the work that nurses do in supporting trainee doctors whilst ensuring patient safety. As such it could be argued that this key relational set of identities should not be left to chance. Our findings highlight a pressing need to consider what can be done in an official manner to facilitate interprofessional collaboration between nurses and trainee doctors that ensure patient safety. One approach to this issue is the concept of longitudinal integrated clerkships (LICS) which are increasingly being used in undergraduate medical education to foster improved interprofessional collaboration by trainee doctors.[60-63] More recently the term longitudinal integrated interprofessional clerkships (LIICS) has been promulgated as being more apposite to describe longitudinal integrated clerkships with clearly defined opportunities for interprofessional collaboration. [64] Well designed and implemented LICS/LIICS require medical students to spend an extend period of time in a specific setting or related settings where learning is guided by a common thread of continuity in patient care, interprofessional collaboration, supervision and assessment. [60-64] Therefore, LICS/LIICS provide medical students with the opportunity to learn how to work productively with individuals from other professions as a team to deliver the best possible patient care over a longer period of time in practice than conventional placements. [60-64] Effective interprofessional collaboration across disciplines or communities of practice in healthcare is often described or conceptualised in terms of bonds, knots or connections that weave together different individuals together as a team at a point in time.[60, 62-65] Therefore, it can be argued that LICS/LIICS provide authentic learning opportunities in the praxis of healthcare that are integral to the professional socialisation and identity construction of medical students who are able to warp and weft the bonds of relationship that bind together the multiple rapidly evolving formal and informal interprofessional teams that they will encounter as trainee doctors. Perhaps then, LICS/LIICS may help to address some of the character tropes and issues pertaining to the relational identities that we report.

An alternative approach would be to directly address the trainee doctor character tropes and issues they raised about the contested nature of the mandate, license, or jurisdiction of nurses to intercede in the medical care of patients that were narrated by the participants in our study. Using boundary objects, such as shared documentation, interprofessional collaboration can be

fostered from the outset of undergraduate medical education.[66, 67] This may facilitate productive trainee doctor-nurse working relationships to enhance the quality of patient care.

Trainee doctors need to be equipped with the knowledge that they need to make the most of the support that nurses provide from the onset of their careers as doctors in training. Future research needs to explore how nurses and doctors in training can be supported to establish productive interprofessional collaborative working relationships in which there is mutual respect and a shared focus on patient safety. This study has revealed a hitherto tacit aspect of nurses' construction of their identities in relation to patient safety at different points in the career trajectory of trainee doctors, adding to what is known about how nurses support informal learning in clinical practice. The work that nurses do in this regard merits acknowledgement and legitimation by professional nursing bodies and the commissioners of healthcare, without such recognition patient care in the context of trainee doctors is gravely compromised.

Conflict of Interest

None

Author Contributions

The study was conceived and designed by RS, AB, LM and KW. The data were collected by RS and analysed by RS, AB, KW and LM. The first draft of the manuscript was written by RS, significantly revised by RS, AB, LM and KW. ICMJE criteria for authorship met by RS, AB, LM and KW. The manuscript was agreed as submitted by RS, AB, LM and KW.

Ethical approval

Cardiff University School of Healthcare Sciences Research Governance and Ethical Approval committee

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