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Title: "How do specialist trainee doctors acquire skills to practice patient centred care? A Qualitative Exploration"

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HOW DO SPECIALIST TRAINEE DOCTORS ACQUIRE SKILLS TO PRACTICE PATIENT CENTRED CARE? A QUALITATIVE EXPLORATION

Abstract

Objectives: The importance of patient centred care (PCC) has been increasingly recognised. However, there is limited work exploring what doctors actually understand by PCC, and how they perceive they acquire PCC skills in the workplace. **The objective** of our study was to explore: (1) what UK doctors, in specialist training, perceive to be the essential components of PCC, and (2) if/how they acquire these skills; (3) any facilitators/barriers for engaging in PCC; and (4) views on their PCC training.

Design: Qualitative study using in-depth individual semi-structured interviews with UK specialist trainees. Interview transcripts were thematically analysed.

Setting and Participants: Thirty-one Specialist Trainee doctors with at least 4 years postgraduate experience working in various medical specialities within the Medical Directorate of an acute hospital in the East Midlands of England (UK).

Results: Transcribed data was categorised into 3 main themes. The first theme was 'Understanding PCC' where the doctors gave varied perspectives on what the doctors understood by PCC. Although many were able to highlight key components of PCC there were also some accounts, which demonstrated a lack of understanding. The second theme was 'Learning PCC skills: A work in progress'. Learning to be patient-centred was perceived to be an on-going process. Within this, trainee doctors reported 'on-the-job' learning as the main means of acquiring PCC skills, but they also saw a place for formal teaching (using methods such as role play). 'Delivering PCC: Beyond the physician' referred to the many influences the doctors reported in learning and delivering PCC including patients, the

organisation and colleagues. Observing consultants taking a patient-centred approach was cited as an important learning tool.

Conclusions: Our findings may assist clinical educators in understanding how trainees doctors perceive PCC, and the factors that influence their learning; thereby, helping them shape PCC skills training.

Article Summary:

Strength and limitations of this study:

- As a qualitative study of medical specialist trainee's in the UK, this paper provides in-depth insights into the subjective understanding of patient centered care from the clinician's perspective, and how they perceive they acquire these skills.
- We interviewed doctors (using a semi-structured interview schedule) from a wide range of medical sub-specialties, until data were saturated (no new information emerged). This led to a comprehensive and broad set of views and insights into patient-centered care, including the barriers and facilitator to PCC.
- Interviews were conducted at one time point, future longitudinal research would be valuable to see if and how PCC skills develop across time.
- Participants were those willing to participate, thus there may be selection bias in terms of views on PCC. Those who did not volunteer to be interviewed may have had a different understanding and experience of PCC.
- The study was conducted in one acute trust and it cannot represent all UK hospitals. It would be useful in future work to see how these are similar or different across healthcare systems, levels of training and within/between countries.

Data Sharing: No additional data available

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Contributorship Statement:

Dr V Patel designed, conceived the study and wrote the first draft of the manuscript.

Dr H Buchanan and Dr P Patel helped with the analysis and critical revision.

Dr M Hui and A Kinder helped with critical revision

Prof H Thomas supervised the whole study.

I confirm that all authors listed on the title page have read and approved the final version of the manuscript and its submission to the Journal.

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Introduction

The importance of patient centred care (PCC) has been increasingly recognised in the past two decades, with numerous efforts made to implement the principles of PCC [1-5]. PCC is associated with positive patient outcomes such as improved patient satisfaction, better drug adherence, favourable health outcomes (including survival) and reductions in diagnostic tests, referral rates and costs [1,2,6-10].

Despite the beneficial outcomes of PCC, it is clear there is not a shared understanding of exactly what PCC means. Indeed, the term 'patient centred care' has been poorly, as well as variably, understood by physicians [11]. It has been described as 'participatory medicine', 'shared decision making', 'patient education', 'patient empowerment' and 'nothing about me without me' [9,11-13]. There have been attempts to identify the key principles of PCC, in order to have a shared definition, and understanding. For example, the Picker Institution identified seven principles underpinning PCC [6]; they include respect for patients' values, integrated care, good communication, emotional support, involvement of family and continuity of care. Moreover, Mead et al (2000) identified five core dimensions to help measure the process and outcomes of practicing PCC, namely: biopsychosocial; "patient as person"; "doctor as person"; sharing power and responsibility; and therapeutic alliance [14].

PCC skill training has been incorporated in the curriculum for trainee doctors in the UK and many other countries [15, 16]. Yet our doctors in training are not well equipped to practice in

ways that appropriately meet patient needs and expectations resulting in patient dissatisfaction and complaints [17,18]. Thus, there is a need to understand the process of how doctors acquire PCC skills to introduce positive changes not only at the workplace but also in training doctors appropriately. There are some studies supporting the development of patient-centred communication skills [19-23] and, more generally, there is research describing how medical students and junior doctors engage in workplace learning by continuous reflection within the social interaction between senior doctors and patients in a supportive environment [24,25]. However, there is limited work exploring what doctors understand by PCC, and how (and indeed if) they perceive they acquire PCC skills in the workplace. Therefore, this study aims to explore (1) what UK doctors, in specialist training, perceive to be the essential components of PCC (2) if/how they acquire these skills; (3) any facilitators/barriers for engaging in PCC; and (4) views on their PCC training.

Method

The study is undertaken within a qualitative research with interpretive paradigm, interpreting the phenomena of knowledge development. The interpretive paradigm is concerned with understanding the world as it is from subjective experiences of individuals. The epistemological stance is that of creating the knowledge on how doctors understand PCC and learn these skills [26]. We used semi-structured interviews to gather data. This method of data collection was selected as our study was focused on the personal experience and views of the doctors and semi-structured interviews allow participants the freedom to express their views in their own terms. However, we appreciate that the characteristics and role of researcher as interviewers and data analysts can influence both the data that is collected and how it is interpreted. Accordingly, we were alert to this and it added to our cautious and self-aware approach to all aspects of the study [26,27].

Participants

We were specifically interested in Specialist Trainees (STs), equivalent to senior residents or clinical fellows, as they have completed their medical undergraduate degree, and are now training within their chosen medical speciality. We emailed eighty STs with at least 4 years postgraduate experience working in various medical specialities within the Medical Directorate of an acute hospital in the East Midlands (England) inviting them to participate in a study on their views and experience of patient-practitioner communication. Many participants volunteered to participate but the first thirty-one (39%) who volunteered were included in the study. There were 19 (61%) males and 12 (39%) females from various medical specialities at different levels of training (1-5 years).

Semi-structured interviews

Questions were formulated in the context of the study's aims, linking to gaps in the relevant literature. After explaining the purpose of the interview, informed consent was obtained and then participants were asked to share their experiences using the semi-structured questions noted (see Table 1). Interviews were conducted at the postgraduate unit, individually by VP (female) who was a Specialist Trainee at the time of data collection. VP is a trained interviewer with previous interview training. Prompts and probes were used where appropriate to facilitate in-depth responses and to try to ensure participants could expand on answers [28]. Interviews were audio-recorded and lasted on average 50 minutes (range=35-65 minutes), with no second contact with the participants. After thirty-one participants we reached data saturation (there was no new information emerging) at which point no further interviews were conducted.

Data analysis

Data collected from all the interviews were collated together. VP with the support of HT (non-Medical Professor) examined the data by firstly immersing themselves in the data by reading and re-reading the transcripts. They then categorised all the data, which had similar meaning indexing them into themes. During this process, whenever there were ambiguities while indexing, further clarification was obtained by PP and HB. Identifying the recurrent pattern of meaning, data were further re-organised into succinct themes manually. These themes and sub-themes were further studied to identify the deeper meaning, understanding the on-going phenomena of learning PCC skills through the participants' perspective and inductively drawing conclusions [29].

Ethical Approval

Approval from the local R&D Department was obtained in accordance with the Research Governance Framework for Health and Social Care (IRAS number 159805). As participants were staff, full ethical committee approval was not required.

Results

Data were categorised into 3 major themes and 7 sub-themes (Table 2) which are discussed below. The three major themes, respectively, map onto the first three aims of the study, and the fourth aim, on training, maps onto the second and third themes.

Theme 1: Understanding of PCC

The interviews with participating doctors generated some interesting and varied perspectives on what the doctors understand by PCC. While the majority perceived PCC as viewing care through the patients' eyes, others perceived it as sharing treatment options and listening to

patients.

Doctor 6: PCC is nothing but the patients' perception of healthcare i.e. what their idea is of a good outcome.

Doctor 2: Any decision(s) regarding patients have to involve them. Their social circumstances, family and finances are all relevant to their care

Some doctors defined PCC as about empowering patients with chronic conditions through education.

Doctor 3: PCC is mainly educating patients with chronic illness by explaining the diagnosis, treatment, and management options so that they are actively participating in managing his/her condition.

There were also doctors who demonstrated that PCC may still not be fully understood. For example, one doctor perceived PCC primarily as a safety measure:

Doctor 24: PCC is there to increase the patients' safety". For patients to be safe and environment to be safe, protocol led treatment would be helpful to reduce complication.

Theme 2: Learning PCC skills: A work in progress

a: The importance of consultants

Majority of doctors acknowledged that observing senior colleagues and consultants' practice was a source of learning, leading them gradually to emulate their practice and thus develop PCC skills.

Doctor 10: I was influenced by the consultant's holistic approach, and through observation I learnt the PCC skills.

Doctor 27: Observing consultants practicing (PCC) is a good way of learning.

However, it was also acknowledged that senior colleagues are not always good role models, instead practicing a paternalistic form of patient care. Thus, some doctors expressed the need for high quality role models skilled in PCC to learn from, and practice PCC skills.

> *Doctor 3: Gone are the days of the Doctor who has the parental role - now listen to patients, address their concerns. Bulk of old senior practitioners do not want to change their practice. They will oppose the change and they, being powerful in the team, will affect the team.*

b. Role of formal education

The doctors in our sample discussed how their knowledge base surrounding how to manage and educate patients on their condition was an important factor in helping to practice PCC.

> Doctors 22: *Physician's knowledge base is needed to give advice on treatment and also to educate the patients.*

Many doctors reported that they learned about the concept of PCC from their Undergraduate Medical Education while learning to take history from patients, and also from reading the General Medical Council (GMC) and Trust guidelines.

> Doctor 1*: I remember from UG teaching that we had a module 'learning from lives' where holistic patient care was taught.*

> Doctor 28: *I learnt [PCC] from reading the GMC and Trust guidelines.*

However, majority of doctors commented that there was never any formal training or teaching of PCC and most of its skills were learnt on the job.

> Doctor 6: *Formal teaching is massively lacking in PGME [Postgraduate Medical Education]. Skills were picked up as you go along.*

> Doctor 2: *Informal training is excellent i.e. while shadowing, getting feedback from supervisors or through undertaking workplace-based assessments focuses your mind on PCC skills.*

c. Improving PCC skills

Appreciating the challenges of teaching PCC skills, doctors suggested that one of the best ways of improving PCC skills was to devote more time on the ward observing consultants and having feedback after clinical encounters from team members and patients.

> *Doctor 2: Feedback by consultants after the real patient encounter during ward round clinics was the best way to learn PCC.*
>
> *Doctor 13: PCC skill is a continuous process happening throughout your training as a foundation doctors and as a registrar. I am learning every day by seeing and doing it.*
>
> *Doctor 17: Patients feedback, the outcome of the disease and their agreement is all positive influences, and thus we start practicing it.*

Majority of doctors felt regular teaching sessions 'near the workplace' would be helpful in consolidating communication skills and focusing on delivering PCC.

> *Doctor 22: General medical teaching, clinical scenarios/role play, diversity training, interactive discussion or workshops would be helpful.*

Theme 3: Delivering PCC: Beyond the physician

From the doctors' accounts it was evident that physicians alone could not deliver PCC – it goes far wider than this. Indeed, PCC needed to be facilitated from the wider organisation to the patients themselves.

a: Working as a team

Doctors emphasised that working, as a team is essential for PCC; effective communication among its members is the key factor for effectively practicing PCC. Conversely, if all members do not understand PCC, and do not communicate effectively about their patient, then PCC is made more difficult.

> *Doctor 8: Team [staff members at all levels], rather than physicians alone, should understand the concept. This is pivotal for PCC.*
>
> *Doctor 30: We all have to work towards same goal (of patient's wellbeing). Relationships*

within the team, affects every single person to work and deliver the best care.

Doctor 20: Communication skills are vital to deliver PCC skills; Patients are moved to different wards through their journey in hospital. Patients do not have an idea what is happening if there is no proper communication with the patients, and also between different team members.

b: Organisational factors

Doctors opined that the structure of the organisation in which they worked, the facilities including the information technology (IT) available at the point of care and the work pattern, could all influence PCC delivery.

Doctor 5: We have to think hard and organise healthcare as a whole not just within individual department. How we can design the interface between inpatients and outpatients? Interface between primary, secondary and tertiary care? NHS IT, electronic records maintain so that it's available even in tertiary centres e.g. in cardiology, renal centres and also in GP practice communication could be better and improves efficacy

Doctor 6: Outpatient clinics 7 to 10 minutes slot, which is not enough to cover all the agenda and to deal with biometric data also.

Doctor 30: We work in shift pattern and the health care is 24/7. I am not able to work 24 hours and thus a single person is not able to deliver PCC.

c. Patient factors

Majority of doctors emphasised that good feedback from patients has a positive influence on their practice. Doctors also described examples of clinical encounters, which helped them view care through patient's perspective.

Doctor 14: Clinical situations helped me to develop the skills. For example, I inserted a cannula to a patient who needed antibiotics. But later I received feedback from the seniors that even though it was the best course of action it was not agreeable with the patients. Such experiences have made me realise the importance of PCC. There is no primary training given on this aspect of skills most of it is self-learning.

However, some doctors appeared to perceive that (lack of) patient involvement due to their medical condition or background could pose challenges, thereby acting as a barrier to practising PCC.

Doctor 21: Patients' inertia; some refuse to engage and may think it is not relevant to do so.
Doctor 17: Patients' coming from ethnic minority with different culture/religious impacts, their perspective and confidence would be different.

Doctor 20: Patient's cognitive status i.e confused or delirious and in such situations sometime decisions are taken without patient being involved.

Doctor 16: I have seen patients losing confidence by leaving them to make decision.

Doctor 26: Some patients like paternalistic approach, you are the doctor do what you think is the best. Some patients are not keen to known about their treatment.

d. The doctor as a 'person'

Doctors reported that their own personality traits, their beliefs and attitudes, as well as their life experience as a patient or as a family/friend influenced their practice.

Doctor 2: How you are brought up and your own personalities, personal issues, your moral, religious values, your upbringing could all impact on your practice.

Doctor 3: I am a patient myself. Care should be the way I feel and thus I tend to practice this with others.

Discussion

There were varied perspectives on what the doctors understood by PCC. Many focused on key aspects of PCC, such as viewing care through the patients' eyes, and sharing treatment options and listening to patients. Arming patients with information on diagnosis, treatment and management in order to facilitate active participation was also evident in many

interviews. Moreover, considering the patient in their social context and treating the patient holistically was considered important across many accounts. This is encouraging, and demonstrates that many doctors were able to highlight key components of PCC [14]. However, there were also perceptions that did not convey a clear understanding of PCC, which is of concern. This may be due to definitional problems with PCC, or may reflect specific PCC training needs. It should also be noted that we do not have evidence of how patient centred these doctors are in practice.

The doctors reported that current training, at least in their experience, lacked formal teaching and, perhaps crucially, feedback on PCC skills. Although most recognised 'on-the-job' learning as the main means of acquiring PCC skills, they also saw a place for formal teaching, including approaches such as role play which have been highlighted in the literature as important tools for imparting PCC skills [22,30-31]. Thus, there may be a place for incorporating teaching more formally for trainees, though as the trainee doctors noted this would need to be easily accessible (i.e., near their workplace).

The doctors agreed that their practice and attitude to PCC was significantly influenced by consultants as role models. Through consultants' holistic approach and observation they were able to learn and subsequently practice PCC skills. However, not all consultants were good role models – trainee doctors noted there are still senior colleagues who are paternalistic in their manner. PCC can be perceived as relinquishing power to patients, which has caused discomfort among some physicians [9]. This may become less evident as doctors trained in PCC, become consultants. For now, though, it should be noted that not all senior colleagues provide good quality PCC role models and may impede fostering these qualities in their

junior colleagues. Being aware of this and possibly focusing on training sessions for doctors at all levels may be a fruitful way forward.

It was clear that learning and practicing PCC skills are work in progress, continuing throughout these doctors' training. It has been noted that communication is a skill that needs to be taught and honed throughout one's career [32]. Overall, doctors stated that more time spent on the ward/clinics with patients helped them to develop a better understanding of the concept of PCC. Indeed, research has shown that by continuous performance and self-reflection doctors acquire these skills [24,33,34].

Doctors indicated that PCC cannot happen in isolation as it goes beyond the individual physician. Organisational, individual and team factors influence PCC and there is interaction between these factors. Doctors emphasised that working, as a team is essential for PCC; effective communication among health care professionals is a key factor for effective PCC. If all members do not understand PCC, and do not communicate effectively about their patient, then PCC is more difficult. Thus, having a shared model i.e. a common understanding of the concepts of PCC not only among doctors about also across health professionals through training would be beneficial for everyone involved in healthcare.

Doctors commented on "doctors as a person", and that their personality, upbringing, and attitudes all contribute to their ability to practice PCC, a view which concurs with evidence where physicians are encouraged to be aware that their personality can impact on their practice of PCC [12,20]. Equally, PCC is not something that is 'done' to a patient, but patients influence and inform the consultation at the time, and beyond. The doctors recognised that they learned about PCC from patients during consultation, and were able to

reflect on these encounters. Importantly, patient non-participation in decision-making was cited as a barrier to PCC by doctors. However, there is a fundamental difference between not involving patients as per their wishes and not involving them as a consequence of a 'paternalistic' approach. Epstein highlights the differing expectations of PCC from a patient and physician perspective and that PCC needs to be viewed as an approach to care which requires doing the right thing for each patient, valuing their personal, professional and organisational relationships, even independently of the health outcome [36]. As research shows about 60% of patients take a proactive role and are keen to engage in managing their condition, it gives a *prima facie* indication of a significant number who may not desire such a role [37,38]. Patient activation and preparation can increase the likelihood of mutually useful conversations between patients and clinicians [39]. There may be a role for highlighting this across training.

Organisational factors were also highlighted as key to PCC. Trainee doctors highlighted the influence of the structure of the UK NHS, and stated that organisational support is needed to address challenges such as time constraints, inadequate staffing levels, increasing workload and non-availability of trained faculty to lead changes at the workplace. These views are consistent with the literature and suggest that finite, stretched resources and inadequate connectivity through IT is an impediment for the practice of PCC [40-43]. Delivering PCC with these key organisational barriers in place could be addressed by regular training and performance review as a team within the organisation.

Limitations of the study:

We acknowledge there are limitations in our study. Participants were those willing to participate, thus there may be selection bias in terms of views on PCC. In addition, the study was conducted in one acute trust and it cannot represent all UK hospitals. However, our

sample comprises trainees from a wide range of medical sub-specialities, which may have led to a more comprehensive set of views on this topic. It would be useful to see how these are similar or different across healthcare systems, levels of training and within/between countries.

Conclusions:

PCC is one of the essential elements of high quality care. Although it may appear easy, it is in practice very difficult to do well [32]. Our findings may assist clinical educators supporting formal and informal PCC skills training to doctors and also other health professionals in the workplace. In addition, our findings highlight the organisational support i.e. addressing the time, staffing, and IT issues required for effective implementation of PCC.

References:

1. Richards T, Coulter A, Wicks P. Time to deliver patient centred care; **BMJ** 2015;350-51.
2. Stewart M, Brown JB, Donner A, et al. The impact of patient-centered care on outcomes. **J Fam Pract**; 2000;49:796–804.
3. NHS England. **High quality care for all, now and for future generations**, London. 2013
4. **Department of Health (DOH). Equity and excellence: liberating the NHS**.2010
5. Institute of Medicine (US) Committee on Quality of Health Care in America. **Crossing the quality chasm: a new health system for the 21st century. Washington DC**: National Academies Press. 2001
6. Gerteis M, Edgman - leviatan S, Daley J et al. **Through the patients' eye**; San Franciso. USA. 1993
7. Greenfield S, Kaplan SH, Ware JE Jr, et al. Patients' participation in medical care: effects on blood sugar control and quality of life in diabetes: **J Gen Intern Med**. 1998; 3:448-57.
8. Meterko M, Wright S, Lin H, wt al. Mortality among patients with acute myocardial

infarction: the influences of patient-centered care and evidence-based medicine. **Health Serv Res**: 2010;45:1188–204.

9. Stewart M. Towards a global definition of PCC, **BMJ**; 2001;322:444.
10. Stewart M, Weston M, Mcwhinney I R et al Second edition. **Patient centred medicine: transforming the clinical method;** Radcliffe medical press, Radcliff. 2003
11. Hawken N. "Seeing things from the patient view; what will it take?" **BMJ** 2015; 350;g7757.
12. Little P, Everitt H, Williamson I, et al. Preferences of patients for patient centred approach to consultation in primary care: observational study **BMJ**; 2001;322:468.
13. Barry J M, Edgman –Levitan S. Shared decision making-The Pinnacle of Patient Centred Care. **New England Journal of Medicine**; 2012;366-369.
14. Mead N, Bower P. Patient-centredness: a conceptual framework and review of the empirical literature; **Social Science and Medicine** 51:1087-1110. 2000
15. General Medical Council (GMC). **Good Medical Practice** 2013; London.
16. Royal College of Physicians (RCP). **Future Hospital: Caring for Medical Patients**: 2013. London.
17. Tadd, W, Hillman A, Calnan S, et al (2011). Dignity in Practice: An exploration of the care of older adults in acute NHS Trusts, Preventing Abuse and Neglect in Institutional Care of Older Adults. Cardiff University; University of Kent, London.
18. Foot C, Gilburt H, Dunn P, et al People in control of their own health and care, **The Kings Fund**: 2014. London
19. Frankel R M, Eddin-Folensbee F, Inui ST. Crossing the patient-centred divide: Transforming healthcare quality through enhanced faculty development: **Acad. Med** 2011;86:445-452.
20. Bombeke K and Symons L et al. Patient-centeredness from education to practice: the 'lived' impact of communication skills training. **Medical Teacher**; 2012; 34; 0142-1466.
21. Smith C R, Dorsey M A, Lyles S J, et al. "Teaching self-awareness –Enhance learning about patient centred interviewing". **Academic Medicine**, 1990; 74:11.
22. Silverston P. Consultation skills teaching in primary care. **Education for Primary Care**, 2013; 24.1473-9879.
23. Von Fragstein M; Silverman J; Cushing A et al. UK consensus statement on the content of communication curricula in undergraduate medical education. **Medical**

Education, 2008; 42.1365-2923.

24. Monrouxe LV, Rees CE, Bradley P. The construction of patients' involvement in hospital bedside teaching encounters. **Qual Health Res**. 2009;19:918–30.
25. Eertwegh V V, Dalen V J et al: Residents perceived barriers to communication skills learning: Comparing two medical working contexts in postgraduate training: **Patient Educ Couns**. 2014;95:91-97.
26. Bunnis S, Kelly D. Research paradigms in medical education research. **Medical education**. 2010. 44:358-366:
27. O'Brien B, Harris B I, Beckman J T et al. Standards for Reporting Qualitative Research: a synthesis of recommendations. **Acad Med**. 2014 89:1245-1251:
28. Seidman I, **Interviewing as qualitative research: A guide for researchers in education and the social sciences**, 1998; New York.
29. Pope C, Ziebland S, Mays N. Qualitative research in health care. Analysing qualitative data. **BMJ**; 2000. 320:114-16
30. Eraut, M, Hirsch W. The Significance of Workplace Learning for Individuals, Groups and Organisations. **Oxford University Department of Economics**. 2007
31. Maguire P, Pitceathly C. Key communication skills and how to acquire them: **BMJ** 2002;325:697.
32. Levinson W. Patient-centred communication: a sophisticated procedure ***BMJ Qual Saf*** 2011;1-3.
33. Sfard, A. On two metaphors for learning and the dangers of choosing just one. **Educational Researcher**. 1998; 27(2), 4-13.
34. Lave, J. and E. Wenger. **Situated Learning. Legitimate Peripheral Participation**, Cambridge, University Press. 1991
35. Eraut, M, Alderton J, Harrison R, et al **Learning from Other People at Work. Perspectives on Learning: Supporting Lifelong Learning**. London, 127-145. 2002
36. Epstein M R, Street L R. The values and Value of Patient-Centered Care: **Annals of Family Medicine**: 2011;9:100-103.
37. Agoritsas T and Heen FA et al. Decision aids that really promote shared decision making: the pace quickens. **BMJ**; 2015;350: g7624.
38. Eaton S, Roberts S, Turners B. "Delivering patient centred care in long term conditions", **BMJ**: 2015;350:4181.
39. Joseph-Williams N, Lloyd A, Edwards A, Stobbart L, et al. Implementing shared decision making in the NHS: lessons from the MAGIC programme. ***BMJ*** 2017; 357:

10.1136.

40. Waker J, Melsner M, Delbanco T. US experience with open notes. **BMJ** 2015;350:g7785 201562.
41. Luxford K, Newell S. New South Wales mounts Patient Based care Challenges **BMJ** 2015; 350;g7582.
42. Alexandraki I, Mooradian AD. Redesigning medical education to improve health care delivery and outcomes. **Health Care Manager** 2013; 32: 37-42.
43. Parish E. Roundtable Debate How can we get better at providing patient centred care; **BMJ** 2015; 350:h412.

Table 1: Semi-Structured Interview Questions

1. When you hear or read the phrase, 'patient centred care', what are your thoughts on what the phrase means?
2. Moving away from PCC and thinking more generally about the way you provide care to patients, how do you think you developed your ideas on patient care?
3. Who/what other factors have been influential in developing those ideas into the skills you apply in practice?
4. Are there any barriers, which limit how you can apply your approach to patient care?
5. What do you think about the ST training in this aspect of training?
6. Are there ways you would wish to improve patient centred care?

Table 2: Themes and sub-themes generated from the data analysis

1. Understanding of PCC
2. Learning PCC skills: A work in progress
    a. The importance of consultants
    b. Role of formal education
    c. Improving PCC skills
3. Delivering PCC: Beyond the physician
    a. Working as a team
    b. Organisational factors
    c. Patient factors
    d. The doctor as a 'person'

Research checklist:

No	Item	Heading, Page number
Domain1. Research team and reflexivity		
Personal Characteristics		
1.	Interviewer/facilitator	Method, page no.7
2.	Credentials	Method, page no. 7
3.	Occupation	Method, page no. 7,8
4.	Gender	Method, page no. 7,8
5.	Experience and training	Method, page no. 7,8
Relationship with participants		
6.	Relationship established	Method, page no. 7,8
7.	Participant knowledge of the interviewer	Method, page no. 7,8
8.	Interviewer characteristics	Method, page no. 7,8
Domain 2: study design		
Theoretical framework		
9.	Methodological orientation and Theory	Introduction, method Page 6,7,8
Participant selection		
10.	Sampling	Method, page no. 7,8

No	Item	Heading, Page number
11.	Method of approach	Method, page no. 7,8
12.	Sample size	Method, page no. 7,8
13.	Non-participation	Method, page no. 7,8
Setting		
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"How do specialist trainee doctors acquire skills to practice patient centred care? A Qualitative Exploration"

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Title: How do specialist trainee doctors acquire skills to practice patient centred care? A Qualitative Exploration

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HOW DO SPECIALIST TRAINEE DOCTORS ACQUIRE SKILLS TO PRACTICE PATIENT CENTRED CARE? A QUALITATIVE EXPLORATION

ABSTRACT

Objectives: The importance of patient centred care (PCC) has been increasingly recognised. However, there is limited work exploring what doctors actually understand by PCC, and how they perceive they acquire PCC skills in the workplace. The objectives of our study were to explore i) what UK doctors, in specialist training, perceive to be the essential components of PCC ii) if/how they acquire these skills iii) any facilitators/barriers for engaging in PCC; and iv) views on their PCC training.

Design: Qualitative study using in-depth individual semi-structured interviews with UK specialist trainees. Interview transcripts were thematically analysed.

Setting and Participants: Thirty-one specialist trainee doctors, with at least 4 years postgraduate experience, were interviewed. Participants worked in various medical specialities within the Medical Directorate of an acute hospital in the East Midlands of England.

Results: Interview data were transcribed verbatim and categorised into three main themes. The first theme was 'Understanding PCC' where the doctors gave varied perspectives on what they understood by PCC. Although many were able to highlight key components of PCC there were also some accounts which demonstrated a lack of understanding. The second theme was 'Learning PCC skills: A work in progress'. Learning to be patient-centred was perceived to be an on-going process. Within this, trainee doctors reported 'on-the-job' learning as the main means of acquiring PCC skills, but they also saw a place for formal training (e.g, educational sessions focussing on PCC, role play). 'Delivering PCC: Beyond the physician' referred to the many influences the doctors reported in learning and delivering PCC including patients, the organisation and colleagues. Observing consultants taking a patient-centred approach was cited as an important learning tool.

Conclusions: Our findings may assist clinical educators in understanding how trainee doctors perceive PCC, and the factors that influence their learning; thereby, helping them shape PCC skills training.

Strength and limitations of this study:

- As a qualitative study of medical specialist trainees in the UK, this paper provides insights into the subjective understanding of patient centered care from the clinician's perspective, and how they perceive they acquire these skills.
- We interviewed doctors (using a semi-structured interview schedule) from a wide range of medical sub-specialties until data were saturated (no new information emerged). This led to a comprehensive and broad set of views and insights into patient-centered care, including the barriers and facilitator to PCC.
- Interviews were conducted at one time point, future longitudinal research would be valuable to see if and how PCC skills develop across time.
- Participants were those willing to participate, thus there may be selection bias in terms of views on PCC. Those who did not volunteer to be interviewed may have had a different understanding and experience of PCC.
- The study was conducted in one acute trust and it cannot represent all UK hospitals. It would be useful in future work to see how these are similar or different across healthcare systems, levels of training and within/between countries.

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How do specialist trainee doctors acquire skills to practice patient centred care? A Qualitative Exploration

Introduction

The importance of patient centred care (PCC) has been increasingly recognised in the past two decades, with numerous efforts made to implement the principles of PCC [1-5]. PCC is associated with positive patient outcomes such as improved patient satisfaction, better drug adherence, favourable health outcomes (including survival) and reductions in diagnostic tests, referral rates and costs [1,2,6-10].

Despite the beneficial outcomes of PCC, it is clear there is not a shared understanding of exactly what PCC means. Indeed, the term 'patient centred care' has been poorly, as well as variably, understood by physicians [11, 12]. It has been described as 'participatory medicine', 'shared decision making', 'patient education', 'patient empowerment' and 'nothing about me without me' [9,11-14]. There have been attempts to identify the key principles of PCC in order to have a shared definition and understanding. For example, the Picker Institution identified seven principles underpinning PCC [6]; they include respect for patients' values, integrated care, good communication, managing pain and physical health, emotional support, involvement of family and continuity of care. Moreover, Mead et al (2000) identified five core dimensions to help measure the process and outcomes of practicing PCC, namely: biopsychosocial; 'patient as person'; 'doctor as person'; sharing power and responsibility; and therapeutic alliance [15]. Sidani & Fox argue for holistic, collaborative and responsive care as the basic components of the PCC. They advocate implementation of these principles can only be feasible through a trusting, respecting and nurturing therapeutic relationship between health care professionals and patients in all clinical settings [16].

Training in PCC

Key principles underpinning the care of all patients in the UK are outlined in the General Medical Council and Royal College of Physicians (RCP), and by the Institute of Medicine in the USA [5, 17, 18]. The RCP in 'Future Hospital: Caring for Medical Patients'[18] lays out principles underpinning the care of all medical patients. It clearly states that doctors should be providing individualised, compassionate, holistic and collaborative care in the community, hospital and social services. Though these recommendations are explicit in what is expected from a clinician, they are vague on how these principles are learned and developed in clinical practice. Indeed, recent evidence suggests that doctors in training are not well equipped to practice in ways that appropriately meet patient needs and expectations resulting in patient dissatisfaction and complaints [19, 20]. Thus, there is a need to understand the process of how doctors acquire PCC skills to introduce positive changes not only in the workplace but also in training doctors appropriately. There are some studies supporting the development of patient-centred communication skills [21-25]. Also, more generally, there is research describing how medical students and junior doctors engage in workplace learning by continuous reflection within the interaction between senior doctors and patients in a supportive environment [26,27]. However, there is limited work exploring what doctors understand by PCC, and how (and indeed if) they perceive they acquire PCC skills in the workplace [12]. Therefore, this study aims to explore (1) what UK doctors, in specialist training, perceive to be the essential components of PCC (2) if/how they acquire these skills; (3) any facilitators/barriers for engaging in PCC; and (4) views on their PCC training.

Method

This study adopted an interpretive approach employing qualitative semi-structured interviews. The interpretive paradigm is concerned with understanding the world as it is from subjective experiences of individuals. The epistemological stance is that of creating the knowledge on how doctors understand PCC and learn these skills [28]. As our study focused on the personal experience and views of the doctors, semi-structured interviews allowed participants the freedom to express their views in their own terms. In order to establish trustworthiness of the findings we referred to the guidelines and strategies of Lincoln & Guba and Korstjens &Moser [29,30]. We summarise these (alongside how we have used these guidelines in our study) in Table 1. As part of this, VP acknowledged the importance of being self-aware and reflexive about her own role in the process. This included collecting, analysing and interpreting the data and in the pre-conceived assumptions she brought to the research. Accordingly, this added to her cautious and self-aware approach to all aspects of the study [28,31]. For example, she was mindful in interviews not to presume too much about STs and their views, but to be open to different responses and perceptions. This was checked periodically in interviews by VP and HT. Reflexive notes included the researcher's subjective relationship with the interviewees and her role as a Specialist Trainee. For example, she noted that interviewing fellow STs may have made it easier for the participants to 'open up' and discuss their views on PCC (including barriers).

Participants

We were specifically interested in Specialist Trainees (STs), equivalent to senior residents or clinical fellows, as they have completed their medical undergraduate degree, and are now training within their chosen medical speciality. An administrator in the Postgraduate Unit emailed eighty STs (with at least 4 years postgraduate experience) working in various

medical specialities within the Medical Directorate of an acute hospital in the East Midlands (England). There was no specific policy/initiative in the study site hospital regarding PCC. However, NHS England and all the NHS trusts are recommending PCC skills to improve patient satisfaction and health outcomes [32].

Participants were invited to participate in a study on their views and experience of patient-practitioner communication. Many participants volunteered to participate but the first thirty-one (39%) who volunteered were included in the study. There were 19 (61%) males and 12 (39%) females from various medical specialities at different levels of training (1-5 years). Table 2 demonstrates the participant's ethnicity and medical speciality. Seven participants had also undertaken research training alongside their medical speciality.

Semi-structured interviews

Questions were formulated in the context of the study's aims, linking to gaps in the relevant literature. After explaining the purpose of the interview, informed consent was obtained and then participants were asked to share their experiences using the semi-structured questions noted (see Table 3). Individual interviews were conducted at the Postgraduate Unit, by VP (a trained interviewer who was a Specialist Trainee at the time of data collection). Prompts and probes were used where appropriate to facilitate in-depth responses and to try to ensure participants could expand on answers [33]. Interviews were audio-recorded using a Dictaphone and lasted on average 50 minutes (range=35-65 minutes). All interviews were transcribed verbatim after every 3-5 interviews so VP and HW could check for any new data. After thirty-one participants we reached data saturation (there was no new information emerging) at which point no further interviews were conducted.

Data analysis

VP with the support of HT (non-Medical Professor) examined the data by firstly immersing themselves in the data by reading and re-reading the transcripts. They then categorised all the data, which had similar meaning indexing them into themes. During this process, whenever there were ambiguities while indexing, further clarification was obtained by PP and HB. Identifying the recurrent pattern of meaning, data were further re-organised into succinct themes manually. These themes and sub-themes were further studied to identify the deeper meaning, understanding the on-going phenomena of learning PCC skills through the participants' perspective and inductively drawing conclusions [34]. Although there is no shared understanding of exactly what PCC means we referred to the Picker Institution seven principles underpinning PCC while conducting the analysis [6].

Ethical Approval

Approval from the local R&D Department was obtained in accordance with the Research Governance Framework for Health and Social Care (IRAS number 159805). As participants were staff, full ethical committee approval was not required.

Patient and Public Involvement

None

Results

Data were categorised into 3 major themes and 7 sub-themes (Table 4) which are discussed below. The three major themes, respectively, map onto the first three aims of the study, and the fourth aim, on training, maps onto the second and third themes. We present each of these below with representative quotes. Most quotes are reproduced in full, but some were

shortened in the interest of brevity (but without altering the meaning).

Theme 1: Understanding of PCC

The interviews with participating doctors generated some interesting and varied perspectives on what the doctors understand by PCC. While the majority perceived PCC as viewing care through the patients' eyes, others perceived it as sharing treatment options and listening to patients. Moreover, considering the patient in their social context and treating the patient holistically was considered important across many accounts. It was also noted during the interviews that STs believed PCC to be particularly important in long term conditions.

> *Doctor 6: PCC is nothing but seeing healthcare through the patients' perception i.e. what their idea is of a good outcome, their focus, thinking about their perception on the whole process and also the outcomes.*
>
> *Doctor 3: PCC is mainly needed in patients with chronic conditions, patients should be educated by explaining the diagnosis, treatment, investigations and treatment options patients should be motivated and involved in the management of his/her condition without which management would be difficult.*

There were also doctors who demonstrated that PCC may still not be fully understood. For example, one doctor perceived PCC primarily as a safety measure. The research background of the trainees influenced their views on PCC. Specifically, those STs who had research training reported that they better understood, and embraced more fully, PCC.

> *Doctor 22: Research changed my attitude on this aspect, it enhanced and developed my views on the patient being involved. By interacting with patients, by doing face-to-face interviews, developing educational Modules - so many other things came to light…it's not just the concept of the disease - the disease concept is just on the surface and underneath it, there are so many hidden agendas. Psychological factors play a major role.*

Theme 2: Learning PCC skills: A work in progress

STs only referred to formal medical training in terms of learning about the *concept* of PCC. Indeed, majority of doctors commented that there was never any formal training or teaching of PCC skills beyond this.

Learning and practicing PCC skills mostly occurred in tandem, with STs indicating that they were constantly learning as they practiced.

a: The importance of consultants

Majority of doctors acknowledged that observing senior colleagues and consultants' practice was a source of learning, leading them to gradually emulate their practice. However, it was also acknowledged that senior colleagues are not always good role models, instead practicing a paternalistic form of patient care.

> *Doctor3: Gone are the days of the Doctor who has the parental role - now they listen to patients, address their concerns. This is a 'new concept'...many physicians trained years back, they follow the directive treatment where patients are the recipient and physicians tell the patients what to do. The bulk of old senior practitioners do not want to change their practice. They will oppose the change and they, being powerful in the team, will affect the team.*

Thus, some doctors expressed the need for high quality role models skilled in PCC to learn from, and practice PCC skills.

b. Role of formal education

Many doctors reported that they learned about the concept of PCC from their Undergraduate Medical Education (UME) while learning to take history from patients, and also from reading the General Medical Council (GMC) and Trust guidelines. However, they did not report formally learning skills *per se*. Instead majority of doctors commented that there was never

any formal training or teaching of PCC during their higher medical training and that most skills were learned on the job.

c. Improving PCC skills

Appreciating the challenges of teaching PCC skills, doctors suggested that one of the best ways of improving PCC skills was to devote more time on the ward observing consultants. Feedback was central to many accounts from team members and patients.

> *Doctor 2: Feedback by consultants after the real patient encounter during ward round clinics was the best way to learn PCC.*

> *Doctor 17: Patient feedback, the outcome of the disease and their agreement is all positive influences, and thus we start practicing it.*

Majority of doctors felt regular teaching sessions 'near the workplace' would be helpful in consolidating communication skills and focusing on delivering PCC.

> *Doctor 22: General medical teaching, clinical scenarios/role play, diversity training, interactive discussion or workshops would be helpful.*

Theme 3: Delivering PCC: Beyond the physician

From the doctors' accounts it was evident that physicians alone could not deliver PCC – it goes far wider than this. Indeed, PCC needed to be facilitated from the wider organisation to the patients themselves.

a: Working as a team

Doctors emphasised that working as a team is essential for PCC; effective communication among its members is the key factor for effectively practicing PCC. Conversely, if all members do not understand PCC, and do not communicate effectively about their patient, then PCC is made more difficult.

Doctor 8: The team [staff members at all levels], rather than physicians alone, should understand the concept. This is pivotal for PCC.

Doctor20: Communication skills are vital to deliver PCC skills; Patients are moved to different wards through their journey in hospital. Patients do not have an idea what is happening if there is no proper communication with the patients, and also between different team members.

b: Organisational factors

Doctors opined that the structure of the organisation in which they worked, the facilities including the information technology (IT) available at the point of care and work patterns, could all influence PCC delivery.

Doctor 5: We have to think hard and organise healthcare as a whole not just within individual departments. How can we design the interface between inpatients and outpatients; interface between primary, secondary and tertiary care? NHS IT, electronic records need to be maintained so that they're available even in tertiary centres e.g. in cardiology, renal centres and also in GP practice…communication could be better as this improves efficacy

c. Patient factors

Majority of doctors emphasised that good feedback from patients has a positive influence on their practice. Doctors also described examples of clinical encounters, which helped them view care through patient's perspective.

Doctor 14: Clinical situations helped me to develop the skills. For example, I inserted a cannula to a patient who needed antibiotics. But later I received feedback from the seniors that even though it was the best course of action it was not agreeable with the patients. Such experiences have made me realise the importance of PCC. There is no primary training given on this aspect of skills most of it is self-learning.

However, some doctors appeared to perceive that (lack of) patient involvement due to their medical condition or background could pose challenges, thereby acting as a barrier to practising PCC.

> *Doctor 17: Patients coming from ethnic minority with different culture/religious impacts, their perspective and confidence would be different.*

> *Doctor 26: Some patients like the paternalistic approach, you are the doctor do what you think is the best. Some patients are not keen to know about their treatment. They can pose a threat to delivering PCC.*

d. The doctor as a 'person'

Doctors reported that their own personality traits, their beliefs, values and attitudes, as well as their life experience as a patient or as a family/friend had influenced their practice. The differences in the background experience of doctors not only influence their clinical practice but also their understanding of the term 'PCC'.

> *Doctor2: How you are brought up and your own personalities, personal issues, your moral, religious values, your upbringing could all impact on your practice.*

Many doctors reported that the physician's knowledge base on managing the underlying condition was needed to practice PCC skills.

Discussion

There were varied perspectives on what the doctors understood by PCC. Many focused on key aspects of PCC, such as viewing care through the patients' eyes, and sharing treatment options and listening to patients. This is encouraging, and demonstrates that many doctors were able to highlight key components of PCC [15]. It was also interesting to note a

difference across participants, in that individuals who had research training reported that they had a better understanding and keenness to embrace the concepts of PCC after their training. However, there were also perceptions that did not convey a clear understanding of PCC, which is of concern. This may be due to definitional problems with PCC, or may reflect specific PCC training needs. It should also be noted that we do not have evidence of how patient centred these doctors are in day-to-day clinical practice.

The doctors reported that current training, at least in their experience, lacked formal teaching and, perhaps crucially, feedback on PCC skills. Although most recognised 'on-the-job' learning as the main means of acquiring PCC skills, they also saw a place for formal teaching, including approaches such as role play which have been highlighted in the literature as important tools for imparting PCC skills [24,35-37]. Thus, there may be a place for incorporating teaching more formally for trainees, though they noted this would need to be easily accessible (i.e., near their workplace).

The doctors agreed that their practice and attitude towards PCC were significantly influenced by consultants as role models. Through consultants' holistic approach and observation they were able to learn and subsequently practice PCC skills. However, not all consultants were good role models – trainee doctors noted there are still senior colleagues who are paternalistic in their manner. PCC can be perceived as relinquishing power to patients, which has caused discomfort among some physicians [9, 12]. This may become less evident as doctors trained in PCC, become consultants. For now, though, it should be noted that not all senior colleagues provide good quality PCC role models and may impede fostering these qualities in their junior colleagues. Being aware of this and possibly focusing on training sessions for doctors at all levels may be a fruitful way forward.

It was clear that learning and practicing PCC skills are work in progress, continuing throughout these doctors' training. The STs acknowledged that patient-centred communication skills are essential not only with the patients and their family members but also among all health professional involved in their care [36]. It has been noted that communication is a skill that needs to be taught and honed throughout one's career [36,38]. Overall, doctors stated that more time spent with patients in the ward/clinics helped them to get more actively involved in patient's care. Reflecting on patient encounters, receiving feedback from patients, team members and senior staff had helped them to develop a better understanding of the concept of PCC. Indeed, research has shown that by continuous performance and self-reflection doctors acquire these skills [26,39].

Doctors indicated that PCC cannot happen in isolation as it goes beyond the individual physician. Organisational, individual and team factors influence PCC and there is interaction between these factors. Doctors emphasised that working as a team is essential; effective communication among health care professionals is a key factor for effective PCC. Indeed teamwork has been emphasised not only for continuity of PCC but also to create a better work environment for all professional groups [16]. If all members do not understand PCC, and do not communicate effectively about their patient, then PCC is more difficult. Thus, having a shared model i.e. a common understanding of the concepts of PCC not only among doctors about also across health professionals through training would be beneficial for everyone involved in healthcare.

Doctors commented on 'doctors as a person', and that their personality, upbringing, and attitudes all contribute to their ability to practice PCC. This view mirrors evidence where

physicians are encouraged to be aware that their personality can impact on their practice of PCC [13,21,22]. Trained faculty can help support trainees to enhance their self-awareness and self-efficacy and help develop positive attitudes towards practicing PCC [21,40]. Interestingly, Buetow et al argued recently that there should be equal focus on all stakeholders in clinical practice i.e. patients, clinicians, partners/family members. This would result in holistic collaborative management of the patients moving towards 'person-centred care' [41]. This may be interesting aspect to explore in future research.

PCC is not something that is 'done' to a patient, but patients influence and inform the consultation at the time, and beyond. The doctors recognised that they learned about PCC from patients during consultation, and were able to reflect on these encounters. Importantly, patient non-participation in decision-making was cited as a barrier to PCC by doctors. However, there is a fundamental difference between not involving patients as per their wishes and not involving them as a consequence of a 'paternalistic' approach. Epstein highlights the differing expectations of PCC from a patient and physician perspective. He notes that PCC needs to be viewed as an approach to care which requires doing the right thing for each patient, valuing their personal, professional and organisational relationships, even independently of the health outcome [42]. As research shows about 60% of patients take a proactive role and are keen to engage in managing their condition, it gives a *prima facie* indication of a significant number who may not desire such a role [43,44]. Patient activation and preparation can increase the likelihood of mutually useful conversations between patients and clinicians [45]. There may be a role for highlighting this across training.

Organisational factors were also highlighted as key to PCC. Trainee doctors highlighted the influence of the structure of the UK NHS, and stated that organisational support is needed to

address challenges such as time constraints, inadequate staffing levels, increasing workload and non-availability of trained faculty to lead changes at the workplace. These views are consistent with the literature and suggest that finite, stretched resources and inadequate connectivity through IT is an impediment for the practice of PCC [46-49]. Delivering PCC with these key organisational barriers in place could be addressed by regular training and performance review as a team within the organisation.

Limitations and strengths of the study:

We acknowledge there are limitations in our study. Participants were those willing to participate, thus there may be selection bias in terms of views on PCC. We also did not take our findings back to the participants for member checking which could have helped establish if we had interpreted the findings in line with participants' meaning. In addition, the study was conducted in one acute trust and it cannot represent all UK hospitals. However, our sample comprises trainees from a wide range of medical sub-specialities, which may have led to a more comprehensive set of views on this topic. It would be useful to see how these are similar or different across healthcare systems, levels of training and within/between countries.

Conclusions:

PCC is one of the essential elements of high quality care. Although it may appear easy, it is in practice very difficult to do well [38]. Our findings may assist clinical educators supporting formal and informal PCC skills training to doctors and also other health professionals in the workplace. In addition, our findings highlight the organisational support i.e. addressing the time, staffing, IT issues, trained faculty and PCC role-models are required for effective implementation of PCC.

References:

1. Richards T, Coulter A, Wicks P. Time to deliver patient centred care: **BMJ** 2015;350-51.
2. Stewart M, Brown JB, Donner A, et al. The impact of patient-centered care on outcomes. **J Fam Pract**: 2000; 49:796–804.
3. NHS England. **High quality care for all, now and for future generations**: 2013 London.
4. **Department of Health (DOH). Equity and excellence: liberating the NHS**: 2010. London.
5. Institute of Medicine (US) Committee on Quality of Health Care in America. **Crossing the quality chasm: a new health system for the 21st century**: National Academies Press. 2001. **Washington DC**
6. Gerteis M, Edgman - leviatan S, Daley J et al. **Through the patients' eye**: 1993. San Franciso.. USA.
7. Greenfield S, Kaplan SH, Ware JE Jr, et al. Patients' participation in medical care: effects on blood sugar control and quality of life in diabetes: **J Gen Intern Med** 1998; 3:448-57.
8. Meterko M, Wright S, Lin H, wt al. Mortality among patients with acute myocardial infarction: the influences of patient-centered care and evidence-based medicine: **Health Serv Res** 2010;45:1188–204.
9. Stewart M. Towards a global definition of PCC: **BMJ** 2001;322:444.
10. Stewart M, Weston M, Mcwhinney I R et al Second edition. **Patient centred medicine: transforming the clinical method:** 2003. Radcliff.
11. Hawken N. "Seeing things from the patient view; what will it take?" ***BMJ*** 2015; 350;g7757.
12. Naldemirci O , Wolf A , Elam M et al. Deliberate and emergent strategies for implementing person-centred care: a qualitative interview study with researchers,

professionals and patients: ***BMC Health Services Research*** 2017; 17:527: doi: 10.1186

13. Little P, Everitt H, Williamson I, et al. Preferences of patients for patient centred approach to consultation in primary care: observational study: **BMJ** 2001; 322:468.
14. Barry J M, Edgman –Levitan S. Shared decision making-The Pinnacle of Patient Centred Care.**New England Journal of Medicine** 2012; 366-369.
15. Mead N, Bower P. Patient-centredness: a conceptual framework and review of the empirical literature: **Social Science and Medicine** 2000; 51:1087-1110.
16. Sidani S, Fox M. Patient-centered care: clarification of its specific elements to facilitate interprofessional care: ***J Interprof Care*** 2014; 28(2): 134–141
17. General Medical Council (GMC). **Good Medical Practice** 2013. London.
18. Royal College of Physicians (RCP). **Future Hospital: Caring for Medical Patients**: 2013. London.
19. Tadd W, Hillman A, Calnan S, et al. Dignity in Practice: An exploration of the care of older adults in acute NHS Trusts, Preventing Abuse and Neglect in Institutional Care of Older Adults: Cardiff University; University of Kent, 2011. London.
20. Foot C, Gilburt H, Dunn P, et al People in control of their own health and care: **The Kings Fund**. 2014. London
21. Frankel R M, Eddin-Folensbee F, Inui ST. Crossing the patient-centred divide: Transforming healthcare quality through enhanced faculty development: **Acad. Med** 2011; 86:445-452.
22. Bombeke K and Symons L et al. Patient-centeredness from education to practice: the 'lived' impact of communication skills training: **Medical Teacher** 2012; 34:0142-1466.
23. Smith C R, Dorsey M A, Lyles S J, et al. "Teaching self-awareness –Enhance learning about patient centred interviewing": **Acad. Medicine** 1990; 74:11.
24. Silverston P. Consultation skills teaching in primary care. **Education for Primary Care** 2013; 24.1473-9879.
25. Von Fragstein M; Silverman J; Cushing A et al. UK consensus statement on the content of communication curricula in undergraduate medical education: **Medical Education** 2008; 42.1365-2923.
26. Monrouxe LV, Rees CE, Bradley P. The construction of patients' involvement in hospital bedside teaching encounters: **Qual Health Res** 2009; 19:918–30.
27. Eertwegh V V, Dalen V J et al: Residents perceived barriers to communication skills

learning: Comparing two medical working contexts in postgraduate training: **Patient Educ Couns** 2014; 95:91-97.

28. Bunnis S, Kelly D. Research paradigms in medical education research: **Medical Education** 2010; 44:358-366:
29. Lincoln YS ,Guba. Naturalistic inquiry Newbury Park: Sage 1985. CA
30. Korstjens I, Moser A . Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing: **European Journal of General Practice** 2018; 24:1, 120-124.
31. O'Brien B, Harris B I, Beckman J T et al. Standards for Reporting Qualitative Research: a synthesis of recommendations. **Acad Med**. 2014; 89:1245-1251
32. NHS England. Developing Patient Centred Care. 2014 Available at https://www.england.nhs.uk/integrated-care-pioneers/resources/patient-care/.
33. Seidman I, **Interviewing as qualitative research: A guide for researchers in education and the social sciences**: 1998. New York.
34. Pope C, Ziebland S, Mays N. Qualitative research in health care. Analysing qualitative data: **BMJ** 2000; 320:114-16
35. Eraut, M, Hirsch W. The Significance of Workplace Learning for Individuals, Groups and Organisations. 2007. **Oxford University Department of Economics**.
36. Maguire P, Pitceathly C. Key communication skills and how to acquire them: **BMJ** 2002;325:697.
37. Sfard, A. On two metaphors for learning and the dangers of choosing just one: **Educational Researcher** 1998; 27(2), 4-13.
38. Levinson W. Patient-centred communication: a sophisticated procedure: ***BMJ Qual Saf*** 2011;1-3.
39. Lave, J. and E. Wenger. **Situated Learning. Legitimate Peripheral Participation**. University Press. 1991. Cambridge.
40. Hawken N. "Seeing things from the patient view; what will it take?": **BMJ** 2015; 350;g7757.
41. Buetow A S , Martínez-Martín P, Hirsch A M et al. Beyond patient-centered care: person-centered care for Parkinson's disease: **npj Parkinson's Disease** 2016; 2, 16019; doi:10.1038.
42. Epstein M R, Street L R. The values and Value of Patient-Centered Care: **Annals of Family Medicine** 2011; 9:100-103.
43. Agoritsas T and Heen FA et al. Decision aids that really promote shared decision

making: the pace quickens: **BMJ** 2015; 350: g7624.

44. Eaton S, Roberts S, Turners B. Delivering patient centred care in long term conditions: **BMJ** 2015; 350:4181.
45. Joseph-Williams N, Lloyd A, Edwards A, Stobbart L, et al. Implementing shared decision making in the NHS: lessons from the MAGIC programme: ***BMJ*** 2017; 357: 10.1136.
46. Waker J, Melsner M, Delbanco T. US experience with open notes: **BMJ** 2015; 350:g7785 201562.
47. Luxford K, Newell S. New South Wales mounts Patient Based care Challenges: **BMJ** 2015; 350;g7582.
48. Alexandraki I, Mooradian AD. Redesigning medical education to improve health care delivery and outcomes: **Health Care Manager** 2013; 32: 37-42.
49. Parish E. Roundtable Debate- How can we get better at providing patient centred care; **BMJ** 2015**;** 350:h412.

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Contributors:

VP designed, conceived the study and conducted the interviews. VP wrote the first draft of the manuscript. HB and PP helped with the analysis and critical revision.MH, AK and PG helped with critical revision. HT supervised VP.

All authors listed on the title page have read and approved the final version of the manuscript and its submission to the Journal.

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Table 1 Trustworthiness of findings

Criterion	Brief definition	Strategy employed in our study
Credibility	Confidence that can be placed in the truth of the research findings.	We used analyst triangulation. That is, we had several analysts (from different backgrounds) reviewing the findings and analysis. VP and HT held regular meetings during the process of analysis. HB (health psychologist) and PP (Consultant) checked codes and themes independently.
Transferability	Can findings be transferred to other contexts or settings with other respondents	Transferability is primarily the responsibility of the one doing the generalizing (the reader). We have aimed to facilitate this by describing the research context and the assumptions that were central to the research.
Dependability & Confirmability	Stability of findings over time and degree to which other researchers can confirm findings (that are clearly derived from the data)	VP kept an audit trail as a record of the research path from the start of the research study to the end in order to transparently describe the research steps.
Reflexivity	Involves examining one's own conceptual lens, explicit and implicit assumptions, preconceptions and values, and how these	VP made reflexive notes during and after the interviews and while transcribing the audiotape and analysing the transcript. Reflexive notes also included the researcher's subjective relationship with the interviewees and her role as a Specialist

	affect research.	Trainee.

Table 2 Ethnicity and medical speciality

Medical Speciality		**Ethnicity**	
Geriatric	7	Afro-Caribbean	1
Acute Medicine	6	White British	7
Endocrine	4	Chinese	2
Gastroenterology	4	Asian British	19
Rheumatology	3	Other ethnicity	2
Neurology	2		
Infectious disease medicine	1		
Metabolic Medicine	1		
Cardiology	1		

Table 3: Semi-Structured Interview Questions

1. When you hear or read the phrase, 'patient centred care', what are your thoughts on what the phrase means?
2. Moving away from PCC and thinking more generally about the way you provide care to patients, how do you think you developed your ideas on patient care?
3. Who/what other factors have been influential in developing those ideas into the skills you apply in practice?
4. Are there any barriers, which limit how you can apply your approach to patient care?
5. What do you think about the ST training in this aspect of training?
6. Are there ways you would wish to improve patient centred care?

Table 4: Themes and sub-themes generated from the data analysis

1. Understanding of PCC
2. Learning PCC skills: A work in progress
    a. The importance of consultants
    b. Role of formal education
    c. Improving PCC skills
3. Delivering PCC: Beyond the physician
    a. Working as a team
    b. Organisational factors
    c. Patient factors
    d. The doctor as a 'person'

Research checklist:

No	Item	Heading, Page number
Domain1. Research team and reflexivity		
Personal Characteristics		
1.	Interviewer/facilitator	Method, page no.8
2.	Credentials	Method, page no. 8
3.	Occupation	Method, page no. 8,9
4.	Gender	Method, page no. 8,9
5.	Experience and training	Method, page no. 8
Relationship with participants		
6.	Relationship established	Method, page no. 8,9
7.	Participant knowledge of the interviewer	Method, page no. 8,9
8.	Interviewer characteristics	Method, page no. 8,9
Domain 2: study design		
Theoretical framework		
9.	Methodological orientation and Theory	Introduction, method Page 6,7,8
Participant selection		
10.	Sampling	Method, page no. 8,9

No	Item	Heading, Page number
11.	Method of approach	Method, page no. 8,9,10
12.	Sample size	Method, page no. 8,9
13.	Non-participation	Method, page no. 8,9
Setting		
14.	Setting of data collection	Method, page no. 8,9
15.	Presence of non-participants	Method, page no. 8,9
16.	Description of sample	Method, page no. 8,9
Data collection		
17.	Interview guide	Method, page no. 8,9
18.	Repeat interviews	Method, page no. 8,9
19.	Audio/visual recording	Method, page no. 8
20.	Field notes	Method, page no. 8,9
21.	Duration	Method, page no. 8,9
22.	Data saturation	Method, page no. 8,9
23.	Transcripts returned	Method, page no. 8,9
Domain 3: analysis and findings		
Data analysis		
24.	Number of data coders	Method, page no. 9,10

No	Item	Heading, Page number
25.	Description of the coding tree	Method, page no. 9,10
26.	Derivation of themes	Method, page no. 9,10
27.	Software	Method, page no. 9,10
28.	Participant checking	Method, page no. 9,10
Reporting		
29.	Quotations presented	Results, page 10-15
30.	Data and findings consistent	Results, page 9-15
31.	Clarity of major themes	Results, page 10-15
32.	Clarity of minor themes	Results, page 10-15

Close