




BMJ Open ‘They say’: medical students’ perceptions of General Practice, experiences informing these perceptions, and their impact on career intention – a qualitative study among medical students in England

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ABSTRACT

Objectives The number of UK graduates choosing General Practice training remains significantly lower than the current numbers required to meet the demands of the service. This work aims to explore medical students’ perceptions of General Practice, experiences which lead to the development of these perceptions, and the ultimate impact of these on career intention.

Design This mixed-methods, qualitative study used focus groups, semistructured interviews, longitudinal audio diary data and debrief interviews to explore and capture the experiences and perceptions of students in their first and penultimate years of university.

Setting Three English medical schools.

Participants Twenty students were recruited to focus groups from first and fourth/fifth year of study. All students in these years of study were invited to attend. Six students were recruited into the longitudinal diary study to further explore their experiences.

Results This work identified that external factors, internal driving force and the ‘they say’ phenomenon were all influential on the development of perceptions and ultimately career intention. External factors may be split into human or non-human influences, for example, aspirational/inspirational seniors, family, peers (human), placements and ‘the push’ of GP promotion (non-human). Driving force refers to internal factors, to which the student compares their experiences in an ongoing process of reflection, to understand if they feel General Practice is a career they wish to pursue. The ‘they say’ phenomenon refers to a passive and pervasive perception, without a known source, whereby usually negative perceptions circulate around the undergraduate community.

Conclusion Future strategies to recruit graduates to General Practice need to consider factors at an undergraduate level. Positive placement experiences should be maximised, while avoiding overtly ‘pushing’ GP onto students.

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ The inclusion of multiple sites and year groups in this work enables the exploration of perceptions of General Practice across England and how progression through undergraduate studies may impact on these perceptions.
- ⇒ Audio diary data enable capture of participants’ experiences, thoughts and sense-making process immediately after events, while the use of debrief interviews allows further reflection on these events.
- ⇒ This work does not include data from Scotland, Wales or Northern Ireland; data from other sites across the UK may offer additional insights into students’ experiences in those countries, and deeper understanding into issues affecting the whole of the UK.
- ⇒ Diary data in particular provide a rich data source, however, it is labour intensive for the researcher and participant; thus, numbers of participants are smaller than in less rich data collection methods.
- ⇒ Recruitment bias has been minimised through recruitment to the whole year group and avoidance of GP special interest groups; however, some element of recruitment bias must be considered, in a project so heavily focused on General Practice.

INTRODUCTION

The King’s Fund independent enquiry in 2011 identified increasing pressures on General Practice (GP) and highlighted that these pressures had not been reflected in increased numbers of general practitioners.¹ In response to this increased demand, the UK government pledge 6000 new GPs by 2024²; however, full time equivalent GPs in England have reduced from 28 115 in 2015, to 27 627 in May 2022.³

In order to recruit additional GPs, over 1000 new training posts have been created; however, 2019 data from the UK foundation programme show only 758 F2 doctors filling 4000 GP training places.⁴ Older doctors changing career and international medical graduates have been recruited to fill this deficit.

A number of studies and government publications have explored perceptions of medical practice, in attempts to understand why levels of F2 doctors entering GP training remain low, some of which have focused on undergraduates' perceptions of General Practice.

Findings of such studies have included perceptions that the lifestyle of the GP is flexible, suited to family life,⁵⁻⁷ and offers a breadth of clinical cases.^{5,8} Conversely this breadth is seen by some undergraduates as superficial, repetitive and unfulfilling.⁹⁻¹¹ Research has highlighted other negative perceptions such as the high administrative load,¹² lack of academic or research opportunities,^{9,13,14} and the perceived low prestige of the GP.^{12,15-17} Placements, clinical teaching, role models, denigration and the hidden curriculum have all been identified as contributing to these perceptions.^{7,13,18-24}

Previous work has all been from retrospective interviews, studies of focus groups. We aimed to understand the links between perception, experiences and ultimately intention to pursue General Practice as a career, with a uniquely prospective methodology.

METHODS

We undertook a qualitative study, using audio diaries, semistructured interviews and focus groups to capture students' experiences of General Practice, and the impact of this on their career intention.

Recruitment

Students were recruited from three institutions, Newcastle University, University of Manchester and University College London. Students were recruited from the first year of study and penultimate year of study. The purpose for this recruitment was to gather a selection of perceptions from different institutions and year groups, students were not recruited from final year of study due to the pressures of final year examinations.

All students in these years of study were invited to attend a focus group regarding 'Perceptions of General Practice' via posters in student areas, and verbal invitations in lectures and seminar groups. Students in eligible year groups who had consented to receiving research emails were also invited via this route. These multiple

recruitment strategies aimed to ensure receipt of the invitation by all eligible students. GP special interest groups were avoided in recruitment, in order to minimise this as a source of recruitment bias.

Stage 1: focus groups

In the first stage of data collection, focus groups were performed according to a written focus group protocol. In these groups, students were asked a set of open questions exploring their perceptions of who becomes a General Practitioner, the perception of General Practice within their institution, and their own feelings about a career in GP. This data were recorded and later transcribed. The purpose of these groups was to establish a baseline understanding of students perceptions of General Practice, allowing them to explore these perceptions with their peer group, and prompting reflection into their own understanding through group and researcher interaction.²⁵

Stage 2: semistructured interviews and diary data collection

The second stage of data collection was a prospective process consisting of a semistructured interview, a period of longitudinal audio diaries and a debrief interview; [figure 1](#). Interested students were recruited either directly from focus groups, or through a second round of the aforementioned recruitment methods.

All interested students were first contacted by the lead researcher, to provide written information, further explain the longitudinal process and establish consent. A primary semistructured interview was performed over an online platform, following the same question format as the aforementioned focus groups, establishing the students' baseline perceptions, and/or explore any perceptions they may have felt uncomfortable expressing in a focus group environment. The student then entered the longitudinal diary collection phase. In this phase, the student was given access to a Dictaphone app, and they were asked to make a short audio diary entry following any experiences which they felt impacted their perception of GP. They were asked to record the details of the experience, their feelings surrounding it, and any impact they felt it had on their perception, or intention to pursue GP as a career. The diary phase lasted for approximately 6 months, a period designed to maximise data collection, while being acceptable to students with other commitments. This time frame was personalised for each student to account for situations such as exams, electives and holidays.

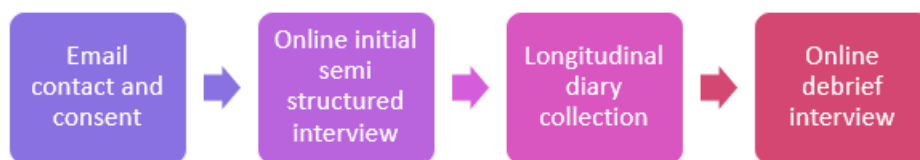


Figure 1 Process of data collection.

Finally, a further online interview was performed by the lead researcher, the recorded experiences were discussed in greater depth, exploring impact on students' perceptions and intention to pursue a career in General Practice. The use of diaries enabled capture of private experiences and reflection,²⁶ and the diary-interview technique enabled deeper understanding and exploration of participants' narratives²⁷

Data analysis

Following data collection, all audio files were transcribed verbatim by Ndata transcription service, and participant names were replaced with numbers for anonymity. Nvivo was then used to analyse the data for themes using a paradigmatic mode of narrative analysis.²⁸ In this process, nodes were initially drawn from the narrative longitudinal data. These nodes were grouped into similar concepts and then themes. Focus group and then semi-structured interview data were then analysed, and categorised into already identified themes, either expanding on or challenging these, or developed into further themes. Throughout the process, the raw audio data were revisited, to ensure that thematic findings were congruent with the individuals' experiences.

Patient and public involvement

There was no patient involvement in this study. A student advisor was recruited at the start of the process; this advisor had volunteered to assist in the research process. The role of the student advisor was to engage with the research team as the study was designed, review protocols and review student information sheets. The advisor met with the research team to ensure that the research process was reasonable and acceptable to a peer of the participants. The student advisor also assessed the clarity and understandability of documentation provided to students.

RESULTS

Participants

Figure 2 demonstrates the participants involved in each stage of the study. In total, 20 students responded to focus group invitations and participated in this first stage of the study. Two of these participants responded positively to the invitation to continue onto the next stage of the study and participated in the semistructured interviews. A further seven participants responded to the invitation to participate directly into the next round, through a second round of the recruitment methods described earlier. It is of note that only one focus group was performed in Manchester, due to the impact of the coronavirus pandemic during data collection. Three participants (across all sites) were lost to follow-up after the semistructured interview phase, resulting in a total of six participants completing the longitudinal diary section of the study.

Participant demographics

Of 26 participants in the entire study, 22 were under 25, 2 were between 25 and 35 and two declined to submit any age details. Thirteen participants identified as female, and 11 as male, two declined to submit any gender information. Seventeen students self-reported as being white British, with one student each self-reporting as being from each of the following ethnic groups; Irish, French, Pakistani, white and Asian mixed ethnic group, Sri Lankan, Caribbean, Indian/Thai. Two students declined to submit ethnic information.

Table 1 outlines the demographic details of the participants completing the longitudinal study.

External influences of perception and career intention: human influences

The model in figure 3 categorises the findings of the thematic analysis.

These external factors can be split into human and non-human influences. Inspirational and aspirational seniors were frequently discussed as having impact on the participants:

I went to a GP and the GP that I met was incredibly intelligent, really, really fantastic at their job, really fantastic at teaching and I just found them so inspiring. (Penultimate year student)

These seniors who had a positive impact were inspirational to participants and demonstrated features which the participant wished to emulate in their own practice. Not all seniors were aspirational:

Before I went into med school, I did some shadowing with a family friend who's a G.P. and he, as a person, was quite depressed, very laconic in the way that he would approach his patients, and his life, very depressive outlook, and just had a negative outlook towards being a G.P. and going into Medicine. (Penultimate year student)

While negative experiences such as this were considered, their impact was overshadowed by experiences with a senior who was considered inspirational.

Experiences with family and family friends also impacted on perceptions of GP, especially if those family members were in the medical field:

I don't know whether it's my family because I've got a few surgeons in my family, GP was always like an easy option. (Penultimate year student)

This participants' mother is also a GP, and she does consider herself very likely to go into General Practice, partly due to her mother's dual role as a family member and inspirational senior. However, her family's opinion of General Practice does result in some embarrassment, due to their perception of this being an 'easier' career path, and she is aware of this opinion when reflecting on her career plan.

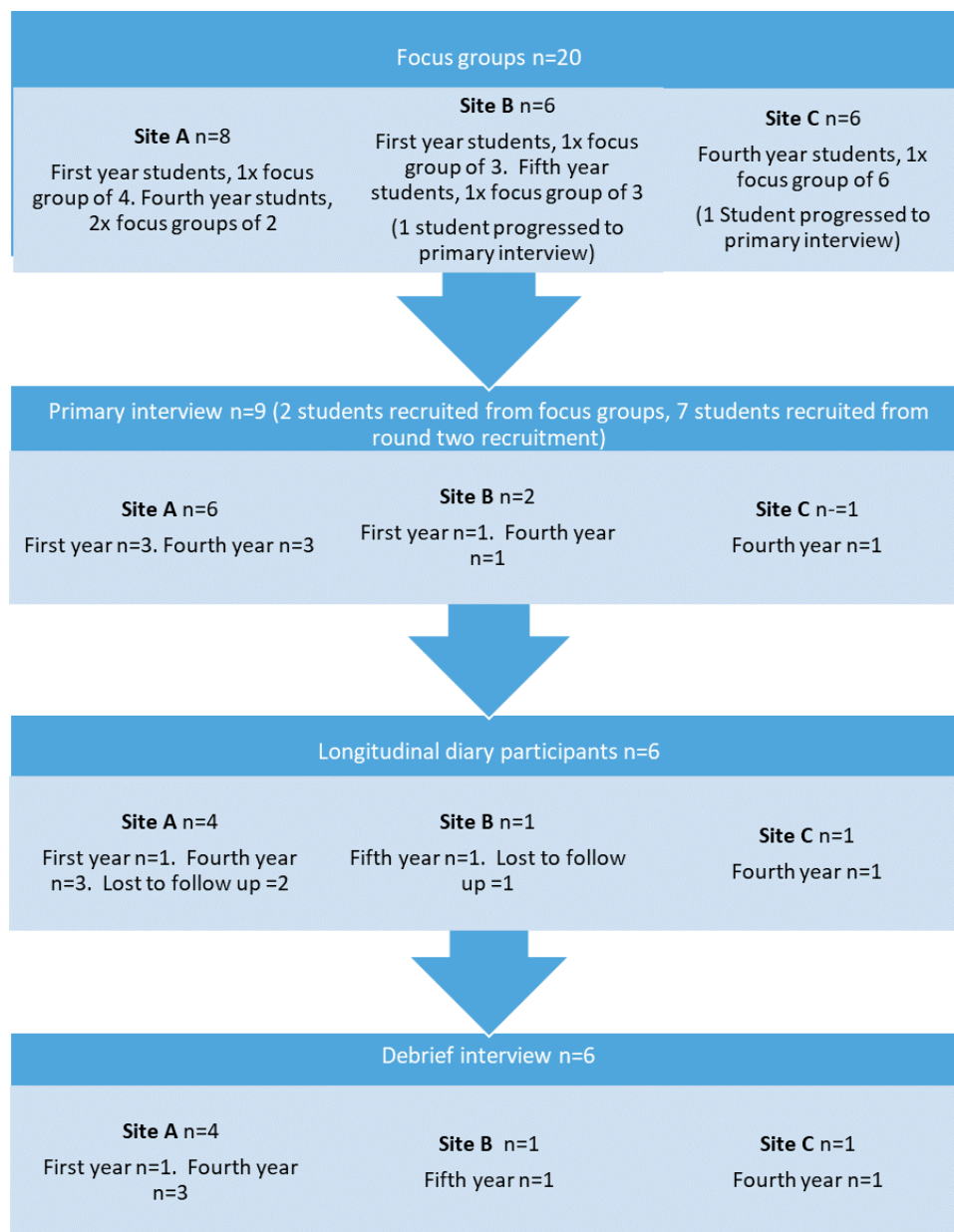


Figure 2 Participants involved at each stage of the study.

While on placement, most participants describe experiences with hospital colleagues, some of which included negative perceptions of General Practice:

Table 1 Demographic details of longitudinal participants

Participant	Year of study	Age group	Ethnic group	Gender
1	1	<25	7 (white and Asian)	Male
2	4	<25	1	Female
3	4	25–35	1	Male
4	4	<25	1	Male
5	5	<25	1	Female
6	4	<25	1	Female

I was talking to the F1 on-call about careers and he was saying he didn't want to do GP because he doesn't like the idea of sitting down all day. It was interesting because a lot of what an F1 does is admin anyway and it sort of just essentially doing a lot of ordering, it was as if he was arguing that he didn't want to do all these referrals and ordering tests, but that's what he does anyway. (Penultimate year student)

While the above comment could be considered derogatory towards GP, they are not simply accepted, instead she reflects on them based on her own experience, and demonstrates a degree of scepticism when they are not congruent with her own perception.

Conversations within the medical student population may also perpetuate negative perceptions of General Practice:

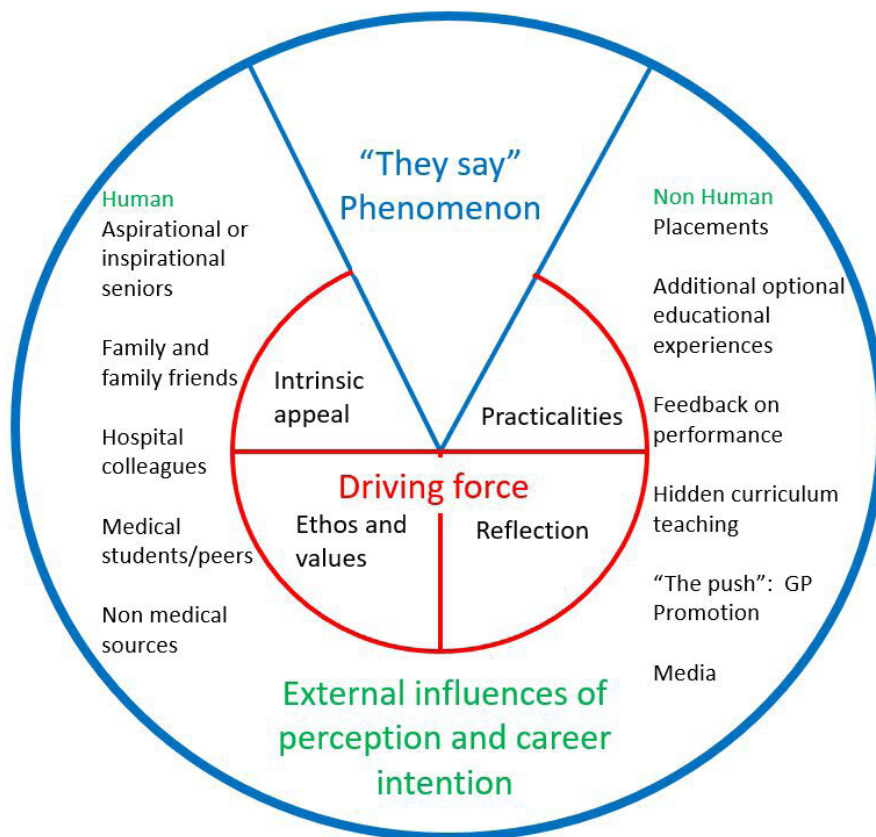


Figure 3 Model of external influences and driving force applied to perceptions of GP as a career. GP, General Practice.

One of the chaps said, ‘Oh I could quite happily do surgery & do that as a career & when I burn out, I will be a GP at the end as it doesn’t take much’. (Penultimate year student)

The opinion of peers had a persistent impact on students:

I like GP a lot but when people are constantly ... you don’t want to go into something that where everyone else looks down on you. My boyfriend (a medical student) doesn’t have that higher opinion of GPs ... You get a lot of people, not pressuring, but making comments about what you should be doing with your career which I think is a bit silly personally. (Penultimate year student)

While considering that she would enjoy a career in GP, the persistent perception of low prestige among her peers does cause her to reflect on her career intention.

Participants may also have experiences with the lay population which impact their perception of General Practice:

And then he, as people often do when they find out you’re a medical student, started talking to me about his own experience with the NHS and things. It led on to him saying ‘ah I’ve got no time for GPs at all because they missed my granddaughter’s meningitis and she ended up in hospital’. (Penultimate year student)

The lay population freely shared their negative experiences of General Practice with participants; however, there were few instances of positive interactions regarding GP. This open culture of criticism of GP may contribute to the global feeling of low prestige of the career.

External influences of perceptions and career intention: non-human influences

Clinical placements make up a large proportion of medical school, and placements in GP offer an environment rich in potential to influence perceptions:

I had slightly negative views about going into GP before coming (to university) but then we had like a clinical session with a GP and she made it sound really interesting and I thought ‘actually, maybe I shouldn’t close any doors yet’. (First year student)

Placements early in an undergraduate course, even if a 1 day session as described above may influence perceptions prior to the development of deep-seated negative perceptions. GP placement also offers an opportunity to meet aforementioned inspirational or aspirational seniors, though they can also expose participants to some negative aspects of GP work:

Our GP was always telling us she comes in an hour before appointments and leaves an hour after the last appointment every day. (Penultimate year student)

Students may also choose to partake in optional experiences, such as student selected components (SSCs):

I've really begun to appreciate how much I've really, really enjoyed this placement particularly because I've had so much independence and responsibility, and I've learnt a lot about Meds, learning about the role of a G.P. and about other healthcare professionals and I've really started to appreciate those things. (Penultimate year student)

This participant considers GP her first choice of career, hence choosing GP for her SSC. Supervisory doctors may have sought additional experiences for her, knowing her interest in the career. This increased responsibility enabled her to visualise herself in this role and reflect on it as a future career.

'The Push' refers to the pushing of GP as a career, this may be due to recruitment issues. Participants were acutely aware of this within their institutions:

I think it's also the national shortage of primary care I feel they are trying to, not (institution) specifically, but medical schools as a whole are trying to increase the interest in GP. (Penultimate year student)

This pushing may also result in women being advised by colleagues that GP would enable them to have more family time. Such unsolicited advice was not received well by some participants:

I'm quite stubborn, and quite independent, and I like to make my own decisions and I don't really like being told what to do. So, being told that you have to be a G.P. makes you think, oh no I'm not going to be a G.P., I'm going to be something else and prove you wrong. (Penultimate year student)

Feedback on performance, particularly related to skills which were suited to General Practice were shown to cause participants to consider that this role may 'fit' with their own skills. Some students also discussed hidden curriculum sessions as increasing their reflexivity, especially with regards to denigration.

Students also considered the biases of the media, considering that GP was not always portrayed positively:

G.P.s are shown as a boring job whereas with Surgery all the exciting programmes, and you don't exactly see a high intensity programme like Casualty set In a G.P. studio. (First year student)

Driving force

The concept of driving force refers to factors internal to the individual student, which contextualise their external experiences to influence their career intention.

Intrinsic appeal refers to the participants' enjoyment and feeling of suitability to GP as a career. Participants considered if they had the skills required to be a good GP:

My mom has a friend from home, he is like one of the only GPs in a small town and he can chat for hours, he

knows everyone in the community and he is a very approachable person. It's not that I'm not friendly and approachable I just think I don't necessarily have the best personality to be a really good GP. (Penultimate year student)

Some of these intrinsic appeals were more controversial, and linked to negative perceptions of GP, such as one participant who seeks a career with intellectual challenge:

More like the cerebral work tends to be done in the secondary care, I think? (First year student)

Ethos and values represent the principals which the participants held to be important, and are tied into their deep-seated belief as to what it is to be a doctor. Participants highlighted issues such as General Practice as a business model, and the difficulty in managing complex patients with difficult social situations:

He (the patient) is sort of coming in with no real presenting complaints, just he feels that people aren't helping him. And we are putting him through to social services and additional support in that way and he doesn't really want any support. I think this is one of the more difficult aspects of GP where you will get patients that come in and you just don't really have anything to do with them, in a way, because they aren't really willingly necessarily to accept help. (Penultimate year student)

Students also considered the practicalities of their future career, particularly as they were approaching the end of their studies, such as if it enabled them to practice in a specific location. Finally, all of these considerations form a continuous reflexive process, where the student considers their external experiences, with their internal driving force, and if this would be a suitable career for them to pursue:

I've got more information which I think has essentially meant that whereas maybe at the beginning I was on a steady baseline, now what's happened is I've got more information which essentially built-up a pro versus con's argument and overall, I'm probably in the same place but just with more information and sort of oscillating. It's more as if I'm more informed but still sort of scaling the pros and the cons. (Penultimate year student)

'They say'

'They say' is a phenomenon seen throughout this work, demonstrated on the model as a blue wedge, probing into driving force and encircling external experience. Participants repeatedly reported perceptions of GP, not based on their own experiences. A key feature of this phenomenon is that the perception is of an unidentified source, that is, 'They say GP is ...'

They say typically relates to negative perceptions, such as that GP is mainly 'coughs and colds', or not intellectually challenging.

I think that's how people view GP's and I kind of agree that they have a very broad knowledge of lots of different things. But the truly intellectually challenging like the really focusing and the specialised stuff will be in secondary practice where people have the time to focus on one or two major or smaller areas. (First year student)

Sometimes it was used in a more positive context, such as referring to GP being family friendly:

I think as well, I want to have a big family so for me GP is a massive pull because it's easy to be part time I think as a GP in a practice. I don't know whether this is actually substantiated but it just seems that way and it is mainly Monday to Friday. (Penultimate year student)

These perceptions, unfounded in experience may be socially shared within the medical school environment, resulting in a widely held societal perception:

When everybody starts talking, your whole year group starts talking about it, it only takes one or two high profile people who Medical students look up to that is, say (sic), they believe them and then word spreads like wildfire and like any gossip it goes up, and up, and up, and up and things like that travel really, really quickly. (Penultimate year student)

DISCUSSION

This work has identified a number of influencers on perception of GP, broadly split into human and non-human influences. It has also further identified the reflexive process, whereby the student considers these perceptions in the context of their internal driving force, considering if this is a career they wish to pursue. Finally, this work has identified the 'they say' phenomenon, a passive and pervasive societal perception of GP within the undergraduate community.

Comparison with existing literature

This work has elaborated on existing knowledge of perceptions of General Practice, particularly perceptions that GP offers flexibility and work-life balance.^{5 6 29} This was not always viewed positively by students in this work, and some female students disliked feeling that they were advised to choose GP for this reason. Findings in this work have also mirrored literature that GP is perceived by students to be less intellectually challenging than other careers.⁹

Placements have been identified within the existing literature as having an impact on perception, giving a wider view of General Practice and increasing enthusiasm for the career.^{7 30} This work has elaborated on the process, identifying experiences which impact on perception formation.

The existing literature identifies denigration as a cause of negative perceptions,^{11 24 31} this research has elaborated on a more complex phenomenon, whereby participants are able to critique such denigration, if they feel it is not representative of the truth.

Implications for future practice

Three broad suggestions are proposed, whereby clinicians and educators may consider how actions and policy impact on perception of undergraduates:

Maximising positive placement experiences

While it would be simplistic to think that institutions or clinicians can offer complete positivity in student placements, efforts can be taken to maximise positive experiences. Ensuring that students are expected, have timetabled learning opportunities and are not exposed to disproportionate levels of scepticism and dissatisfaction. Training of placement supervisors, such as on the impact of denigration, ongoing assessment of placement quality and swift action on feedback from students may all impact on maximising these positive experiences.

General practitioners in particular, are in a powerful position to influence students as an inspirational/aspirational senior. Understanding and awareness of the influence we as educators have on students, may minimise some of the negative perceptions of GP from the profession itself.

Avoiding 'pushing' General Practice

Students in this study have highlighted negative aspects of the current recruitment 'push' into GP, and female students have found unsolicited advice surrounding GP and family life to be especially inflammatory. Many students have been exposed to the recruitment difficulties of General Practice in the lecture theatre, prior to any first-hand experience in a GP placement, and throwaway remarks may have impacted on future perceptions of the profession.

Thus, we see the intention to 'encourage' GP among the student population may be misplaced, especially when directed to specific genders. This 'push' may have the converse effect and discourage students from the profession.

While strategies for increasing recruitment are necessary, reflection is needed around the impact such strategies impart on undergraduates. Rather than strategies which imply desperation for recruits, focusing on improving experiences in GP, or other suggestions in this work may be more effective.

Clinical supervisors should also be made aware of the impact of unsolicited career advice given to students, particularly around assumptions made due to their gender.

Reducing the impact of the 'they say' phenomenon

This phenomenon is possibly one of the most difficult issues raised in this work to tackle, due to its insidious nature. Perceptions associated with 'they say' are shared

within the medical student society and may be difficult for educators and clinicians to influence. While 'they say' is undoubtedly linked to denigration, and reducing denigration experienced by students may reduce the impact of this phenomenon, the source of these societal beliefs cannot be identified from one experience alone.

Providing students with experiences which contradict this phenomenon may enable them to challenge these societal perceptions, but for some, these deep-seated perceptions may be more difficult to quash. Clinicians and educators should also be aware of being the source of these perceptions, as a seemingly innocuous remark may be cascaded through this phenomenon. Further work is needed to understand the root and spread of perceptions associated with this phenomenon, to negate the negative effects on General Practice.

Strengths and limitations

The use of longitudinal diaries in the study enabled a unique understanding of participants' sense making process and a chronological record of experiences. The number of participants in this qualitative study was small, with 6 of 26 students involved in the diary phase. This small sample size enabled in depth analysis of narrative and thematic data, providing rich insights into the process of perceptions and career intentions.

While participants were recruited from a variety of genders, ethnicities, ages and institution, there were no participants aged over 30, which would have offered additional insight into how these findings affect mature students. Data from Scotland, Northern Ireland or Wales could have also contributed to understanding how findings may apply to other countries of the UK.

Although efforts were taken to avoid recruiting from, for example, GP interest groups, the nature of this research would be of interest to those who have a more positive opinion of General Practice. We presume that there may be a more positive bias within this work to that of the general student population.

In a qualitative work such as this, the role of the researcher must be considered in providing a lens through which the data are viewed.³² Thus, the role of the researchers as General Practitioners may have had an impact on interpretation of these data, in light of their own lived experiences. Throughout this study, Lincoln and Gruba's criteria for rigour in qualitative research³³ were applied to ensure the rigour of the processes of this study, and the trustworthiness of the findings.

The coronavirus pandemic also had an impact on this work, one initial face-to face focus group needed to be abandoned, and further recruitment to the longitudinal section of the study was halted due to the pandemic.

Conclusion

Through the prospective longitudinal methodology, this work has offered a unique perspective on influences of student's perception of GP, and ultimately how this may impact their intention to pursue General Practice as a career.

While perceptions of General Practice among undergraduates in England may initially appear discouraging, this work has identified that General Practitioners in particular, can have a significant impact on the perceptions of students. Experiences with General Practitioners can be inspirational to a student; the impact of this on the career intentions of the individual student cannot be underestimated.

Further research is needed to understand how experiences after university may build on the perceptions of students, and the impact of this on GP recruitment. Further research is also needed into the 'they say' phenomenon, identified here, to understand the source and spread of these perceptions. Further analysis of these data using a narrative methodology²⁸ may provide further insight into individual processes of developing perceptions.

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Contributors KB was lead researcher for this work, which forms part of an MD in Medical education. KB performed Newcastle focus group data collection, recruitment, analysis and primary preparation of this manuscript. KB is responsible as guarantor for the overall content of this manuscript. HA reviewed the analysed data, developed the discussion around the analysis and reviewed the primary manuscript in preparation for publication. SAK ran focus groups at University of Manchester and recruited students for the longitudinal study. SAK reviewed and amended this manuscript prior to publication. MMJ ran focus groups at UCL and recruited students for the longitudinal study. MMJ reviewed and amended this manuscript prior to publication. LMP reviewed the analysed data, developed the discussion around the analysis and reviewed the manuscript prior to submission.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval Ethical approval for this study was granted from the ethical committee at Newcastle University (project number 1409_2/15304/2018). Additional approval for data collection was granted by committees at University of Manchester and University College London. Informed consent was gathered from all participants by way of a consent form, and participants were free to withdraw from the study, with the withdrawal of their data at any time.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available upon reasonable request. Anonymised data available on reasonable request from the corresponding author.

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