**Title Page**

**“Why does everyone call it GP Land?”**

**Conceptualisations of influences affecting medical students’ career decisions**

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**Abstract**

Background

Despite longstanding concerns about recruitment to UK general practice there has been no concerted educational intervention to address them.

Aim

We examined how medical students’ perceptions of their experiences of their undergraduate curriculum may affect choosing general practice as a career. This included perceived differences in medical school culture, curriculum philosophy, design and intent between medical schools.

Design, Setting and Method

A range of UK medical schools’ students were invited by email to participate in focus groups and return a questionnaire detailing their current career choice to facilitate sampling students with varied career preferences. Students late in their studies were sampled as they were likely to be considering future careers. Focus group discussions were audio taped, transcribed and anonymised for both school and participant then thematically analysed.

Results

Six focus groups (58 students) were convened. Some student participants’ career aspirations are strongly shaped by family and home but clinical placements remain important in confirming or refuting these choices. High quality attachments are a powerful attractor to general practice and when they reflect authentic clinical practice promote general practice careers. GP tutors can be powerful positive role-models. Students’ comments revealed conflicting understandings about general practice.

Conclusions

Attracting rather than coercing students to general practice is likely to be more effective in changing career choices. Early, good, on-going and, importantly, authentic clinical exposure promotes general practice and combats negative stereotyping. We recommend increasing opportunities for students to understand what it means to be a “good GP” and how this is achievable.

**How this fits in**

There are currently serious concerns about recruitment to UK general practice. There has been no concerted educational intervention and we know little about the factors which help shape medical students’ career intentions. This paper indicates that authentic early clinical exposure and positive rolemodels within general practice are important in promoting GP as a positive career choice.

**Background**

Primary care is a critical component of sustainable, appropriate and affordable health care systems,[1] and as a key component of UK primary care, general practice (GP) is critical to health care in the UK. However too few young doctors are choosing general practice as a career,[2][3] it risks a haemorrhage of its existing medical staff [4] and it is facing both an unsustainable workload[5] and political pressure to expand its provision.[6]

Many health economies world-wide face challenges in recruiting sufficient primary care physicians. The USA has had a chronic national shortage of family physicians which is likely to increase as a result of changing demographics and regulation (the Affordable Care Act)[7],[8] while Australia, Canada and Norway have struggled to recruit sufficient family practitioners to serve rural and remote communities.[9–11] While there may be differences in the challenges in recruiting primary care medical staff between health economies, there are also similarities: too few newly graduated doctors want to become primary care physicians,[2][12],primary care is perceived to be an unattractive[13][14][15] or poorly remunerated career.[13] Interventions to address the issues vary. National (Australia[16]) and regional (Canada,[17] US regions[18] and Norway[9]) initiatives which have adopted a long term educational approach of embedding medical education and training in underserved communities have been successful in addressing aspects of under-recruitment to primary care. In spite of the longstanding concerns about recruitment to general practice in the UK there has not been any concerted educational intervention to address it. Counter-intuitively, the proportion of time a UK medical student spends learning in UK general practice has decreased since 2002[19] and national policy interventions have been limited to a commitment that 50% of training places will be for general practice,[3] a target which to date has not been matched.[20]

Barker, 2010, claimed that “*the future of a sustainable health system would seem to rest in primary care as never before*”.[21] If this is true we need to very carefully examine the number of doctors choosing such a career and what determines the career choices our doctors make.

Women are more likely to express an intention to enter general or family practice,[22][23] students and doctors who grew up in a rural environment are more likely to elect to practice in a rural environment[24][25] and students’ career intentions before entry to medical school affect career intentions in their final year of study.[22] Students who specifically express intentions to work with disadvantaged or underserved populations are more likely to choose primary care. [22][25] Goldacre has also already outlined that those students who state an early primary care preference are likely to retain this preference.[26]

Unfortunately sometimes the ethos of the educational institution, disparaging remarks from hospital colleagues, observation of poor practice, and perceived tedious, uncompetitive paid work discourages students from this pathway.[22][14]The school’s culture is important: students attending schools with more ‘badmouthing’ of primary care as a career are less likely to state they wish to practice in primary care.[22] Nevertheless we know little about the factors which help shape students’ career intentions while they are medical students.

The curriculum itself may be important: there is weak evidence that longitudinal placements[27] or community education,[25],[22],[15] increase the likelihood of a medical student choosing primary care as a career. Medical students make their career choices for a variety of positive reasons, including appropriate role-modelling by General Practitioners (GPs), opportunities for patient contact and good undergraduate experiences, and a preference for more flexible working providing a better work-life balance.[28] There is also evidence that the medical school you attend may influence career preference though the underpinning reasons for this are not clear.[28]

**Aims and Objectives**

Our overall aim is to examine how medical students’ experiences of the undergraduate medical curriculum may affect choosing general practice as a career. This entails exploring both the perceived encouraging and discouraging aspects of their learning experiences both within general practice and in hospitals which may influence their choice. It is also pertinent to explore whether and how differences in student perceptions of culture, curriculum philosophy, design and intent between medical schools may significantly influence students’ preferences.

**Methods**

***Methodology***

While our focus was on career choice for general practice we considered it important to understand both pushes and pulls to and from general practice and other disciplines. We therefore aimed to sample students who have made choices a) for general practice and b) specifically against general practice and opted for an alternative speciality. We also wished to explore whether pre-medical school career aspirations affect choice of medical school and the impact of the medical school on their students’ career aspirations. We therefore used a sampling frame which included schools of different types, from different regions and whose graduates are more or less likely to choose a career in general practice. We chose to use focus groups to encourage interactive dialogue between students to facilitate exploration of factors which encourage or discourage students to favour general practice as a career choice. Finally we chose to interview students late in their penultimate or early in their final year of study because they were about to apply or had just applied for their Foundation (PG year 1) posts and were likely to have been thinking carefully about their careers.

***Sampling***

We adopted a two level sampling frame; school and then individual student participant.

***Medical schools:*** We invited a selection of UK medical schools; English and devolved nation schools, Metropolitan and ‘provincial’ schools, Oxbridge, redbrick, 20th century and 21st century or new schools. This nomenclature indicates the location, date since establishment and possibly variability in traditions or culture of the medical school.

***Students:*** Recruitment was managed by each Schools’ general practice education team using the methods they knew to be most effective in contacting and engaging their student body. Students were sent a school specific Participant Information Leaflet which was prepared in conjunction with the local general practice education team and, if they were interested in participating, asked to return a questionnaire which asked their career choice (box 1). This asked them to state whether they had a) already made a definite choice of a career in general practice or b) another clinical discipline or c) against a career in general practice or d) another clinical discipline and e) students who have not made a choice for any discipline. Up to 12 students were invited to a focus group discussion with a maximum of two students in each career choice category except for the final ‘no choice yet’ category from which a maximum of 4 students were invited (although a single student could represent a choice for one career and against another).

***Data collection***

Four focus groups were facilitated by PM and two by AMH both of whom had extensive experience of conducting focus group meetings. Written consent was obtained at the start of the each focus group. A topic guide was used, the content of which was informed by a literature review conducted by SN, and a focus group pilot and career intention pilot survey in Leicester conducted by AMH. The focus groups were audio taped and transcribed and checked by PM and then anonymised for both school and participant.

***Analysis***:

Transcripts were thematically analysed by SN, AMH and RKM who agreed a combined empirical coding of data applying the relevant concepts which had been identified a priori from the literature. Analysis was conducted across all cases and within to examine all the issues we wished to explore.[29] Later focus groups were used to test earlier tentative findings thus aiding the validity and reliability of any conclusions.

***Research ethics***

The study was reviewed and given research ethics approval by the Keele University School of Medicine Research Ethics Committee.

***Results***

Six focus groups were convened in an Oxbridge (n=6), devolved nation (8), a redbrick university (17), metropolitan or London-based (6), a 20th century(13) and a 21st(8) century school. We were unable to sample an exclusively graduate entry school.

 The following themes were identified:

* Prior influencing concepts
* Curriculum experiences
* Conceptualisation of general practice as a speciality
* Medical school culture
* Catalysts for change

In exploring each theme typical illustrative quotations are provided.

**Prior influencing concepts (personality, experience, and family)**

Student participants had views about what kinds of personalities best suited general practice or a hospital career:

“I think certain personalities are better suited for GPs. I think my personality is perhaps more GP related. I’m a bit more sensitive. I’m not like ruthless. I think you have to be quite ruthless and ambitious genuinely to be in hospitals.” 21st Century p. 18

These views may have been affected by their experiences as medical students and reflect participants’ perceptions of the differences between hospital and general practice. Whilst some students’ career aspirations are strongly shaped by family and home clinical placements remain important in confirming or refuting these choices:

“I liked the rotation, but nothing clicked. But I found it quite hard and seeing sick children was… I didn’t like that and parents are so demanding. It wasn’t something that I would want to do all the time…but GP a bit of everything rather than just into Paeds, so yes, completely changed.” 21st Century p. 3

**Curriculum experiences (positive and negative perceptions, role-modelling)**

High quality general practice attachments are a powerful attractor to general practice:

"...the sole reason I want to be a GP is because I’ve had exposure to general practice." redbrick p.20

"If you get a good GP then you’re inspired by them. During a four week block of GP you actually get responsibility, you get to run your own clinic, you see patients, and you can see the continuity with a GP. I think that is a big influencing factor.” Oxbridge p.10

Students’ perceptions of the quality of the placement and their understanding of general practice as a career were driven by the authenticity of their experience rather than by the formal curriculum:

"...we get our own clinic this time so we make our own decision, you feel like you’ve got a little bit more authority, like more trust in you. For that reason you think I could do this." 20th Century p. 8

"When I’m in hospitals I’m always just an observer. I haven’t been taking part in anything, but with GP I can actually imagine myself in the role because I was given an opportunity to sort of play act in that role. I think that’s what made me want to do GP even more because I could see myself doing it because I had that experience." 21st Century p. 13

Whilst teaching in general practice was valued overall it was perceived to be most useful if it reflected authentic clinical practice. In addition if it wasn’t perceived to be authentic, it didn’t promote general practice as a career.

 “…they brought in patients related to the topic we’re learning about, which is really good….you want to see patients to do with the topic that you need to learn about. However…in regards to choosing GP or not GP, I don’t think it helps.” 21st Century p.15

We anticipated that positive or negative placement experiences would affect career choice.

"If you only ever get rubbish GPs, then you’re going to hate it, and not learn very much from it, and find it boring, and pointless. Whereas, when you have a good GP, and you can see the difference they’re making, and they’re teaching you, and you’re getting loads of good experiences, then you really enjoy it, and you see how valuable and worthwhile it is." Metropolitan p.28

Students clearly articulate the central role of the GP tutor in both providing an excellent clinical service and supporting active learning articulating the importance of positive and negative role-models (both GPs and others):

 “Seeing patients on home visits, caring for patients who were nearing the end of their lives, it just seemed to me that it was really rewarding and again, the inspirational teachers, the GP tutor we had she was an absolutely amazing GP. It’s easy to do the job badly, but it’s hard to do it well as a GP.” 21st century p.5

**Conceptualisation of speciality**

 “GP Land? Why does everyone call it GP Land?” Metropolitan p.17

Students’ comments revealed not only what they individually and as groups thought about general practice but also what they perceived others, sometimes significant others such as hospital consultants and university supervisors, thought about general practice as a career. “GP Land” is seen as something quite distinct and separate from hospital medicine. Students’ comments revealed sometimes conflicting understandings about general practice for example highlighting a sense of isolation of “having to do it on your own” as a GP but also valued opportunities to “work within a multidisciplinary team”.

"I was quite surprised about what being a GP is like. I thought it was really good, to be honest. Everyone was looking out for the patients, everyone shared information, they were really interested in helping everyone become healthier, moving forwards and just doing it in really collaborative ways because basically as a GP you’re on your own. I saw how it could be at its best, so yeah, I want that." Oxbridge p.14

Some students had concerns about becoming “good GPs” considering general practice a difficult and demanding role and would only want to do it if they felt they could do it well:

"I think what’s more important than saying, I want to be a GP, is saying I want to go out there and become a good GP.You hear it in hospital medicine all the time, oh, the GP referred... you know what I mean? It would be lovely to be known as a good GP.” 21st century p.19

This student highlights the negative impression that hospital culture sometimes portrays of general practice and GPs. However students themselves described examples of what they perceived as both good;

“Good GPs made the patients so much happier, they left knowing exactly why the decision was made, they felt like they’d been given an appropriate amount of time, had everything weighed up, examined. The patients were more satisfied.” Metropolitan p.28

and bad practice:

"Just give patients things, and patients don’t know what they’re taking, how to take it, what’s wrong with them, or don’t really prescribe anything." Metropolitan p.33

Students’ perception of appropriate role-models emphasised what they think makes a good GP, and for them in career decisions actively wanting to be a GP, rather than just choosing by default, appeared important.

 “…what I learned was that you’ve got to really want to be a GP to be a GP. At my last GP practice I went to, they all wanted to do something else and they just kind of fell into being GPs and they’d just call their patients in and go, oh, this is another heart sink patient.” 21st century p.17

However in comparison:

“The inspirational teachers, the GP tutor we had she was an absolutely amazing GP, because I saw from her that you can … because there’s a saying, isn’t there that it’s easy to do the job badly, but it’s hard to do it well as a GP. So I think she sort of … she just did it amazingly and that’s kind of an inspiration to me.” 21st Century p.3.

Further conflicting conceptualisations of general practice outlined were that it is seen as both boring due to the lack of perceived autonomy and interesting patients; and stressful because of the workload. Students also perceived that general practice may act as a fallback.

“You can progress along another way and then if you decide that you don't like it, you can drop into GP relatively easily. So when people ask me what I want to do, I wouldn’t say GP, even though it’s pretty high up on my list, because it’s not primarily. I’ll go for something and if that doesn’t work out or I don't like the lifestyle aspects, I’ll drop into GP as a sort of backup, which sounds a little bit derogatory. I think it’s the way that quite a few medical students think.” 21st Century p. 4

**Medical school culture (overall and specific to individual schools)**

Many students perceived that from year one, that they were being pushed into general practice.

 “One of the first things they always let us know is that 80% of people become GPs, and that really annoyed me. How can you decide that in my first year? You can’t just force me into something that I don’t want to do, and I think that’s always been a strong driver for me to not be a GP.” 21st Century p. 12

“It will start with the lecturer coming in going well you know, at least 50% of you are going to be a GP... They’re almost dismissive, like half of you don’t really need to be here… It makes you feel like you’ve no longer got a choice.” 20th Century p.27

This illustrates that some students feel coerced into GP and perceive that medical schools may act as “GP factories”, an impression which can be reinforced by how students may (mis)interpret the curriculum:

“I think PBL is a GP -based course… I think sometimes they try too hard. For all the exam questions, you are a trainee GP in what you do and it’s like they want us so much to be GPs.” Red Brick p.18

“There appears to be a very GP driven curriculum… And yet, at the same time, there’s an awful lot of criticism at GPs when you’re in hospital, it’s drilled into you a bit negatively. And, actually, I always enjoy GP.” Metropolitan p.14

Whilst many medical students will ultimately practise as GPs, the way this message is delivered sets students’ expectations and their perceptions of the value of general practice. Unfortunately as the comments above and below illustrate general practice isn’t consistently valued by the medical school culture:

"...but there is a vibe that I get that GP is bad, hospital medicine is good, and academic hospital medicine is the best, and that’s how it’s ranked." Oxbridge p.11

It appears that such impressions are fostered by both the student body and by staff:

“It comes from the year group more than the clinical school and I certainly feel like it’s quite anti-public health and anti-GP. Someone said they wouldn’t consider choosing GP because it would be like wasting their medical degree. People can vocalise that opinion and it’s seen as funny. However it’s interesting as you move on and we see what GP is, more people are open to admitting it.” Oxbridge p.10

**Catalysts for change**

Unsurprisingly students felt negatively about sub-optimal experiences which were sometimes a stronger influence on decision making than positive experiences.

 “The kinds of supervision or the learning support that you get can definitely put people off.” 21st Century p. 11

However positive authentic clinical experiences in general practice can be an important contribution to students changing their minds:

“I kind of discounted GP for quite a while, not that I had bad experiences, but just because nothing had really clicked, but then on my last attachment I felt a lot more involved than previously. I think it was seeing how to go beyond just following some prescribed pathway, that you can actually do more than that.” 21st Century p.5

***Discussion and Recommendations***

**Summary**

These data demonstrate the complexity of students’ decision making with regard to careers. Pre-medical school career intentions formed by personal and family experience can be powerfully reinforced by students’ (mis)interpretations of the rationale driving their curriculum and messages from the school. High quality clinical experience and authentic placement in general practice can be a strong attraction to general practice as a career. Negative role models are powerful repellents while positive role models are attractants to careers in general practice, though the challenge of being a ‘good’ GP was clearly articulated by students. There is a powerful perception of a hierarchy of careers with general practice at the bottom which is perpetuated by both the student body and the behaviours of clinical and academic staff.

**Comparison with existing literature**

Many of the these factors have been discussed in other papers.[13][14][22][24][25][26][27][28] We have however increased our understanding of why and how early, good, on-going and, importantly, authentic clinical exposure within community settings is important in promoting general practice as a career option. Whilst early clinical exposure in general practice can contextualise students’ basic science learning it also helps students understand what general practice is and how it works. This appears to be important in combating any negative stereotyping concerning general practice encountered by students. Furthermore for those students within our sample who only experienced general practice later on in their curricula such exposure was seen as a catalyst for positively changing their views concerning a career in general practice. We would therefore recommend that all UK medical schools provide early authentic placements within general practice as students would be encouraged to develop positive ideas around careers in general practice from the outset.

**Strengths and limitations**

Unexpectedly we did not find any significant differences between schools in students perceptions of general practice even though we know that the proportion of graduates choosing general practice varies dramatically between schools.[2] It may be that we have insufficient data to demonstrate such a finding and that more focus groups, or alternative methodologies, would be required to explore this fully. It may be because we recruited participants though the GP educator group in each school we accessed students who were more disposed to general practice though the illustrative quotations demonstrate both positive and negative views.

Our study provides nuanced, sometimes conflicting, conceptualisations of general practice and being a GP, in our sample of students across purposive samples of UK schools and students. The data were gathered by experienced researchers using a topic guide informed by a prior literature review. Nevertheless we have only interviewed 58 students recruited by each school’s GP educator group and the extent to which their ideas are represented within the whole student body is not known. We have only been able to access students’ perceptions of the rationale of their curricula and the intentions driving utterances by school staff. Furthermore students have limited experience of other schools’ curricula and whilst some students did compare and contrast their experiences with what they perceived others had in other institutions, most students’ views originated from personal experiences. However such a finding highlights the importance of providing medical students the very best educational opportunities within general practice which can encourage a positive career choice.

**Implications for practice.**
While these data demonstrate the complexity of career decision making we can make a number of firm recommendations for both schools and our discipline to increase the attractiveness of general practice as a career.

For medical schools, we firstly recommend that all schools increase authentic exposure to general practice both as early experiences and later in the course. Our definition of an authentic early experience is an opportunity to observe a GP consulting and, individually or in pairs, to meet patients. Later in the course authentic learning experience requires opportunities to consult one to one with patients and, late in the course, appropriate supervised autonomy though apprenticeships[30][31] and student clinics. Secondly it is essential to convey what it means to be a “good GP” and that this is achievable. Appropriate scaffolding[32] by, for example, promoting contact between students and GPs in training and GP teachers ‘unpicking’ their clinical reasoning for students to scaffold their own learning is likely to be helpful. We recognise that this is difficult and that it may require additional faculty development.[33] Thirdly, schools need to adopt ‘zero-tolerance’ of any form of discipline bashing. While further effort should be directed at understanding ‘GP-ism’, the concerted personal and institutional undermining of GPs and the practice of primary care, and how to counteract it effectively, these data and those of others[14][22] demonstrate its pernicious effects.

For GP clinical tutors, it is above all else essential to project a positive role model. We acknowledge however that this is currently exceptionally challenging when morale is so low. When supervising students GP tutors need to consider how to meaningfully demonstrate team working as, when observed, this seems to be viewed as a positive aspect of general practice and to highlight how GPs can effectively work without isolation and positively with secondary care colleagues. This is in particular relation to preventing academic stagnation and also the means of maintaining the quality of clinical practice.[34] How GPs keep up to date and develop through appraisal and Continuing Professional Development (CPD) are opportunities for students to learn both about general practice and how to be a successful GP.

**Implications for Further Research**

Research that explores in more depth why some medical schools have larger numbers of students choosing careers in general practice is required. Is it the impact of the curriculum, the culture of the school or the students that choose to go to those schools? If we better understand what motivates students in choosing their careers then we are in a better position to change accordingly. It seems critical at this time to further explore how we can most effectively convey what it means to be a “good GP” and raise students’ awareness of the value of patient-centred general practice as the bedrock of our NHS.

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**Contributorship**

The study proposal was developed jointly by the authors: SN conducted the underpinning literature reivew, RKM developed the methods and AMH conducted a pilot study which underpinned the focus group schedule developed by all three authors. The initial analysis was carried out by AMH before his death. The analysis was completed by SN. RKM wrote the first draft of the introduction and methods. SN wrote the first draft of the results and discussion. Both SN and RKM approved the final version of the paper.

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Box 1

**What influences medical students in deciding for or against a career in general practice**

**Participant questionnaire**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Given name: |  |  | Family name: |  |

|  |  |
| --- | --- |
| Email address |  |

|  |  |  |
| --- | --- | --- |
| Career choice: | Yes | No |
|  |  |  |  |
|  | I have decided I **want** to be a GP |  |  |
|  | I have decided I **do not want** to be a GP |  |  |
|  |  |  |  |
|  | I have decided I **want** to be a specialist |  |  |
|  |  If yes, please state speciality you have chosen  |  |
|  |  |  |  |
|  | I have decided **against** a speciality |  |  |
|  |  If yes, please state speciality you have decided against  |  |
|  |  |  |  |
|  | I have made no firm decisions about my career |  |  |

Please email to XX@XX.ac.uk within one week.

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