

The Factors That Influence Medical Students When Deciding on a Career in General Practice

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Abstract

Aims

Irish General Practice is experiencing a crisis in the recruitment and retention of its General Practitioners (GPs). The aim of this study was to determine Irish final year medical students' current career intentions, attitudes towards General Practice and the factors influencing their career decisions.

Methods

Questionnaires were distributed to five Irish medical schools. Students' undergraduate experience of General Practice, their likelihood of pursuing a career in General Practice and the individual and occupational aspects influencing their career intentions towards a career in General Practice were assessed.

Results

Ninety-four students completed the survey in its entirety. Approximately 50% (44/94) of students indicated their intention to pursue a career in General Practice. Eighty-six percent (86%) reported having positive General Practice placements. Contact with GPs, either their own GP (56% 54/94) or during their studies (69% 64/94), was found to have the most positive influential impact on students' aspirations to specialise in General Practice. The perception of General Practice portrayed by other specialities (43% 41/94) and classmates (31% - 29/94) was found to be the most influential factor deterring students from General Practice.

Discussion

With increasing demand for GP's, strategies aiming to promote General Practice as a speciality and that address negative perceptions of the specialty are crucial.

Introduction

General Practice in Ireland is experiencing a crisis in the recruitment and retention of its GPs ¹. The introduction of universal access to free GP care to children under the age of six and its proposed extension, as envisaged by slaintecare, will further exacerbate this crisis ².

Ireland has a lower number of GPs when compared with other countries, with a 2015 OECD report putting this figure at 63 per 100,000 population ³. This falls well below international best practice standards of 80 per 100,000 population ³.

How GPs work is also changing. In Ireland 10% (17/175) of current GP graduates do not see themselves working in General Practice within the next 5 years ^{3,4}. 66% (116/175) of newly qualified GPs don't see themselves working fulltime in General Practice in 5 years ³.

Furthermore, large-scale dissatisfaction with current working conditions, frustration surrounding limited career progression and the search for better working environments has resulted in high levels of emigration by Irish doctors ². General Practice is experiencing similarly high rates of emigration with 33% (72/217) of current GP trainees considering emigrating in addition to the 18% (30/175) of recent graduates who have already emigrated ³. This will further aggravate the manpower crisis in General Practice.

Medical students are the future of the medical workforce in Ireland. Therefore, an understanding of their attitudes towards General Practice, and the factors that influence their decision to choose GP as a career are crucial in addressing the growing shortage of GPs in Ireland.

An accumulating body of literature exists on the factors influencing the opinion and attitude towards pursuing a career within General Practice internationally⁵. Amongst these, several common sociodemographic [older age, female gender, growing up in a rural background], professional [interest in community orientated practice, structured and shorter training scheme, flexibility of working conditions, work-life balance], and systemic influencing factors have been identified ⁵.

A consistent finding linked to an increased likelihood of medical students choosing General Practice as a career was exposure to, and positive experiences of, General Practice placements throughout their studies ⁶. Furthermore, medical students' own GP, and GP's encountered during their time at medical school were shown to have a strong influence on the perceptions medical students had towards General Practice ⁷. Denigration of General Practice by hospital based specialities has been routinely encountered by medical students on hospital rotations within the United Kingdom ⁸. This has been shown to have a strong influence on medical students' negative perceptions of General Practice as a career ⁹.

Currently, in Irish medical schools, medical training is predominantly focused on hospital medicine, with medical students getting less exposure to General Practice, with the exception of the University of Limerick.

This approach limits the exposure to General Practice based education and training, and the positive influence it conveys on medical student's career aspirations. Further, it remains unclear if Irish medical students encounter denigration of general practice during hospital rotations. The purpose of this study was to investigate final year Irish medical students' perception of general practice as a career and the factors influencing these career decisions.

Methods

A cross-sectional structured questionnaire study of final year medical students was conducted across five Irish medical schools. Ethical approval was provided by the Irish College of General Practitioners.

Following a literature review, a 46-item questionnaire was developed. Research questions addressed in the survey were grouped into three main categories: student demographics, undergraduate exposure to General Practice and an exploration into the factors influencing medical students' perception and consideration of, General Practice as a career. The questionnaire combined dichotomous, multiple choice and likert response scale questions.

A sample size of 90 responses was determined to provide an accurate representation of Irish final year medical students at a confidence level of 95% with a 10% margin of error with oversampling performed to account for possible dropouts.

An invitation was sent to all six-medical schools within the Republic of Ireland. Five of the six universities consented to the study. Minor refinements to the questionnaire were made based on feedback from universities' ethical committees until consensus was reached and a standardised document created.

Each University facilitated the distribution of the questionnaire to their final year medical students via their various virtual learning environments followed by an email inviting the students to participate. Information regarding the purpose and aim of the study in addition to data protection information was included.

An online survey tool (survey monkey) was used to collect the required data. Informed consent was obtained by interested participants prior to completing the survey on survey monkey by participants checking a box confirming they had read the information provided and were happy to participate. The survey was open for 12 weeks. Reminders to complete the questionnaire were sent by each of the Universities virtual learning environments until the required number of responses was reached. To maintain anonymity, students email addresses and identifiable data was not stored.

Completed questionnaires were analysed using the online survey tool. Weighted averages of responses influencing student's career decision were calculated using the proportion of the type of reason, weighted by the total number of responses in each applicable survey response. This was used to determine the most important attributes influencing the decision-making process of students towards choosing a career in General Practice.

Results

Ninety-four students completed the survey in its entirety, a response rate of 30%. Ethics precluded individual response rates from being disclosed. 56% (53/94) of those completing the survey were female and 43% (40/94) male. One percent (1/94) preferred not to disclose their gender. Most participants (74% 70/94) were aged between 20-25 years with 26% (24/94) over the age of 25, 20% (18/94) between 25-30 and 6% (6/94) aged over 30 years of age. 81% (76/94) consisted of European student entrants with the remainder being born outside of the Europe. Eighty five percent (80/94) of participants were undergraduate level medical students.

Exposure to General practice

All participants reported exposure to General Practice. Medical students' exposure to General Practice ranged from periods of 4-6 weeks (33% - 31/94) 6 to 8 weeks (25% 23/94) and over 8 weeks (16% - 15/94). Of these, 86% (80/94) of respondents reported their exposure to General Practice to be an overall positive experience and 88% (82/94) reported that this exposure was sufficient to provide an impression of General Practice as a career.

Over half of students (55%, (51/94) described their exposure to General Practice as influential in their consideration of whether to pursue a career in General Practice.

Current career intentions towards pursuing a career in General Practice

Twenty three percent (22/94) stated that they were very likely to pursue a career in General Practice with a further 23% (22/94) stating that they were likely to do similarly. Eleven percent (10/94) were uncertain of their intention to pursue careers in General Practice. Equally, 23% (22/94) of participants reported being unlikely or 20% (20/94) being very unlikely to pursue a career in General Practice.

Factors influencing student's perception of General Practice

General Practitioners, either the students own GP (56% 52/94) or other GP's encountered through their medical education (68% - 64/94) were found to have the greatest and most important positive influence on student's perception of General Practice with weighted averages of 1.74 and 1.49 respectively.

Sixteen percent (15/94) of respondents had a first degree relative who was a General Practitioner. Of those that had 68% (64/94) stated that this had positive impacted on their perceptions of general practice as a career.

The negative perception of General Practice by doctors from other specialities (43% - 41/94) and classmates (31% -29/94) were the most important attributes negatively influencing student's perception of General Practice with weighted averages of 2.39 and 2.37 (Table 1).

The perception of General Practice by the media (81% - 76/94), general public (67% - 65/94) and respondents' parents (64% - 63.94) were found to be non-influential in shaping student's perception of General Practice.

	Yes- this had a positive influence on my perception of general practice (%)	Yes- this had a negative influence on my perception of general practice (%)	No – this has not had any influence on my perception of general practice (%)	Weighted average
The medias portrayal of general practice	4.26	13.83	81.91	2.78
Negative perception and portrayal of GP from doctors of other specialities	8.51	43.62	47.87	2.39
My classmates' portrayal of general practice	16.13	31.18	52.69	2.37
My parent's portrayal of GP	30.85	4.26	64.89	2.34
My local GP portrayal of general practice	56.38	11.70	31.91	1.76
Other GP's portrayal of general practice	69.15	12.77	18.09	1.49
The public portrayal of general practice	23.40	9.57	67.02	1.44

Table 1: Attributes influencing medical student's perception of General Practice.

How perception of General Practice influencing students career decision

Table 2 illustrates that the factors positively influencing student's perception of General Practice as a career in order of importance were: perceptions that General Practice is a challenging and rewarding speciality (36% - 34/94; weighted average 2.99) that it provides the opportunity to become involved in academia/teaching (53% - 49/94; weighted average of 2.6) , that it does not have a competitive training scheme (37% -34/94; weighted average of 2.53), that it is intellectually stimulating (73% - 68/94; weighted average score of 1.64), and that it involves psycho-social medicine (59% 55/94 with weighted average of 1.44).

The majority of respondents considered General Practice to involve more paperwork in comparison to other specialities. This was found to be the most important factor deterring students from choosing General Practice (61% - 57/94; weighted average of 2.38).

	Agree- makes me more likely to choose GP as a career (%)	Agree- makes me less likely to choose GP as a career (%)	Disagree- makes me more likely to choose GP as a career (%)	Disagree- makes me less likely to choose GP as a career (%)	Weighted Average
GP is easy vs. other specialities	12.90	11.83	38.71	36.56	2.99
GP doesn't provide many opportunities to get involved in academia/teaching	8.60	30.11	53.76	7.53	2.6
GP is a competitive training scheme to obtain a place on	22.83	20.65	36.96	19.57	2.53
GP involves more paperwork vs. other specialities	4.30	61.29	26.88	7.53	2.38
GP is intellectually challenging	73.40	7.45	1.06	18.09	1.64
GP involves a lot of psycho-social medicine	59.57	38.30	1.06	1.06	1.44
GP allows regular working hours	80.85	6.38	3.19	9.57	1.41

Table 2: Individual attributes influencing student's decision to choose General Practice as a career.

Influence of Government initiatives

Final year medical students represent the workforce that will be central to the Sláintecare reform of the health service. Therefore, their attitudes and opinions towards Sláintecare prove pivotal in determining if it will have an influential effect on their decision to choose General Practice as a career.

The proposal of transitioning chronic disease management from secondary to primary care was found to be a positive influential factor of greatest importance for students choosing General Practice with a weighted average of 2.26 (table 3). The under six's universal access and its proposed extension was found to be non-influential.

The potential reduction in private practice was cited as a reason deterring 47% (44/94) of medical students with 45% (45/94) reporting that it had no influence on their decision with an associated weighted average of 1.61.

	Makes me less likely to want to do GP (%)	Doesn't influence my decision regards a career in GP (%)	Makes me more likely to want to do GP (%)	Weighted Average
Chronic disease management in the community	19.15	27.66	53.19	2.26
Access to free primary care for all	28.72	50.00	21.28	1.71
No private practice in GP in the future	47.87	45.74	6.38	1.61
Free GP care for under six's	35.11	55.32	9.57	1.54

Table 3: Influence of Government initiatives on student's decision making.

Discussion

This study has a number of important implications for medical education in Ireland. Of greatest importance is the need to develop measures to address the negative depictions of General Practice by other specialities and other medical students as this has been confirmed to negatively influence medical students' perceptions of the specialty. This paper recommends that a strategy be implemented within hospitals that educates specialities on the detrimental impact denigration of General Practice has on medical students' perceptions of General Practice as a career. Following this, the authors suggest that a zero-tolerance approach should be enacted throughout medical schools inclusive of all clinical training settings to tackle the undermining of General Practice as a career choice¹³.

The study highlighted the pivotal role GP's play in shaping medical students' perception of General Practice as a career with the vast majority of students having positive GP placements and that GPs themselves exert a very positive influence on career choice. Furthermore, it reinforced the responsibility that Irish GP's have in sustaining the future of their specialty by continuing to be positive and enthusiastic role models of the specialty¹³.

It is vital that medical schools ensure a more balanced curriculum. This should involve increased amounts of time devoted to high quality General Practice placements with motivated GP's to provide students with positive insights into the specialty. This will help to shape and encourage students to pursue a career within General Practice¹³.

There were several strengths and limitations to the study. Incorporation of sample size calculations ensured results were generalisable to the entire medical student population and accurate conclusions could be drawn. The recorded response rate of 95% satisfies the 80% threshold required to ensure results are representative of the population and provide clinically relevant information.

The use of voluntary, self-administered questionnaires minimised the risk of response bias. The distribution of the questionnaire throughout all Irish medical schools mitigated the risk of selection bias while increasing generalizability. However, responder bias must be considered including the potential for one medical school to be overly representative based on accumulated responses.

A response rate under 60% gives rise to sampling bias. The lack of opportunity for students to provide free text limited the study's ability to gain an in-depth exploration into the reasoning behind student's perception of General Practice and why certain attributes shape desire and/or disinterest in specialising in general practice once graduated. The survey documented the likelihood of student's career aspirations towards General Practice. However, the actual enrolment in General Practice residency and retention rates was not recorded. Thus, further studies are required to explore the findings further.

Declaration of Conflicts of Interest:

The authors declare no conflicts of interest.

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