Would you be a geriatrician? Student career preferences and attitudes to a career in geriatric medicine

Danielle Ní Chróinín1,2, Edel Cronin3, Walter Cullen4, Diarmuid O’Shea1,5, Michael Steele1, Gerard Bury1, Lorraine Kyne1,6

1School of Medicine and Medical Science, University College Dublin, Dublin, Ireland
2Geriatric Medicine, Beaumont Hospital, Beaumont, Dublin, Ireland
3Physiotherapist, Mill Lane Nursing Home, Naas, Co. Kildare, Ireland
4Graduate Entry Medical School, University of Limerick, Limerick, Ireland
5Geriatric Medicine, St Vincent’s University Hospital, Dublin, Ireland
6Geriatric Medicine, Mater Misericordiae University Hospital, Dublin, Ireland

Address correspondence to: D. Ní Chróinín. Tel: +353 1 7164574; Fax: +353 1 7164557. Email: dmmnic@student.ucc.ie

Abstract

Background: career intentions of medical students may impact on education and workforce planning. We sought to determine (i) career choices of senior medical students; (ii) interest in geriatric medicine; (iii) factors influencing such choices; and (iv) the impact of a 6-week Medicine in the Community module.

Methods: cross-sectional survey of all senior UCD medical students, before and after completion of a ‘Medicine in the Community’ module, 2009–11.

Results: eighty-two per cent (274/336) completed the survey at module’s end. Two-thirds (174) had chosen a future speciality, most frequently general practice (32.1%) and internal medicine (17%). Half (49.8%) believed career selection is made during medical school. Thirty-one per cent would consider a career in geriatric medicine; reasons cited were interesting field (34.5%), clinical variety (25%) and perception as emotionally rewarding (20.2%). Commonest deterrents were perceived slowness-of-pace and not wanting to work with older patients. Female students (adjusted OR: 1.89, P = 0.05) and those prioritising travel opportunities (adjusted OR: 2.77, P = 0.01) were more likely to consider geriatric medicine. Half (51.5%) reported that the community medicine module increased their interest in geriatric medicine; 91.3% that it would positively influence how they treated older patients. Students reporting a positive influence of the module were more likely to consider a career in geriatric medicine (OR: 1.62, P = 0.02).

Conclusion: two-thirds of students had already chosen a future speciality. One-third would consider geriatric medicine. This may have important implications for workforce planning and development of geriatric medicine. Undergraduate exposure to the discipline may increase interest in geriatric medicine as a career, and positively influence management of older patients.

Keywords: career choice, geriatrics, teaching, education, older people

Introduction

As the population ages, the provision of healthcare to older patients, often with chronic disease and complex multimorbidity, is a priority for service development. Ideally, service provision should align with the evolving healthcare needs of the population. Career intentions of medical students may have a significant impact on workforce planning. Exploring student career preferences may provide insight into factors influencing career choices, and the role of medical education in influencing these decisions.

In international studies, a third of medical students reported considering a career in geriatric medicine [1–3]. Factors associated with increased likelihood of considering
geriatric medicine have included female gender, positive attitudes to older persons, extra-curricular exposure to older people and specific educational interventions, e.g. short-intensive geriatric medicine teaching programmes [1–4].

Our aims were to determine: (i) career preferences of senior medical students, (ii) whether they would consider geriatric medicine, (iii) factors influencing and timing of such choices and (iv) whether a 6-week Medicine in the Community module influenced career decisions.

Methods

Medical students in the final 18 months of their degree (MB) programme in University College, Dublin (UCD), over a 2-year period (graduating classes 2010, 2011), were eligible for inclusion. All completed a 6-week Medicine in the Community Module module. This module, already described in detail [5], was developed collaboratively by the disciplines of Geriatric Medicine and General Practice, and focuses on the practice of medicine, and delivery of healthcare, in the community (Supplementary data are available in Age and Ageing online).

The same questionnaire was administered, in hard copy, to students on the first morning of teaching, and again following the end-of-modules examination. Completion was voluntary and anonymous. Strength of agreement was assessed by the five-point Likert scale (1–5). Proportions of respondents agreeing/strongly agreeing with each statement were calculated. An open-ended question invited reasons for considering/not considering a career in Geriatric Medicine.

The primary analysis assessed the responses of students who had completed the 6-week module.

(see also Supplementary data available in Age and Ageing online).

Results

Eighty-two per cent (274) of 336 eligible students completed the post-module questionnaire, 49.7% the pre-module questionnaire. Among post-module respondents (primary analysis), 59.1% (162/274) were female, 71.4% (195) aged <24 years, and 17.6% (47) graduate-entry medical students (prior degree). Most students were Irish (71.6%, 164), the remainder (110, 28.4%) from outside the European Union. Pre- and post-module respondents were demographically similar.

Choice of speciality

Two-thirds (65%, 174) of respondents had chosen a future speciality. Half (49.8%, 135) of students believed that trainees select their speciality during medical school, 26.2% (71) that the decision is made in the first year after graduation (internship), and 16.2% (44) within the following 2 years (Supplementary data available in Age and Ageing online).

General practice (32.1%) was the most popular speciality (Figure 1), followed by internal medicine (17.0%, 28). Within internal medicine, 64.3% (18) had chosen a specific speciality, most commonly neurology (8). Only two students (1.2%) specifically named geriatric medicine as their preferred speciality.

However, more were open to considering a career in geriatric medicine. Thirty-one per cent (84/272) of post-module survey respondents agreed/strongly agreed that they would consider the speciality; this was significantly higher than the proportion of pre-module respondents (20.6%, P = 0.02). Commonest themes cited for considering geriatric medicine were interesting field of work (34.5%, 29/84), clinical variety (25%, 21) and emotionally rewarding speciality (20.2%, 17). Commonest reasons for not considering it were a perceived ‘slowness’ of pace (22.9%) and not wanting to work with older people (5.7%).

Female (OR: 2.04, 95% CI: 1.18–3.57, P = 0.01), Irish (OR: 3.47, 95% CI: 1.60–7.52, P = 0.002) and graduate-entry medical students (OR: 2.14, 95% CI: 0.98–4.67, P = 0.06) were more likely to consider a career in geriatric medicine.

Students’ priorities in choosing a career

Analysing factors that might influence career choice, highest levels of agreement were seen for interesting field of work (percentage agreeing/strongly agreeing: 97%) and variety (87.1%) (Figure 2); fewest (34%) considered research opportunities important.

Students who considered travel opportunities important when making career decisions were more likely to consider a career in geriatric medicine (OR: 1.30, 95% CI: 1.01–1.66, P = 0.04), with an inverse trend observed for respondents who prioritised procedures (OR: 0.79, 95% CI: 0.59–1.05, P = 0.10) (similar findings on ordinal logistic regression).

On multivariate analysis, adjusting for graduate-entry status and nationality, both female gender (OR: 1.89, 95% CI: 1.00–1.57, P = 0.05) and prioritisation of travel (OR: 2.77, 95% CI: 1.23–6.26, P = 0.01) were independently associated with considering a career in geriatric medicine.

(see also Supplementary data available in Age and Ageing online).
Influence of teaching module

Half (51.5%) agreed/strongly agreed that the Medicine in the Community module had increased their interest in a career in geriatric medicine; this was associated with female gender (OR: 1.59, 95% CI: 0.97–2.63, P = 0.06). More importantly, 91.3% (241/265) of respondents reported that it would positively influence how they treated older patients; this was associated with Irish nationality (OR: 2.50, 95% CI: 0.96–6.58, P = 0.06), but not gender, graduate-entry status or age. Students reporting that the module would positively influence their treatment of older patients were more likely to consider a career in geriatric medicine (OR: 1.62, 95% CI: 1.09–2.43, P = 0.02) (test for trend P = 0.001), and more likely to report that the module increased their interest in a career in geriatric medicine (OR: 5.74, 95% CI: 3.27–10.07, P < 0.001) (test for trend P < 0.001).

Discussion

Two-thirds of medical students completing this survey had chosen a future speciality. Half believed such decisions are made during medical school. General practice was most popular, followed by internal medicine. Previous studies of senior medical students and interns reported lower rates of interest in General Practice [6, 7]. However, undergraduate experience may be an important factor in determining career preferences. Our medical school’s Medicine in the Community module represents a collaborative development by Geriatric Medicine and General Practice. Multimorbidity and multidisciplinary care feature as central themes, reflecting their importance in the community and beyond. While geriatric medicine was not a common preferred specialty among students, many had not out-ruled it, and a specific teaching intervention led to increased levels of interest.

Students who considered travel important were more open to a career in geriatric medicine, important given that many may look at pursuing positions outside of Ireland in the short or longer term [7]. In our cohort, slowness of pace and the older age demographic were the most commonly cited deterrents to the speciality. A Canadian study reported working with both chronic disease and older patients as perceived deterrents [8], while in a UK study, over half of those surveyed associated geriatric medicine with having low earning potential, low prestige and lack of research opportunities [3]. It is possible that such perceptions could impact negatively on speciality selection, although this has not been a finding across all studies [8]. Lack of prestige, research opportunities or income were not common themes precluding interest in geriatric medicine in our own study.

Half of respondents in our survey reported that the Medicine in the Community module would positively influence how they treated older patients hereafter. Self-reported achievement of learning outcomes, and positive perceptions of teachers (previously published data), who may serve as role-models, may underpin this finding [5, 9, 10]. Our module was not designed to indoctrinate would-be geriatricians, but rather to impart germane generic skills, applicable to the care of older people. Participants encountered older persons across a range of clinical scenarios. Evidence suggests that empathically oriented programmes, exposing students to healthy, functioning older people, may be beneficial in fostering positive attitudes to older persons [11]. Our survey was not designed to analyse attitudes to older patients in depth, and we only report students’ own beliefs regarding their future management of older patients.

Figure 2. Percentage agreeing/strongly agreeing with statement that each of listed factors is important in making career choices. Factors assessed: interesting field of work, variety, working hours, working in a team, opportunity to carry out technical procedures, availability of specialist training posts, allowance for non-work commitments, availability of consultant posts, opportunity to travel, opportunity to work independently, income, hospital-based career, research opportunities.
Study strengths included the high percentage response rate (82%), and the exploration of career preferences beyond geriatric medicine alone, influencing factors and timing of decision-making. We acknowledge some limitations. Almost one in five students did not complete the post-module survey, potentially biasing our results towards students with an interest in geriatric medicine. However, like other researchers [1–3], we found that approximately a third would consider the speciality. While more female and Irish students completed the survey, the proportions are reflective of the demographic attending our institution. Although a single-centre study, UCD represents the second largest medical school in the Republic of Ireland, comprising a not-insignificant proportion of medical students in Ireland. Future research might include similar studies in other institutions, detailed qualitative study of career decision-making, and longitudinal studies to map early specialty selection against later career paths.

**Conclusion**

Information regarding decision-making processes may better enable those involved in the planning of healthcare delivery to integrate undergraduate and post-graduate medical training, individual career preferences and the evolving medical needs of the community. Ageing of the population will impact throughout the gamut of medical specialities. Well-designed educational interventions may increase interest in geriatric medicine as a career, and positively influence management of older patients.

**Key points**

- Career intentions of medical students may impact on education and workforce planning.
- In a survey of 274 students, two-thirds of students had already chosen a future specialty.
- One-third would consider geriatric medicine, especially female students and those prioritising the opportunity to travel.
- Undergraduate exposure to the discipline may increase interest in geriatric medicine as a career.
- Educational interventions such as a Medicine in the Community module may also positively influence management of older patients.

**Conflicts of interest**

None declared.

**Supplementary data**

Supplementary data mentioned in the text is available to subscribers in *Age and Ageing* online.

**References**


Received 31 January 2013; accepted in revised form 15 May 2013