Students' preferences for primary care careers evolve over time: the situation in two medical schools in Switzerland and Portugal.

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Introduction

Objective:

Describe the course of medical students' preference for a primary care (PC) career over time in two medical schools in Switzerland and Portugal, and put the findings into the context of a conceptual framework of primary care career choice.

Background:

Many countries encounter an insufficient number of medical graduates choosing a primary care career. To help understand the various factors involved in students' career choice, a conceptual framework of PC career choice was recently proposed (Pfarrwaller et al, Acad Med 2017). We use this framework as a theoretical basis for the study presented here.

Methods

We used data from cohorts of undergraduate medical students at both institutions, collecting career preferences throughout medical school. We grouped students' career choice at three time points (year 1, 3, and 6) according to their interest in a PC career.

Both medical schools offer a 6-year degree, divided into a pre-clinical (first 3 years) and a clinical part. In both places, students are exposed to primary care in the first 3 years.

Limitations of the study:

- Usage of different definitions of «PC career choice» at the two sites (see figures 1 and 2),
- Small cohort size and study of a single cohort per site.

Results

PC career choice in Geneva:

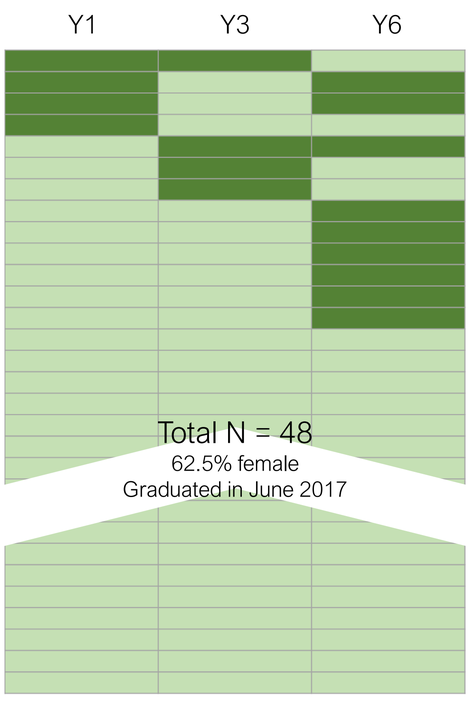

Figure 1: In the Geneva cohort, 9 of 48 students (18.8%) favoured a PC career at graduation.
Definition of «PC career choice» in the questionnaire:
specialty = general internal medicine AND practice type = private practice
(only one answer possible per item).

The two figures represent preferences for a PC career for each student in the cohorts. Each line represents one student (not all lines depicted for reasons of space), and each column represents one time point (years 1, 3 and 6).

= Primary care career choice (as per the definition mentioned under figures 1 and 2)

= Career choice other than primary care (including undecided)

We observed in both sites:

- The proportion of students favouring a PC career over a non-PC career is higher at graduation than at the beginning of medical school.
- Nevertheless, the number of students favouring a PC career over a non-PC career can be considered too low to meet the demand.
- The increase seems to be more pronounced between year 3 and year 6, i.e. during the period when clinical placements are most important.

We also observed a difference:

- In Geneva, career preferences of PC vs non-PC seem to fluctuate more than in Braga.

PC career choice in Braga:

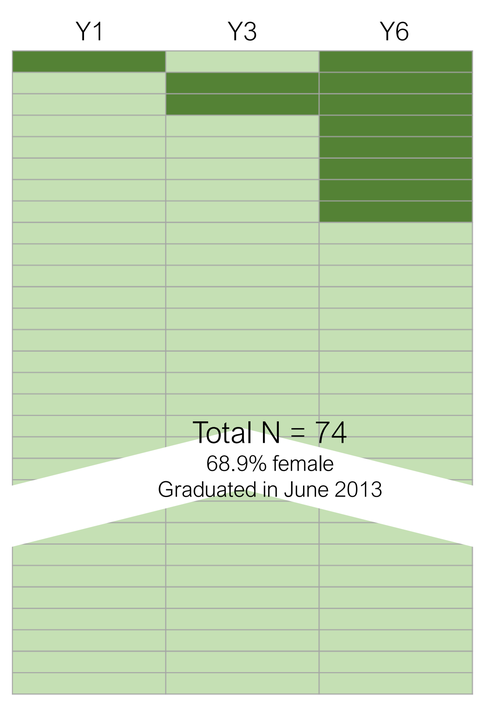

Figure 2: In the Braga cohort, 8 of 74 students (10.8%) favoured a PC career at graduation.
Definition of «PC career choice» in the questionnaire:
«Family medicine» mentioned as one of the top three preferred options.

Discussion

PC career choice gradually develops over the course of medical school.

We observed that the preference for PC does not seem to be stable in all students and may fluctuate over time.

Based on the conceptual framework of PC career choice, we hypothesize that this could be due to changing influences over time, acting on the students' career choice process.

Due to the limitations of our study, we can only make hypotheses, which we will integrate into our future work.

For example, students both in Geneva and Braga benefit from practical learning experiences in PC settings. **Put into the context of our theoretical framework**, we can hypothesize that the opportunity to practice what has been learned in role plays, in simulated scenarios and with patients in a primary care practice fosters students' self-efficacy. This in turn determines students' learning goals and future intentions.

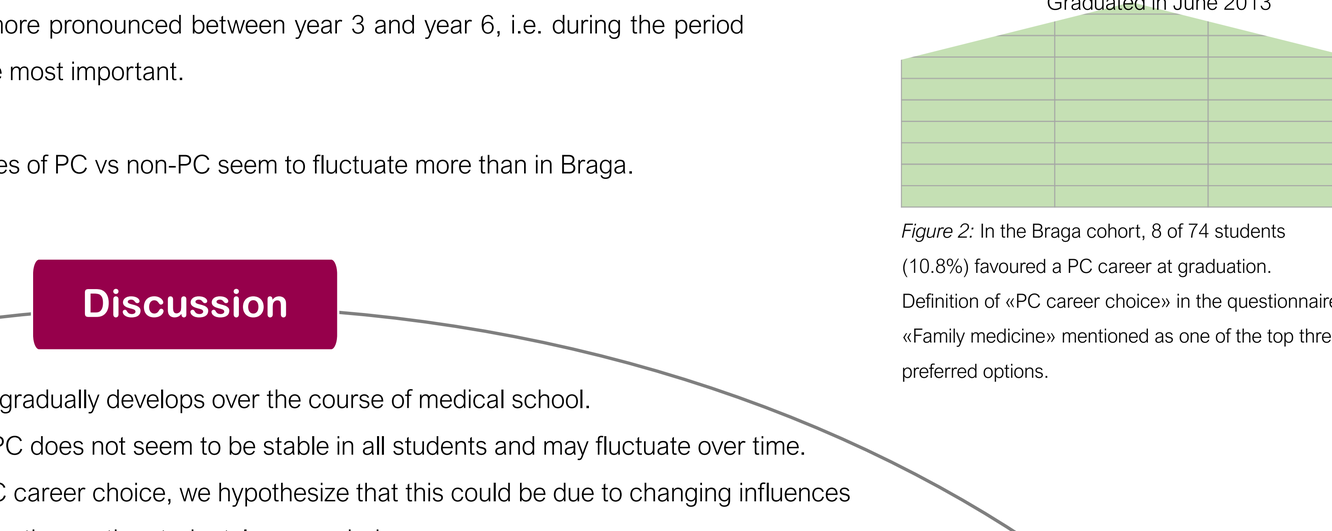

Figure 3: Excerpt from the conceptual framework of primary care career choice (Pfarrwaller et al. Acad Med 2017), depicting the career choice process over time.

In **Braga**, clinical experiences in PC settings take mostly place in the second half of the undergraduate curriculum, which could explain why preferences for PC tend to develop towards the end of medical studies. In the future, reflections could be made about how to strengthen PC in the earlier years.

In **Geneva**, the PC curriculum spans over the 6 years. For the cohort described here, PC teaching in the first 3 years was not well structured and lacked a clear definition of PC. Since then, changes have been made to improve the structure and quality of PC teaching, and reflection for further improvements are currently under way.

Conclusion

We still have largely insufficient numbers of medical graduates who prefer a PC career over non-PC careers.

The conceptual framework of PC career choice provides a valuable theoretical basis for critical reflection within our Units and institutions, to define actions to strengthen our influence on students' primary care career choice.

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