Personal and motivational factors influencing undergraduate medical students' preferences for general practice career: results of a longitudinal study.

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1. INTRODUCTION

Background: In Switzerland, like in many EU countries, an insufficient proportion of students choose a general practice (GP) career. GP physicians' shortage is a key issue. Undecided students might be a target to fulfill this gap.

Aims: 1) identify medical students GP career preferences throughout preclinical years 2) determine whether those choosing GP vs those undecided present specific personal characteristics, motivations and/or motives to choose GP.

2. METHODS

Setting & Sample: At the beginning and the end of the 3 preclinical years, 237 medical students (138 women) self-reported their career preferences, level of motivation (1=low to 6=high) for different specialties including GP, personal characteristics (gender, personality, motivation type) and level of attractiveness (1=low, 6=high) of 12 motives for choosing GP.

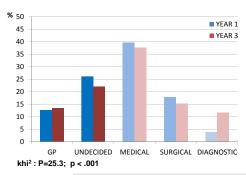
Graph 2: Percentage of students career 'preference throughout preclinical years (N=237) by gender

YEAR 3

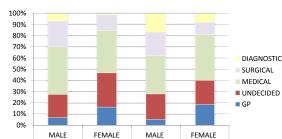
Analyses: Paired T-test, chi-square, ANOVA, linear regression.

3. RESULTS

Graph 1: Percentage of students career 'preference throughout preclinical years (N=237)







Throughout preclinical years:

- the proportion of students attracted by GP remained nearly unchanged at 12%.
- the proportion of undecided students slightly decreased (from 26% to 22%); this was mainly due to female.

YEAR 1

- male were less attracted by GP than female, as well as less undecided at year 1.

Table 1: Comparison of level of motivation for GP, personal and motivational characteristics between students interested by a GP career or students undecided at the end of preclinical years

| | Career preference GP (n=36) | | ANOVA p-value | |
|----------------------|-----------------------------------|------------|------------------|--|
| Measure/Mean±SD | | | | |
| GP motivation | 5.1 ± 1.0 | 3.0 ± 1.3 | .001 | |
| | | | | |
| Neuroticism | 23.3 ± 9.1 | 21.4 ± 6.7 | .070 | |
| Extraversion | 30.5 ± 4.7 | 29.6 ± 5.3 | .139 | |
| Openness | 29.2 ± 6.4 | 29.8 ± 5.5 | .662 | |
| Agreeableness | 32.0 ± 4.1 | 30.0± 3.7 | .046 | |
| Conscientiousness | 33.3 ± 6.1 | 30.3 ± 5.8 | .034 | |
| | | | | |
| Extrinsic motivation | 3.8 ± .8 | 4.0 ± .8 | .217 | |
| Intrinsic motivation | 4.9 ± 1.1 | 4.0 ± .9 | .001 | |
| Caring motivation | 5.4 ± .9 | 5.2 ± .7 | .242 | |
| | | · | | |

Table 2: Prediction of the level of motivation for GP according to the motives and gender of the 2 groups of students at the end of preclinical years

| Career 'preference | GP | Undecided |
|--------------------------------------|--------|-----------|
| Model/ Adj.R ² | .360 | .350 |
| | | |
| Lifestyle | .175 | .096 |
| Working in rural environment | .152 | .165 |
| Shortage in the speciality | .002 | .020 |
| Long-term relationship with patients | .198* | .257** |
| Variety of pathology | .297** | .245** |
| Intellectual challenge | .106 | .085 |
| Carreers opportunities | .061 | .074 |
| Potential income | 233* | 169 |
| Post graduate studies duration | .096 | .059 |
| Social acknowledgement | .032 | .123 |
| Peer acknowledgement | 066 | 118 |
| Following a role model | 131 | 221** |
| Gender | .095 | .010 |

* p < .05, ** p < .01

"Long-term relationship with patients" and "Variety of pathology" were significant motives predicting GP motivation both for students attracted by GP (β =.20; β =.30) and undecided (β =.26; β =.25). Among students attracted by GP, "potential income" was a significant drawback (β =-.23), whereas for undecided it was "following a role model" (β =-.22). Gender didn't significantly predict GP motivation.

As anticipated, level of motivation for GP is higher (5.1 over 6) in students showing career preference for GP than undecided students (3 over 6).

Students attracted by GP were characterized by higher conscientiousness and agreeableness, whereas undecided students by lower intrinsic motivation.

4. SUMMARY

- Results at one medical school confirm that the proportion of preclinical students interested by a GP career is largely insufficient to meet the needs of the population (about 50%).
- At the end of preclinical years, less then 15% of the students were motivated and intended to be trained as GPs. In addition, about 20% were still undecided, but they were moderately motivated for GP.
- Undecided students present specific personal and motivational characteristics as well as specific motives for eventually choose GP.

TAKE-HOME MESSAGE

Profiling personal characteristics and motivations for undecided students could help targeting efficient strategies to encourage GP career choices meeting society needs.

