



## Why choose geriatric medicine? A national survey among French postgraduate medical students

Joaquim Prud'Homm, Aline Corvol, Aude Aguillon, Marine Olivieri,  
Valentine Rousseau, Dominique Somme

### ► To cite this version:

Joaquim Prud'Homm, Aline Corvol, Aude Aguillon, Marine Olivieri, Valentine Rousseau, et al.. Why choose geriatric medicine? A national survey among French postgraduate medical students. Age and Ageing, 2020, 10.1093/ageing/afaa120 . hal-02948425

**HAL Id: hal-02948425**

**<https://hal.science/hal-02948425v1>**

Submitted on 24 Sep 2020

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

# Why choose geriatric medicine? A national survey among French postgraduate medical students.

[Prud'homm J](#)<sup>1,2</sup>, [Corvol A](#)<sup>1,2,3</sup>, [Aguillon A](#)<sup>1</sup>, [Olivieri M](#)<sup>1</sup>, [Rousseau V](#)<sup>1</sup>, [Somme D](#)<sup>1,2,3</sup>.

1 - CHU de Rennes, Rennes, France.

2 - Université Rennes 1, Faculté de Médecine, Rennes, France.

3 - Arènes, UMR 6051, Rennes, France.

**Abstract:** Since 2017, geriatric medicine has been available as a postgraduate specialty to French year 7 medical students. We investigated the incentives of the 171 French medical students who opted for geriatric medicine as a postgraduate specialty subsequent to year 6 national qualifying examinations in 2017. A prospective quantitative survey-based study was conducted by means of a questionnaire compiled online and sent by email between December 2017 and May 2018. The questionnaire comprised 43 questions, including 14 single or multiple choice questions, 28 scaled questions evaluating factors of influence using a 5-point Likert scale, and 1 open-ended contingency question. Of the 171 students, 139 responses were received. The national response rate to this questionnaire was 81.2%. One hundred fourteen students (82.6 %) had previous experience of training in geriatric medicine, which for 95 (84.0 %) students took place between years 3 and 6 of medical training. This training influenced the choice of 102 respondents (90.2 %). Factors reported as having exerted a strong or very strong influence were in particular the rewards of working with older adults; positive personal encounters with older adults in the past; the appeal of interprofessional teamwork; the challenge of cases involving complex diagnostic and therapeutic decisions; the challenge of patients with chronic conditions. The present study is the first to focus on the reasons why French students choose to specialize in geriatric medicine. The results emphasize the importance of training programs in geriatric medicine to promote enthusiasm for this specialty.

30 Word counts for the abstract: 244

31

32 Key words: geriatrics training, geriatrics career, students' incentives, students' preferences

Revised manuscript

## 33 INTRODUCTION

34 As of January 1 2018, the number of individuals over the age of 60 in France was estimated  
35 at 13 146 259 (19.5% of the population) and those aged over 75 years at 6 149 436 (9.1%)  
36 [1]. The number of geriatricians was 1781 (1 geriatrician per 3452 inhabitants) [2]. Although  
37 a consensus of a European undergraduate and postgraduate curriculum in geriatric  
38 medicine has been agreed, geriatricians' national curricula and certificates vary [3, 4, 5, 6,  
39 7]. The timeframe of the harmonization of these curricula is difficult to define at the present  
40 time. Nevertheless, the shortness of the Geriatrics medical workforce is an international  
41 concern. In France, geriatric medicine was recognized as a specialty by French health  
42 authorities in 2004 [8]. Virtually all geriatricians practice as salaried employees [2]. As a  
43 specialty, its potential to recruit physicians is limited as demonstrated by the fact that public  
44 sector vacancies tend to remain unfilled [9].

45

46 French medical studies are made up of three 'cycles' [10, 11, 12]. The first 3 years begin with  
47 a basic foundation year leading to selection by competitive examination of students eligible  
48 to pursue. Successful completion of years 1-3 corresponds to an undergraduate degree.  
49 Successful completion of years 4-6 awards a qualification corresponding to a Master's  
50 degree. During these 3 years, theoretical and practical training are combined to include  
51 clinical internships usually lasting 3 months and undertaken in various hospital departments  
52 as well as in private practice. Students may work as interns in years 6 and 7 during their  
53 vacation time. The final phase of medical studies spans a period of 3-6 years during which  
54 time students work as full-time interns within hospital medical teams or in private practice  
55 under the supervision of senior physicians in charge of their training. On successful  
56 completion of internships, teaching modules and doctoral thesis, interns graduate as fully  
57 qualified doctors of medicine together with postgraduate qualifications in their chosen  
58 specialty.

59

Since 2004, year 6 students have taken national ranking examinations as a prerequisite to the final years of medical study [13]. In 2017, 8372 year 6 students were ranked from first to last subsequent to written computer-based examinations [14, 15]. Ranking affords students precedence over others in their choice of specialty and place of study subject to the number of places made available by the Ministry of Health and Higher Education [16]. Decisions are therefore dictated not just by choice of specialty but also by choice of prospective town of study. The selection process takes place in two phases: firstly students apply for specialty and town of study by compiling a non-exhaustive list of wishes by order of preference; next a final choice is made by means of the national selection process.

Reforms in 2016 to the final years of medical studies in France resulted in the creation of a diploma of specialized studies in geriatric medicine [17, 18]. The following year, finishing year 6 French medical students were in 2017 able to opt for this medical specialty for the first time subsequent to national ranking examinations. Of the 200 posts in geriatric medicine on offer throughout France, 171 were filled via the national selection process, demonstrating a recruitment rate of 86%. By comparison, the average rate of recruitment via national ranking examination across all medical specialties excluding general medicine is 98% [9, 19]. Against a backdrop of limited attractiveness of this recently created geriatric specialty, we have attempted to document why these year 7 French students decided to lead the way in choosing to specialize in geriatric medicine in 2017.

## 80 METHODS

81 We conducted a nationwide prospective quantitative study in France by means of a  
82 questionnaire compiled online using the SurveyMonkey.fr website. The study population  
83 involved French 7 years medical students enrolled in a specialized postgraduate study  
84 program in geriatric medicine in 2017. Mean ranking of students enrolled in specialized  
85 studies programs in geriatric medicine subsequent to national ranking examinations was  
86 5922 +- 1613. Reconstructive plastic and cosmetic surgery obtained the highest mean  
87 student ranking (706 +- 335) and occupational health and medicine (6756 +- 1440) obtained  
88 the lowest [9, 19]. Hence, a large proportion of students had no choice but to opt for geriatric  
89 medicine as a means of pursuing their studies in a given town whereas the opposite (i.e. no  
90 possibility of opting for geriatric medicine notwithstanding the availability of other specialties  
91 in that particular town) was a much rarer occurrence [9, 19].

92  
93 The questionnaire items were designed to assess why interns chose geriatric medicine.  
94 Given that the respondents had also decided on their town of study by this stage, certain  
95 questions focused specifically on this criteria so as to determine any relative precedence of  
96 one choice factor over the other. The questionnaire items compiled were based on  
97 hypotheses adapted from a previous United Kingdom study conducted in 2016 [20]. The  
98 questionnaire consisted of 43 questions: 14 single or multiple choice questions, 28 scaled  
99 questions evaluating factors of influence using a 5-point Likert scale and 1 open-ended  
100 contingency question. These questionnaire items were designed to gain insight into the  
101 incentives underlying student choices based on their perceptions of geriatric medicine,  
102 subject to the student's ranking. We therefore investigated immediate incentives (those  
103 present regardless of student ranking) and second-best incentives (incentives related to the  
104 fact that another choice probably better suited to a student was no longer available). There  
105 are elements pertaining to student perceptions of geriatric medicine in the questionnaire that  
106 in the present context have not been scrutinized for accuracy but simply reflect whether or  
107 not they have an impact on decisions. For instance, rather than investigating whether the

respondents thought that it was easier to pursue an academic career in geriatric medicine than in another specialty, we merely examined whether this was an influencing factor in their choice (it was not a matter of whether this opinion was true or not, which in itself could constitute subject matter for further research). For each choice factor, the 5-point Likert scale ranged from “very little influence” to “very strong influence”. The factors rated by the Likert scale were presented to the respondents in random order. Responses to these factors were sorted into 3 groups: 1 “strong or very strong” response group whereby 50% or more of the students responded by “strong influence” or “very strong influence”; 1 “little or very little influence” response group whereby 50% or more of the students responded by “little influence” or “very little influence”; and 1 so-called “homogeneous influence” response group where the distribution of responses to the various influencing factors was consistent with neither of the above groups. The questionnaire was tested for comprehensibility and ease of response selection by 3 students enrolled in a specialized complementary studies program in geriatric medicine and was adjusted in line with their comments. The present study took place between December 2017 and May 2018. The questionnaire was conveyed to the appropriate interns by email through a professor, local coordinator of the Geriatric diploma, of each faculty. A total of 3 reminder emails were sent. The responses were collected anonymously. The questionnaire is provided in Supplement (Supplementary Text S1).

The analysis presented is essentially descriptive. Continuous variables are expressed as mean  $\pm$  standard deviation. Categorical variables are expressed as counts and/or percentages. The calculations were computed using Microsoft Excel (2010) ® software.

## 130 RESULTS

131 We received 142 responses out of a population of 171 individuals. Three duplicate  
132 responses were excluded. The total national response rate to this questionnaire was 81.2%  
133 (139/171). Mean completion rate per questionnaire was 88.0%. We received 130 (91.5 %)   
134 responses within the first 3 months of the study, corresponding to the 2nd to 5th month  
135 period following the beginning of year 7 for the respondents. Of the 139 responses, 97 were  
136 provided by female (69.7%) and 42 by male respondents (30.3%). Mean age of the  
137 respondents was 25.9 years +- 1.5 years. Thus, 119 (85.61 %) students had completed  
138 years 4-6 of their medical studies in France and 20 (14.3 %) abroad.

139

140 One hundred and fourteen students (82.6 %) who opted for geriatric medicine had already  
141 gained experience in geriatric training. Thus, 95 (84.0 %) of these students took part in  
142 geriatric training between years 4-6 of their medical studies, 10 (8.8 %) had worked as  
143 interns, and 9 (7.2 %) had taken part in several training programs over the course of their  
144 studies. Geriatric training programs influenced choice of specialty in 102 students (90.2%).  
145 Sixty students (43.8%) decided on their choice of specialty during years 4-6 of their medical  
146 training, 51 students (37.2%) during the vacation between year 6 and the national selection  
147 process, 15 (10.9%) as acting interns, and 11 (8.0%) at the last moment, namely when a  
148 final decision was due. None of the students reported having already chosen their specialty  
149 before admission to a faculty of medicine or during years 1-3 of their medical training.

150

151 Geriatric medicine was the first-choice specialty requested in the national selection process  
152 for 83 students (60.5%). Of the remaining students, 36 (73.4%) opted for a medical specialty  
153 as their first choice. In cases where geriatric medicine was not the first-choice specialty,  
154 mean rank of preference for this option was 2.3 +- 0.7 (including 4 outliers: rank of  
155 preference 12, 18, 27 and 42). Seventy-five students (54.7%) rated choice of specialty as  
156 equally as important as choice of town; 54 students (39.4%) rated choice of specialty as



more important than choice of town; 8 students (5.8%) judged choice of town to be more important than choice of specialty.

Of the 28 factors evaluated by a 5-point Likert scale, 7 (25%) had a strong or very strong influence on why students decided to specialize in geriatric medicine (Table 1). It is noteworthy that none of the students responded "very little influence" or "little influence" to the factor "rewards of working with older adults". Eleven factors (40%) were judged to have little or very little influence on why students chose to specialize in geriatric medicine (Table 2). The factors underlying the second-best specialty decisions analyzed (no other specialty of interest or no possibility of choosing internal medicine whatever the faculty) emerged as the factors having the least influence on choice of specialty. The 10 other factors (35%) had a homogeneous influence (Table 3). Within this category, rate of occurrence of the response "strong influence" or "very strong influence" on choice of specialty ranged from 24.6% (regarding high nationwide esteem for geriatric medicine which thus appears to have little impact) to 42.0% (regarding greater ease in finding employment after geriatric training by comparison with other specialties as expressed by a non-negligible proportion of the respondents). Conversely, rate of occurrence of the response "little influence" or "very little influence" ranged from 46.2% (regarding status of faculty of medicine which is therefore of little consequence) to 21.4% (regarding a preference for salaried employment as expressed by a non-negligible proportion of the respondents).

Lastly, 123 students (97.6%) replied "no" to the question "Do you regret your decision to specialize in geriatric medicine?"

## 180 DISCUSSION

181 This pioneering study describes the characteristics of the first students to enroll in a diploma  
182 of specialized studies in geriatric medicine in France and their incentives for choosing this  
183 specialty when it was recognized as such via reform to the final years of medical training.

184

185 Our results highlight the importance of training programs in geriatrics in the course of  
186 medical studies. The responses to our questionnaire confirm that there is a greater likelihood  
187 of students making a well-informed, constructive decision to specialize in geriatric medicine  
188 as a result of such training experience.

189

190 We then attempted to determine the incentives for choosing to specialize in geriatric  
191 medicine using a pragmatic approach [21]. The first conclusions to be drawn from this  
192 survey are that second-best options have little or very little influence on choice of specialty.  
193 Furthermore, the incentive criteria that we proposed can be classified according to Max  
194 Weber's theory of behavior, whereby individuals act in line with various types of rationality  
195 [22]: a) purposeful rational behavior (i.e. behavior emphasizing life balance, stability, nature  
196 of work and status); b) value-oriented behavior (i.e. ethical behavior in accordance with  
197 one's beliefs and values); c) behavior shaped by emotion (i.e. acting on impulse/frame of  
198 mind). Most of our factors underpinning choice ultimately pertained to purposeful rational  
199 behavior (26/28). It is therefore likely that we underestimated incentives stemming from  
200 values or emotions. It is however noteworthy that the factor demonstrating the highest level  
201 of influence on choice of geriatric medicine as a specialty corresponds to "value-oriented  
202 behavior" (rewards of working with older adults), and that the factor related to behavior  
203 shaped by "emotion" (positive personal encounters with older adults in the past) was also  
204 one of the top 5 factors with strong or very strong influence. Ultimately, the remaining three  
205 top 5 factors were rational and reflected the fundamental characteristics of geriatric care  
206 (interdisciplinary teamwork, complexity, multimorbidity) above and beyond any  
207 considerations of career prospects or choice of town. Analysis of our results reflects the fact

that the decision to specialize in geriatric medicine resulted from quite well-informed knowledge of practice in this field, and was therefore a constructive decision rather than a second-best option. These results are consistent with those obtained by Fisher et al. in the United Kingdom [20] and the meta-analysis by Meiboom et al. [23]. It is of interest that in both of these studies, physicians opting for geriatric medicine were shown to display greater enthusiasm for complexity and interdisciplinary teamwork than their counterparts. Fisher et al. surveyed 269 geriatricians who had for the most part been practicing for 3 to 5 years and who demonstrated a very strong affinity for the field (which was named as first-choice specialty by 93.4% of the respondents, exceeding our rate of 60.5%) [20]. Conversely Meiboom et al. surveyed individuals who had not opted for a career in this field because they felt uncomfortable with the inappropriateness of standard guidelines resulting from the high complexity of the conditions involved [23], whereas we reported in the present study that complexity was one of the five factors having strong or very strong influence on selection of this specialty.

The major strength of the present study is its very high response rate, with a national response rate of 81.2%. Its main limitation is absence of a social desirability test which may have caused bias in the student responses [24].

In conclusion, in the light of contemporary challenges in terms of demographics and epidemiology, it appears important to promote the development of geriatric medicine as a specialty. The present pioneering study involving students enrolled in a specialized postgraduate study program in geriatric medicine has highlighted the importance of geriatric training programs during years 4-6 of medical studies. Our results confirm that students make a constructive decision to pursue this career path, inspired by a desire to work with older patients, the benefits of interdisciplinary teamwork and the challenge of complex clinical cases. Further research is required to investigate why other students have so far shunned this career path.

236

237 Words count for the main text: 2500

Revised manuscript

238 ACKNOWLEDGEMENTS

239 Conflict of Interest: The authors declare that there is no conflict of interest relevant to this  
240 manuscript.

241 Author Contributions: All authors contributed from the conception to the final approval of this  
242 manuscript. We thank the members of the French College of the Geriatrics Teachers.

243 Sponsor's Role: The authors declare that this study did not received any funding.

244 REFERENCES

- 245 1. French National Institute of Statistics and Economic Studies. *Population totale par sexe et*  
246 *âge au 1<sup>er</sup> janvier 2020, France – Bilan démographique 2019*. Paris: French National  
247 Institute of Statistics and Economic Studies, 2020 [cited 2020 25th April] Available  
248 from <https://www.insee.fr/fr/statistiques/1892086?sommaire=1912926>
- 249 2. French National Medical Council. *Atlas de la démographie médicale en France. Situation*  
250 *au 1<sup>er</sup> Janvier 2018*. Paris: French National Medical Council, 2018 [cited 2020 25th April]  
251 Available from [https://www.conseil-national.medecin.fr/sites/default/files/external-](https://www.conseil-national.medecin.fr/sites/default/files/external-package/analyse_etude/hb1htw/cnom_atlas_2018_0.pdf)  
252 [package/analyse\\_etude/hb1htw/cnom\\_atlas\\_2018\\_0.pdf](https://www.conseil-national.medecin.fr/sites/default/files/external-package/analyse_etude/hb1htw/cnom_atlas_2018_0.pdf)
- 253 3. Roller RE, Petermans J. Education and training in geriatrics in the 21st century - where do  
254 we come from - where do we go? *European Geriatric Medicine* 2015; 6: 205–7.
- 255 4. Kolb G, Andersen-Ranberg K, Cruz-Jentoft A, O'Neill D, Topinkova E, Michel JP. Geriatric  
256 care in Europe – the EUGMS Survey part I: Belgium, Czech Republic, Denmark, Germany,  
257 Ireland, Spain, Switzerland, United Kingdom. *European Geriatric Medicine* 2011; 2: 290–5.
- 258 5. Ekdahl A, Fiorini A, Maggi S, Pils K, Michel J-P, Kolb G. Geriatric care in Europe – the  
259 EUGMS Survey Part II: Malta, Sweden and Austria. *European Geriatric Medicine* 2012; 3:  
260 388–91.
- 261 6. Masud T, Blundell A, Gordon AL *et al*. European undergraduate curriculum in geriatric  
262 medicine developed using an international modified Delphi technique. *Age Ageing* 2014; 43:  
263 695–702.
- 264 7. Roller-Wirnsberger R, Masud T, Vassallo M *et al*. European postgraduate curriculum in  
265 geriatric medicine developed using an international modified Delphi technique. *Age Ageing*  
266 2019; 48: 291–9.
- 267 8. French Senate. *Reconnaissance de la gériatrie comme une spécialité médicale*. Paris:  
268 French Senate, 2003 [cited 2020 25th April] Available from  
269 <https://www.senat.fr/questions/base/2003/qSEQ031009555.html>
- 270 9. French National Management Center. *Rapport d'activité 2017. Tome I*. Paris: French  
271 National Management Center, 2017 [cited 2020 25th April] Available from

272 <https://www.cng.sante.fr/sites/default/files/documents/fichiers/2018->  
273 [07/RA\\_CNG\\_2017\\_TOME\\_I.pdf](https://www.cng.sante.fr/sites/default/files/documents/fichiers/2018-07/RA_CNG_2017_TOME_I.pdf)

274 10. French National Office for Information on Education and Professions. *Les études de*  
275 *médecine*. Paris: French National Office for Information on Education and Professions, 2019  
276 [cited 2020 25th April] Available from [http://www.onisep.fr/Choisir-mes-etudes/Apres-le-](http://www.onisep.fr/Choisir-mes-etudes/Apres-le-bac/Principaux-domaines-d-etudes/Les-etudes-de-sante/Les-etudes-de-medecine)  
277 [bac/Principaux-domaines-d-etudes/Les-etudes-de-sante/Les-etudes-de-medecine](http://www.onisep.fr/Choisir-mes-etudes/Apres-le-bac/Principaux-domaines-d-etudes/Les-etudes-de-sante/Les-etudes-de-medecine)

278 11. French National Medical Council. *Le remplacement d'un médecin. Situation au 1<sup>er</sup>*  
279 *Janvier 2018*. Paris: French National Medical Council, 2018 [cited 2020 25th April] Available  
280 from <https://www.conseil-national.medecin.fr/medecin/carriere/remplacement-dun-medecin>

281 12. French National Medical Council. *Les facultés de médecine*. Paris: French National  
282 Medical Council, 2019 [cited 2020 25th April] Available from [https://www.conseil-](https://www.conseil-national.medecin.fr/etudiants-internes/etudes-medecine/facultes-medecine)  
283 [national.medecin.fr/etudiants-internes/etudes-medecine/facultes-medecine](https://www.conseil-national.medecin.fr/etudiants-internes/etudes-medecine/facultes-medecine)

284 13. French National Management Center. *Épreuves Classantes Nationales*. Paris: French  
285 National Management Center, 2020 [cited 2020 25th April] Available from  
286 <https://www.cng.sante.fr/concours-examens/epreuves-classantes-nationales-ecn>

287 14. Arrêté du 28 juillet 2017 fixant par rang de classement la liste des étudiants et des  
288 internes de médecine ayant satisfait aux épreuves classantes nationales anonymes donnant  
289 accès au troisième cycle des études médicales, organisées au titre de l'année universitaire  
290 2017-2018 [cited 2020 25th April] Available from [https://journal-officiel.vlex.fr/vid/arrete-du-](https://journal-officiel.vlex.fr/vid/arrete-du-28-juillet-788916365)  
291 [28-juillet-788916365](https://journal-officiel.vlex.fr/vid/arrete-du-28-juillet-788916365)

292 15. French National Management Center. *Nos missions*. Paris: French National  
293 Management Center, 2020 [cited 2020 25th April] Available from  
294 <https://www.cng.sante.fr/qui-sommes-nous/nos-missions>

295 16. Décret n° 2017-535 du 12 avril 2017 relatif aux conditions d'accès des médecins en  
296 exercice au troisième cycle des études de médecine. [cited 2020 25th April] Available from  
297 [https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000034420050&categorie](https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000034420050&categorieLien=id)  
298 [Lien=id](https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000034420050&categorieLien=id)

299 17. French Social Affairs and Health Ministry. *La réforme du 3ème cycle des études de*

300 *médecine*. Paris: French Social Affairs and Health Ministry, 2017 [cited 2020 25th April]  
301 Available from [http://solidarites-sante.gouv.fr/professionnels/se-former-s-installer-](http://solidarites-sante.gouv.fr/professionnels/se-former-s-installer-exercer/etudes-de-medecine-reforme-du-3eme-cycle/r3c)  
302 [exercer/etudes-de-medecine-reforme-du-3eme-cycle/r3c](http://solidarites-sante.gouv.fr/professionnels/se-former-s-installer-exercer/etudes-de-medecine-reforme-du-3eme-cycle/r3c)  
303 18. Arrêté du 12 avril 2017 portant organisation du troisième cycle des études de médecine.  
304 [cited 2020 25th April] Available from  
305 <https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000034419758>  
306 19. French National Management Center. *Rapport d'activité 2017. Tome II*. Paris: French  
307 National Management Center, 2017 [cited 2020 25th April] Available from  
308 [https://www.cng.sante.fr/sites/default/files/documents/fichiers/2018-07/Tome\\_2\\_RA2017.pdf](https://www.cng.sante.fr/sites/default/files/documents/fichiers/2018-07/Tome_2_RA2017.pdf)  
309 20. Fisher JM, Garside MJ, Brock P *et al*. Why geriatric medicine? A survey of UK specialist  
310 trainees in geriatric medicine. *Age Ageing* 2017; 46: 672–7.  
311 21. Sayer, A. (2000). *Realism and social science* London: SAGE Publications Ltd doi:  
312 10.4135/9781446218730  
313 22. Colliot-Thélène C. Retour sur les rationalités chez Max Weber. *Les Champs de Mars*  
314 2011; 22: 13–30.  
315 23. Meiboom AA, De Vries H, Hertogh C *et al*. Why medical students do not choose a career  
316 in geriatrics: a systematic review. *BMC Med Educ* 2015; 15: 101.  
317 24. Tournois J, Mesnil F, Kop J-L. Self-deception and other-deception: A social desirability  
318 questionnaire. *Eur Rev Appl Psychol* 2000; 50: 219–33.



319 TABLES

Factors influencing postgraduate choice of geriatric medicine as a specialty	Rate of occurrence of high/very high influence response
rewards of working with older adults	88.8
challenge of cases involving complex diagnostic and therapeutic decisions	85.7
appeal of interprofessional teamwork	83.3
opportunities for developing a wide range of professional skills (in relation to acute geriatric units, rehabilitation departments, long term chronic care facilities etc.)	77.7
positive personal encounters with older adults in the past	70.6
challenge of patients with chronic conditions	65.8
extraprofessional lure of region of study	61.9

320

321 Table 1: Factors receiving over 50% of responses related to “strong” or “very strong”  
 322 influence on decision of respondent (choice of geriatric medicine as specialty in a given  
 323 faculty). Reading of percentage analysis: higher percentage is commensurate with higher  
 324 level of influence on decision of respondents.

325

Factors influencing postgraduate choice of geriatric medicine as a specialty	Rate of occurrence of little/very little influence response
easier to have more free time in geriatric medicine than in other specialties	52.3
information initiatives from prospective team during selection period	55.5
wariness of private practice	56.3
renown of international geriatric scientific community	57.9
local travel time between various internship and training facilities	58.1
prestige of geriatric medicine as a profession in France	65.8
travel time from town of study to Paris	67.4
no other specialty of interest in town of study	70.6
information initiatives from French Society of Geriatrics and Gerontology and/or Association for Young Hospital Geriatricians during selection period	73.0
doubts over coping with any another medical specialty	83.3
no possibility of opting for internal medicine as a specialty	85.7

326

327 Table 2: Factors receiving over 50% of responses related to “little” or “very little” influence on  
 328 decision of respondent (choice of geriatric medicine as a specialty in a given faculty).  
 329 Reading of percentage analysis: higher percentage is commensurate with lower level of  
 330 influence on decision of respondents.

331

Factors influencing postgraduate choice of geriatric medicine as a specialty	Rate of occurrence of strong/very strong influence response	Rate of occurrence of little/very little influence response
greater availability of hospital posts after geriatric training programs	42.0	35.7
prestige of academic geriatricians from prospective town of study	41.2	34.9
French population figures	40.4	30.1
travel time from town of study to home town	36.5	42.0
value of prospectus for diploma of specialized studies in geriatric medicine in Official Journal	34.1	39.6
preference for salaried employment	34.1	32.5
greater academic career prospects in geriatric medicine	32.5	21.4
working conditions at geriatric department in town of study	31.7	35.7
prestige of faculty of medicine	25.4	46.2
high national renown of geriatric teaching	24.6	35.7

332

333 Table 3: Factors receiving less than 50% of responses regarding “strong”/“very strong  
 334 influence and less than 50% of “little”/“very little” influence on choice of respondents (choice  
 335 of geriatric medicine as a specialty in a given faculty).

336 SUPPLEMENTS  
337 Annex 1 Questionnaire  
338

339 Dear Colleague,

340

341 My name is Joaquim Prud'homm, and I am a chief resident-assistant physician in geriatric  
342 medicine at Rennes (France). As part of my postgraduate complementary specialized study  
343 thesis, I have taken a particular interest in the reasons why students choose to specialize in  
344 geriatric medicine. My research work has the support of the National College of Geriatric  
345 Teaching Staff, which explains why the academic supervisor of your university town has  
346 been informed.

347

348 I would therefore like to ask you to fill in a questionnaire. It will only take 10 minutes and I am  
349 grateful for your time. Please feel free to contact me if you encounter any technical  
350 problems. I would also be grateful for your email address so as to inform you, should you so  
351 wish, of the results of my research work.

352

353 I intend to store the data acquired offline, ensuring of course that no access to personal data  
354 is available to academic supervisors. Data analysis will be strictly anonymous and will be  
355 classified in such a way as to rule out any individual identification.

356

357 The aim of my study is to gain better insight into your needs and expectations. Thank you  
358 once again for your time.

359

360 Joaquim

361

362

363

364

365 Choice of Geriatric Medicine as Graduate Specialty

366 1. Are you: male/female?

367 2. How old are you?

368 3. Have you been studying medicine in France? Yes/No

369 4. At which faculty were you enrolled when geriatric modules were taught between years 3-6  
370 of your medical training? Name of French faculty of medicine to be selected from a  
371 dropdown list

372 5. At which faculty are you enrolled in a specialized postgraduate study program? Name of  
373 French faculty of medicine in to be selected from a dropdown list

374 6. Have you had experience of training in a department of geriatric medicine in the course of  
375 your studies? Yes/No

376 7. In what capacity? Paramedical training/Year 3-6 student/Acting intern/Other (please  
377 specify)

378 8. Did geriatric training influence your decision? Yes/No

379 9. When exactly did you decide to specialize in geriatric medicine? Before admission to  
380 faculty of medicine or during first 3 years/During years 3-6 of medical training/During the  
381 vacation period between years 6 and 7/While acting as an intern/Last minute decision at final  
382 selection stage

383 10. Which criteria is more important to you, specialty or town of study? Town of study more  
384 than specialty/Specialty more than town of study/Specialty just as important as town/No  
385 notion of choice

386 11. Was geriatric medicine your first-choice specialty (discounting town of study)? Yes/No

387 12. What was your first-choice specialty? Medical/surgical specialty to be selected from a  
388 dropdown list (contingency question if the respondent ticked "No" to question 11)

389 13. Where did you place geriatric medicine in your order of specialty preference (regardless  
390 of whether or not you were awarded your town of study)?

391 14. Please indicate the level of influence of the following factors on your final choice of  
392 specialty and town of study: (response options for each factor: very little influence, little  
393 influence, moderate influence, strong influence, very strong influence)

- 394 - Greater prospects for an academic career in geriatric medicine
- 395 - Greater availability of hospital posts after geriatric training
- 396 - Doubts over coping with any other medical specialty
- 397 - Wariness of private practice
- 398 - No possibility of opting for internal medicine as a specialty
- 399 - No other specialty of interest in town of study
- 400 - French demographics
- 401 - Travel time from town of study to Paris
- 402 - Travel time from town of study to home town
- 403 - Local travel time between various internship and training facilities
- 404 - Extraprofessional lure of region of study
- 405 - Prestige of prospective faculty of medicine
- 406 - Prestige of academic geriatricians in prospective town of study
- 407 - Information initiatives from prospective team during selection period
- 408 - Information initiatives from French Society of Geriatrics and Gerontology and/or Association  
409 for Young Hospital Geriatricians during selection period
- 410 - Preference for salaried employment
- 411 - Opportunities for developing a wide range of professional skills (in relation to acute geriatric  
412 units, rehabilitation departments, long term chronic care facilities etc.)
- 413 - Value of prospectus for diploma of specialized studies in geriatric medicine in Official  
414 Journal
- 415 - High national renown of geriatric teaching
- 416 - Renown of international geriatric scientific community
- 417 - Working conditions at geriatric department in town of study
- 418 - Rewards of working with older adults

419 - Appeal of interprofessional teamwork  
420 - Challenge of cases involving complex diagnostic and therapeutic decisions  
421 - Challenge of patients with chronic conditions  
422 - Positive personal encounters with older adults in the past (outside the workplace)  
423 - Prestige of geriatric medicine as a profession in France  
424 - Easier to have more free time in geriatric medicine than in other specialties  
425 15. Do you regret choosing geriatric medicine as a specialty? Yes/No  
426 16. Please give your reasons in one sentence (contingency question if the respondent ticked  
427 "No" to question 15)  
428  
429 Thank you for filling in this questionnaire. We would like to get to know you better. It is highly  
430 likely there will be a follow-up study within a few years with a view to comparing present-day  
431 data with potential data in the future. If you are willing, please provide the details below.  
432 Name (optional)  
433 First name (optional)  
434 National ranking (optional)  
435 Email address (optional)  
436  
437 For further information, please contact us at the following email address:  
438 joaquim.prud'homm@chu-rennes.fr  
439  
440 Links to articles:  
441 –Fisher, James Michael, Mark J. Garside, Peter Brock, Vicky Gibson, Kelly Hunt, Sally  
442 Briggs, and Adam Lee Gordon. "Why Geriatric Medicine? A Survey of UK Specialist  
443 Trainees in Geriatric Medicine." Age and Ageing 46, no. 4 (July 1, 2017): 672–77.  
444 <https://doi.org/10.1093/ageing/afx009>. <http://eprints.nottingham.ac.uk/39459/>  
445 –Meiboom, Ariadne A., Henk de Vries, Cees M.P.M. Hertogh, and Fedde Scheele. "Why  
446 Medical Students Do Not Choose a Career in Geriatrics: A Systematic Review." BMC

447 Medical Education 15 (June 5, 2015). <https://doi.org/10.1186/s12909-015-0384-4>.

448 <https://bmcmmededuc.biomedcentral.com/articles/10.1186/s12909-015-0384-4>

449

Revised manuscript