



Original communication

Pilot study on doctors working in departments of forensic medicine in German-speaking areas



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ABSTRACT

Several directors of institutes of forensic and legal medicine in German-speaking areas have noticed a lack of young doctors with specialty qualifications (full board certification) in forensic medicine during recent years. The pilot study was intended to brainstorm the possible reasons for this shortage, by carrying out a survey of doctors working in departments of forensic medicine, paying particular attention to job satisfaction and opinions as to why there are fewer forensic specialists. We sent the link to an online questionnaire to all members of the societies of forensic medicine in Germany, Switzerland and Austria. Altogether, 129 respondents completed the questionnaire and were included in the study. Slightly more men than women replied; the mean age of all respondents was 41. Most respondents had completed their specialty training and worked full-time. In general, participants were moderately satisfied with their careers. Men reported greater career success than women, as determined by objective criteria. Career support was considered to be suboptimal. For most of the respondents, the level of enjoyment of working in forensic medicine was either higher than or approximately the same as the level recalled from five years earlier. Possible reasons for the lack of qualified doctors in forensic medicine institutes are the non-availability of both senior posts and specialty training posts. Career opportunities in forensic medicine are not considered to be attractive.

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1. Introduction

Television series such as ‘CSI’ and ‘Silent Witness’ have made forensic medicine a more popular subject in recent years and much better known among the general population than was previously the case.^{1,2} Despite this change, several directors of institutes of legal and forensic medicine in German-speaking areas (Germany, Switzerland and Austria) have noticed a lack of young doctors qualified in forensic medicine. A similar shortage of specialists in forensic medicine has also been observed in other countries, such as Japan, China, Great Britain and the US. Studies of the affected countries have concluded that too few medical graduates choose forensic medicine as their specialty, and that the working

conditions in forensic medicine are generally unattractive.^{2–5} In Switzerland and Germany, however, the number of specialists in forensic medicine has increased in recent years, particularly among women.^{6,7} No data were available for Austria in this context.⁸ Too few medical graduates choosing forensic medicine is therefore not the reason for the apparent lack of young doctors qualified in forensic medicine.

1.1. So what is the reason? Are doctors in forensic medicine not satisfied with their work situation?

To gain an idea of the background to this issue, it is important to understand the current situation concerning forensic medicine in Germany, Switzerland and Austria. Whilst the term ‘forensic medicine’ is used in Germany and Austria, the term ‘legal medicine’ is used in Switzerland.⁹ According to Beran, these two terms should not be used synonymously as they are two different but synergistic components of medical knowledge and practice.¹⁰ To avoid misunderstanding, we will use only the term ‘forensic’ in the following, although it might not be completely in line with the

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practice in Switzerland. Unlike most other medical disciplines, forensic medicine is primarily affiliated with universities in the German-speaking areas. The university provides the forensic department budget for the purpose of research and educating students, while the police and the judiciary finance basic services such as autopsies, forensic investigations and other tasks.¹¹ In Germany, several institutes of forensic medicine have been closed or have come near to closing during the past 10 years.^{12,13} This dearth has also been observed in other countries, such as Japan, where closures resulted from governmental decisions, including budget reductions.^{4,5}

The objective of this pilot study is to give an idea of the possible reasons for the apparent decrease in young doctors with full specialty qualifications in institutes of forensic medicine, focussing on the following topics:

- Sociodemographic and professional characteristics of the study participants
- Job satisfaction
 - o level of enjoyment in forensic medicine compared with the level recalled from five years earlier
 - o subjective career success
 - o career support
 - o objective career success
 - o professional career (aspired/pursued)
- Possible reasons for a lack of specialists in forensic medicine

2. Materials and methods

In September 2011, we sent the link to an online questionnaire to the forensic medicine associations in Switzerland (Swiss Society of Forensic Medicine, SGRM), Germany (German Society of Forensic Medicine, DGRM and Professional Association of Forensic Medicine Germany) and Austria (Austrian Society of Forensic Medicine, ÖGGM), along with the request to forward the link to their members. An introductory letter accompanied the survey, with a request to submit completed questionnaires before the end of October. We also displayed a poster and distributed flyers during the annual meeting of the German-speaking Society of Forensic Medicine (*DGRM-Jahrestagung*) in Frankfurt at the beginning of October. Three weeks after the email invitation, we sent letters and flyers with the same link to every institute of forensic medicine in the German-speaking areas, with a request to forward the link to their members.

The pilot study included all doctors working in departments of forensic medicine or traffic medicine, except for those in another specialty such as radiology. Students and doctors in other departments, such as toxicology and genetics, were excluded.

2.1. Study sample

The poll was sent to the Societies of Forensic Medicine in Switzerland, Austria, and Germany. Several doctors working in the field of forensic medicine are members of multiple organisations while others are not members of any organisation. The four organisations together have approximately 1130 members.^{14–16} Official statistics from the three countries only list qualified specialists, giving a total figure of approximately 400.^{6–8} As doctors in training are not included in any official statistics, we cannot determine the absolute number of people contacted or calculate the response rate.

2.2. Questionnaire

The standardised questionnaire that we used for the anonymised survey was an adaptation of the questionnaire used in the Swiss

Society of Radiology (SGR-SSR) survey in 2010, which evaluated the professional satisfaction of radiologists in Switzerland.¹⁷ Specific questions were changed and adapted to forensic medicine. The questionnaire had already been shown to be a valid tool.^{17,18} The survey was carried out in German. The link to the questionnaire was sent to the above-mentioned groups by email. The questionnaire contained 92 items addressing the following topics:

- Sociodemographic data
- Workplace and position held
- Workload, as a percentage
- Factors that could increase the attractiveness of the field to medical graduates
- Professional satisfaction as part of the *Life Satisfaction Questionnaire* (FLZM)¹⁹. This tool focuses on subjective satisfaction in eight general aspects of life: 'friends/acquaintances', 'leisure activities/hobbies', 'health', 'income/financial security', 'job/work/profession', 'housing/living conditions', 'family life/children' and 'partner relationship/sexuality'. In the present study, we used only the 'job/work/profession' aspect, asking respondents to rate their satisfaction in a given life domain on a five-point scale, from 'unsatisfied' to 'very satisfied'.
- *Question on satisfaction with career success* (7-point Likert scale, 1 = very unsatisfied, 7 = very satisfied) as a measure of the respondent's contentment with career advancement.^{18,19}
- Enjoyment of forensic medicine compared to the enjoyment recalled from five years before
- Career (aspired to/pursued) in forensic medicine
- Personal opinion on the shortage of doctors in forensic medicine
- Personal opinion on career opportunities, using a 7-point Likert scale, (1 = not good, 7 = very good)

The anonymised online questionnaire was configured in such a way that all the questions had to be answered to reach the following page. If participants were unwilling to answer all of the questions, they had to stop answering the questionnaire at that point.

2.3. Statistical analysis

Frequency analyses were performed, with determination of the median, mean, range and standard deviation, as were counts and percentages. Differences between groups were examined with chi-square tests, *t*-tests, and one-way analyses of variances (ANOVAs). The significance level was set as $p \leq 0.05$. We used the SPSS computer program for the analysis.

3. Results

A total of 198 individuals returned the questionnaire on time. Eight of the questionnaires received were excluded for not meeting the inclusion criteria, e.g. were from students and toxicologists not working as doctors in forensic medicine. Of the remaining 190 responses, 129 participants completed the questionnaire, while 61 filled in only part of it. The following results refer only to completed questionnaires ($n = 129$: 62 women (48.9%), 67 men (51.9%).

3.1. Sociodemographic characteristics

As Table 1 shows, two-thirds of the participants were German and one-third came from Switzerland and Austria, with the fewest from Austria. The age distribution ranged from 25 to 69 years of age, with a mean age of 41. On average, women were approximately 10 years younger than the men. This difference was significant, and was also found in the study by Hauswirth and Bartsch.²⁰ Most of

Table 1
Sociodemographic characteristics of the participants.

	Women (n = 62) 48.1%	Men (n = 67) 51.9%	Total (129) 100%
Country			
Germany	62.9%	62.7%	62.8%
Austria	8.1%	16.4%	12.4%
Switzerland	27.4%	20.9%	24%
Age in years ^a			
Minimum	25	26	25
Maximum	60	69	69
Mean	36.61	45.6	41.30
SD	8.44	11.2	10.96
Living in a partnership	77.4%	68.6%	82.2%
Children	22 (35.5%)	41 (65.2%)	63 (48.8%)
Grown-up children	5 (22.7%)	16 (39.0%)	21 (16.2%)

^a p = 0.000.

the study participants lived with a partner, and nearly half had children. One-third (33.3%) of those parents had grown-up children.

3.2. Professional characteristics

The majority of participants had completed their specialty training (had full board certification); among these specialists, there were more men than women (Table 2). The number of women working in lower and training positions was higher than the number of men, who more frequently worked as senior doctors, assistant directors and directors.

The workplace for more than 80% of the participants was a university, with only 14% working at institutions not affiliated with universities. With respect to the workload, 51 (82.3%) of the women worked full-time, whereas 64 (95.5%) of the men did so.

3.3. Job satisfaction

Job satisfaction is one of the primary factors for remaining both in the specialty and in the profession itself. Career success is one aspect of job satisfaction. Participants rated their advancement based on objective parameters and also made a subjective assessment. Furthermore, experienced career support is crucial to professional satisfaction.

3.3.1. The level of enjoyment of working in forensic medicine relative to the level recalled from five years earlier

Participants were asked if they enjoyed working in forensic medicine as much as they had five years previously; 30.2% said they enjoyed it as much, 31% enjoyed it even more, and 25.6% enjoyed it less. In addition, 13.2% replied that they had not been working in

Table 2
Professional characteristics of the study participants (n = 116).^a

	Women	Men	Total
Specialty training			
Completed	30 (48.4%)	54 (80.6%)	84 (65.1%)
In training	32 (51.6%)	13 (19.4%)	45 (34.9%)
Current position at work			
Specialty registrar in training	31 (53.4%)	13 (22.0%)	44 (37.1%)
Registrar with full qualifications	10 (17.5%)	7 (11.9%)	17 (14.7%)
Consultant	3 (5.3%)	14 (23.7%)	17 (14.7%)
Head of department	6 (10.5%)	6 (10.2%)	12 (10.3%)
Assistant director	2 (3.5%)	9 (15.3%)	11 (9.5%)
Director	1 (1.8%)	8 (13.6%)	9 (7.8%)
Research post	4 (7.0%)	2 (3.4%)	6 (5.2%)
Workplace			
University	51 (82.3%)	53 (79.1%)	104 (80.6%)
Non-university	8 (12.9%)	10 (14.9%)	18 (14.0%)

^a n = 13 are missing. These participants gave "other" as their workplace.**Table 3**
Subjective career success.

	Women Mean (SD)	Men Mean (SD)	Total Mean (SD)
Career success/satisfaction ^{a,b}	4.15 (1.84)	4.93 (1.76)	4.55 (1.83)

^a 1 = very unsatisfied to 7 = very satisfied.^b p = 0.0015.

forensic medicine during the five years in question. There was no significant gender difference.

3.3.2. Subjective career success

Based on subjective criteria, participants were quite satisfied with their careers, although women were significantly less satisfied than men, as shown in Table 3.

3.3.3. Career support

Table 4 shows the results of how participants experienced career support. Our sample considered the support on offer to be suboptimal. No gender difference was observed. "Coaching" and "Having a mentor" were the items most highly rated. Satisfaction with career support, in general, was moderate; 57.4% of the participants had a mentor.

3.3.4. Objective career success

It can be seen in Table 5 that, based on objective criteria, men had greater career success than women. More of them had completed their doctorate and specialty training. Men were more frequently engaged in research projects, had more publications to their names, had obtained scholarships or research grants, and begun their *Habilitation* (postdoctoral lecturing qualification). Men also gave lectures more frequently than women.

3.3.5. Professional career (pursued/aspired to)

The very nature of forensic medicine means that jobs are generally tied to a university, which includes being on an academic career track. Participants were asked about the professional career they had already pursued and the one they hoped to achieve. More than half (57.4%) of the study group intended to perform basic services in a department of forensic medicine (i.e. performing autopsies, writing reports, or being on duty). Approximately one-quarter (25.6%) pursued/aspired to an academic career, including research and *Habilitation*; 6.2% were uncertain about their future career, and 10.8% indicated other plans, with working in a private setting being the most common.

With respect to the question of whether postmortem or clinical aspects of forensic medicine were of greater interest, the majority of the participants preferred to address both aspects, with 13.2% focussing solely on clinical aspects, including the examination of living victims of violence and 24.8% focussing solely on postmortem work. There were no significant gender differences.

Table 4
Career support.

Career support ^a	Women Mean (SD)	Men Mean (SD)	Total Mean (SD)
Networking	2.73 (1.1)	2.62 (1.1)	2.67 (1.1)
Career planning	2.77 (1.3)	2.55 (1.0)	2.65 (1.2)
Coaching	3.28 (1.3)	2.93 (1.1)	3.10 (1.2)
Emotional support	2.85 (1.3)	2.86 (1.1)	2.86 (1.2)
Role model	3.03 (1.3)	2.68 (1.1)	2.85 (1.2)
Having a mentor was very supportive to my career ^a	3.82 (1.3)	4.08 (.9)	3.95 (1.1)

^a 1 = does not apply to 5 = strongly applies.

Table 5
Objective career success.

	Women (%)	Men (%)	Total (%)
Doctoral thesis	41 (41.8%)	57 (58.2%)	98 (76%)
Specialty training completed	31 (36.5%)	54 (63.5%)	85 (65.9%)
MD/PhD awarded	3 (60%)	2 (40%)	5 (3.9%)
Had worked in a foreign country	11 (32.4%)	23 (67.6%)	34 (26.4%)
Giving lectures at meetings/congresses	48 (42.9%)	64 (57.1%)	112 (86.8%)
Publications (peer-reviewed)	46 (41.8%)	64 (58.2%)	110 (85.3%)
Research scholarship	1 (12.5%)	7 (87.5%)	8 (6.2%)
Taking part in a research project	30 (35.7%)	54 (64.3%)	84 (65.1%)
Research only	3 (23.1%)	10 (76.9%)	13 (10.1%)
Self-acquired research grants	18 (39.1%)	28 (60.9%)	46 (35.7%)
Research awards	5 (27.8%)	13 (72.2%)	18 (14.0%)
Habilitation [postdoctoral lecturing qualification]	9 (36%)	16 (64%)	25 (19.4%)

3.3.6. Possible reasons for the lack of specialists in forensic medicine

Table 6 presents possible reasons for the lack of qualified doctors in forensic medicine. Reasons suggested most frequently were “insufficient senior posts” and “insufficient training posts”. Approximately 69% believed that there are insufficient possibilities for obtaining work in a private setting and that there are not enough career opportunities. Slightly more than half of the participants believed that not enough attention is paid to the subject in medical school. Income is also a problem – men in particular gave too low an income as a reason ($p = 0.000$).

4. Discussion

4.1. Sociodemographic and professional characteristics

Although consistent with the official statistics, in that two-thirds of our study group came from Germany and one-third from Switzerland and Austria, with the fewest from Austria, our sample may not be representative of the whole field of forensic and legal medicine. The gender ratio of male to female qualified specialists is 69:31 in our sample, which also agrees with the distribution of forensic professionals in the three countries.

According to statistics from the German Medical Association (*Bundesärztekammer*), there were 326 registered specialists (with full board certification) in forensic medicine in Germany in 2011.⁶ The male:female ratio was 29:71. Of these specialists, 107 were not currently practicing, while the majority of the others had jobs in the institutional sector. Only 3.68% worked as doctors in a private setting. The number of doctors finishing their specialty training has increased in recent years, particularly among women. In 2011, the Swiss Medical Association (FMH) registered 45 doctors who had completed specialty training in forensic medicine. The FMH only

Table 6
Ranking of possible reasons for a lack of qualified forensic professionals (multiple answers possible; $n = 129$). Bold value represents $p < 0.05$.

Ranking	Total	Women	Men	p
1. Insufficient senior posts	105 (81.4%)	49 (46.7%)	56 (53.3%)	.507
2. Insufficient training posts	102 (79.1%)	49 (48.0%)	53 (52.0%)	.992
3. Fear of performing postmortems/ working with the dead	92 (71.3%)	48 (52.2%)	44 (47.8%)	.140
4. Too few possibilities of working in a private setting	89 (69.0%)	46 (51.7%)	43 (48.3%)	.219
5. Lack of career opportunities	88 (68.2%)	38 (43.2%)	50 (56.8%)	.104
6. Not enough attention paid in medical school curriculum	34 (54.8%)	28 (45.2%)	62 (48.1%)	.138
7. Unattractive income	68 (52.7%)	22 (32.4%)	46 (67.6%)	.000
8. Inadequate training for specialty registrars	68 (52.7%)	34 (50.0%)	34 (50.0%)	.642
9. Too much theory/administration	56 (43.4%)	24 (42.9%)	32 (57.1%)	.300
10. Poor reputation of forensic medicine as specialty	46 (35.7%)	26 (56.6%)	20 (43.5%)	.152

registers members of the association, which not all doctors are, especially if they have come from a foreign country with recognised qualifications in the specialty, such as full board certification. The number of specialists may therefore be higher than the figure given in the current FMH statistics. Of the FMH-registered specialists, 31.1% were women and 68.9% were men. There were 32 training posts in the Swiss institutes of forensic medicine. Both the number of doctors and the number of women who have completed specialty training have increased in recent years.^{7,15} In Austria in 2011, there were 33 specialists in forensic medicine, but no data are available on gender, training posts, completion of specialty training, or the percentage of doctors working in a private setting.⁸

In our study, there were more females in specialty training posts than in the positions of senior doctors, heads of department or directors. Similar figures can be seen in the general statistics and other studies^{15,18,20,21} and our results are consistent with the official figures showing that more women have completed specialty training in Germany and Switzerland recently.^{14,16} In the pilot study, the higher percentage of men in more senior posts could, however, be due to the significant age difference of the participants. On average, the women were 10 years younger than the men – a difference also found by Hauswirth and Bartsch.²⁰

4.2. Satisfaction at work (job satisfaction)

4.2.1. The level of enjoyment relative to the level recalled from five years earlier

The vast majority of our sample enjoyed working in forensic medicine to about the same extent or even more than they had done five years earlier. In a survey of radiologists in Switzerland, 81.5% enjoyed radiology as much as or even more than five years previously.¹⁹ Among German radiologists, 75.2% were more or approximately equally satisfied than five years earlier; nearly a quarter of German radiologists were less satisfied, which is similar proportion to the figure we obtained.²² A possible reason for the differences between these and our own studies could be that the earlier surveys mainly targeted qualified specialists. It has been shown that job satisfaction increases with completed specialty training and higher positions.²²

4.2.2. Subjective career success

The results of our survey indicate that the participants had some degree of satisfaction with their career success. Women were significantly less satisfied than men, a phenomenon that is not specific to the field of forensic medicine. Other surveys have found this as well and e.g. the satisfaction of radiologists in Switzerland is greater (5.59 on a scale of 1–7) than it was for our survey.¹⁷ Approximately 64% of general practitioners and 81.7% of radiologists in Germany are satisfied.^{22,23} Doctors who have begun working recently are more satisfied than those who had been working longer. The survey of radiologists in Germany further revealed a correlation between the position held and job satisfaction (i.e. satisfaction increases with more senior positions). The largest increase was observed in the 35–44 age group, which can be attributed to doctors having completed their specialty training and earning more money at this time.²²

4.2.3. Career support

Our study participants rated their career support as suboptimal, especially on the subscales ‘career planning’ and ‘networking’. Based on a survey of Swiss radiologists, Buddeberg reported an even lower opinion of career support than we found in our sample. ‘Coaching’ was also the scale with the highest rating, emphasising the importance of mentoring younger doctors and enhancing their skills. Several studies have demonstrated that mentorship is an

important factor for career development. ‘Career planning’ and ‘networking’ can be improved by having a mentor.^{24,25} In a Swiss survey of surgeons, 58% had a mentor, which was approximately the same as in our sample (57%). Our results indicate that having a mentor is supportive to career advancement. Kaderli recommends there should be more mentors for surgeons, a practice that could also be adopted for forensic medicine.²⁴

4.2.4. Objective career success

Our results show that men have more success when assessed by objective criteria, particularly regarding research activities. This may be due to the significant age difference in our study sample, with the women being approximately 10 years younger than the men. The participating men have therefore had more time and experience to achieve objective career success because of their age. It is known that carrying out research and heading for an academic career is generally less attractive to women, given that an academic career was previously incompatible with working part-time and having children.^{18,24} Considering that currently some 50–60% of medical graduates are women^{20,26–28} and that more women are now completing specialty training in forensic medicine, it is crucial to support combining an academic career in forensic medicine with having a family, e.g. by offering part-time jobs. According to Madea, academic achievements are of the highest priority to forensic medicine and are an essential part of university life – and most institutes of forensic medicine belong to a university.¹¹ As mentioned in Section 4.2.3, it would be helpful to have a mentor during specialty training, something that has been shown to be of particular value to women doctors.^{24,25}

4.2.5. Professional career

The majority of our study participants have not previously pursued and are not now seeking an academic career but intend to perform routine case work, such as autopsies, examining living victims of violence, and other basic services. Only one out of four of the participants aspires to, already pursues, or has completed an academic career. As forensic medicine departments are affiliated with universities, the question arises of whether it is possible to provide only basic services and not do any research.

This question has also been discussed by Madea and addressed in surveys in the US and Japan.^{4,5,11,29} All studies emphasise the importance of research in forensic medicine. Madea believes that the problem is unrelated to the subject matter but rather related to the lack of appreciation of research in forensic medicine. He considers it crucial to prioritise investment in research activities and proposes separating employees who are unwilling to perform research from those who wish to pursue an academic career. The money that is used to pay for basic services should be applied to research activities, given that only with high-quality research can high-quality basic services be guaranteed.¹¹ The author of the US study also emphasised that research is required for high-quality evidence-based work in forensic medicine. According to the medical examiners surveyed, however, there is not enough time for research because of too much service work. In the US, funding for research in forensic medicine seems to be rare, and the levels appear to be low, which are other reasons for the shortage of researchers.²⁹ The Japanese study revealed that the desired balance between research, autopsies and education cannot be managed because of the high workload of basic services. One conclusion of the Japanese study was that employees who are affiliated with universities should prioritise research investment.^{4,5}

Our results show a trend for the study participants to turn their career paths away from research, which might be because of the difficulties in combining research with service responsibilities, as seen in the US and in Japan. As research is undoubtedly essential for forensic medicine, this trend should be taken seriously. Like Madea,¹¹

we suggest separating academic work from the basic services, by (i) giving those employees who are unwilling to perform research the chance to perform only basic services and (ii) supporting those who intend to follow an academic career with more protected time from service work in which to perform research. The quality of research will improve as those involved will have a real interest in it. The quality of basic services will also improve, as employees who do not need to invest time in research activities can put all their efforts into the work they want to perform, saving time and money.

4.2.6. Possible reasons for the lack of qualified specialists in forensic medicine

As mentioned in the introduction, several directors of institutes of forensic medicine in the German-speaking areas noticed a lack of young doctors with specialty qualifications in forensic medicine. In the opinion of our study group, a shortage of senior positions and specialty training posts are the main reasons for this trend. These results are very interesting, because there cannot be both a lack of forensic specialists and a lack of posts. Furthermore the number of doctors who have completed specialty training in forensic medicine has increased recently,^{6,7} so too few training posts at the institutions should not really be the problem. One explanation for the apparent contradiction might be that there are indeed posts at the institutes but only few opportunities to work in forensic medicine outside of these institutions. Some 69% of our study participants consider the lack of opportunity to work in a private setting as another reason for the lack of doctors with specialty qualifications. There are not enough possibilities of working as a forensic specialist in all aspects of the subject, if not at an institution. In Germany and Austria, several doctors have recently set up private practices, which is still highly controversial.⁹ Another reason frequently given by our participants was insufficient career opportunities, which may be due to a combination of too few posts outside an institute, too little career support, and too little flexibility in the workplace and working conditions to allow research, as mentioned previously.

Studies from other countries, including the US, Japan, the UK and China, ascribe the shortage of forensic professionals to inferior working conditions, low budgets and closure of institutions.^{2–5,7,11,13,30} As discussed above, our study respondents are moderately satisfied with their career success and the majority enjoys working in forensic medicine as much as or even more than five years earlier. The Japanese study provides a possible reason, in that doctors in specialty training, particularly young forensic pathologists, quit their jobs because of low income and inferior work conditions.^{4,5} Low income was also an explanation given by US forensic pathologists/medical examiners. These results were partly confirmed in our study. Approximately half the study participants considered their income to be too low, especially the men, but this seems to be secondary to other aspects like too few posts or insufficient career opportunities, because ‘income’ was ranked at position 7 out of 10. Among Swiss radiologists surveyed, 60% ranked their income as an important factor, also putting it in position 7 out of 9.¹⁷

Another reason for the shortage, given by 71.3% of our study participants, was that of being appalled by having to perform postmortem examinations and working with the dead. This result is surprising, as postmortems are still one of the main tasks of forensic medicine, something that is well known before starting specialty training. A survey among forensic pathologists/medical examiners in the US indicated that this reason was given in the miscellaneous comments as a possible explanation for the lack of forensic pathologists/medical examiners.³ It might be that, in the opinion of our study participants, performing postmortem examinations is appalling to medical graduates. New technologies like postmortem imaging are gaining importance and might be helpful to those graduates who feel appalled by the task.

5. Limitations

As official statistics include only qualified specialists (with full board certification), as mentioned in Sections 2.1. and 4.1., we cannot determine the absolute number of doctors working in departments of forensic medicine and therefore do not know the response rate. The study sample may not be representative; the results reflect only the participants' opinions, which may differ from those of other doctors working in the field of forensic medicine. Furthermore, doctors who are less satisfied than others may have been more highly motivated to take part in the survey. There are some contradictions in our results, and these require further analysis and studies. It was not possible to record regional differences because we could not then have guaranteed anonymity for such small groups. The survey took place only once, which may have influenced the responses to questions related to well-being and momentary satisfaction.

6. Conclusions

From our pilot study, we can conclude that the apparent shortage of young specialists in institutes of forensic medicine is most likely not because of dissatisfied doctors, as the participants – doctors working in forensic medicine – are moderately satisfied and enjoy their work. Career support, however, should be improved, particularly by offering mentors to all doctors. Other studies have demonstrated that mentors are supportive of career planning and helpful in recruiting medical students and postgraduates, particularly women doctors. As 60% of all medical postgraduates in the German-speaking areas are women, it is essential to help women plan their careers, particularly with respect to combining an academic career with having a family. The majority of our study participants did not pursue academic careers but preferred to remain in basic services. Research, however, is crucial to maintain the high quality of basic service work and is an essential part of working at a university. We therefore suggest separating basic work from research and creating service positions for those doctors who are not actively interested in research. Our study participants consider that possible reasons for the lack of specialists in forensic medicine include the insufficient vacancies for senior doctors and postgraduate training posts, which might reflect the almost impossibility of working outside of an institution. They also consider career opportunities to be inadequate. Further investigations are needed to get a more detailed view of the actual situation of doctors working in forensic medicine. Other aspects of the pilot study could be analysed in the next step.

Ethical approval

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Conflict of interest

There is no conflict of interest.

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