

Career and Family – Are They Compatible?

Results of a Survey of Male and Female Gynaecologists in Germany

Karriere und Familie – eine Frage der Unmöglichkeit?

Ergebnisse einer Umfrage unter Frauenärztinnen und Frauenärzten in Deutschland

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Key words

- gender
- career
- work-life balance
- child care
- female physician

Schlüsselwörter

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- Karriere
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- Kinderbetreuung
- Ärztin

Abstract



Purpose: Nowadays, most gynaecologists are female and the compatibility of job-related career and family life is an upcoming issue. The working group “Gender and Career” of the German Society for Gynaecology and Obstetrics (DGGG) designed a survey to reflect the present situation with a focus on the compatibility of career and family.

Material and Methods: A web-based 74-item survey was filled out by members of the DGGG. In total, there were 1037 replies, 75% female (n = 775) and 25% male (n = 261) gynaecologists.

Results: 62% of the female and 80% of the male respondents had already finished their doctoral theses and 2% female and 13% male had finished their PhD. Mean number of children was 1.06 (SD 1.08) in female and 1.68 (SD 1.34) in male gynaecologists. The majority of females desired day care for their children, but only 5 to 13% of employers offer any day care. 88% of the female and 72% of the male physicians think that job-related career and family are not compatible.

Conclusion: The majority of female gynaecologists wished to have professional child care, but most employers or other institutions do not offer this. This might be one of the reasons why career and family appear incompatible.

Zusammenfassung



Fragestellung: Die Frauenheilkunde zeichnet sich durch einen überwiegenden Anteil von Ärztinnen aus, sodass die Vereinbarkeit von Beruf und Familie einen bedeutenden Stellenwert einnimmt. Von der Kommission „Familie und Karriere“ der Deutschen Gesellschaft für Gynäkologie und Geburtshilfe (DGGG) wurde ein Fragebogen entwickelt, der die Einschätzung der aktuellen beruflichen und privaten Situation aus Sicht der Frauenärztinnen und Frauenärzte erfasst.

Material und Methodik: Ein webbasierter Fragebogen mit 74 Items wurde von insgesamt 1037 Mitgliedern der DGGG beantwortet; davon waren 75% Frauenärztinnen (n = 775) und 25% Frauenärzte (n = 261).

Ergebnisse: 62% der Frauen und 80% der Männer waren zum Zeitpunkt der Umfrage promoviert und 2% der Frauen bzw. 13% der Männer habilitiert. Insgesamt hatten Frauenärztinnen durchschnittlich 1,06 (SD 1,08) und Frauenärzte 1,68 (SD 1,34) Kinder. Fast 60% der Frauenärztinnen wünschen sich außerfamiliäre Betreuungsmöglichkeiten für die Kinder, allerdings werden Betreuungsplätze nur in 5 bis 13% vom Arbeitgeber angeboten. Sowohl für Frauenärztinnen (88%) als auch für Frauenärzte (72%) ist Karriere und Familie schlecht miteinander vereinbar.

Schlussfolgerung: Obwohl die Mehrheit der Frauenärztinnen sich eine außerfamiliäre Kinderbetreuung wünscht, wird diese von den Arbeitgebern nicht ausreichend angeboten. Dies könnte einer der Gründe sein, warum die Vereinbarkeit von Karriere und Familie von den Frauenärztinnen und auch Frauenärzten als insgesamt schlecht beurteilt wird.

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Introduction and Definition of the Problem

The proportion of female students within human medicine has been continuously increasing since women were first allowed to study medicine in Germany at the beginning of the 20th century. Although the number of female students even reached over 60% in the 2009/2010 winter semester [1], women are hardly represented in the higher echelons of universities and hospitals. Only 8% of chief physician positions are held by female doctors, and in surgical specialities the number is even less [2]; the number of university chairs held by women is negligible. The number of female doctors to complete a PhD in human medicine in 2007 is also clearly under-represented, amounting to approximately 20% overall in comparison to over 80% for male PhD candidates [3].

Gynaecology is a typical example of a gender-specific career. In Germany, there are currently only two female university chief physicians for gynaecology and obstetrics at over 30 university hospitals, meaning that just 4% of university hospitals are managed by women compared to 96% by men. In contrast, there is a high proportion of female assistant physicians (77%) at university gynaecological hospitals compared to male assistant physicians (23%) [4]. The number of female senior physicians (48%) is roughly equal to that of male senior physicians (52%), although the number of female deputy chief physicians is much lower at 34% [4].

It is frequently claimed that the lack of compatibility between career and family impacts upon a person's academic career and thus is one of the main reasons for the low number of female management staff. In order to discover the current professional and private circumstances of male and female gynaecologists and to draw conclusions regarding the alleged and actual reasons for the unequal gender distribution at the management level in gynaecology, the "Family and Career" commission of the German Society for Gynaecology & Obstetrics (Deutsche Gesellschaft für Gynäkologie und Geburtshilfe, DGGG) developed a web-based questionnaire. Key questions included: What are the family-related and professional aims of male and female gynaecologists? Is there demand for additional child care outside of the family among male and female gynaecologists? Do their respective employers offer child care? Are family and career compatible?

Material and Methods

Random sample

First, a pilot study was conducted with 98 male and female gynaecologists. Some questions were then rephrased due to criticisms and inconsistent answers. In the main study, an invitation was sent by email to all the members of the German Association for Gynaecology and Obstetrics (DGGG) in November 2009 along with the access details for the web-based "Job-Family-Career" questionnaire. A total of 4564 (100%) male and female gynaecologists were contacted, of which 2830 (62%) were female. Five weeks later (beginning of January 2010), the DGGG members were sent a written reminder. By the time the deadline was reached at the beginning of March 2010, a total of 1037 members (23%) had responded to the questionnaire, of which 75% were female gynaecologists ($n = 775$) and 25% were male gynaecologists ($n = 261$). The average age of the participants was 40 years (± 9 years), with women (38 ± 7 years) being on average around 10 years younger than men (48 ± 11 years). This means that there is a confounding of gender and age (Table 1).

Table 1 Number of children for the male and female gynaecologists surveyed.

	Women	Men
Number of children in %		
▶ No children	311 (40.13%)	73 (27.97%)
▶ 1 child	183 (23.61%)	32 (12.26%)
▶ 2 children	204 (26.32%)	93 (35.63%)
▶ 3 children	66 (8.52%)	39 (14.94%)
▶ 4 children or more	11 (1.42%)	24 (9.20%)
Would like (additional) children		
▶ In evidence	361 (46.58%)	60 (22.99%)
▶ Not in evidence	303 (39.10%)	158 (60.53%)
Children per person (MV* \pm SD°)		
▶ Assistant physician	0.83	0.49
▶ Specialist	1.45	1.41
▶ Senior physician	0.89	1.89
▶ Chief physician	1.06	2.41

The differences are statistically significant

* MV = Mean value, ° SD = Standard deviation

Questionnaire

The survey instrument used was the web-based "Job-Family-Career" questionnaire developed by the "Family and Career" commission (led by Prof. R. Kreienberg) of the DGGG in collaboration with the Institute of Medical Sociology at Charité – Universitätsmedizin Berlin (Dr. Susanne Dettmar). The questionnaire development and data collection was carried out using the web survey provider SurveyMonkey.com [5]. The questionnaire is available as a supplement to this article in electronic format (HTML, PDF) on the publishing company's website.

The 74-item questionnaire contains questions on the current professional and private circumstances of the respondents, for instance on family-related and professional stress in everyday life, family-related and professional goals and wishes (e.g. desire to have children, child care, career) as well as their current work-life balance.

Statistical analysis

The collected data consisted of qualitative (e.g. gender, professional position) and quantitative (e.g. age, number of children) data, which made it necessary to employ different descriptive and inferential statistical methods. As a result, generalised linear models [6] were used as statistical tests, which can be flexibly applied to different data structures and research questions. Answers with two alternatives (e.g. "yes", "no") were modelled with a binomial distribution, while responses with several alternatives (e.g. "assistant physician", "senior physician", "chief physician" etc.) or numerical data in general (e.g. number of children) were modelled with a Poisson distribution.

The present study particularly investigated the differences in family-related and professional circumstances with regard to gender. As there was a substantial confounding of gender and age (see above and Table 2), the effects of age, gender and their interaction were modelled as independent variables, with the influence of the other variables being controlled. In this way, the age differences were eliminated as far as possible as the explanation for the statistical interference effects of the gender difference found. Descriptive information (e.g. percentages, mean values) corresponds to the values observed and has not been corrected. For reasons of clarity, multi-dimensional tables and diagrams according to age and gender have been avoided and only

Table 2 Socio-demographic data.

	Women 775 (74.73%)	Men 261 (25.17%)
Age (M ± SD) (years)	38 (± 7)	48 (± 11)
Marital status		
▶ Married	601 (77.55%)	225 (86.21%)
▶ Single	110 (11.61%)	20 (7.66%)
▶ Single parent	31 (4.39%)	3 (1.15%)
▶ Miscellaneous	33 (4.26%)	13 (4.98%)
Professional position		
▶ Surgery owner	0 (<0.01%)	0 (<0.01%)
▶ Scientific assistant	3 (<0.01%)	1 (<0.01%)
▶ Expert	1 (<0.01%)	1 (<0.01%)
▶ Assistant physician	340 (53.0%)	32 (19.0%)
▶ Specialist	159 (25.0%)	17 (10.0%)
▶ Temporary senior physician	12 (2.00%)	7 (4.00%)
▶ Senior physician	113 (18.0%)	53 (31.0%)
▶ Chief physician	11 (2.00%)	46 (27.0%)
▶ (Deputy) clinic director	3 (<0.01%)	7 (4.00%)
▶ Univ. professor	3 (<0.01%)	6 (4.00%)
▶ Doctoral thesis	456 (62.4%)	168 (79.6%)
▶ PhD	12 (1.65%)	27 (13.0%)

The differences are statistically significant.

the frequency and values relating to gender have been shown. In the case of qualitative variables with several categories, categories with few responses (10 or fewer) were sometimes combined as one category or combined with neighbouring categories in order to prevent statistical problems.

In total, 13 research questions (regression models) were investigated with 3 effects each, i.e. 39 tests were conducted. A conservative Bonferroni adjustment would create a local criterion for the type I error of $\alpha = 0.05/39 \approx 0.001$. However, no adjustment was made for the local type I error in order to correct false positive results due to multiple tests. Effects with $p \leq 0.05$ were interpreted as statistically significant. However, all tests conducted have been reported, as suggested by Proschan and Waclawiw [7], in order to enable the reader to make an independent assessment of the relevance of the results.

The evaluation was conducted using the statistics program R (V2.11.1, R Core Development Team, 2011).

Results

Family situation

Overall, 59% of the women and 72% of the men participating in the study have children. On average, female doctors have fewer children than male doctors (1.06 vs. 1.68), with age ($p < 0.001$), gender ($p < 0.001$) and the interaction of age \times gender ($p < 0.001$) having a significant influence. The demands of the person's professional role can also be a further factor that influences the number of children. An analysis (not contained in Table 1) of the interaction of gender, age and profession shows that, apart from the influence of gender ($p < 0.001$) and age ($p < 0.001$), professional position ($p < 0.001$) also has a significant influence on the number of children (Table 1).

Child care, employers, and the compatibility of family and career

More women than men would like their children to be cared for outside of the family (57% [$n = 258$] vs. 29% [$n = 23$]), although more men than women see it as their partner's responsibility (3% [$n = 13$] vs. 37% [$n = 29$]). These attitudes are considerably dependent on the gender ($p < 0.001$) and not on the age ($p = 0.63$) of the respondents (Fig. 1).

Despite the women's wishes, approximately 75% of employers do not offer any child care at all or do not offer high-quality child care, with the employers' services for younger (0 to 3 years) and older (4 to 7 years) children being equally low and not showing any significant differences ($p = 0.89$) (Fig. 2).

Overall, 88% of the female doctors and 72% of the male doctors consider family and career to be incompatible. Although this assessment is dependent on age ($p = 1.47E-03$), it is much more dependent on gender ($p = 5.31E-06$) (Fig. 3).

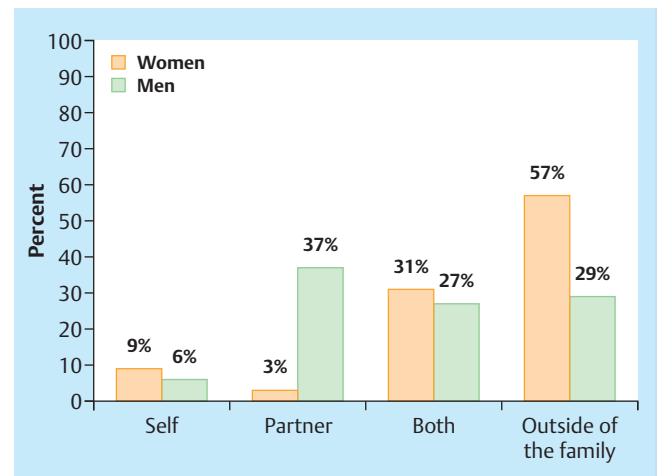


Fig. 1 If you would like children, who should ideally take care of child care during the day?

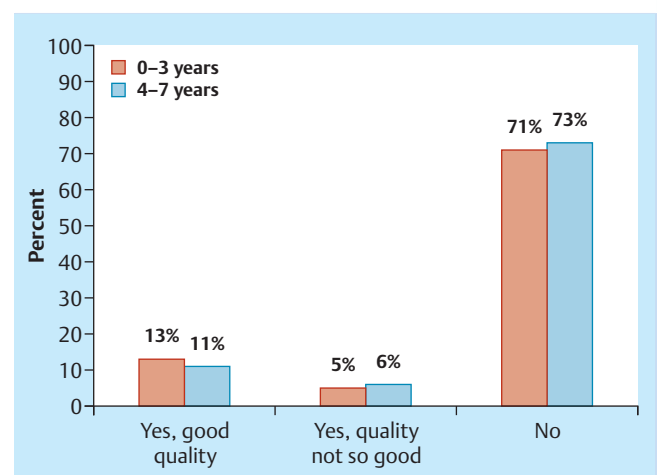


Fig. 2 Does your employer offer child care?

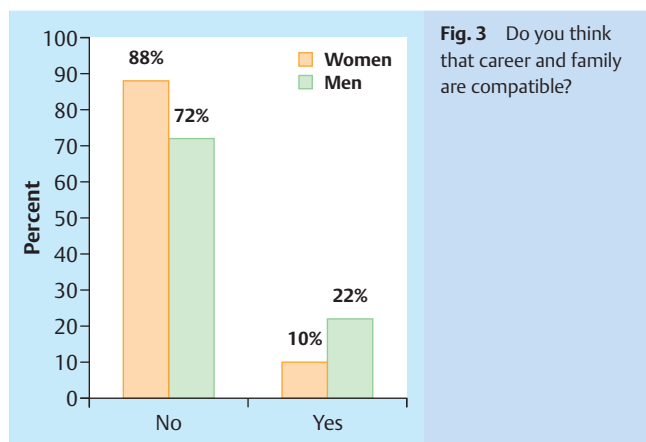


Fig. 3 Do you think that career and family are compatible?

Professional situation and aims

Women are more frequently represented among assistant physicians (53 vs. 19%) or specialists (25 vs. 10%) than men, but more rarely at a higher managerial level (e.g. senior physicians 18 vs. 31% or chief physicians 2 vs. 27%). There is both a highly significant age effect ($p < 0.001$) and a highly significant gender effect ($p < 0.001$) here. Female doctors are less likely to complete a doctoral thesis than men are (62 vs. 80%), which may be due to both their age ($p < 0.001$) and their gender ($p < 0.001$). The differences with regard to PhDs are even clearer, with women holding these less often than men (2 vs. 13%). Here, too, age ($p < 0.001$) and gender ($p < 0.001$) are highly significant influencing factors (Table 2).

With regard to professional goals, no general connections can be observed for gender and age, as multiple responses were possible. The connections have therefore been reported divided according to position. Women decide more frequently to take up future positions at a lower level, e.g. as an employed specialist (24 vs. 4%), or at a middle management level, e.g. as a senior physician (37 vs. 19%). Positions outside of management, such as working as a specialist with their own practice (55 vs. 30%), are sought more often by women. It seems that a position as a chief physician is more attainable for men (28%) than it is for

women (7%). These differences in professional goals can be explained both by age and by gender (all $p < 0.001$, Table 3).

Women are more likely to intend to complete a doctoral thesis than men are (62 vs. 48%). However, this can primarily be explained by the lower age of the women ($p < 0.001$) and not by gender differences ($p > 0.05$). Women are less likely to plan to undertake PhDs (8 vs. 20%), which is linked to both age ($p < 0.001$) and – in contrast to the intention to complete a doctoral thesis – to gender ($p < 0.001$).

Discussion

In the present study by the “Family and Career” commission of the DGGG, information was collected on the family-related and professional circumstances of male and female gynaecologists in Germany and their corresponding wishes with regard to child care.

The average number of children for male and female gynaecologists in our survey corresponds to the average values among academics, which are below the average number of children for the total population in 2008 of 1.38 [8]. In a survey from 2003, the Federal Ministry of Education and Family showed that 53% of female doctors and 45% of male doctors are childless [9]. In our collective, there is a lower percentage of women and men who are childless, which can in part be explained by the high proportion of women. However, it could also be due to the higher average age and the higher professional situation of the men. In addition, our results not only show that female gynaecologists have fewer children on average, but also that women have more children in hierarchically lower positions and have significantly fewer children in hierarchically higher positions than their male colleagues in similar positions. This also reflects the current gender-specific situation. According to a survey by the Westphalian University, Münster, between 2002 and 2003, female professors had 0.8 children on average and male professors 1.77 children [10]. In addition, this survey showed a significantly unequal distribution with regard to the care of pre-school children. While the female partner took on child care for two thirds of the male professors, this only happened for 8% of the female professors [10]. In our collective, there was shown to be a similar distribution pattern for female and male colleagues. Regardless of professional position, the partners of male gynaecologists were responsible for child care significantly more often, with the proportion being lower for the partners of female gynaecologists. In contrast, the majority of female gynaecologists' children were cared for by institutions outside the family. There was a similar distribution pattern among the respondents who still wanted to have children. Fewer than 10% of the women wanted to take on the sole responsibility for day-to-day child care themselves. The majority of the female respondents wanted their children to be cared for outside of the family – interestingly, this was not the case for the majority of male respondents. However, with regard to whether child care was offered by the employer, it was shown that the majority of employers do not offer child care for children under the age of three or for children three to seven years old. Child care options from other parties, too, were only available to half of the respondents. There therefore seems to be a large discrepancy between the wishes of female gynaecologists and the actual possibility of finding child care close to their workplace.

Consequently, it is hardly surprising that career and family are only considered compatible by the minority of the respondents.

Table 3 Professional aims of the male and female gynaecologists surveyed.

	Women n = 775	Men n = 261
Intends to complete doctoral thesis (of participants with no doctoral thesis)	275 (35.48%)	43 (16.48%)
▶ In evidence	171 (62.1%)	21 (48.8%)
▶ Not in evidence	104 (37.8%)	22 (51.2%)
Intends to undertake PhD (of participants with no PhD)	715 (92.25%)	185 (70.88%)
▶ In evidence	60 (8.3%)	37 (20.0%)
▶ Not in evidence	655 (91.6%)	148 (80.0%)
Personal career goal (of all participants)	775 (74.73%)	261 (25.17%)
▶ Chief physician ^a	56 (7.22%)	74 (28.35%)
▶ Senior physician ^a	283 (36.51%)	50 (19.16%)
▶ Employed specialist	187 (24.13%)	11 (4.21%)
▶ Specialist with own practice ^b	428 (55.23%)	77 (29.50%)

^a No differentiation in hospital or university hospital

^b Grouping of attending physician work, own practice, medical care centre and practice with surgical activities

The differences are statistically significant.

This is clearly reflected in the career wishes of the respondents – the majority of male and female gynaecologists wanted to set up their own practice. However, this career goal is found significantly more frequently in women than in men. Of course, the different ages and the predominant occupational group may play a role between the genders here and thereby alter the results somewhat. Nevertheless, these results correspond to the current doctors' statistics. In 2009, almost 60% of all working female doctors worked in their own practices according to the German Medical Association (Bundesärztekammer) [11].

It is therefore no surprise that women in Germany who strive for a managerial position more often choose not to have children. Amongst men, their professional goals can be combined well with a family life and children, for instance through a traditional division of roles. While professionally successful male doctors with families are supported by a partner who does not work or only works part time, successful women in top positions generally also have successful partners [12]. According to a long-term study into the professional biographies of men and women in medicine and psychology (PROFIL = Professionalisierung und Integration der Lebenssphären. Geschlechtsspezifische Berufsverläufe in Medizin und Psychologie), the birth of a child more often leads to a professional career move for male doctors whereas it tends to lead to a deterioration in professional role for female doctors [12].

Strengths and weaknesses

The questionnaire from the "Family and Career" commission of the DGGG was completed by a total of 23% of the respondents. This rate of return, which is low at first glance, must be viewed critically. Firstly, the high number of non-participants in comparison to other epidemiological studies can be explained by technical problems (e.g. incorrect or old e-mail addresses, spam filters), late replies (e.g. irregular e-mail checking) and personal reasons (e.g. lack of time, lack of interest). Secondly, doctors receive many enquiries by email to which there is barely enough time to respond after a day's hospital work. As a result, our rate of return corresponds to that of other questionnaires for doctors and should not be seen as a weakness. A study by Becker et al. [13] in 2006 had a rate of return of 29% among gynaecological doctors undergoing further training.

The proportion of women among the respondents was significantly higher than the proportion of men. This could possibly be due to the fact that the proportion of women in specialist medical further training for gynaecology is considerably higher, and also that it is generally young female doctors who consider the compatibility of career and family and so take the time to respond to a survey. The female gynaecologists who responded were on average significantly younger than the male gynaecologists who took part. The subject of the survey could also be a reason for this, as it is not just young female doctors undergoing further training who consider the issue but also (male) gynaecologists who are already in managerial roles and currently mainly employ young women who want to combine a career and a family.

Conclusion

Our survey shows that above all female gynaecologists would like their children to be cared for outside of the family and that so far career and family are not compatible for most gynaecologists. It is unclear whether women are less likely than men to choose man-

agerial positions as a direct result of a lack of child care from the employer or another party. However, we postulate that this would be the first step towards better compatibility so that women (and men) can actually be given a realistic opportunity to make an independent decision, possibly also with regard to taking up a managerial position.

Conflict of Interest

The authors declare that they do not have any financial relationship with any company associated with the article.

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