

# Expectations for Endoscopic Training During Gynaecological Specialty Training – Results of a Germany-wide Survey

## Erwartungen an die endoskopische Ausbildung während der gynäkologischen Weiterbildung – Ergebnisse einer deutschlandweiten Umfrage

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### Key words

- training
- endoscopy

### Schlüsselwörter

- Ausbildung
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### Abstract



**Question:** Endoscopy is an integral part of surgical gynaecology and is playing an increasingly important role in ensuring adequate gynaecological training in the context of specialty training in general. At present, little is known about the expectations and notions of young junior doctors with respect to endoscopic training. For this reason, junior doctors throughout Germany were surveyed on this topic and asked to share their opinions.

**Methods:** Using an anonymized standardized survey, the following information was elicited: importance of endoscopic training, willingness to take courses, expectations for instructors and the hospital, ideas about the number of required operations, both as a surgical assistant and as a surgeon, as well as satisfaction with the current status of training. The questionnaires were sent via the Young Forum (Junges Forum) of the German Society of Gynaecology and Obstetrics (DGGG) and the newsletter of the Working Group for Gynaecological Endoscopy (AGE).

**Results:** The evaluation of the study was based on 109 completed questionnaires. The resident junior doctors were 31 years old on average and were in their third to fourth year of their specialty training on average. The majority of the participants (87%) considered the learning of endoscopic techniques to be very important and advocated regular participation in endoscopy training courses. Among the participants, 48% were prepared to invest up to €1500 of their own funds to attend courses up to twice a year during the entire specialty training period. The expectations of the instructors and institutions focused on technical expertise, the willingness and time for teaching and on the number and range of surgical procedures, followed by being granted leave for the courses and having costs covered for the courses. Thirty-eight per cent stated that their ex-

### Zusammenfassung



**Fragestellung:** Die Endoskopie hat ihren festen Stellenwert in der operativen Gynäkologie und wird im Hinblick auf eine adäquate gynäkologische Weiterbildung im Rahmen der Facharztweiterbildung zunehmend wichtiger. Zu diesem Zeitpunkt ist wenig bekannt über die Erwartungen und Vorstellungen junger Assistenzärzte bez. der endoskopischen Ausbildung. Aus diesem Grund wurden deutschlandweit Assistenzärzte zu diesem Thema befragt und um eine Stellungnahme gebeten.

**Methodik:** Anhand anonymisierter standardisierter Fragebögen wurde u.a. erfragt: Wichtigkeit der endoskopischen Ausbildung, Bereitschaft zur Kursteilnahme, Erwartungen an Ausbilder und Klinik, Vorstellung über die Anzahl der benötigten Operationen sowohl als Assistent als auch als Operateur, Zufriedenheit mit dem aktuellen Weiterbildungsstand. Versandt wurden die Fragebögen über das Junge Forum der DGGG (Deutsche Gesellschaft für Gynäkologie und Geburtshilfe) sowie den Newsletter der AGE (Arbeitsgemeinschaft Gynäkologische Endoskopie).

**Ergebnis:** Die Auswertung der Studie basiert auf 109 ausgefüllten Fragebögen. Das durchschnittliche Alter der Assistenzärzte betrug 31 Jahre, diese waren durchschnittlich im 3.–4. Weiterbildungsjahr. Die Mehrheit der Teilnehmer (87%) erachteten das Lernen von endoskopischen Techniken als sehr wichtig und befürworten regelmäßige Kursteilnahmen zur Weiterbildung endoskopischer Techniken. 48% der Teilnehmer sind zu einem finanziellen Eigenengagement für Kursteilnahmen bis 2-mal/Jahr während der gesamten Weiterbildungszeit von bis zu 1500 € bereit. Die Erwartungen an die Ausbilder und Institution liegen schwerpunktmäßig auf dem fachlichen Können, der Bereitschaft und Zeit zur Lehre sowie auf Anzahl und Spektrum der operativen Eingriffe, gefolgt von Freistellung und Kostenübernahme

pectations had been completely or mostly met and 62% said they had been met in part or inadequately. Eighty-three per cent of the respondents reported that they would change specialty training institutions in order to achieve their own goals in the context of specialty training.

**Conclusions:** This study presents data for the first time on the satisfaction of young junior doctors and their expectations for endoscopic specialty training. The residents exhibited a high level of interest in endoscopy and a high level of willingness to actively shape the specialty training, including course participation. However, there appears to be a great deal of room for improvement for endoscopic specialty training, independent of the current training institution, training year or sex of the junior doctors.

## Introduction



Endoscopy is a key element of diagnosing and treating gynaecological disorders. The ongoing technical advances and overall development, including surgical techniques that are as minimally invasive as possible, have led to the increasing significance of endoscopy. To ensure that gynaecological training in the context of specialty training is adequate, the learning of endoscopic skills is therefore becoming increasingly relevant. In many operating theatres, hysteroscopy and/or laparoscopy are routine procedures. However, there is wide variation in the way entire range of diagnostic and therapeutic options for endoscopic procedures is offered in the individual hospitals and practices.

While the current Specialty Training Regulations and logbook for gynaecology and obstetrics provides for the acquisition of endoscopic skills, they are not specifically required (cf. Specialty Training Regulations, Saarland Medical Association). The AGE's internal statistics on participants [8] in courses accompanying specialty training show that junior doctors are increasingly interested in learning endoscopic surgical techniques. Young physicians must therefore receive appropriate solid and practice-oriented advanced training as part of their specialty training if the goal of meeting the highest possible quality standards is to be met in future. However, for high-quality specialty training, it is essential to be precisely apprised of the interests and expectations of the junior doctors.

In Germany, little is known at present about the expectations and notions of young junior doctors specializing in gynaecology with respect to endoscopic training. This Germany-wide survey has elicited information on the significance of endoscopy in specialty training for the first time. It furthermore assessed the junior doctors' expectations of their own instructors and for the specialty training institution and examined the junior doctors' satisfaction with their current standard of specialty training. Moreover, the study enabled focuses of interest with regard to learning endoscopic techniques to be identified.

## Materials and Methods



### Study design

To identify the significance of the endoscopic training during specialty training, a Germany-wide survey was conducted from 2013 to 2014 among junior doctors specializing in gynaecology. In cooperation with the Junges Forum of the German Society of Gynaecology and Obstetrics (DGGG) and the Working Group for Gynaecological Endoscopy (AGE), a three-page questionnaire

der Kurse. Bei 38% werden die Erwartungen voll bzw. größtenteils und bei 62% teilweise bzw. unzureichend erfüllt. 83% der Teilnehmer würden zum Erreichen der eigenen Ziele im Rahmen der Weiterbildung die Weiterbildungsstätte wechseln.

**Schlussfolgerung:** Diese Studie zeigt erstmals Daten zur Zufriedenheit junger Assistenzärzte und deren Erwartungen an die endoskopische Weiterbildung. Dabei zeigen Assistenzärzte ein hohes Interesse an der Endoskopie und eine hohe Bereitschaft zur aktiven Gestaltung bei der Weiterbildung inkl. Kursteilnahmen. Insgesamt scheint jedoch noch hohes Optimierungspotenzial zur Verbesserung der endoskopischen Weiterbildung vorhanden zu sein, unabhängig von der aktuellen Ausbildungsstätte, dem Ausbildungsjahr oder Geschlecht der jungen Ärzte.

was compiled. This questionnaire was sent by email to all members of the Junges Forum and by newsletter to the members of the AGE. The members were requested to return the completed questionnaire anonymously. With several thousand participants, it is impossible to precisely calculate an exact return rate due to the unknown size of the distribution list.

### Content of the questionnaire

The survey contained questions concerning the following areas (cf. **Fig. 5**):

1. General information on the study participants and the specialty training institution
2. Attitude towards endoscopic specialty training
3. Participants' expectations and satisfaction

The participants were asked to state the following details: sex, age, current specialty training year and information on the specialty training institution (university hospital, maximum care hospital, general hospital, day clinic or practice).

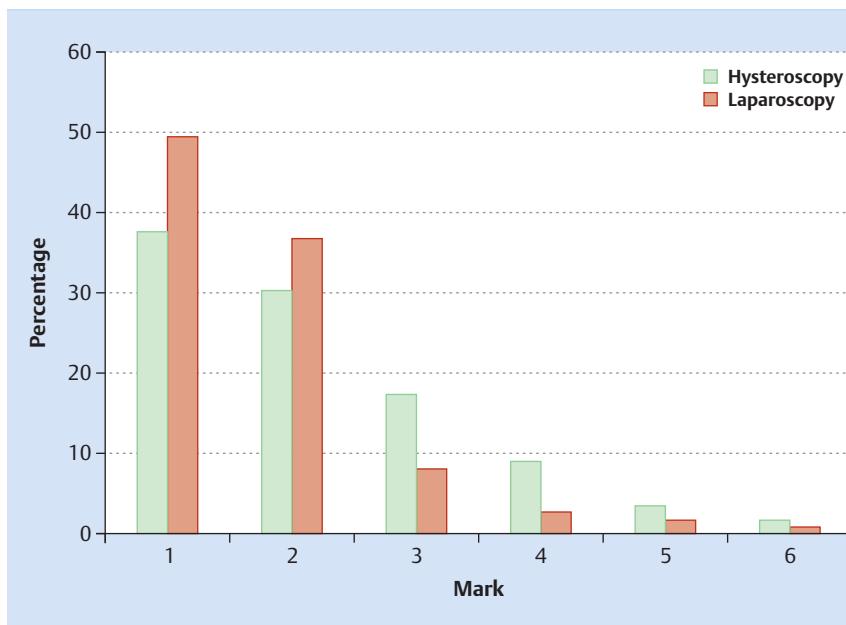
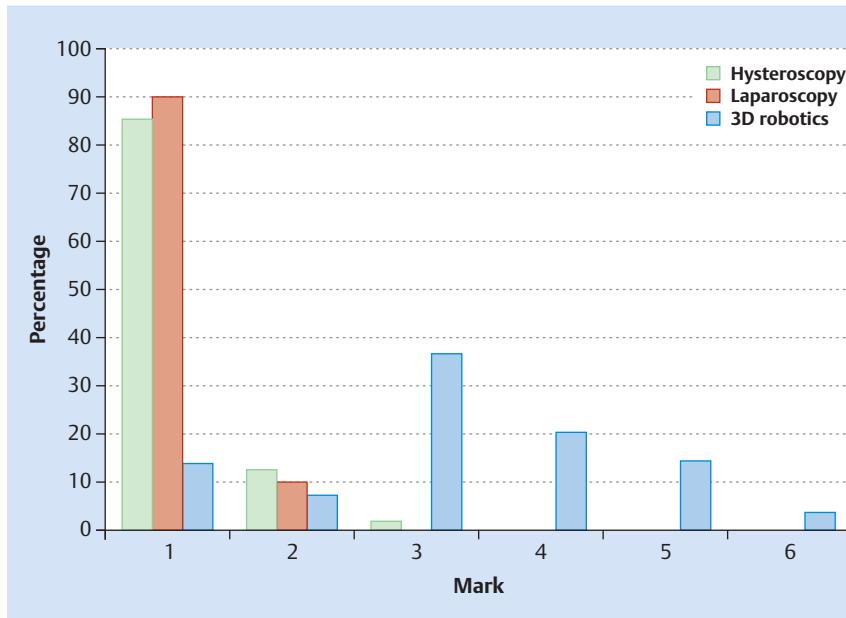
With respect to endoscopic training, they were asked to rate the following parameters: the importance of learning hysteroscopy/laparoscopy/robotics based on a grade scale (1 = very important to 6 = unimportant); the importance of courses for learning endoscopic techniques and their frequency in the context of the specialty training, here too, based on a grade scale or based on defined response items. The willingness of the participants to make their own financial contribution to endoscopic specialty training was then asked about. The participants were asked to use a grade scale to describe the importance of independent training using simulators to supplement the course offerings.

With respect to expectations and satisfaction, the participants were asked to rate the following parameters: the ideal number of assisted endoscopic procedures and such procedures they performed themselves, broken down into diagnostic and surgical hysteroscopy or laparoscopy with four predefined response items each. They were then asked about the realization of the respective expectations and about their willingness to change from their current workplace if they were dissatisfied. The participants were also asked to use a grade scale to rate their expectations for their instructors and their training institution.

Finally, the participants were asked to rate their overall satisfaction with the current state of their own specialty training and their probable place of employment after completing their specialty training (hospital vs. private practice).

### Evaluation

The evaluation of the results was broken down by the sex of the physicians and training year, as well as by the current specialty



training institutions (university hospital vs. maximum care hospital vs. general hospital). The statistical assessment was performed with an unbound, normally distributed sample using a t-test and ANOVA (significance:  $p < 0.05$ ).

The data were first presented during the ESGE Congress in 2014 and during the DGGG Congress in 2014. This publication presents the data in their entirety.

## Results

### Study population

The evaluation of the study was based on 109 completed questionnaires. The resident junior doctors were 31 years old on average. The survey participants were in the 3.2nd specialty training year on average and comprised 76.1% women and 23.9% men. Of the survey participants, 36.7% worked in a university hospital,

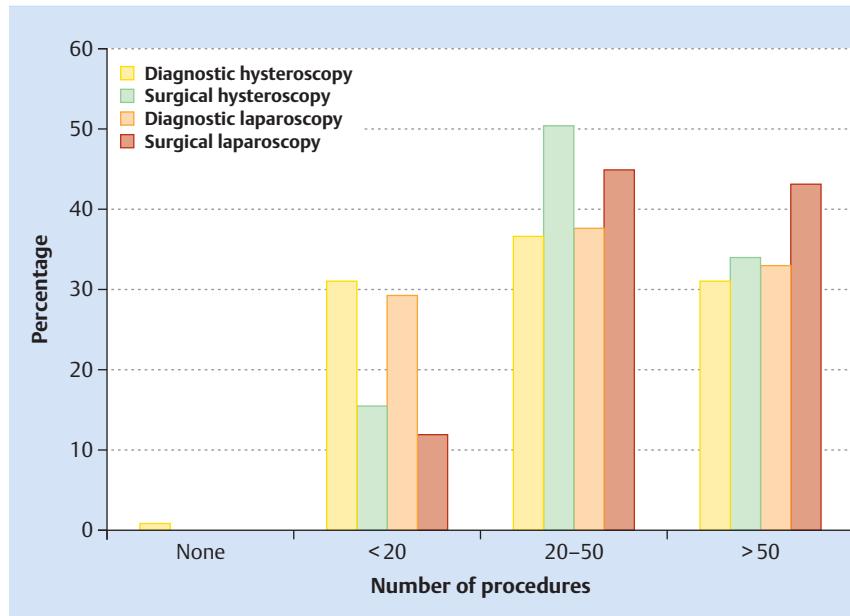
30.6% in a maximum care hospital and 32.7% in a general hospital.

### Interest in endoscopy

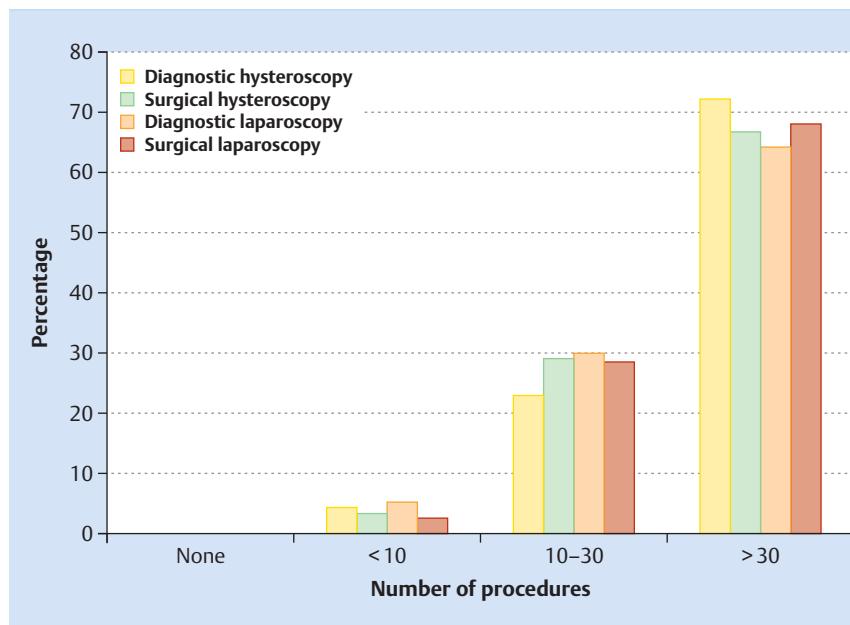
Ninety per cent of the participants rated the learning of endoscopic techniques in specialty training with regard to laparoscopy as very important and 80% of those surveyed rated such learning with regard to hysteroscopy as very important (cf. **Fig. 1**). The learning of 3D robotics techniques tended to be considered to be unimportant.

### Course participation

Nearly 50% of the participants considered participating in courses for learning endoscopic techniques with respect to laparoscopy as very worthwhile or worthwhile (37%), while 38% of the participants considered courses on hysteroscopy to be very worthwhile or worthwhile (30%) (cf. **Fig. 2**).



**Fig. 3** The responses to the question "How many endoscopic procedures should one ideally assist with as part of one's specialty training (up to the completion of specialty training, regardless of the requirements of the German Medical Association)?" The x-axis represents the number of procedures and the y-axis represents the percentage of participants.



**Fig. 4** The responses to the question "How many endoscopic procedures should one ideally perform oneself as part of one's specialty training (up to the completion of specialty training, regardless of the requirements of the German Medical Association)?" The x-axis represents the number of procedures and the y-axis represents the percentage of participants.

Forty-five per cent of the participants said they would like to participate in a course for learning endoscopic techniques once or twice during their overall specialty training, while 37% reported that they would like to attend such a course once a year. Of the participants, 17% stated that endoscopy courses should be attended only based on the participants' own interest and only 1% of the participants categorically rejected participation in courses.

### Finances

With respect to the participants' own financial contribution to learning endoscopic skills as part of the overall specialty training (over the course of five years), 18% of the participants would invest €500 themselves, 28% of the participants would invest €500 to €1000, and 49% would invest €1000 to €1500 themselves. Five per cent of the participants would invest more than €1500.

### Simulator training

Nearly 50% of the participants considered the opportunity to undergo training using a laparoscopy and/or hysteroscopy trainer and/or simulator to be very important.

### Number of procedures

The junior doctors' ideas about the number of endoscopic procedures that they should ideally be able to assist with or perform themselves during their specialty training are presented in

**Figs. 3 and 4.**

Over 30% of the participants said that they would like to assist with 20 to 50 or more than 50 diagnostic/surgical hysteroscopies and laparoscopies each and over 60% of the participants reported that they would like to perform more than 30 diagnostic/surgical hysteroscopies or laparoscopies themselves as the surgeon.

**Table 1** Junior doctors' expectations of their instructors depending on training year. Grade scale: 1 = very important to 6 = unimportant.

	Year 1 to 3 n = 57	Year 4 to 5 n = 48	p value
Patience	1.4 ± 0.61	1.7 ± 0.68	<b>0.019</b>
Technical expertise	1.2 ± 0.71	1.2 ± 0.39	1
Teaching skills	1.8 ± 0.80	1.9 ± 0.72	0.506
Feedback/praise/constructive criticism	1.6 ± 0.97	1.8 ± 0.66	0.252
Willingness/time for teaching	1.4 ± 0.55	1.4 ± 0.53	1
Certification (e.g. MIS surgeon)	2.9 ± 1.36	3.3 ± 1.30	0.129

**Table 2** Junior doctors' expectations of their instructors broken down by sex. Grade scale: 1 = very important to 6 = unimportant.

	Female n = 79	Male n = 26	p value
Patience	1.5 ± 0.61	1.6 ± 0.8	0.505
Technical expertise	1.2 ± 0.63	1.2 ± 0.4	1
Teaching skills	1.9 ± 0.77	1.7 ± 0.72	0.246
Feedback/praise/constructive criticism	1.6 ± 0.6	2 ± 1.32	<b>0.036</b>
Willingness/time for teaching	1.4 ± 0.53	1.5 ± 0.58	0.417
Certification (e.g. MIS surgeon)	3 ± 1.22	3.5 ± 1.66	0.102

### Expectations for the specialty training institution and instructors

Among the participants, 11.3% reported that the expectations they have for the specialty training institution had been met in full and 26.4% reported that they had been met for the most part. A further 26.4% of the participants reported that their expectations were met in part and 22.6% said they were not adequately met. Another 7.5% of the participants reported that their expectations had hardly been met and 5.7% said they had not been met at all. Of the participants, 83% said they were prepared to change hospitals in order to achieve their own goals, while 17% said they were not prepared to do so.

The highest expectations that the respondents had of the instructors concerned their technical expertise, with over 80% reporting this, while over 60% mentioned the instructors' willingness and time for teaching and just under 60% mentioned the instructors' patience. If the expectations are broken down by training year of the junior doctors, a significant difference in the expectation for patience is revealed in the statistical evaluation: Junior doctors in their first to third training year considered patience on the part of the trainers to be more important than their counterparts in their fourth or fifth year. When broken down by sex, there was a significant difference in expectations with respect to feedback/constructive criticism. Female junior doctors found this to be more important than male junior doctors (cf. **Tables 1 and 2**). Among the participants, 11% reported that their expectations of the in-

structors had been met in full and 41% reported that they had been met for the most part. A further 39% of the participants reported that their expectations were met in part and 9% said they were not adequately met.

The highest expectation participants had for their training institution concerned the number of surgical procedures, at 50%, followed by leave from work for training, at 48%, and the range of surgical procedures, at 45%. If the expectations are broken down by the hospital where the junior doctors work, a significant difference was observed between junior doctors working at a university hospital vs. a maximum care hospital or general hospital in terms of expectations for cost coverage for the training. For the other categories, no significant differences were observed. When broken down by sex, there was a significant difference with respect to the expectations with respect to being released from work for training. Female junior doctors considered this to be more important than their male counterparts (cf. **Tables 3 and 4**). Among the participants, 13% reported that their expectations for the specialty training institution had been met in full and 42% reported that they have been met for the most part. A further 28% of the participants reported that their expectations had been met in part and 17% said they had not been adequately met.

### Satisfaction

With respect to the participants' satisfaction with the state of current endoscopic basic and advanced training in general, 15%

**Table 3** Junior doctors' expectations for their hospital broken down by specialty training institution. Grade scale: 1 = very important to 6 = unimportant.

	University hospital n = 38	Maximum care hospital n = 30	General hospital n = 36	p value
Instruments	1.8 ± 0.81	2 ± 1.01	1.9 ± 0.80	0.641
Coverage of costs for specialty training courses	2.1 ± 0.92	1.5 ± 0.62	2 ± 1.18	<b>0.008</b>
Range of surgical procedures	1.6 ± 0.81	1.7 ± 0.65	1.6 ± 0.63	0.808
Number of surgical procedures	1.6 ± 0.85	1.6 ± 0.49	1.5 ± 0.56	0.767
Leave to attend specialty training courses	1.8 ± 0.90	1.6 ± 0.85	2.0 ± 1.22	0.28
Certification (e.g. MIS training centre)	2.3 ± 1.18	3.2 ± 1.46	3.1 ± 1.52	0.013

**Table 4** Junior doctors' expectations for their hospital broken down by sex. Grade scale: 1 = very important to 6 = unimportant.

	<b>Women</b> <b>n = 79</b>	<b>Men</b> <b>n = 26</b>	<b>p value</b>
Instruments	1.8 ± 0.73	2.1 ± 1.19	0.128
Coverage of costs for specialty training courses	1.9 ± 0.91	2.2 ± 1.28	0.193
Range of surgical procedures	1.7 ± 0.73	1.6 ± 0.64	0.534
Number of surgical procedures	1.6 ± 0.64	1.5 ± 0.70	0.501
Leave to attend specialty training courses	1.6 ± 0.88	2.2 ± 1.28	<b>0.009</b>
Certification (e.g. MIS training centre)	2.9 ± 1.26	3.5 ± 1.66	0.055

of the participants were fully satisfied, and 23% were mostly satisfied. A further 39% of the participants were partly satisfied and 23% were inadequately satisfied with the current state of their own endoscopic specialty training. With respect to their further career plans, 81% of the participants reported that they expected to work at a hospital after completing their specialty training and 19% expected to work in private practice afterwards.

## Discussion



This survey gathered information on expectations and requirements of young junior doctors in gynaecology with respect to endoscopic training and also addressed their level of satisfaction. The survey results show the significance of endoscopy in specialty training: Among the participants, 89.9% considered learning to perform laparoscopy and 85.3% considered learning to perform hysteroscopy to be very important. This reflects the growing significance of endoscopy in the context of gynaecological specialty training. Course offerings and the opportunity to attend courses are also considered to be significant in line with the willingness of the participants to make their own financial investments. This willingness on the part of the junior doctors to invest a substantial amount of money in their own future and their own specialty training reflects the participants' desire for solid training in endoscopic techniques. The need for financial contributions in the context of the specialty training and the acceptance of this by the junior doctors also demonstrates the participants' acknowledgement of the fact that adequate specialty training also requires active participation on the part of the trainees. In addition to courses that are linked to a certain amount of additional time and expenses, nearly 50% of the participants considered the opportunity for independent training using hysteroscopy simulators and, in particular, laparoscopy simulators as very important. This in turn demonstrates the junior doctors' motivation to improve and expand their own skills through their personal commitment.

At the international level, too, it has been shown that regular independent and mentor-guided training using simulators can improve technical skills, shorten surgery time and in turn, lead to better patient outcomes [1]. A standardized curriculum with respect to gynaecological endoscopic training is recommended. Difficult endoscopic techniques such as suturing of the vaginal cuff after total laparoscopic hysterectomy were significantly improved by means of simulation training [2].

A further important aspect involves the participants' ideas concerning the ideal number of endoscopic procedures to be performed both as assistants and independently as surgeons in order to ensure that specialty training is adequate. More than one third of the participants said that at least 20 to 50 assisted endoscopic

procedures each for diagnostic and surgical hysteroscopy as well as diagnostic and surgical laparoscopy would be ideal. Another third said that in fact more than 50 assisted procedures would be ideal. Over 60% of the participants would ideally like to perform over 30 endoscopic procedures each themselves as the surgeon. Whether or not the participants' desires can actually be put into practice remains to be seen, especially with respect to the variations in the range of surgical procedures at the hospitals of different sizes. However, here too, the participants' high level of interest in endoscopy and their strong desire for in-depth endoscopic training are demonstrated.

The great need to improve specialty training with respect to endoscopy is reflected by the fact that while at present, 37.7% of the participants consider their expectations for their current training institutions to be met in full or mostly, 49% of the participants consider their expectations to be met only in part or even only inadequately. Eighty-three per cent of the respondents reported that they would change hospitals or their current training institution in order to achieve their own goals if they were dissatisfied. This shows potential for improving the current situation, since it would be desirable to have a much higher percentage of junior doctors whose expectations were met at least most of the time.

Another important result of the survey was the insight gained on the junior doctors' expectations for their instructors and their training institution. Based on the statements in the survey, over half the participants assess technical expertise or technical competency as very important. This demonstrates the junior doctors' desire for their instructors to convey solid technical expertise. This calls for a high level of quality and sufficient experience with respect to surgical endoscopy on the part of both the instructors and the training institutions. The willingness and the time for teaching as well as patience on the part of the instructors were considered to be very important. In this area, there was a significant difference between junior doctors in the first to third training year and in the fourth to fifth training year, with the younger junior doctors considering these aspects to be more important. There was also a significant difference between female and male junior doctors with respect to the significance of feedback/praise/constructive criticism, with women considering this aspect to be more important. Among the participants, 48% reported that their expectations were met only in part or not adequately. With respect to the expectations for their training institution, over 40% of the participants assessed the number and range of operations and being released for specialty training as very important, followed by modern instruments and the coverage of costs for the training. There was a significant difference between the various workplaces with respect to cost coverage for the training. Being released from work to attend specialty training was more important for female junior doctors than for their male counterparts.

Among the participants, 45% reported that their expectations had been met only in part or inadequately. These results demonstrate on the one hand that the conditions for adequate endoscopic specialty training are in place with respect to the instructors and the training institutions, but that there is a great deal of room for improvement when it comes to implementing the training in practice. On the other hand, the high rate of participants who reported that their expectations had been met only in part or inadequately shows that there is also a great deal of room for improvement for endoscopic training during specialty training. These data are comparable to the results of the German Medical Association's evaluation of specialty training conducted in 2011. During the evaluation, the overall assessment for all disciplines was an average of 2.54 (1 = best possible mark), while the junior doctors rated gynaecological specialty training in particular somewhat lower, with an average mark of 2.60 [3].

On the specific question as to the participants' degree of satisfaction with the current situation, only 38% of the participants reported that they were fully or mostly satisfied, while 39% said they were only partly satisfied and 23% were even dissatisfied. It would be desirable to significantly improve the junior doctors' level of satisfaction with regard to their endoscopic training, also taking into consideration the fact that 81% of the participants reported that they planned to work at a hospital after completing their specialty training.

In general, the results show that while junior doctors do in fact participate in endoscopic training during their gynaecological specialty training, such endoscopic training can be expanded. Higher participation rates on the part of the junior doctors would have made the results of the study more meaningful. In light of the fact that the survey was sent out throughout Germany, the number of participants cannot be considered to be fully representative. Furthermore, both a positive and a negative selection bias can be assumed: participation by active and committed junior doctors who are interested in improvement and further development, on the one hand, and participation by junior doctors who are frustrated about the current situation, on the other.

A realistic and certainly effective means of increasing the junior doctors' satisfaction with the endoscopic specialty training would be to increase the number and frequency of course offerings. The possibility for junior doctors to undergo training independently using appropriate simulators could also significantly increase the junior doctors' satisfaction. In interdisciplinary and international comparison, too, the data situation shows that independent training, e.g. with simulators, has been proven to enhance effectiveness, technical expertise and technical skills [4, 5]. Endoscopic training leads not only to higher satisfaction on the part of the junior doctors resulting from the improvement of their own skills, but also leads to shorter operation times and smoother surgical work flows [6, 7]. At present, there is no reliable evidence for whether or not it can improve patient outcomes or significantly lower overall costs [6].

In 2011, a survey on overall satisfaction in gynaecological specialty training was conducted Germany-wide in which the current situation was evaluated both by junior doctors and training instructors [8]. This survey also used an anonymous questionnaire; it involved 188 junior doctors and 154 instructors. The assessment of satisfaction by the junior doctors was significantly worse than the assessment of the training instructors. Here too, suggestions for improvement included adaptation of the training content to the specialty training catalogues, increasing invest-

ments in training models and standardizing curricula and surgical training.

To improve endoscopic training in the context of gynaecological and obstetric specialty training, the desires and ideas of the junior doctors should be addressed. The participants' desires with regard to the number of operations performed both as assistants and as the surgeon coincide with the requirements for the MIS I certificate. It would be desirable to adapt the requirements for the MIS I certificate to the results of this survey and the junior doctors' expectations. The objective should be the capacity to meet the requirements for the MIS I certificate at the time of the specialty training examination.

The Gynaecological Endoscopic Surgical Education and Assessment programme (GESEA) also acknowledged the need to standardize endoscopic training in order to ensure the highest possible quality of surgical treatment with a low rate of patient mortality and morbidity. Similar to the MIS certification (I–III), here too, a two-step model was developed for achieving a certificate in gynaecological endoscopy with the possibility of structured further training culminating in the Master level [9].

With respect to advanced laparoscopic surgery in general, especially regarding sophisticated suturing techniques, bimanual coordination and dealing with difficult anatomical circumstances, there appears to be a need for a set curriculum for junior doctors in the area of minimally invasive surgery [10].

The Working Group for Gynaecological Endoscopy (AGE), the German Society of Gynaecology and Obstetrics (DGGG), and the Junges Forum of the DGGG all already endeavour to achieve a high-quality training programme for junior doctors by offering support and research grants. For example, this year a new course will be offered by the Junges Forum in collaboration with the AGE: a basic MIS I course specifically for specialty training assistants as an introduction to gynaecological endoscopy.

In general, 35% of the surveyed junior doctors reported that their expectations were inadequately or hardly met or were not met at all. However, in order to offer adequate training, solid high-quality expertise and skills on the part of the instructors is indispensable. For this reason, the instructors' expectations, training status and ideas are just as important. The only way to achieve the highest possible quality standards is to work together. With this survey, current data on this topic have been gathered and evaluated Germany-wide for the first time. The outcome will ideally serve as an impetus and starting point for further improvement of endoscopic training in Germany.

## Acknowledgements



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## Conflict of Interest



None.

**Junior doctors' expectations for endoscopic training during specialty training**  
Specialty gynaecology and obstetrics 2013

Sex:	<input type="checkbox"/> Female	<input type="checkbox"/> Male
Current specialty training year:	Year _____	Age: _____ years
Current hospital:	<input type="checkbox"/> University hospital <input checked="" type="checkbox"/> Regular care hospital	<input type="checkbox"/> Maximum care hospital <input type="checkbox"/> Practice <input type="checkbox"/> Day clinic

**1. Do you think learning endoscopic techniques is important for specialty training?**

Marks 1–6 (1 = very important, 6 = unimportant)

Hysteroscopy  
 1     2     3     4     5     6

Laparoscopy  
 1     2     3     4     5     6

Modern endoscopy (e.g. 3D, robotics, "DaVinci")  
 1     2     3     4     5     6

**2. Do you think that participating in courses (possibly at another facility) for learning endoscopic techniques is worthwhile?**

Marks 1–6 (1 = very worthwhile, 6 = not worthwhile at all)

Hysteroscopy  
 1     2     3     4     5     6

Laparoscopy  
 1     2     3     4     5     6

**3. How frequently should this type of course or possibly advanced courses be attended as part of specialty training?**

Not at all     1–2 ×     1 × per year     In line with interest

**4. How much would you invest yourself in order to learn endoscopic skills in your overall specialty training (over a total five-year period)? (in Euros)**

0–500     500–1000     1000–1500     >5000

**5. How important do you think it is to have the opportunity to undergo training using a laparoscopy and/or hysteroscopy trainer and/or simulator?**

Marks 1–6 (1 = very important, 6 = unimportant)

Hysteroscopy  
 1     2     3     4     5     6

Laparoscopy  
 1     2     3     4     5     6

**6. How many endoscopic procedures should one ideally assist with as part of one's specialty training (up to the completion of specialty training, regardless of the requirements of the German Medical Association)?**

Purely diagnostic hysteroscopies  
 None     <20     20–50     >50

Surgical hysteroscopies  
(e.g. polypectomy, endometrial ablation)  
 None     <10     10–20     >20

Purely diagnostic laparoscopies (e.g. chromoperturbation)  
 None     <20     20–50     >50

Surgical laparoscopies (e.g. ovarian cysts, adhesiolysis)  
 None     <20     20–50     >50

**7. How many endoscopic procedures should one ideally perform as the surgeon as part of one's specialty training (up to the completion of specialty training, regardless of the requirements of the German Medical Association)?**

Purely diagnostic hysteroscopies

None     <10     10–30     >30

Surgical hysteroscopies  
(e.g. polypectomy, endometrial ablation)

None     <5     5–15     >15

Purely diagnostic laparoscopies (e.g. chromoperturbation)

None     <10     10–30     >30

Surgical laparoscopies (e.g. ovarian cysts, adhesiolysis)

None     <10     10–30     >30

**8. Do you think that your expectations for your current specialty training hospital can be met?**

Marks 1–6 (1 = absolutely, 6 = not at all)

1     2     3     4     5     6

**9. In order to achieve your goals, would you also change hospitals during your specialty training?**

Yes     No

**10. What expectations do you have for your instructors?**

Marks 1–6 (1 = very important, 6 = unimportant)

Patience

1     2     3     4     5     6

Technical expertise

1     2     3     4     5     6

Teaching skills

1     2     3     4     5     6

Feedback/praise/constructive criticism

1     2     3     4     5     6

Willingness/time for teaching

1     2     3     4     5     6

Certification (e.g. MIS I/II/III surgeon)

1     2     3     4     5     6

**11. Are these expectations being met by your current instructors?**

Yes     Mostly     Partly     Inadequately     No

**12. What expectations do you have for your hospital?**

Marks 1–6 (1 = very important, 6 = unimportant)

Instruments

1     2     3     4     5     6

Coverage for costs for extra specialty training courses (at least in part)

1     2     3     4     5     6

Range of surgical procedures

1     2     3     4     5     6

Number of surgical procedures

1     2     3     4     5     6

Leave to attend training courses

(e.g. participation in surgical course)

1     2     3     4     5     6

Certification (e.g. MIS training centre)

1     2     3     4     5     6

<p><b>13. Are these expectations being met by your current training facility?</b></p> <p><input type="checkbox"/> Yes   <input type="checkbox"/> Mostly   <input type="checkbox"/> Partly   <input type="checkbox"/> Inadequately   <input type="checkbox"/> No</p> <p><b>14. Are you satisfied with the state of your current basic or advanced endoscopic training?</b></p> <p><input type="checkbox"/> Yes   <input type="checkbox"/> Usually   <input type="checkbox"/> Sometimes   <input type="checkbox"/> Rarely   <input type="checkbox"/> No</p> <p><b>15. Where do you think you will work once you have completed your specialty training?</b></p> <p><input type="checkbox"/> At a hospital   <input type="checkbox"/> In private practice</p>	<p><b>Other remarks:</b> _____ _____ _____</p> <p style="background-color: #668dce; color: white; padding: 5px; text-align: center;"><b>Thank you for your participation!</b></p> <p>Please send your completed questionnaire to:  <b>Fax 06841-1628087</b>   or   By regular mail to the      Study Office      University Women's Hospital      (Building 9)      Kirrberger Straße 100      66421 Homburg/Saar</p>
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**Fig. 5** Questionnaire: "Junior doctors' expectations for endoscopic training during specialty training – Specialty gynaecology and obstetrics 2013".

#### Literature

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