

Joining to promote young talents: an experience report from the first German Summer School for Obstetrics and Gynaecology for medical students

Nathalie Rippinger¹  · Thomas M. Deutsch¹ · Markus Wallwiener¹ · Vera Hepp² · Martin Weiss³ · Anton J. Scharl⁴ · Thomas Strowitzki⁵ · Tanja Fehm² · Bettina Toth⁶ · Birgit Seelbach-Göbel⁷ · Christof Sohn¹ · Julian Puppe⁸ · Sabine Keß¹

Received: 14 May 2019 / Accepted: 6 August 2019
© Springer-Verlag GmbH Germany, part of Springer Nature 2019

Abstract

Purpose The Commission for the Promotion of Young Talents of the German Society for Gynaecology and Obstetrics e.V. was founded in 2017, aiming to inspire medical students for a career in obstetrics and gynaecology by developing a concept for the first German Summer School in this field. Here, medical students shall be introduced to this multifaceted specialty and have their interest in it kindled.

Methods This article reports about the experiences of the first gynaecological summer school which was held at the University Hospital Heidelberg for 2 days in August 2018. The programme included keynote presentations, discussion roundtables and skills-lab training. To assess students' related satisfaction, and to improve future projects, an evaluation survey with seven items and two open-comment questions was given to each participant after the event.

Results Mostly female students [n (♀) = 37, 93%; n (♂) = 3, 7%] from 15 different medical universities from all over Germany participated. Available places were booked within 1 week. Participants were in their clinical part of their studies between the 5th and 16th semester. The average rating of the event was excellent with 1.1 points (1 = best–5 = worst), while the selection of topics scored lowest marks with an average rating of 1.7 points.

Conclusion Due to the great success, the high demand and the student's positive evaluation, annual summer schools in obstetrics and gynaecology are planned. Because most of the participating students have shown a high interest and have appropriate education in the domain, the information content of keynote presentations could be increased above basic level in future projects.

Keywords Summer school · Medical students · Gynaecology · Obstetrics

Introduction

There has been a growing and chronic shortage of physicians in recent years, and it is becoming increasingly difficult to recruit young doctors for patient care, especially in rural areas [1–4]. In response to the decline in applicants in the gynaecological field, the Commission for the Promotion of Young Talents of the German Society for Gynaecology and Obstetrics e.V. (DGGG) was founded in 2017,

cooperating with the Youth Forum for Gynaecology and Obstetrics e.V. (YFGO) [5]. The main goal of this commission is to support young doctors during their early career and to inform medical students about the manifold aspects of obstetrics and gynaecology (OB-GYN), and thus to sustainably recruit trainees for this specialization [5]. Profound hands-on medical training is a difficult task, especially in the field of obstetrics and related emergency situations. Students often feel help- and needless in the delivery room: since it is often difficult to fully involve them in regular or emergency situations, they are frequently in a passive observer's role, which might cause frustration and lead to a decision against OB-GYN [6]. Summer schools including skills-lab and emergency training not only teach team communication, but offer students experience that might benefit them

Julian Puppe and Sabine Keß contributed equally.

✉ Nathalie Rippinger
nathalie.rippinger@med.uni-heidelberg.de

Extended author information available on the last page of the article

in future critical situations [7]. Authors from other medical specialist areas already reported that a brief contact-based intervention during a summer school might provide a platform to recruit medical students into their respective field, and even to reduce fear related to contact with patients, e.g., with malignant diseases [2, 8–11]. German orthopaedic and trauma surgeons from their respective Youth Forums say that the majority of their summer school participants then choose their field for further specialization: they affirm that, despite high planning workloads and financial expense, recruiting students via summer schools has been successful [2]. The first German Summer School in OB-GYN was primarily designed as a platform for medical students to establish a low threshold contact with young and senior doctors, to exchange experiences and to inspire and consolidate their interest in this field. The project was considered a pilot project, and, if well implemented, the concept should be continued. This article reports our experiences with the first German Summer School in OB-GYN and gives recommendations for future improvements.

Summer School for Gynaecology and Obstetrics: concept

The first summer school took place on 2nd and 3rd August 2018 at the Department of Gynaecology and Obstetrics at the University Hospital Heidelberg. It was advertised through the DGGG e.V., the YFGO e.V., representatives of medical students of German university hospitals, and social media. An online application and registration process was provided. To ensure that all participants had a basic clinical understanding, only medical students from the clinical section of medical school were allowed to register (i.e., from the 5th semester).

The demand was very high: all 40 available places were booked within a few days. We recorded over 80 applications within 10 days, underlining high student interest in such an event; this corresponds with other recorded high application rates for other medical summer schools in Germany [2]. The summer school was able to host 40 participants [n (♀) = 37, 93%; n (♂) = 3, 7%] from 15 different German medical universities, and all were in their clinical part of medical school between the 5th and 16th semester (Table 1) [5].

To keep the cost of attending for medical students as low as possible and therefore ensure a high participation rate, the attendance fee was €50. This fee included the whole 2-day event, an overnight stay in a youth hostel, a social evening and on-site catering. This pilot project was generously financially supported by the DGGG e.V.

After the summer school experience, all participants received an evaluation form to assess their satisfaction and provide an opportunity to suggest improvements. As

Table 1 Distribution of the participants and the respective semester of their clinical training for the first Summer School in Gynaecology and Obstetrics for medical students, according to Rippinger et al. [5]

Faculty of Medicine	n^a	Clinical semester
University of Heidelberg	12	6, 7, 8, 8, 8, 8, 10, 10, 10, 12, 12, 16
University of Rostock	5	9, 10, 10, 10, 12
University of Gießen	5	6, 8, 9, 12, 13
University of Regensburg	3	6, 10, 10
University of Wuerzburg	2	10, 10
University of Tuebingen	2	5, 7
University of Duesseldorf	2	12, 12
University of Frankfurt	2	10, 10
University of Goettingen	1	6
University of Saarland	1	12
University of Erlangen-Nuernberg	1	14
University of Cologne	1	8
University of Oldenburg	1	8
University of Duisburg-Essen	1	4
Berlin Charité	1	8

^aTotal number of participants $n=40$

evaluation criteria, we used seven questions comprising rating levels from 1 to 5 (1—excellent, 2—good, 3—acceptable, 4—poor, 5—very poor) to evaluate timing (time of presentation/break time), selection of topics, selection of speakers, catering service quality, price/performance relationship of the event, available infrastructure and a global rating for the first summer school. Average scores for each item were calculated. In addition, in an open-comment section, the students could express their thoughts, plaudits and criticisms.

Summer School for Gynaecology and Obstetrics—on the spot: students showed great interest in practical training

The two-day programme included keynote presentations, case-based lectures, skills-lab training and hands-on workshops. The course composition reflected a multidisciplinary approach aiming to give an overview of the broad field of OB-GYN. The event was held gratuitously by members of the YFGO e.V. and residents from the Department of Gynaecology and Obstetrics at the University Hospital Heidelberg, working alongside with well-known specialists and professors from all over Germany.

The first day was divided into a morning and an afternoon part: the morning programme started with a presentation by the YFGO e.V. introducing the field of OB-GYN in all its facets, and gave an overview of the different legal qualifications

and specifications needed for the specialization curriculum in OB-GYN. Subsequently, a keynote presentation for endocrinology and reproductive medicine and interesting prenatal and obstetric cases were discussed by well-known experts in this field with integrated learning videos and case discussions. Students were encouraged to participate actively, and at the end of each session, a 10-min discussion round was held.

The second part of the 1st day was dedicated to hands-on workshops and skills-lab training for participants to become familiar with techniques and workflows in OB-GYN, which includes management of shoulder dystocia and breech presentation, prenatal sonography, laparoscopic surgery, hysteroscopy, and breast and pelvis examination techniques. To maximise learning effects, students were separated into small groups consisting of four to seven students. Each group was coached by one to four trainers, depending on the respective exercise. The small group size created a relaxed atmosphere and students were very actively involved. The practical part was based on rotation principles, and by the end of the 2-day event, every group had participated in each exercise.

To familiarise students with the field of obstetrics and to train team communication, emergency training for the management of a shoulder dystocia at the Noelle® childbirth simulator was performed, while Kiwi® Vacuum Delivery and normal and breech child delivery were trained with obstetric pelvic models. Furthermore, as sonography plays a major role in OB-GYN, students could practise foetal biometry and abnormalities with ultrasound simulators, while hysteroscopy trainers taught first steps in surgical training. Breast models and pelvic trainers were used to learn gynaecological examinations and a proper technique for Pap smears.

At the close of the 1st day, a joint evening dinner was organized. This occasion offered opportunities for sharing experiences between lecturers and students. The students in particular sought advice regarding application processes for internships and resident training positions, and were especially interested in the quality of postgraduate resident training. Furthermore, the tutors were able to answer all questions raised by the students and to give first-hand information about the process and the challenges of surgical training during residency training.

The 2nd day started with a keynote lecture on gynaecological oncology and surgery. Interestingly, many students had not known that the field of OB-GYN includes a broad variety of surgical procedures. The rest of the day was filled with practical exercises.

Summer School for Gynaecology and Obstetrics: evaluation results

A total of 35 from 40 evaluation forms (88%) were returned and filled completely. The first summer school for OB-GYN was rated “excellent” (average rating score 1.1), which reflects the positive feedback of the students (Table 2). However, the item “selection of topics” scored the lowest rate with 1.7 average points: in the open-comment section, students who gave a low rating level to this question (≥ 3) asked for more specialized lectures. They commented that the lectures were sometimes too similar to their regular lectures for medical studies, and wished for more specific, detailed and complex information. Furthermore, the majority of students were noted as having a high interest in ethical issues, such as embryo protection and the regulation in abortion processes; these topics should be included in future projects. Overall, in the open-comment section, the students were very grateful that such an event was organized and the general feedback was very positive. Some even pleaded for an extension of the event over several days. Skills-lab training was praised throughout, with the laparo- and hysteroscopy trainers, as well as the Noelle® childbirth simulator, having an excellent reception.

Outlook and future projects

Due to the great success of this pilot project, the high demand and the students’ positive evaluation, the Commission for Promotion of Young Talents, with the support of the DGGG e.V., and the YFGO e.V. are planning to introduce annual Summer Schools for OB-GYN [5]. For future projects, the selection of topics for keynote presentations and lectures should be more adapted considering the students’ feedback from the first event and their skills level. Therefore, the information content of the keynote presentations

Table 2 Evaluation form results (feedback from 35 out of 40 participants) according to Rippinger et al. [5]

Evaluation criteria	Average rating
Timing (time of presentations/break time)	1.2
Selection of topics presented	1.7
Selection of speakers	1.3
Drinks and food during event	1.0
Price/performance relationship of event	1.0
Available infrastructure	1.0
Global rating for first summer school in Heidelberg	1.1

Rating level: 1 = excellent; 2 = good; 3 = acceptable; 4 = poor; 5 = very poor

could be increased above basic level, since the majority of the participating students were very motivated, well prepared and with a strong interest in OB-GYN. In the longer term, analogous to the work of Merschin et al. it should be evaluated whether the summer school participants actually choose OB-GYN as their specialist training, to analyse long-term impact of summer schools and justify such a costly and labour-intensive event [2].

We would like to emphasise that the next summer school is already planned for 13–14th of September 2019 at the University Women's Hospital of the University of Tuebingen. Online registration is now open: <https://www.if-kongress.de/veranstaltungen/>.

Further information on the Summer School or the Commission for Promotion of Young Talents can be found here: <https://www.dggg.de>.

Acknowledgements We would like to thank all professors and lecturers for their volunteering and invaluable support and Karl Storz SE & Co. KG who provided additional laparoscopy and hysteroscopy trainers. In addition, we thank J. Windisch from the if-kongress and I. Fragale from the DGGG e.V., who supported the organisational processes.

Author contributions NR project development, manuscript writing, review and editing, supervision—lead. TMD review and editing. MW review and editing. VH review and editing. MW review and editing. AJS supervision, review and editing. TS review and editing. TF project development, supervision, review and editing. BT project development, supervision, review and editing. BS-G project development, supervision, review and editing. CS review and editing. JP project development, manuscript writing, review and editing, supervision—lead. SK project development, manuscript writing, review and editing, supervision—lead.

Funding The Summer School was financially supported by the German Society for Gynaecology and Obstetrics e.V. (DGGG).

Compliance with ethical standards

Conflict of interest All authors declare that there is no conflict of interest.

Ethical approval This article does not contain any studies with animals performed by any of the authors. This submission is a report about the experiences shared during the first summer school in obstetrics and gynaecology in 2018.

Informed consent Course participation was not linked with study participation. The study was deemed to be without risk, only anonymous evaluation forms were distributed to all the course participators for the collection of data; consequently, the Ethics Committee of Heidelberg University Hospital did not request approval for consent for this designated analysis. Course participation, and completing the evaluation forms were all voluntary.

References

1. Ärzte Zeitung online, 11.04.2018. Sorgen und digitale Hoffnungen bei den Chirurgen. https://www.aerztezeitung.de/politik_gesellschaft/bedarfsplanung/article/961433/nachwuchsmangel-sorgen-digitale-hoffnungen-chirurgen.html. Accessed 28 Feb 2019
2. Merschin D, Mutschler M, Stange R, Kopschina C, Schuttrumpf JP, Doepfer AK, Achatz G, Niethard M, Hoffmann R, Kladny B, Perl M, Munzberg M (2016) The Summer School of the German Society for Orthopaedics and Traumatology—a success story. *Zeitschrift für Orthopädie und Unfallchirurgie* 154(5):499–503. <https://doi.org/10.1055/s-0042-106477>
3. Martin W (2006) Arbeitsmarkt für Ärztinnen und Ärzte: Bewerbermangel in der Frauenheilkunde. *Deutsches Arzteblatt International* 103(43):A-2899/B-2523/C-2427. <https://www.aerzteblatt.de/archiv/53245>. Accessed 10 June 2019
4. Weise K, Niethard FU (2010) On the lack of young physicians in trauma surgery and orthopaedics. *Zeitschrift für Orthopädie und Unfallchirurgie* 148(1):17–18. <https://doi.org/10.1055/s-0029-1240871>
5. Rippinger N, Puppe J, Deutsch TM, Freis A, Gass P, Weiss M, Wallwiener M, Fehm T, Toth B, Seelbach-Goebel B, Gabriel L, Kess S (2018) Gemeinsam unseren Nachwuchs fördern! Erste gynäkologische Summer School „Gynäkologie und Geburtshilfe“ für Medizinstudierende war ein voller Erfolg. *FRAUENARZT* 59 (2018) Nr. 10
6. Ismail S, Kevelighan EH (2018) A questionnaire survey of second year graduate-entry medical students' perception of obstetrics and gynaecology as a future career speciality. *J Obstet Gynaecol* 38(4):556–561. <https://doi.org/10.1080/01443615.2017.1380612>
7. Fialkow MF, Snead CM, Schulkin J (2018) Benefits and barriers to teaching medical students in an Ob-Gyn Clinic. *Health Serv Res Manag Epidemiol* 5:2333392817753518. <https://doi.org/10.1177/2333392817753518>
8. Hankir A, Zaman R (2015) Global strategies targeting the recruitment crisis in psychiatry: the Doctors Academy Future Excellence International Medical Summer School. *Psychiatria Danubina* 27(Suppl 1):S130–135
9. De Vries J, Szabo BG, Sleijfer DT (2002) The educational yield of the international summer school "Oncology for Medical Students". *J Cancer Educ* 17(3):115–120. <https://doi.org/10.1080/08858190209528817>
10. Lütgendorf-Caucig C, Kaiser PA, Machacek A, Waldstein C, Pötter R, Löffler-Stastka H (2017) Vienna Summer School on Oncology: how to teach clinical decision making in a multidisciplinary environment. *BMC Med Educ*. <https://doi.org/10.1186/s12909-017-0922-3>
11. Baker KS, Cormican D, Seidman PA (2012) Summer anesthesiology externship: demonstrating the ability of early clinical involvement to educate and increase specialty interest. *J Educ Perioper Med JEPM* 14(4):E063

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Affiliations

Nathalie Rippinger¹  · **Thomas M. Deutsch¹** · **Markus Wallwiener¹** · **Vera Hepp²** · **Martin Weiss³** · **Anton J. Scharl⁴** · **Thomas Strowitzki⁵** · **Tanja Fehm²** · **Bettina Toth⁶** · **Birgit Seelbach-Göbel⁷** · **Christof Sohn¹** · **Julian Puppe⁸** · **Sabine Keß¹**

Thomas M. Deutsch
thomas.deutsch@med.uni-heidelberg.de

Markus Wallwiener
markus.wallwiener@med.uni-heidelberg.de

Vera Hepp
Vera.Hepp@med.uni-duesseldorf.de

Martin Weiss
Martin.Weiss@med.uni-tuebingen.de

Anton J. Scharl
scharl.anton@klinikum-amberg.de

Thomas Strowitzki
thomas.strowitzki@med.uni-heidelberg.de

Tanja Fehm
tanja.fehm@med.uni-duesseldorf.de

Bettina Toth
bettina.toth@i-med.ac.at

Birgit Seelbach-Göbel
seelbach.b@web.de

Christof Sohn
christof.sohn@med.uni-heidelberg.de

Julian Puppe
julian.puppe@uk-koeln.de

Sabine Keß
sabine.kess@med.uni-heidelberg.de

¹ Department of Gynaecology and Obstetrics, University Hospital Heidelberg, Im Neuenheimer Feld 440, 69120 Heidelberg, Germany

² Department of Gynaecology and Obstetrics, Heinrich Heine University, Duesseldorf, Germany

³ Department of Gynaecology and Obstetrics, University of Tuebingen, Tuebingen, Germany

⁴ Department of Gynaecology and Obstetrics, St. Marien Hospital Amberg, Amberg, Germany

⁵ Department of Gynaecologic Endocrinology and Fertility Disorders, University Hospital Heidelberg, Heidelberg, Germany

⁶ Department of Gynaecologic Endocrinology and Reproductive Medicine, University Hospital Innsbruck, Innsbruck, Austria

⁷ Department of Gynaecology and Obstetrics, Clinic St. Hedwig, Hospital of the Merciful Brothers, University Medical Centre Regensburg, Regensburg, Germany

⁸ Department of Gynaecology and Obstetrics, University of Cologne, Cologne, Germany