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National survey on the certification of competence in gynecologic surgical oncology: an
AGOF (association of gynecologists in training) study

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Abstract: 249 (250)

Introduction: Female malignancies can require complex surgeries with expert techniques. A French certification of competence in gynecological cancer surgery has been elaborated in 2021 to certify specialized surgeons. For trainees, this would require a practical curriculum (number of rotations in certain departments), a surgical logbook and the theoretical European exam. The objective of our work was to interrogate trainees in gynecology and obstetrics on their oncological training and their opinion on the certification.

Material and methods: We conducted a national French prospective, observational study, using a web-based questionnaire from 06/2021-02/2022. All trainees were interrogated on their overall training in gynecological oncology. The opinion on the certification was assessed for the sub-group willing to specialize in oncological surgical gynecology.

Results: One hundred and twenty-five responded, and 66.1% wanted to specialize in surgical oncology. Many had completed one rotation in a specialized gynecological oncology center (45.3%) and in digestive surgery (48.8%). Concerning the theoretical training, 92% of the respondents believed it to be insufficient. Eighty participants (64%) wished to specialize in oncological surgical gynecology and were interrogated on the certification. The majority (65%) thought the three criteria were difficult to achieve but adequate. The most difficult criterium was the practical curriculum (70.5%) followed by the surgical logbook (55.1%) due to inequalities of training amongst French regions.

Conclusion: Trainees in gynecology and obstetrics seem ready to take a specialized certification in surgical gynecological oncology to improve patient care. However, they expressed concerns due the disparities amongst regions in accessing certain specialized departments.

Key words: Postgraduate training, Surgery, Gynecological oncology, Gynecological cancer.

Introduction

With 604 127 new cases of cervical cancer, 417 367 new endometrial cancer and 313 959 new cases of ovarian cancers in 2020, gynecological malignancies are frequent diseases and require expert management (1). First, they represent a wide range of pathologies with very diverse managements. Indeed, ovarian, uterine and cervical cancer require very different standards of care from a surgical and oncological point of view (2). It is crucial that the doctor masters all the specificities of each pathology. Certain gynecological malignancies can necessitate general surgery with digestive, urinary and vascular resections. Second, they necessitate specialized care with advanced surgical techniques. It is believed that surgical case volume has an impact on overall survival and quality of care in gynecologic oncology (3–6). Finally, standards of care are rapidly evolving and to offer the best care possible, one must stay up to date with continuous training (7).

Certifications for gynecological oncological centers allow to ensure the patient the best management of care. In Europe, the European Society of Gynecologic Oncology (ESGO) issues these certifications for hospitals and centers (8). Many countries also certify their gynecologists who seek to specialize in oncology surgery (9).

In France, since 2021, there is an identified course for specializing in gynecological oncology surgery. The four competent learned societies: the SFOG (French society of gynecological oncology), the CNGOF (French national college of gynecologists and obstetricians), the SFCO (French society of oncological surgery) and the SCGP (French society of gynecologic and pelvic surgery) supported by the national university college (CNU) of gynecology-obstetrics and UNICANCER agreed to materialize this course and establish a certification awarded by a national jury of gynecological surgeons. Thus, gynecological surgeons wishing to have adequate training in gynecological oncology surgery can ask to be certified by this expert committee. This certification must be renewed.

The four following requirements are evaluated: i) training (theory, practical, logbook, rotations), ii) teaching, iii) research and publications, (master's degree, PhD...) and iv) continuous training (congress...). A total score of 100/120 will be necessary to be certified. The details of the point count are subjective and are chosen by the committee.

The criteria are different for surgeons in training and surgeons already practicing. During the training, the fellow must: i) successfully pass the ESGO (European society of gynecologic oncology) knowledge test, ii) have completed a minimum of 5 years in a specific

program and iii) have completed the specifications requested by the certification committee as well as the surgical logbook.

For surgeons already in practice, they must: i) have a valid gynecology obstetric diploma, ii) have spent 2 years as a senior physicians in a validating service (accredited by the ESGO or having obtained the approval for training in gynecological oncology by the certification committee), iii) to have passed the ESGO test (only for candidates with less than 10 years of practice since the end of their initial training) , iv) to have completed the surgical logbook and v) to practice in a center with a volume of activity in gynecological oncology in accordance with the criteria established by the certification committee.

To get feedback from trainees in gynecology on this new certification, we carried out a web-based survey. The primary objective was to obtain an overview on the quality of the training and the opinion on the general training in gynecological surgical oncology for the whole population. We then aimed to assess the opinion on the certification of those willing to specialize in gynecological surgical oncology.

Material and methods

Study methods

We conducted a national prospective, observational study, on a web-based questionnaire from June 2021 to February 2022. The survey was an online Google Form accessible to those who had the link. Trainees in gynecology and obstetrics were invited to fill out the survey. They were solicited by e-mail (mailing list of the association of gynecologist in training, AGOF), through local head of departments and through social media (Facebook ®). Reminders were sent out every three months by e-mail and social media. They responded anonymously and freely, without supervision.

Objectives

The primary objective was to obtain an overview on the quality of the training and the opinion on the general training in gynecological surgical oncology for the whole population. The secondary objective was to assess the opinion on the certification of the sub-population of trainees willing to specialize in gynecological surgical oncology.

Data collected

The following data was collected: i) demographic information (geographic region, position in the hospital, if resident: number of completed rotations), ii) opinion on the general training (inequalities between regions, difficulty in accessing certain rotation departments, is the training too focused on certain domains...), iii) internship curriculum (number of rotations in certain disciplines, number of surgeries performed, number of hours of theoretical classes, simulation training...), and iv) opinion on the specific oncology surgery training.

The last part of the questionnaire (specific questions on the certification) was accessible only to those willing to apply to take the certification (detailed further).

The complete questionnaire is available in Supplementary material S1.

Certification of surgical gynecologic oncology

The certification of surgical gynecologic oncology is as follows for young gynecologists:

- The surgical logbook is similar to the ESGO one but without a 'mandatory' threshold of number of interventions (7). The surgical logbook must be completed over 5 years with: 10 hysterectomies or extended parametrectomies, 30 pelvic lymphadenectomies (including sentinel lymph node detection), 5 wide vulvar tumor excisions, 5 inguino-femoral

lymphadenectomies, a minimum of 20 cyto-reduction surgeries performed in the context of advanced ovarian cancer management (i.e. involving extensive peritonectomies, bowel resection, procedures extending to the supra-mesocolic floor or removal of metastatic adenopathy), and a minimum of 30 procedures performed via the minimally invasive route excluding diagnostic laparoscopies.

- The ESGO trainee theoretical exam
- For the practical training course trainees in gynecology must have completed a minimum of 5 years in their curriculum with i) 4 semesters including: 2 in a gynecological surgery department accredited by the committee for cancer training and 2 in surgical departments, including at least one in a digestive surgical department; ii) 1 year as a junior doctor in a surgical accredited gynecological oncology or surgery department and iii) at least 2 years as “chief of clinic” or assistant in a department accredited in gynecological oncology.

Sub-group of gynecologists willing to specialize in surgical gynecologic oncology

A sub-group analysis was carried out amongst those who wanted to specialize in surgical gynecologic oncology. Only those who answered “yes” to the filter question: “Do you wish to specialize in surgical gynecologic oncology?” had access to the end of the survey.

The questions concerned the general opinion on this certification with specific questions on each criterion: surgical logbook, ESGO theoretical exam and the practical training internship. Trainees in gynecology were then invited to comment freely on their oncology training course.

Statistics

This was an observational study, and no in-depth statistic was carried out. Continuous variables were expressed as the mean +/- standard deviation or median and range. Categorical values were expressed as absolute number and percentage.

Results

Study population

One hundred and twenty-five young gynecologists filled out the online survey (response rate 13.8%).

Most were still in training (85%). The rest were junior doctors with less than 4 years of experience (junior doctor, assistant or “chef de Clinique”). The majority of respondents had validated more than 5 semesters (73.9%) with 17.9% having already completed 9 rotations of training.

The most represented geographic regions were Bordeaux (14.6%), Lyon (12.2%), Strasbourg (10.6%) and Paris (10.6%).

To the answer “which gynecologic field do you wish to specialize in” (multiple answers possible): 66.1% wanted to specialize in surgical oncology, 49.1% in benign surgery, 41.1% in obstetrics, 27.4% in functional surgery, 14.5% in fetal medicine, 2.4% in assisted reproductive techniques, 1.6% in medical gynecology and 0.8% in breast surgery.

General opinion on the training in gynecology and obstetrics in France

Twenty-one percent of the population thought the training in obstetrics was adequate, 51% believed that a “bit” too focused on obstetrics, 21% believed it was much too focused on obstetrics, and 6.5% thought it was not focused on obstetrics enough.

Surgical oncologic gynecology training and opinion on this training

The details of the training curriculum in oncology and surgery are presented Figure 1 (number of rotations in surgery and oncology). For internships in departments specialized in gynecologic oncology surgery: 45.3% of the respondents had completed one rotation in a specialized center, 23.6% two semesters, 11.3% three semesters and 19.3% four or more semesters.

Ninety percent of the participants thought there were inequalities in training in gynecological oncologic surgery throughout France and 50% believed it was essential to change geographic region to complete their surgical oncology training.

Forty-four percent of the population had difficulties accessing some of the rotations with gynecologic oncologic surgery being the hardest department to access (46/125 had difficulties, 36.9%), followed by general surgery (11/125, 8.8%).

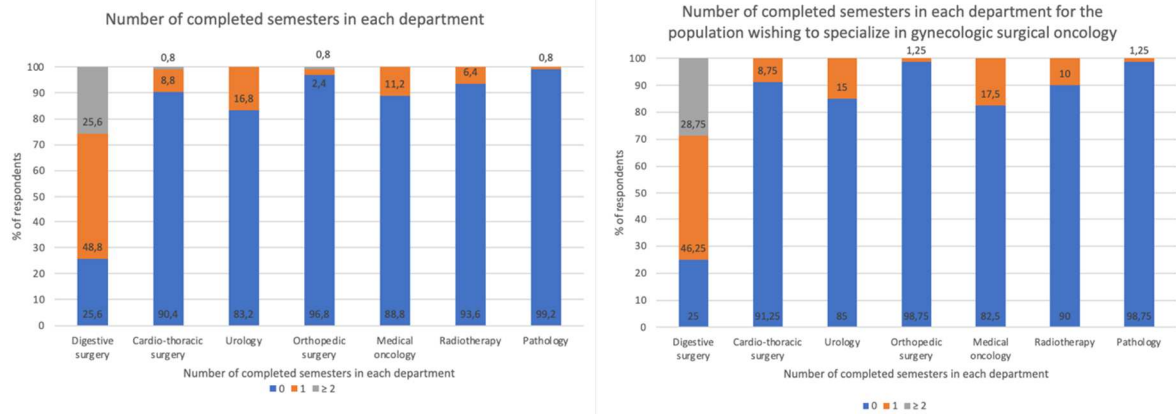


Figure 1: Number of completed rotations in each surgical or oncology-related medical department for all respondents (A) and for those willing to specialize in gynecologic surgical oncology (B).

Participants were then asked if they had seen or done several selected oncologic surgeries: colpo-hysterectomy extended to the parameters by laparotomy, aortic lymphadenectomy by laparoscopy, debulking surgery for ovarian cancer by laparotomy and breast reconstruction surgery (deep inferior epigastric perforator flap, profunda artery perforator flap, latissimus dorsi flap or breast implants). Results are presented Figure 2.

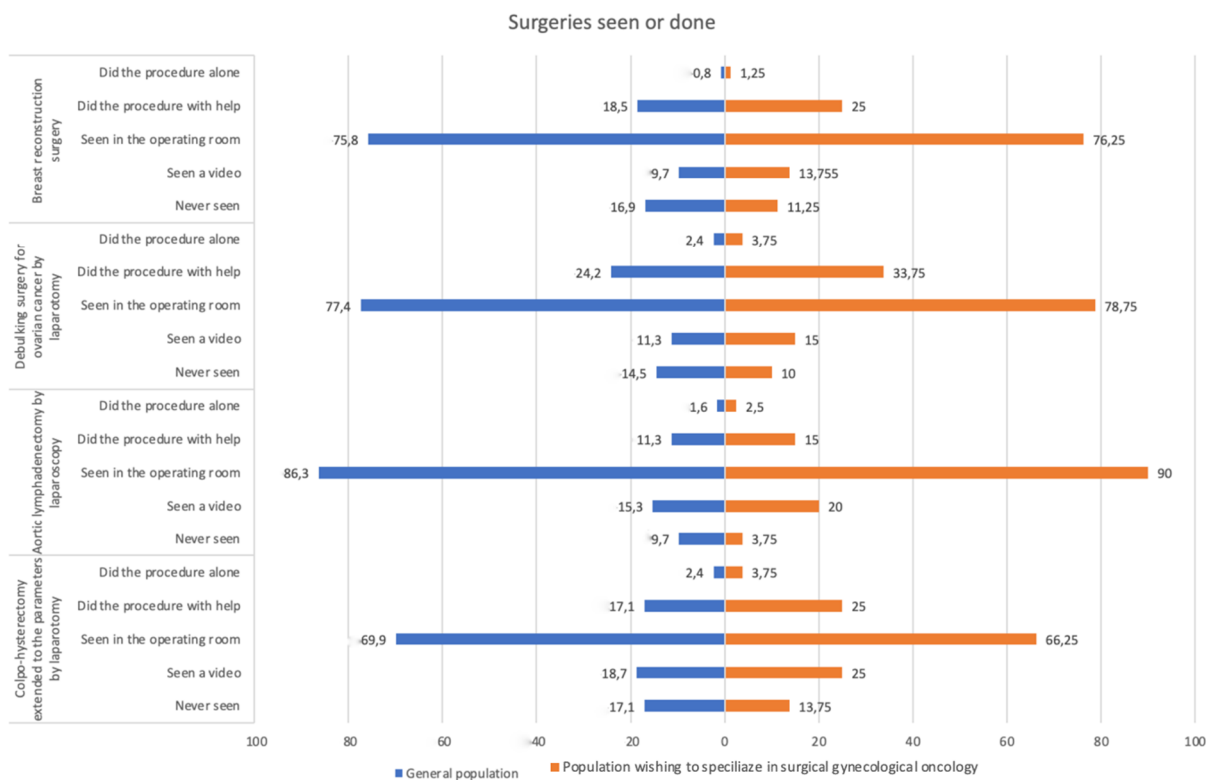


Figure 2: Type and number of surgeries seen by the French gynecologists trainees in the general population and amongst those wishing to specialize in gynecologic surgical oncology.

Finally, trainees in gynecology were asked to answer questions on their theoretical training (simulators and theoretical classes). Results concerning theoretical training, are presented Figure 3.

Ninety-two percent of the respondents believed these trainings were insufficient.

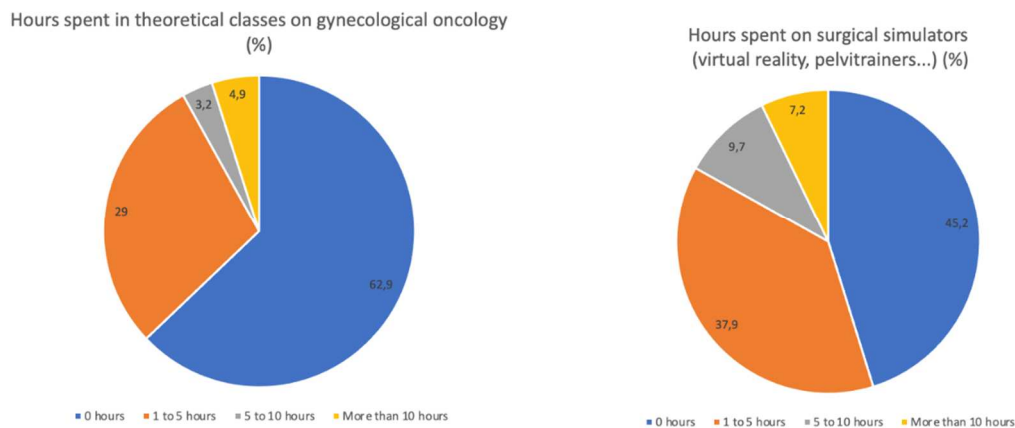


Figure 3: Theoretical training (hours per year) of gynecological surgical oncology amongst young French gynecologists

Sub-group of young gynecologists willing to specialize in surgical gynecologic oncology

Eighty participants (80/125, 64%) wished to specialize in surgical gynecology oncology.

The number of semesters completed in each surgical department did not seem to differ from the general population of respondents (Figure 1). However, the respondents willing to specialize in surgical oncology had completed more oncology rotations (one rotation: 11.2% versus 17.5%). Concerning the surgeries seen or performed, the number did not seem to differ (Figure 2).

Finally, participants were asked what they thought of the new certification. The majority (65%) thought the three criteria were difficult to achieve but adequate, 21.2% believed they were impossible to achieve and 13.8% thought they were adequate. The most difficult criterium was the practical curriculum (70.5%) followed by the surgical logbook (55.1%) and the ESGO exam (12.8%) (multiple answers possible).

The detailed opinion on each criterion is detailed Figure 4. The main setbacks of the ESGO exam were the price (62.8%) and the fact that the exam was in English (29.5%). For the practical curriculum, respondents had the most concerns on the post-diploma period (junior

doctor or “chef de Clinique”: 48.7%) and the 2 semesters in specialized center in surgical gynecological oncology (35.5%).

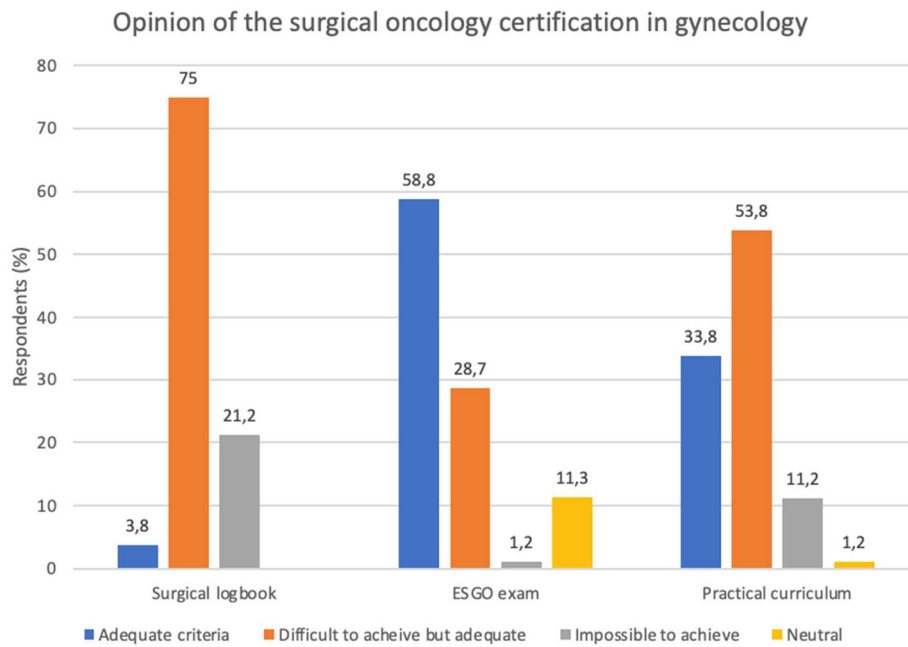


Figure 4: Opinion on the certification of surgical oncology in gynecology

Discussion

It is of paramount importance to offer patients the best care possible in such a diverse and specialized discipline as gynecologic oncology. In this effect, the ultimate goal of the certification of competence in gynecological cancer surgery is to improve the surgical management of patients with cancer. In this work, we found that trainees in gynecology and obstetrics seem ready to take a specialized certification in surgical gynecological oncology to improve patient care. However, they expressed concerns due the disparities amongst regions in accessing certain specialized departments.

In accordance with previous works, we found that French gynecologists trainee, overall, have a good practical training in surgical oncology (10). Seventy percent had at least seen once an advanced surgical procedure in gynecologic oncology such as colpo-hysterectomy extended to the parameters by laparotomy, aortic lymphadenectomy by laparoscopy, debulking surgery for ovarian cancer by laparotomy and breast reconstruction surgery (deep inferior epigastric perforator flap, profunda artery perforator flap, latissimus dorsi flap or breast implants). Between 11.3% and 24.2% had even done some procedures with help. These results were in a general population of residents in gynecology and obstetrics with 85% still in training. It is therefore difficult to compare to different works since other studies were carried out in gynecologic oncologist having finished their training (listed in European Network of Young Gynecological Oncology (ENYGO))(10–13). Even though the practical training was good, the theoretical formation was mediocre with 62.9% and 45.2% having 0 hours/years of classes and simulator training, respectively. This issue must be resolved by increasing the number of workshops, wet labs and simulator hours (12). Moreover, non-surgical skills, such as scientific knowledge, doctor-patient relation, leadership skills and critical reading must be encouraged (11,14).

We did not assess whether the respondents were satisfied with their oncological training. In a web-based questionnaire, it was found that 81.1% of Spanish trainees listed in ENYGO in Spain did not feel qualified to work as gynecologic oncologists after their training (11). The main reasons for this were the need for more training in the surgical field and the need of oncological patient management training.

In France, it is required for gynecologist to complete two surgical rotations in general surgery. Despite this, 25% of the participants had not done an internship in digestive surgery. This can be explained by the fact that residents in gynecology obstetrics in France usually start

by completing their obstetrical rotations early on in their curriculum and carry out their surgical internship later in their training. Since 41.2% of the participants still had 4 semesters to complete (58.8% had completed 6 rotations) it is possible that they simply had not had access to these surgical rotations yet. Padilla et al. found in their work on the training in gynecological oncology in Spain, that only 35.1% had performed a rotation in another specialty (general surgery, radiology, and/or pathology) (11). This study was carried out only in ENYGO trainees with 56.8% having finished their residency (versus 15% in our work). The French practical curriculum is therefore successful in offering their residents a broad surgical knowledge.

Almost half of the respondents (45.3%) completed one semester in a specialized center in gynecological surgical oncology, 23.6% two semesters, 11.3% three semesters and 19.3% four or more semesters. According to the participants, this was the rotation the hardest to access. When asked why they found it difficult to access this department, the most frequent answer was the lack of space. Training rotations specialized in gynecological surgical oncology are mainly found in certain centers (university hospitals, cancer centers...) not easily available in all regions. Changing geographic region was therefore considered mandatory to complete this rotation by most participants. Moreover, in some regions, rotations in these specialized surgical centers are reserved to general surgery residents. Others thought the training was too focused on obstetrics with pressure to complete rotations in obstetrics. Even though most of our participants were willing to take the certification, only 17.5% (versus 11.5% in the general population) had completed a medical oncology rotation. This can be explained by the already difficult requirements needed to obtain the gynecologic and obstetrics diploma in France.

Concerning the certification, the majority of those willing to specialize in gynecological surgical oncology thought the criteria were adequate (65% difficult to achieve but adequate, and 13.8% adequate). The participants were most concerned by the practical curriculum (70.5%). In the free commentary section, participants were afraid to not have access to general surgery rotations due to lack of space in these departments. They highlighted the need to be able to change geographic regions to complete their training, as recommended by Cibula et al (15). Concerning the surgical logbook, most participants thought it was difficult to complete (55.1%). They were mainly afraid that junior gynecological oncological surgeons would not let the trainees operate since they must also complete their logbook. A “train the trainer” program must be encouraged in France (15). They were also concerned that they would not be able to perform several surgeries (wide vulvar tumor excisions, colpo-hysterectomies). However, it must be noted that the number given by the certification is an objective to aim but

not necessarily obtain. Finally, only 12.8% thought the ESGO exam would be difficult to obtain. The gynecologic oncology certification already exists in several countries (9,16,17). The ESGO certification has similar requirements (18).

There are several limits to our work. The first bias is that most respondents were, as expected, interested in gynecology surgery (66.1%). Indeed, those most involved in the implementation of the certification were those who answered the survey. However, the training curriculum (internships and surgeries seen or done) did not seem to differ. Another limitation is that 4 French regions were over-represented. Indeed, 48% of the respondents came from Strasbourg, Bordeaux, Lyon, and Paris region. This is almost in accordance with the French distribution of young gynecologists in France. Indeed, in 2021, 35.5% (74/208) of open positions in gynecology obstetrics were in these 4 regions: Paris (44/208), Lyon (12), Bordeaux (9) and Strasbourg (9). The only difference is that Lille region is the second largest city for gynecological training (13/208) and was poorly represented here.

In several countries (UK, Sweden, Denmark, USA), gynecological oncology is recognized as a sub-specialty (9,16,17). The different pathologies, specified oncological care, and complex surgical procedures require a trained surgeon. This work shows that French gynecologists have a satisfactory global overview of gynecologic oncology during their training which is however not sufficient to become specialized gynecologist oncologists. The trainees seem ready to apply to a certification to improve their knowledge with some concerns due to the disparities amongst regions in accessing certain specialized departments.

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References

1. Globocan 2012 - Home [Internet]. [cited 2018 Mar 22]. Available from: <http://globocan.iarc.fr/Default.aspx>
2. s.r.o LS. Guidelines [Internet]. ESGO - European Society of Gynaecological Oncology. [cited 2022 Feb 10]. Available from: <https://www.esgo.org/explore/guidelines/>
3. Bristow RE, Palis BE, Chi DS, Cliby WA. The National Cancer Database report on advanced-stage epithelial ovarian cancer: impact of hospital surgical case volume on overall survival and surgical treatment paradigm. *Gynecol Oncol*. 2010 Sep;118(3):262–7.
4. Benoit L, Pauly L, Phelippeau J, Koskas M. Impact of Sociodemographic Characteristics on the Quality of Care in the Surgical Management of Endometrial Cancer: An Analysis of a National Database in the United States. *Gynecol Obstet Invest*. 2020;85(3):222–8.
5. Paulsen T, Kjaerheim K, Kaern J, Tretli S, Tropé C. Improved short-term survival for advanced ovarian, tubal, and peritoneal cancer patients operated at teaching hospitals. *Int J Gynecol Cancer Off J Int Gynecol Cancer Soc*. 2006 Feb;16 Suppl 1:11–7.
6. Giede KC, Kieser K, Dodge J, Rosen B. Who should operate on patients with ovarian cancer? An evidence-based review. *Gynecol Oncol*. 2005 Nov;99(2):447–61.
7. Recommendations | ESGO Gynae-Oncology Guidelines [Internet]. [cited 2020 Jan 28]. Available from: <https://guidelines.esgo.org/cervical-cancer/guidelines/recommendations/>
8. s.r.o LS. ESGO Certification for Ovarian Cancer Surgery [Internet]. ESGO - European Society of Gynaecological Oncology. [cited 2022 Feb 28]. Available from: <https://www.esgo.org/ovarian-surgery-certification/>
9. Averette HE, Wrennick A, Angioli R. History of gynecologic oncology subspecialty. *Surg Clin North Am*. 2001 Aug;81(4):747–51.
10. Gultekin M, Dursun P, Vranes B, Laky R, Bossart M, Grabowski JP, et al. Gynecologic oncology training systems in Europe: a report from the European network of young

- gynaecological oncologists. *Int J Gynecol Cancer Off J Int Gynecol Cancer Soc.* 2011 Nov;21(8):1500–6.
11. Padilla-Iserte P, Minig L, Zapardiel I, Chiva L, Laky R, de Santiago J. Current situation in gynecological oncology training in Spain: where we are and where we want to go. *Clin Transl Oncol Off Publ Fed Span Oncol Soc Natl Cancer Inst Mex.* 2018 Apr;20(4):517–23.
 12. Manchanda R, Halaska MJ, Piek JM, Grabowski JP, Haidopoulos D, Zapardiel I, et al. The need for more workshops in laparoscopic surgery and surgical anatomy for European gynaecological oncology trainees: a survey by the European Network of Young Gynaecological Oncologists. *Int J Gynecol Cancer Off J Int Gynecol Cancer Soc.* 2013 Jul;23(6):1127–32.
 13. Manchanda R, Godfrey M, Wong-Taylor LA, Halaska MJ, Burnell M, Grabowski JP, et al. The need for accredited training in gynaecological oncology: a report from the European Network of Young Gynaecological Oncologists (ENYGO). *Ann Oncol Off J Eur Soc Med Oncol.* 2013 Apr;24(4):944–52.
 14. Yule S, Flin R, Paterson-Brown S, Maran N. Non-technical skills for surgeons in the operating room: a review of the literature. *Surgery.* 2006 Feb;139(2):140–9.
 15. Cibula D, Kesic V. Surgical education and training in gynecologic oncology I: European perspective. *Gynecol Oncol.* 2009 Aug 1;114(2):S52–5.
 16. Gershenson DM. The future of gynecologic oncology: are we headed for super-specialization? *Gynecol Oncol.* 2011 Jul;122(1):3–4.
 17. Templeton A. Subspecialty training and academic careers. *Baillieres Best Pract Res Clin Obstet Gynaecol.* 1999 Sep;13(3):423–34.
 18. Akladios C, Darai É, Golfier F, Lecuru F, Collinet P, Uzan C, et al. [National certification for gynecological cancer surgery]. *Bull Cancer (Paris).* 2021 Sep;108(9):806–12.