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Survey Article

Preparedness of Ob/Gyn residents for fellowship training in gynecologic oncology

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ABSTRACT

Residency training in obstetrics and gynecology is being challenged by increasingly stringent regulations and decreased operative experience. We sought to determine the perception of preparedness of incoming gynecologic oncology fellows for advanced surgical training in gynecologic oncology. An online survey was sent to gynecologic oncologists involved in fellowship training in the United States. They were asked to evaluate their most recent incoming clinical fellows in the domains of professionalism, level of independence/graduated responsibility, psychomotor ability, clinical evaluation and management, and academia and scholarship using a standard Likert-style scale. The response rate among attending physicians was 40% (n = 105/260) and 61% (n = 28/46) for program directors. Of those who participated, 49% reported that their incoming fellows could not independently perform a hysterectomy, 59% reported that they could not independently perform 30 min of a major procedure, 40% reported that they could not control bleeding, 40% reported that they could not recognize anatomy and tissue planes, and 58% reported that they could not dissect tissue planes. Fellows lacked an understanding of pathophysiology, treatment recommendations, and the ability to identify and treat critically ill patients. In the academic domain, respondents agreed that fellows were deficient in the areas of protocol design (54%), statistical analysis (54%), and manuscript writing (65%). These results suggest that general Ob/Gyn residency is ineffective in preparing fellows for advanced training in gynecologic oncology and should prompt a revision of the goals and objectives of resident education to correct these deficiencies.

Introduction

Training obstetrician–gynecologists who are competent in the operating room has become increasingly challenging. Though laparotomy was once taught as the primary approach for treatment of many gynecologic diseases, the availability of new minimally invasive surgical techniques has required residents to develop a much broader skill set. With a decreasing proportion of cases performed through a transabdominal approach, the residents have lost a significant source of experience in laparotomy (Weinberg et al., 2011). Unfortunately, they report receiving inadequate training in many minimally invasive techniques as well (Einarsson and Sangi-Haghpeykar, Oct–Dec, 2009). The result is a troubling trend toward residents who graduate with insufficient skills in all types of gynecologic surgery.

Further encumbering the training process are limitations and precautions that have been put in place by regulatory bodies. These include implementation of duty hour restrictions which have decreased training time, hands-on experience, and autonomy for residents. As a result, Ob/Gyn educators report that overall resident education has suffered and total surgical volume during residency has diminished (Espey et al., 2007). Perhaps because a growing proportion of graduating residents feel unprepared to practice general Ob/Gyn, the number who are choosing to pursue fellowship training has increased in recent years (Gerber and Lo Sasso, 2006).

Similar challenges are being faced in many fields of medicine (Drolet et al., 2013; Jagannathan et al., 2009; Mir et al., 2011). In an effort to determine the effects of these ongoing changes on surgical residency training, the Fellowship Council of the American College of Surgeons (ACS) in a recent survey asked directors of surgical fellowship programs to evaluate the preparedness of incoming fellows (Mattar et al., 2013). The consensus was that incoming surgical fellows were deficient in patient ownership and surgical skills and lacked interest in scholarly activities. As a result, they required additional training at the beginning of fellowship to reach the expected level of proficiency. The objective of our study was to similarly evaluate the preparedness of Ob/Gyn residents for advanced surgical training in gynecologic oncology.

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Methods

Survey design and characteristics

We developed a survey to evaluate incoming gynecologic oncology fellows in five domains: professionalism, level of independence/graduated responsibility, psychomotor ability, clinical evaluation and management, and academia and scholarship. Our survey was modified, with permission, from a validated survey created by the Fellowship Council of the American College of Surgeons (Mattar et al., 2013). Minor changes were designed to make the questions more relevant to gynecologic oncology (e.g. proficiency in laparoscopic cholecystectomy was changed to laparoscopic oophorectomy). The final survey comprised a total of 48 quantitative and 5 open-ended items (Table 1). Quantitative questions used a standard 5-point Likert-style scale, except in the psychomotor domain, in which a 4-point scale was used. This project received exemption from the Colorado Multiple Institutional Review Board.

Participants and data collection

The survey was uploaded to the Research Electronic Data Capture (REDCap) platform hosted at the University of Colorado (Harris et al., 2009) and internally tested at the University of Colorado. Practicing gynecologic oncologists in the United States who are directly involved in gynecologic oncology fellowship training were identified through the American Board of Obstetrics and Gynecology (ABOG), departmental websites, and the Society of Gynecologic Oncology website (Society of Gynecologic Oncology, 2014). Any faculty members who were not directly involved in fellowship training as self-identified on the questionnaire were excluded. We then distributed the survey link by email, accompanied by a letter describing the intent and goals of the survey

Table 1
Survey administered to attending physicians involved in Gynecologic Oncology Fellowship training: quantitative questions.

Professionalism
The incoming clinical fellow communicates effectively with his or her patients.
The incoming clinical fellow promptly comes in after hours to evaluate a patient that may need a higher level of care/ICU transfer.
The incoming clinical fellow demonstrates ownership toward patients.
The incoming clinical fellow treats the ancillary staff with respect.
The incoming clinical fellow treats the residents and house staff with respect.
The incoming clinical fellow demonstrates professional behavior.
The incoming clinical fellow knows the history and the imaging of the patient he or she is operating upon.
The incoming clinical fellow arrives to the operating room prepared for the operation.
Level of Independence/graduated responsibility
The incoming clinical fellow formulates a plan of action for patients (inpatient/outpatient) before you see the patient.
The incoming clinical fellow can independently perform a hysterectomy without me being scrubbed in.
The incoming clinical fellow can independently perform 30 min of a major procedure safely with me being in the room next door.
The incoming clinical fellow can independently set up a retractor for laparotomy and appropriately pack/mobilize the bowel for pelvic surgery.
The incoming clinical fellow can independently perform diagnostic laparoscopy.
The incoming clinical fellow can independently perform a laparoscopic BSO.
The incoming clinical fellow can independently perform a LEEP procedure.
The incoming clinical fellow can independently perform basic lysis of adhesions.
The incoming clinical fellow is able to take general gynecology call with only occasional consultation with me and only occasional assistance in the operating room for difficult cases.
The incoming clinical fellow is able to care for all postoperative issues on our surgical patients.
The incoming clinical fellow is expected to be able to perform advanced cases independently by the end of the first half of the fellowship.
The incoming clinical fellow is expected to be able to practice independently by the end of the fellowship.
Psychomotor ability
The incoming clinical fellow is able to control bleeding.
The incoming clinical fellow is proficient in the recognition of anatomy and anatomic tissue planes.
The incoming clinical fellow is proficient in dissection of tissue planes.
The incoming clinical fellow is proficient in safe tissue manipulation.
The incoming clinical fellow is proficient in uses of energy and energy sources.
Clinical evaluation and management
The incoming clinical fellow demonstrates an understanding of the pathophysiology of the disease,
The incoming clinical fellow demonstrates an understanding of the options for treatments, and the role and indication for surgery.
The incoming clinical fellow demonstrates the ability to perform an initial outpatient interview and the design of the correct work-up,
The incoming clinical fellow demonstrates the ability to counsel patients regarding the differential diagnosis and the recommendations for care.
The incoming clinical fellow has a good grasp of indications for surgery and the appropriate work-up.
The incoming clinical fellow has a good grasp of alternatives for treatment, and areas of controversy or lack of consensus.
The incoming clinical fellow demonstrates proficiency in postoperative patient care.
The incoming clinical fellow demonstrates ability to recognize the early signs of the development of complications.
The incoming clinical fellow demonstrates ability to initiate appropriate investigations, and to respond with appropriate interventions.
The incoming clinical fellow understands postsurgical follow-up appropriate to the disease and proper surveillance.
The incoming clinical fellow has the clinical maturity to identify features of the potentially critically ill patient, to triage to the appropriate level of care, and to seek senior help for the problem in a timely manner with clear communication.
Academia and scholarship
The incoming clinical fellow has a genuine interest in academic projects.
The incoming clinical fellow has a healthy curiosity in understanding the underlying mechanisms.
The incoming clinical fellow has motivation to advance the scientific basis of the field.
The incoming clinical fellow is familiar with recent publications in his or her field of advanced training.
The incoming clinical fellow displays self-initiative in conducting clinical research.
The incoming clinical fellow is aware of and eager to meet deadlines for academic projects.
The incoming clinical fellow is able to compile and analyze data.
The incoming clinical fellow is able to present the salient findings of a study clearly.
The incoming clinical fellow demonstrates understanding of research protocol design.
The incoming clinical fellow demonstrates understanding of basic statistics.
The incoming clinical fellow has a good grasp on the fundamentals of preparing an abstract or manuscript.
The incoming clinical fellow is capable of writing a cohesive manuscript.