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Who Selects Obstetrics and Gynecology as a Career and Why, and What Traits Do They Possess?

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1. Introduction

As the title implies, this chapter concerns the traits of students who select obstetrics and gynecology (OB/GYN) as a career, and the various factors which attract or inhibit them from entering a residency. Various professional organizations, medical students, residents and authors have differing opinions whether OB/GYN is considered a primary care residency, or a core surgical specialty (Indyk et al., 2011; Jacoby et al., 1998; Laube & Ling, 1999; McAlister et al., 2007). The reader needs to decide which definition is preferred. Regardless of the choice, the vast majority of these data can be applied to either definition. Although almost all studies collect data about OB/GYN vs. just obstetrics, these data can be applied to both designations. Finally, all data are gathered from the US unless otherwise indicated.

2. Personality traits of students and residents

There are numerous studies which examined the traits of students who enter the various medical specialties. This section will compare traits of students who desire to enter an OB/GYN residency with those who prefer another primary care residency, or a surgical residency. Specialties which are primary care are typified by a continuity of patient care and include OB/GYN, Family Medicine (FM; also known as Family Practice), Internal Medicine (IM), and Pediatrics (PED). Surgery (SURG) is not a primary care specialty, but along with FM, IM, PED and OB/GYN, SURG is considered a specialty that has a non-controllable lifestyle.

Obstetrics and gynecology, FM, IM, PED, and SURG can be contrasted with those specialties which are considered as having a controllable lifestyle, e.g., radiology, ophthalmology, pathology, and anesthesiology. A controllable lifestyle specialty is characterized by the physician controlling the number of hours spent on professional duties, leaving more time for personal activities. Increasingly, students are selecting residencies with a controllable lifestyle (Dorsey et al., 2005; Schwartz et al., 1990, 1989).

2.1 Medical students

In the 1970s, McGrath and Zimet (1977) studied the personality traits of male and female students vs. their specialty choice. Women were found to be more self-confident,

autonomous and aggressive than men; whereas men displayed more nurturance than the normal population. Because females were the minority of medical students before and during the 1990s, it was postulated they had to be self-confident and aggressive in order to compete with their male peers.

In the 1980s, students entering medical school and considering OB/GYN were least depressed, highly motivated and exhibited feminine vs. masculine traits. They also exhibited large degrees of neuroticism, social anxiety, and public self-consciousness (Zedlow & Daugherty, 1991). By the 2000s, neuroticism, conscientiousness, openness, and agreeableness were prominent in students entering OB/GYN (Markert et al., 2008). Other studies in the 2000s, using various survey instruments, examined other medical student traits which influenced residency selection. Women who desired to enter an OB/GYN residency had the following traits in significantly greater amounts than men; sociability, a fondness for demanding and difficult work, agreeableness, conscientiousness, extraversion, openness, persistence, cooperativeness, and being reward-dependent. In contrast, men were significantly more aggressive/hostile, impulsive and sensation-seeking (Hojat & Zuckerman, 2008; Maron et al., 2007; Vaidya et al., 2004). Females exhibited slightly more neuroticism/anxiety than males when compared with other primary care specialties and SURG. On a positive note, male or female students entering into OB/GYN had the lowest neuroticism/anxiety tendencies (Hojat & Zuckerman, 2008; Maron et al., 2007).

In 2002, Borges and Savickas wrote a seminal paper reviewing studies, using the Myers-Briggs Type Indicator or the Five-Factor Model of Personality, on the personalities of students selecting the various medical specialties. Students entering an OB/GYN residency were extroverted, sensing-thinking-judging, highly conscientious, and achievement oriented. These students were less open to new experiences and less agreeable. When compared to students entering FM, OB/GYN students were less sympathetic, trusting, cooperative, and altruistic. However when compared to students entering IM or PED, the OB/GYN students were not as stiff, skeptical, extroverted, or neurotic, but were more conscientious and empathetic. Students entering SURG were much more open to new experiences and were more extroverted than those in primary care specialties.

The same trends were seen when the study by Doherty and Nugent (2011) found success in medical school was best predicted by a student who was conscientious and sociable. A survey of Swiss students affirmed the above and showed female students were more helpful, conscientious, and had greater intrinsic motivation than the males who expressed greater degrees of independence, decisiveness, and a desire for income and prestige. These personality differences showed females preferred specialties with a high degree of patient contact (e.g., OB/GYN), vs. males who were more interested in high-tech, instrument-driven specialties such as SURG (Buddeberg-Fischer et al., 2003).

Student academic achievement is another trait that influences residency selection. Jarecky and colleagues (1993) found that between 1964 and 1991 students who were elected into Alpha Omega Alpha (A US-based medical school honorary that includes only the very top students.) increasingly selected controllable lifestyle residencies, thereby reducing opportunities for students in the bottom 10% of their class from entering those residencies. Comparing data from 1964-1979 to 1980-1991, the number of top students who entered controllable lifestyle residencies increased from 21% to 36%, whereas students in the bottom

10% of their class who entered FM increased from 8% to 40%. Fortunately, for students entering OB/GYN, the trend was reversed with the number of top students increasing from 5% to 11% during the 1964-1979 to 1980-1991 timeframes. Conversely, the bottom 10% of students entering OB/GYN residencies fell from 10% to 5%, respectively.

Myles & Henderson, II (2002) found that students who failed Step I of the United States Medical Licensing Examination (USMLE; given at the end of the two basic science years of US medical education) were likely to fail the National Board of Medical Examiners (NBME) OB/GYN comprehensive exam given at the end of an OB/GYN clerkship. Thus, students who score at or below the 25th percentile on the USMLE Step I should be identified as in need of increased observation and training in the OB/GYN clerkship. This will help ensure a successful outcome and increase the potential number of students who may select an OB/GYN residency (Myles & Henderson, II, 2002). For students who had already indicated a prior interest in OB/GYN, it seems likely that earning a poor score on the NBME OB/GYN exam would discourage them from selecting an OB/GYN residency.

One undesirable trait, Machiavellianism (i.e., someone who avoids identifying with another's point of view, settles for less than the ideal, and isn't concerned for conventional morality), was found in 15% of students from four U.S. medical schools. (Merrill et al., 1993). Students who express this trait are authoritarian, shift blame to others when they have failed a patient, view the medical record and laboratory profile as more important than seeing the patient as a person, and find undiagnosable illnesses and unpredictable patient outcomes as offensive. Thankfully, students who select primary care specialties like OB/GYN (characterized by high patient-contact), exhibited the fewest Machiavellian traits; whereas, the low patient-contact specialties, e.g., anesthesiology, radiology and SURG exhibited the most Machiavellian traits. However, when the decreasing amount of empathy being expressed by students (cf. section 5) is combined with the emotional detachment characteristic of a Machiavellian, OB/GYN residents and faculty must always maintain highly professional, competent, patient/physician interactions (Konrath et al., 2011).

2.2 Practicing OB/GYNs

Female OB/GYNs from 1950 to 1989 were surveyed and their traits contrasted against female physicians in all other specialties (Frank et al., 1999). Like other female physicians, female OB/GYNs had equivalent amounts of home stress, and the same marital status and numbers of children. In contrast to other female physicians, women OB/GYNs spent less time on childcare, cooking and housework. They were more likely to be in a group practice and worked more clinical hours. Female OB/GYNs also had more on-call nights where they slept less, and were more likely to report they worked too much and had increased amounts of work-related stress. Female OB/GYNs counseled and screened more patients than most other female physicians because of their increasing role of having to act as a primary care physician. Their counseling and screening role was especially true for topics concerning breast cancer, hormone replacement therapy, HIV prevention, and the need for PAP smears and colonoscopies. It was revealing that traditional residency training inadequately prepared the residents for the realities of providing a substantial amount of non-OB/GYN primary care for many of their patients (Frank et al, 1999).

3. What do patients prefer in their OB/GYN?

There has always been a controversy over male physicians treating gynecologic and obstetric issues (Balayla, 2010). Even today there are considerable differences in the OB/GYN gender preference in patients within different age ranges. The shifting patient demographics, especially the increasing number of post-menopausal women, combined with the recent large influx of female OB/GYNs, has resulted in preference changes over the decades. In 1970, only 9% of medical students were female. This had increased to 45.7% by 2001 (as cited in Table 1; Johnson et al., 2005). From 1980 to 2000, the number of practicing female OB/GYNs increased from 12% to 32%. Between 1989 to 2002, the number of female OB/GYN residents rose from 44% to 74% (cf. refs. in Gerber & Lo Sasso, 2006). Projections indicate an expanding population of female OB/GYNs in the 2010s and beyond. For example, in 1980, females constituted 27.8% of the OB/GYN residents, and 12% of the physicians in practice. By 2001 those numbers increased to 71.8% and 39%, respectively (as cited in Table 1; Johnson et al., 2005).

It is clear from the studies cited below, that good bedside manner and professionalism are extremely important to patients. Plunkett and Midland (2000) found that "well-educated" Caucasians (from Chicago, Michigan, US) placed an emphasis on communication skills when selecting an obstetrician. In contrast, patients who were to undergo surgery decided the surgical reputation of the OB/GYN was more important than bedside manner. Over 90% of either set of patients wanted the OB/GYN to be responsive to their needs, exhibit professional behavior, and to be confident and knowledgeable. Only 38% of the patients thought that OB/GYN gender was an issue, and even fewer (15%) took the age of the OB/GYN into consideration. Of the 38% of patients who considered OB/GYN gender as important, 96% wanted a female obstetrician and 84% wanted a female gynecologist.

Plunkett et al. (2002) performed another study in Chicago, and included African-Americans, Hispanics, and individuals with varied levels of education. Less than one-half of the women (42%) considered OB/GYN gender as important. When seeing an obstetrician, bedside manner, office location, referral by another physician, and recommendations from friends and family were the four factors considered most important at 57%, 45%, 40% and 35%, respectively. When selecting a gynecologist, office location, recommendations from family and friends, bedside manner, and referrals by other physicians were the top four ranked attributes at 55%, 48%, 47% and 43%, respectively. When specifically asked if they preferred a male or female OB/GYN, 52.8% wanted a female, 9.6% wanted a male, and 37.6% had no preference.

There were similar findings in New York City, where 58% of patients preferred a female OB/GYN, while 7% wanted a male and 34% had no preference (Howell et al., 2002). Only 10% of patients thought the gender of their OB/GYN impacted their care. These patients thought female physicians would naturally understand more about "female issues" than would males. When asked to rank order important attributes patients desired in an OB/GYN, bedside manner, communication skills, and technical expertise were the dominant factors for selecting an OB/GYN — or leaving if they lacked any of these skills (Howell et al., 2002).

In a large study in Michigan, Mavis et al. (2005) found that OB/GYN gender mattered most to patients who were; underrepresented minorities, unmarried, less educated, and younger

than 27. When asked what OB/GYN traits the patients wanted, the top five ranked selections all dealt with interpersonal communication; the OB/GYN is respectful, listens to me, explains things clearly, is easy to talk to, and is caring. These traits were considered more important than clinical expertise. Zuckerman et al. (2002) found striking gender preferences associated with patient religious practices in Brooklyn, New York. Female OB/GYNs were preferred by 56% of Protestants, 58% of Catholics and Jews, 74% of Hindus and 89% of Muslims. Yet patients indicated no gender difference in the quality of the care.

Johnson and colleagues (2005) found that in thirteen different sites in Connecticut, two-thirds of the patients had no gender preference for their OB/GYN, 6.7% preferred a male, and 27.6% preferred a female. Furthermore, the gender or age of the OB/GYN had no impact on the quality of care they received. The most important OB/GYN characteristics the women desired were an OB/GYN who was; attentive to their needs (69%), experienced (68%), knowledgeable (62%), had good technical skills (56%), and was accessible (53%). It is interesting to note that attributes dealing with communication skills and bedside manner were not expressly mentioned by patients in the Connecticut study.

3.1 Gender preferences outside the US

In Ontario, Canada, Fischer and colleagues (2002) found that 75% of patients had no gender preference, and only 21% strongly felt they desired a female OB/GYN, while 4% wanted a male OB/GYN. Various patient characteristics had no bearing on gender preference, e.g., single, pregnant, those with a history of abortion, STDs or sexual dysfunction. In Israel, Piper and colleagues (2008) found that 60.3% of patients expressed no gender preference for their OB/GYN. Women who had children had a predilection to prefer female OB/GYNs. The important factors for Israeli OB/GYN selection were; professional demeanor (98.9%), showing courtesy (96.6%), and being board certified (92%).

Studies performed in Iraq and the United Arab Emirates (UAE; Lafta, 2006; Rizk et al., 2005), showed that a high percentage of patients, 79% and 86%, respectively, preferred a female OB/GYN. Only 8% of Iraqi and 1.6% of UAE women preferred their OB/GYN to be a male. In either country, the preference for a female OB/GYN significantly increased as the educational level fell. Very few women in either country had no gender preference. It was clear that socio-cultural and religious traditions played a very significant role in preferring a female OB/GYN. In the UAE study, Muslim women did not accept a male OB/GYN, even in the presence of a female chaperone, and especially during Ramadan (Rizk et al., 2005). Another prominent barrier to accepting a male OB/GYN was feeling greatly embarrassed if they had to be examined by a male. Many patients (69%) felt that female OB/GYNs had a greater awareness of female reproductive issues, were more compassionate, and better listeners than male OB/GYNs. Younger women had a stronger preference for female OB/GYNs than older women. It seems clear that younger, less educated Muslim women view OB/GYN gender as a gateway requirement to care.

Additional data from the UAE study reveals that women look for the same positive traits in an OB/GYN of either sex, as the other aforementioned studies. They want their OB/GYN to show professionalism by being responsive to their needs, caring, empathetic, displaying a good bedside manner, and being a skilled communicator. Secondarily, they want their OB/GYN to be knowledgeable, experienced, and technically competent (Rizk et al., 2005).

Racz et al. (2008) examined the acceptability of involving Ontario-based medical students in OB/GYN care in two different patient groups: ages 17-85 and secondary school students with an average age of sixteen. Twenty-two percent of the older patients preferred a female student, increasing to 55% in the younger patients. Overall, the greater number of intimate examinations a patient had experienced, the less of a preference she had for OB/GYN gender. When the patients were asked about the presence of medical students in the examination room, there were significant differences expressed by the two age groups. The older patients were more accepting of having medical students of either sex participate in their care (73%) than the younger patients (32%). Over 36% of the younger patients said it would be "very embarrassing" or "unbearable" for a male medical student to perform an intimate examination. Because male medical students were rejected by younger patients to a much higher degree than by the older patients, it is advisable for clerkship directors to forewarn male medical students that younger patients may not want them in the examination room.

In conclusion, although many women may prefer a female physician, it has been demonstrated that physician gender is often not the most important attribute under consideration when patients select an OB/GYN. Clearly, good bedside manner and communication skills are essential in establishing an effective doctor/patient rapport. This is often followed by technical expertise and a good medical reputation. Before the 1970s, most patients had little say in the gender of their OB/GYN, but with the rapidly increasing number of practicing female OB/GYNs, patients now have a greater freedom to make gender a selection preference. Therefore, to maintain an adequate patient population, it will become even more important for male OB/GYNs to practice good bedside manners and empathic communication skills, as well as having technical expertise.

3.2 The influence of media on gender bias

A unique study by Kincheloe (2004) clearly found a physician gender bias when he examined six popular women's magazines over an 18 month period; *Cosmopolitan, Fitness, Glamour, Good Housekeeping, Ladies Home Journal* and *Redbook*. Kincheloe found that female physicians were 20 times more likely to have an identifying photograph as compared to males. Women OB/GYNs were interviewed 47-80% of the time, and female physicians from all other specialties accounted for 31-57% of the articles. When pronouns were used to describe an OB/GYN, a negative connotation was used 92% of the time for male OB/GYNs vs. 17% for females.

In five of the six magazines reviewed, physicians had their quoted gender changed from neutral to reflect female-specific pronouns. The exception was if the physician was portrayed negatively, and then the physician was significantly more likely to be identified as male (Kincheleo, 2004). Since attitudes are shaped by what we see, hear and read, women who buy these magazines seem to be influenced, whether purposefully or subliminally, to acquire a negative bias toward male physicians, in general, and male OB/GYNs specifically. Patients, and the physicians who refer patients, must be reminded to tell their patients that OB/GYN choice should be based on professionalism and clinical skills vs. using gender as a main deciding factor.

4. What is the ideal obstetrics/gynecologist physician and mentor?

Carmel and Glick did a study in 1996 where physicians were asked to rank six attributes of a "good" doctor. The physicians placed the following descriptions in rank order from highest to lowest; humane to patients, has good medical knowledge and skills, is devoted to helping their patients, has a good working relationship with the staff, can research and publish, and are good at management and administration. Carmel & Glick (1996) concluded that the rank order of these attributes was in contrast to the duties needed to get promoted in academia, i.e., research, publications, administrative duties and spending less time with each patient. Therefore, the current academic "system" does not reward being a "good" doctor. Medical students, after starting their clinical rotations, have slightly different priorities as compared to practicing physicians. Students felt that knowledge and skills were the most important factors, followed by being humane, intellectually competent, honest, and reliable (Notzer et al., 1988). It is understandable for students to place knowledge and skills as the most important qualities since they were in the initial stage of their career.

In light of the above, and despite the pressured academic environment in which physicians work, the ability to teach and mentor is viewed as extremely important by medical students. Therefore, faculty and residents must maintain a high degree of professionalism/humanism while still being technically competent. The same is true for residents being taught by faculty. Although patient care must take first priority, 62% of OB/GYN residents say finding time to look for "teachable moments" on the collection and interpretation of critical information in emergent situations is vital to the education of students and residents. Over 90% say you must find time to teach procedures (Gil et al., 2009). Faculty agree to a greater degree than residents that they need to be an appropriate role model, to be enthusiastic about patient care, and teach evidence-based medicine. Although residents still feel these are important skills, they are more pressured for time than faculty and are less likely to express these traits because of time constraints (Johnson & Chen, 2006).

Regardless of time constraints under which faculty and residents are placed, students appreciate constructive criticism given in a timely manner. Students have some ability to self-assess their progress, but specific, descriptive, written feedback is best for increasing student learning (Stalmeijer et al., 2010). In this regard, medical students say the ideal attending physician should spend more than 25% of their time teaching, with at least 25 hours of teaching per week occurring during rounds. Residents and faculty need to stress the importance of the doctor/patient relationship and emphasize the social aspects of medicine so that the patient is seen as an individual rather than an illness. Finally, students feel the faculty need to have served as chief resident in order to be a successful teacher (Wright et al., 1998).

5. Empathy in the doctor/patient relationship

Numerous studies have shown empathic physicians are better at maintaining a good doctor/patient relationship. This makes the patients more relaxed, confident in their physician, compliant, and less likely to sue for malpractice (cf. refs. cited in Newton et al., 2008). Accordingly, the American Association of Medical Colleges and the Accreditation Committee for Graduate Medical Education have emphasized the importance of promoting empathy and professionalism in the curriculum. Displaying empathy is counter to the

natural tendency for medical students or physicians to distance themselves from disease and build an emotional detachment from the patient. Therefore, positive role models need to teach others how to deal with these conflicting emotions (Rosenfield & Jones, 2004).

Empathy is a multi-dimensional trait. Sociologists and psychologists break it down into two main categories; role-playing (cognitive) empathy and vicarious (innate) empathy (Hojat et al., 2009). There is an ongoing debate whether empathy is cognitive or emotional/vicarious (Spiro, 2009). Hojat defines cognitive empathy as, "Empathy is a predominately *cognitive* (rather than emotional) attribute that involves the *understanding* (rather than feeling) of experiences, concerns and perspectives of the patient, combined with a capacity to *communicate* this understanding." (Note: The words in italics and parentheses are part of the definition proposed by Hojat et al., 2009.) Vicarious empathy is defined by Mehrabian et al. (1988) as, "An individual's vicarious emotional response to perceived emotional experiences of others." In other words, vicarious empathy arises out of our own feelings and reactions; it happens when "you and I" becomes "I am you" or "I could be you" (Spiro, 2009).

Recently, a scale measuring cognitive empathy, the Jefferson Scale of Physician Empathy (JSPE), developed by Hojat and colleagues, is in wide use and shows that women have slightly higher JSPE scores than men (cf. ref. 6 in Hojat et al., 2002). The JSPE shows there are equivalent declines in cognitive empathy in male and female students as they progress through undergraduate medical school, with the largest drop occurring after completion of the first clinical year of training (Hojat et al., 2009). Specialties like FM, IM, PED and OB/GYN are "people-oriented", and students who entered these specialties had higher JSPE scores than those selecting "technology-oriented" specialties like SURG, radiology, anesthesiology, and pathology (Hojat et al., 2009).

Hojat and colleagues (2005) compared student JSPE scores, recorded in their first clinical year of training, to the clerkship director's subjective rating of their empathic behavior after their first year of residency. The results showed that residents who had higher JSPE scores as junior medical students were rated by the clerkship directors as being more empathetic than juniors who had lower JSPE scores. This implied that empathy remained stable during the senior year of medical school and into the first year of residency.

Hojat et al. (2002) also examined physician cognitive empathy which showed no significant gender differences. Psychiatrists had JSPE scores that were equivalent to PED, IM, and FM physicians. However, psychiatrists had significantly larger JSPE scores than OB/GYN, SURG, radiology, anesthesia and orthopedic physicians. For specialties with continuity of patient care, IM had the largest JSPE score, followed in rank order by PED, FM and OB/GYN. However, there were no significant differences in JSPE scores between these four specialties.

5.1 Vicarious/innate empathy in medical students

As previously described, empathy can be defined from an emotional vs. a cognitive standpoint. The Balanced Emotional Empathy Scale (BEES), developed by Dr. Albert Mehrabian (1996), was used by Newton and colleagues (2007; 2008) for a seven-year longitudinal study of undergraduate medical students at the University of Arkansas for Medical Sciences. Since the BEES is gender sensitive, the data revealed significant gender differences with women having higher BEES scores than men. Newton et al. (2007, 2008)

separated the data into males and females who desired to enter "core" specialties which have continuity of patient care, i.e., IM, FM, OB/GYN, PED, and psychiatry or "non-core" specialties without continuity of patient care, e.g., radiology, pathology, emergency medicine, anesthesiology and SURG. Significant drops in vicarious empathy occurred in both sexes after the completion of the first and third years of undergraduate medical school. Those students who selected core specialties had a smaller drop in BEES scores compared to those whom selected non-core specialties. Females that selected core specialties had the smallest overall drop in BEES scores, while females selecting non-core specialties had the greatest overall decrease, with their BEES scores approaching the naturally lower BEES scores of males. These data suggest that females who desire to enter male-dominated specialties may be taking on the persona of the less empathic males (Newton et al, 2008).

When the BEES data from the final year of medical school were analyzed with respect to residency choice, students who entered core residencies had significantly higher BEES scores than students who entered non-core residencies (Newton et al., 2007). The average BEES score for the general population is 45. The top four residency BEES scores were OB/GYN (52.21), psychiatry (47.68), PED (46.30) and FM (39.00). The other core specialty, IM, had a BEES score of 33.02, and was ranked 9th out of 16 specialties. (All specialties with an $n \geq 8$ students were considered as providing valid data.) In relation to the general population, the top four specialties had "average" vicarious empathy, while IM was "slightly low". Surgery had "moderately low" vicarious empathy (19.95), while plastic surgery (12.00) and neurosurgery (7.25) had "very low" empathy. However, the lowest two specialties did not have eight or more students entering the residencies over a seven-year period, so interpretive caution must be used since the aggregate BEES score may not be a true reflection of the vicarious empathy shown by this low number of medical students.

5.2 Empathy in non-US countries

Researchers outside of the US have used the JSPE to measure cognitive empathy. There are many similarities to the US data, but some differences are revealed. Italian physicians have lower empathy scores than US physicians and no gender differences were discovered. The JSPE scores for surgeons were no different from all other specialties, and it was suggested that all differences could be attributed to cultural differences (Di Lillo et al., 2009). In South Korea, no gender differences were found, and Korean student cognitive empathy was less than US empathy. It was proposed that the Korean empathy was lower because of the more authoritative role Korean physicians assume, combined with the less assertive nature of their patients (Roh et al., 2010). Female Japanese students had significantly larger JSPE scores than males. However, the overall mean JSPE score was significantly lower than those for US students. This difference may be cultural, since the Japanese show fewer emotions via facial expressions or gestures (Kataoka et al., 2009).

5.3 Maintaining empathy

Within the US, there are decreases in both cognitive and vicarious empathy as medical students progress through their undergraduate medical education. Various interventional measures were used to try to ameliorate empathic deterioration, but the results were variable, and if successful, empathic increases were usually short-lived. (cf. refs. in Newton

et al., 2008). Newton (2008) proposed that the loss of innate empathy makes it difficult to maintain cognitive empathy. Thus, interventions to improve empathic behavior have to be taught on a repeated basis. Given that students who enter an OB/GYN residency have the highest BEES score, i.e., they better maintain their vicarious empathy than students entering other specialties, it is possible that interventions to improve empathic behavior may have a greater impact on these students as compared to those who enter other residencies. However, this suggestion must be weighed against cognitive empathy data that show students desiring an OB/GYN residency have JSPE scores which lie midway in the values for all specialty choices. It may be more desirable for students to have OB/GYN JSPE scores ranked near the top of the specialties, since having both high vicarious and cognitive empathy scores suggests a better outcome for interventions to improve empathy.

All students and physicians, whether in OB/GYN or not, must walk a fine line between being too emotionally attached to patients or being perceived as too aloof and emotionally detached. All humans are naturally repulsed by illness and death and tend to draw away from it (Rosenfield & Jones, 2004). Yet, physicians have selected a profession that deals with what is naturally repulsive. Therefore, it seems only natural that emotional conflicts arise. It is all too easy for a student or physician to depersonalize patients and transform them into a disease, or a cold list of laboratory numbers or physical findings in a medical record (Carmel & Glick, 1996). The increasing use of ever more sophisticated technology makes the depersonalization process all the more pernicious. Depending solely on "concrete numbers and images" hinders the ability to build a meaningful doctor/patient rapport. Spiro (2009) states, "Listening can create empathy – if physicians remain open to be moved by the stories they hear."

Despite decreases in student empathy as they progress through medical school, there are a number of suggested interventions to help improve empathy and, ergo, patient satisfaction. Mindfulness-based stress reduction, self-awareness training, Balint groups, and meaningful experience and reflective practice discussions have been suggested (cf. refs. in Neumann et al., 2011). Rosenfield and Jones (2004) suggested the dilemmas that erode empathy can be broken down into four different areas, each with a given solution:

1. "pathology vs. health" can be balanced with "get to know the whole person"
2. "not knowing vs. knowing too much" with "tolerate ambiguity and remain curious"
3. "vulnerability vs. denial" with "acknowledge the developmental stages you go through"
4. "reaction vs. inaction" with "know when to act"

Success in maintaining empathy depends on having faculty and residents exhibiting and promoting empathic behavior so that they can be role models for the students. Without a doubt, students entering into the clerkships will take on the persona of those to whom they are exposed.

6. The stability of the student and resident population selecting OB/GYN

Regardless of the country examined, most medical students will change their mind about what specialty they want to enter. This occurs between the times when they first matriculate to when they finally select a residency program. The exceptions are those students who are

100% sure they want to enter a particular specialty. In those rare cases, the cons of entering a specialty do not play a significant role in their decision making process. An eighteen-year longitudinal study (1975-1992) at an eastern US medical school revealed only 19% of students who showed an initial interest in OB/GYN, actually entered an OB/GYN residency program. The students who left OB/GYN, usually went into IM (19%) or SURG (17%). In comparison to OB/GYN data, 40% of students stayed with IM, 39% for FM and 22% for PED (Forouzan & Hojat, 1993). Compton and colleagues (2008) sampled the graduating class of 2003 at fifteen US medical schools, and found that at matriculation, 40 out of 942 students indicated an interest in OB/GYN. Of those, ten students (25%) placed into an OB/GYN residency, four (10%) changed their mind after going through the OB/GYN clerkship, five (13%) switched to another primary care residency and twenty-one (53%) switched to a non-primary care residency. In contrast to the OB/GYN data, 15% stayed with PED, 17% with IM and 23% with FM. In all of these cases, those who decided not to enter PED, IM, or FM also switched to non-primary care residencies.

Jeffe et al. (2010) looked all US graduates from 1997 to 2006, and found that the number of students desiring a primary care residency dropped within that time frame. Those desiring OB/GYN remained the most stable, but with low student interest. The numbers of graduates entering OB/GYN dropped from 8.2% to 6.1%. IM dropped from 15.7% to 6.7%. FM dropped from 17.6% to 6.9%, and PED dropped from 10.2% to 6.6%. Of those who entered an OB/GYN residency, 22.7% were male and 77.3% were female. In the UK, from 1974 to 2002, the number of male students who entered OB/GYN dropped from 2.6 to 1.1%. Meanwhile the female percentage dropped from 4.6 to 2%. Overall the number of UK graduates entering into OB/GYN dropped from 3.2 to 2.0% (Turner et al., 2006).

The gender disparity among students interested in OB/GYN was examined by a number of researchers. Gerber et al. (2006) reports that whereas the number of graduates entering OB/GYN residencies remained relatively stable from 1985 to 2000 (6% to 8%), the number of females practicing OB/GYN increased from 12% in 1980 to 32% in 2000. Accordingly, the number of female residents increased from 44% to 74%. Although the number of female OB/GYNs is steadily increasing, it must be remembered that the majority of patients have no gender preference in selecting an OB/GYN, and that only 14.7% of respondents in the study by Johnson and colleagues (2005) thought female OB/GYNs were better physicians than their male counterparts.

An unexpected consequence of the gender shift is that female OB/GYNs tend to work fewer hours than their male counterparts, and are only 85% as productive as full-time OB/GYNs (Pearse et al., 2001). This led the authors to conclude that increasing numbers of female OB/GYNs will lead to an aggregate decrease in OB/GYN productivity. This is occurring at a time when there are increasing numbers of women of all ages in the US, and that a workforce shortage would occur by 2010. (At the time this chapter was written, it's too early to tell if the prediction has come to fruition.)

6.1 How do US students select an OB/GYN residency and what attracts them?

Before the question posed by the section heading can be answered, we must first consider what factors medical students use to select a residency. It appears that for many students the selection of a specialty is somewhat haphazard. Allen (1999) found that UK students are

given improper advice on what it means to be an MD. Counseling students on specialties is spotty and often anecdotal. There are few good role models (especially female) to emulate, and faculty advice rarely takes into account medical student abilities and aptitudes. Students are not encouraged enough and are given menial tasks to perform while on the clerkships. This discourages them from entering a particular specialty. Indeed, often a specialty choice is selected via the rejection of specialties until a few remain which are less onerous (Allen, 1999; Kassebaum & Szenas, 1995).

There are a large number of studies which have examined the reasons why entering medical students want to practice OB/GYN, especially if OB/GYN is considered a primary care specialty vs. a surgical subspecialty. Studies reveal that most students who enter into OB/GYN are from a cadre who had expressed a desire to practice in primary care. The remainder of this section summarizes these data, since many studies reveal similar findings.

Prior to the 1980s many of the top students selected IM or SURG residencies. This has steadily shifted to where top students desire residencies that have a controllable lifestyle, e.g., radiology, anesthesiology, pathology, vs. those specialties that are considered to have an non-controllable lifestyle, e.g., IM, FM, OB/GYN (Jarecky et al., 1993; Schwartz et al., 1990). Because of this shift, many students who selected non-controllable lifestyle, primary care residencies tend to have lower undergraduate science grades and lower medical school entrance exam scores, parents with a lesser amount of education, and a rural upbringing. Students who desire a primary care specialty usually state so upon matriculation, and are usually female, older, and a minority. These students have performed a greater amount of community service than the average applicant, espouse pro-social values, appreciate a broad scope of practice, and desire to ensure patients are counseled and educated on health-related issues (Bland et al., 1995; Owen et al., 2002; Reed et al., 2001; Schieberl et al., 1996). Schools which emphasize the importance of primary care, or whose mission is to produce primary care physicians, naturally have more graduates in OB/GYN, IM, FM and PED (Martini et al., 1994).

With special reference to OB/GYN, a series of seven studies, spanning 1991-2007, examined what influenced medical students to enter or reject an OB/GYN career (Fogarty et al., 2003; Gariti et al., 2005; Hammoud et al., 2006; McAlister et al., 2007; Metheny et al., 1991; 2005; Schnuth et al., 2003). Highly rated attractors common to five of the studies were; the student being female, having a positive OB/GYN clerkship experience, as well as being encouraged during the clerkship. (This latter finding was also found to be extremely important by Blanchard et al. (2005).) Expressing a strong desire to practice OB/GYN when entering medical school is also a good predictor. Also viewed as important attractors; were having continuity of patient care, seeing healthy patients, being devoted to patient education, disease prevention, and having strong opinions about reproductive health. Being exposed to a positive role-model was a variable attractor among these studies and influenced some students more than others.

The above seven studies also mention factors that discouraged students from considering OB/GYN. The issue of a non-controllable lifestyle was a variable factor, i.e., it mattered a great deal for some students, but was found to be of little or no concern for others. However, if a student was clearly devoted to entering OB/GYN, the issue of a non-controllable lifestyle, although known by the student, was not a significant detractor. It was very clear

that a negative OB/GYN clerkship experience strongly deterred students from entering an OB/GYN residency. Some students felt a patient population restricted to women and/or female reproductive issues did not have a large enough variety of diseases and patients to provide job satisfaction. McAlister and colleagues (2007) found that Asians, Pacific Islanders, and students with no medical school debt, did not consider OB/GYN as a career. Two studies found that male students did not enter OB/GYN because of the perception that patients preferred a female OB/GYN, and/or, there were too many females in OB/GYN residencies so that males would constitute a minority (Hammoud et al., 2006; Schnuth et al., 2003).

Factors that were rated as neutral, were little concern over salary and medical school debt. The cost of malpractice insurance was an issue to a few students, but not a deciding factor if the person was determined to enter an OB/GYN career. Once again, those who were sure about entering an OB/GYN residency did not let the perceived detractors alter their choice. The opposite was true for those who had an initial interest in OB/GYN but were not resolved to practice it (Fogarty et al., 2003; Gariti et al., 2005; Metheny et al., 1991).

In 2005, both Blanchard and colleagues and Nuthalapaty et al. determined which non-medically-related factors were most important for students selecting an OB/GYN residency. There were similarities found in both studies. Many of the highly desirable residency traits were related to the "atmosphere/collegiality" of the residency program. For example, the degree of camaraderie between the residents was very highly rated, as well as how well the faculty cared about, and responded to, resident concerns. Faculty accessibility, commitment to resident education, and geographic location also played an important role for either gender. Females rated having family and friends in the area, the amount of primary care offered by the program, and the resident gender mix as significantly more important than the male's ratings. Males tended to view hospital facilities as more important than females. Males also rated salary and moonlighting opportunities as significantly more important than females, but the rank order of these two factors was near the bottom of the list, indicating that the other aforementioned factors played a much larger role in the decision making process. Results from a 1990 study by Simmonds and colleagues showed the same results. This demonstrated that what students are looking for in a residency has remained stable over a fifteen year period.

6.2 How do students in other countries select an OB/GYN residency?

A Canadian study found residency selection results that were similar to the US students, i.e., having OB/GYN as their first choice when entering medical school, being female, and desiring a narrow scope of practice were strong determinants for an individual to enter OB/GYN. Like US students, being exposed to a good clerkship experience and excellent mentors were very important influences for deciding to practice OB/GYN (Scott et al., 2010). It is important to note, that good mentors in other specialties can draw students away from OB/GYN (Bédard et al., 2006).

In non-North American countries, the reasons to enter OB/GYN vary. In Switzerland, being female, having an in initial desire to enter OB/GYN, being driven to succeed and being "people oriented" were positive attractors (Buddeberg-Fischer et al., 2006). In Germany, 10% of students are interested in OB/GYN because of its positive image, the ability to have a

private practice and the variety of illnesses encountered (Kiolbassa et al., 2011). In the UK, having positive, active learning experiences in an OB/GYN clerkship was very important. Conversely, having a poor clerkship experience was a strong deterrent. Exposure to positive role models and having a good mix of medicine and surgery during the rotation were positive factors. Early career advice helped to keep students interested in OB/GYN (Tay et al., 2009). In Jordan, being female, the intellectual content of the specialty, and feeling confident in the specialty, were determining factors to enter OB/GYN (Khader et al., 2008). In Nigeria, material rewards, societal appreciation, and a quick response of patients to treatment, were motivating factors. Like other countries, positive, native, faculty role-models also inspired students to enter OB/GYN (Ohaeri et al., 1994).

6.3 Stability within residency programs

From 1997 to 2001, there was a 3.6% attrition rate for American OB/GYN residents, with female OB/GYNs 2.5 to 5 times more likely than males to leave because of family issues related to their spouses. Females who did leave an OB/GYN residency program were only half as likely to change to a different specialty (Moschos & Beyer, 2004). Most physicians left the OB/GYN residency during or right after their first postgraduate year (PGY) of training (63%), with 29% leaving in PGY2, and only 5% and 3% leaving in PGY 3 and 4, respectively. Gilpin (2005) had similar results with a resident attrition rate of 4.5% in 2003. Most residents left an OB/GYN program in PGY1 (49%), with 34% leaving in PGY2, 13% in PGY3, and 4% in PGY4. Of those who left, 60% went into another OB/GYN residency program, while equal numbers of the remainder selected controllable or non-controllable lifestyle residencies.

More recently, McAllister et al. (2008) looked at US data from 2001 to 2006. Of the 1,066 residents entering an OB/GYN program, 21.6% did not finish for various reasons. Of those who didn't finish, 58.3% switched to a different OB/GYN program, 32.9% left for another specialty, and 8.7% completely withdrew from graduate medical education. Over 90% of the females remained in OB/GYN, while only 41% of males stayed in an OB/GYN program. Residents that switched to a different specialty most often selected FM (18%), anesthesiology (15%), emergency medicine (9%), or PED (6%). Those who did not complete their residency training at their initial site were most often older, Asian, an underrepresented minority, or an osteopathic or international medical school graduate.

Overall, the trend to change OB/GYN residency programs or to leave OB/GYN altogether appears to be increasing. ACGME statistics show that from 1997 to 2005, the rate of departure has increased from 3.8% to 5.1% (cf. refs. McAlister et al., 2008). However, the likelihood of changing from the non-controllable lifestyle of an OB/GYN to a controllable lifestyle varies according to each study (Gilpin, 2005; McAlister et al., 2008; Moschos & Beyer, 2004).

6.4 What are specialty preferences in non-US countries

Table 1 shows there are considerable differences between choices in primary care and SURG in various countries. In all countries, except for Israel and Kenya, the percentage of females entering OB/GYN is larger than the male demographic. Iraq, Brazil and the UK have the greatest percentage of female OB/GYNs (19.1 - 9.6%). Norway, Turkey and Israel have <4%

of female students entering OB/GYN. Brazil, Israel and Kenya have the highest percentage of males entering OB/GYN (16 - 7.3%). Iraq, Turkey and Norway have the lowest numbers of males entering OB/GYN (1.5 - 1.1%).

Table 1 also shows the percentage of students entering into FM, IM, PED and SURG varies by country. More medical students enter one of the above specialties vs. OB/GYN for all countries examined. The IM specialty was most frequently selected in four countries; Brazil, Iraq, Israel and Switzerland. Surgery was most popular in the UK and Kenya, while PED was more popular in Turkey, and FM in Norway.

Country	OB/GYN		FM		IM		PED		SURG	
	M	F	M	F	M	F	M	F	M	F
Brazil (1)	16	16			18	23	14	30	15	6
Iraq (2)	1.5	19.1			20.6	8.8	16.2	8.8	25	0
Israel (3)	9.9	1.7	6.2	4.9	14.6	3.7	11.3	5.4	4.2	0.3
Kenya (4)	7.3	4.4	3.4	1.6	7.8	4.4	12.6	10.4	27.3	7.5
Norway (5)	1.1	3.2	48.1	46.4	10.2	9.1	2.0	3.6	9.8	8.1
Switzerland (6)	1.7	9.6	7.9	9.3	23.7	24.6	4.6	6.3	22.8	4.6
Turkey (7)	1.4	3.1	3.5	0.3	2.0	2.4	6.7	10.2	3.6	0.6
UK (8)	5	10					8	15	28	10

M = Male; F = Female; (1) Castro Figueiredo et al., 1997; (2) al-Mendalawi, 2010; (3) Reis et al. 2001; (4) Mwachaka & Mbugua, 2010; (5) Gjerberg, 2002; (6) Buddeberg-Fischer et al., 2006; (7) Dicki et al., 2008; (8) Lambert & Goldacre, 2002

Table 1. Percentages of students or residents entering into a specialty.

7. Why do residents and practicing OB/GYNs leave the profession?

Job satisfaction plays a large role in any occupation. It is then no surprise that physicians satisfied with their jobs will be more productive, get along better with their colleagues, and have a better mental attitude about job challenges and life in general. This section will explore job satisfaction among OB/GYN residents, faculty and those in private practice, and provide advice on how to enhance the OB/GYN experience.

Before job satisfaction is considered, generational differences on how people think and behave need to be taken into account, since each generation has an opinion on how the other generations behave. Drawing heavily from the publication by Phelan (2010), the "Silent Generation" (born between 1925 to 1942) is characterized as having heavily bureaucratic workplaces with clearly defined leaders, rules, policies and procedures. These individuals postponed gratification, are loyal to their jobs, detail-oriented, and respectful of the hierarchy. The "Baby Boomer Generation" (1943-1961) believes that vigorous competition is necessary to advance your career. They equate "work ethic" with their own "worth" to society and therefore, are driven and work long hours. The Baby Boomers miss many of their children's "firsts" and feel if they "pay their dues" they will eventually be rewarded with advancement.

"Generation X" (1962-1981) usually grew up in homes where both parents worked, or from single-parent homes. They are self-reliant, independent, resourceful and accepting of change.

They expect a balanced lifestyle, and are currently redefining the parameters of a "work week". These individuals saw the advent of personal computers and email. "Generation Y" (1982-2000) people are comfortable with technological advances and expect them to occur at ever increasing rates. *Importantly, GenYers are in a "continuous state of partial attention" due to growing up with cell phones, tweeting, texting, surfing the web and instant communication.* Accordingly, GenYers have difficulty filtering what they "say" because of the increasing amount of electronic vs. face-to-face communication, and this makes expressing empathy difficult (cf. section 5). The lack of verbal communication skills will contribute to their inability to form a trusting physician/patient bond. Furthermore, the speed of obtaining information is more important than dealing with the details, and where the information fits into the "big picture". Since data are only a web-search away, they do not feel the need to memorize large amounts of information. They see no need for knowing the history of a given subject.

For the medical profession, the infusion of Generation X and Y students and residents means they place a greater priority on lifestyle than the previous generations, and seek to have a more balanced work and home life. Thus, physicians born before Generation X and Y perceive these medical students and residents are not as dedicated to their work. Conversely, GenXers and GenYers see the Silent Generation and Baby Boomers working long hours, having too many demands on their time and having a limited or poor work-life balance. In order to maintain job satisfaction for all generations of OB/GYNs, each generation has to understand the other, and make attitudinal adjustments. It is vitally important to realize that although GenXers and GenYers do not desire to work as many hours as previous generations, they are still very dedicated to learning and being proficient. These individuals seek practice settings which provide them with professional satisfaction as well as personal growth. The GenXers and GenYers who seek flexibility in their work should not be considered as lazy or less committed (Phelan, 2010).

When examining all specialties, it is unfortunate that OB/GYN physicians are some of the least satisfied. Leigh and colleagues (2002) and Kravitz et al. (2003) found that only 34% of OB/GYNs were satisfied with their job, while 24% were dissatisfied. These data place OB/GYN physicians at next to last (30/31) for job satisfaction among all specialties. There are two main reasons for this disappointing statistic. Burnout and emotional exhaustion play the major roles which influence the remainder of the reasons for leaving an OB/GYN residency or career. Becker et al. (2006), reported 90% of OB/GYNs had moderate burnout, and 34% were clinically depressed. If a physician was dissatisfied in their profession, they were twice as likely to be depressed and suffer from emotional exhaustion. In addition, 96% of OB/GYN residents feared malpractice, which led 35% of them to pursue a fellowship for additional training. It's logical that depression, emotional exhaustion, and fear of malpractice are highly connected with job dissatisfaction.

Although not unique to OB/GYN, lack of sleep, especially while on call, also leads to burnout and job dissatisfaction. Only 10.8% of residents say they get more than four hours of sleep while on call, while 21.2% get less than one hour (Defoe et al., 2001). Many interns (77.6%) say they were fatigued when on call, while all residents reported negative medical experiences while sleep deprived. Sixty percent of residents feared a compromise of patient care because of a sleep-induced deterioration of clinical expertise. Additionally, a pernicious depersonalization of the patient may occur with sleep deprivation as professional traits are compromised by fatigue.

Perry and colleagues (2003) found that not only does the amount of sleep dramatically decrease after starting an OB/GYN residency, other lifestyle changes also occur which erode OB/GYN health. Residents are ill more often once they start an OB/GYN residency. The amount of time devoted to eating a proper diet and getting exercise drops. Time for religious activities and family interactions also decrease, with the latter causing residents to miss a greater number of "significant" events with the children and/or family. All of these detrimental factors contribute to burnout and emotional exhaustion. Fifty-nine and 61% of OB/GYNs report conflicts with colleagues and patients, respectively. This makes an OB/GYN more than twice as likely to suffer from emotional exhaustion (Yoon et al., 2010).

The traditional thought that working a long number of continuous hours has perceived benefits is not valid. In order to avoid burnout and emotional exhaustion, residents desire having some control over the number of hours worked. Allowing residents more personal time will help increase the current 48% of OB/GYNs that are currently satisfied with their life/work balance. Emphasizing the sense of personal accomplishment among the residents also helps to enhance career satisfaction (Keeton et al., 2007). A new type of practitioner, "The Laborist", can help alleviate the OB/GYN workload and reduce burnout and emotional exhaustion. The laborist is defined as a physician who is solely devoted to obstetric care and, therefore, releases the OB/GYN from being constantly on call when a patient is in labor. This allows the OB/GYN to perform other clinical and office duties without being interrupted until time for delivery. Weinstein (2003) explains the detailed roles of the laborist, and increasing numbers of hospitals are considering their use.

7.1 Why, or why not, practice academic medicine?

Those OB/GYNs that enter academic medicine do so because of their desire to carry out research and the intellectual stimulation that teaching in academia offers. Those that have completed an MD-PhD program are very likely to enter an OB/GYN department vs. entering private or group practice (cf. refs. in Straus et al., 2006). Furthermore, an academic setting is needed for the environment that provides opportunities for collaborative research, and the accommodation of equipment and animal care needs (if any) the research requires.

As residents progress through an OB/GYN program, interest in pursuing an academic career drops with each successive year of training (Cain et al., 2001; Straus et al., 2006). The reality of lower financial rewards and the burdensome bureaucracy associated with academia are, by far, the two primary reasons OB/GYN residents fail to enter academia. Another reason is residents feel they could not effectively balance the time needed to perform research and publish, do committee work, as well as address clinical duties. Cain and colleagues (2001) clearly pointed out the vital importance of good and consistent mentorship in trying to dispel student and resident misconceptions about academia. However, being realistic in addressing these issues is important.

8. Enhancing recruitment into OB/GYN residencies

Making effective teaching a priority in the clerkship or residency program is a must. Actually doing so, vs. giving education "lip service", shows students that an OB/GYN department is not under the sway of the "hidden curriculum" that abrogates teaching to a distant second place after the pursuit of clinical and research dollars (Hafferty, 1998). For

example, when the University of Colorado Health Science Center restructured their clerkship to emphasize teaching and mentoring, they doubled the number of third year students interested in OB/GYN. Timely and constructive feedback from residents and faculty increased student satisfaction from 67% to 85%. There were highly significant increases in instructors being viewed as positive role models, being enthusiastic about teaching, and contributing to student professional development (Dunn et al., 2004).

In concert with good teaching, is good mentoring that adequately describes the duties of an OB/GYN physician, e.g., explaining the pros and cons of a private practice vs. an academic appointment. Furthermore, it is advantageous to let students know what to expect in the clerkship or residency, and to develop and nurture a professional rapport. Engaging the students in active learning and problem solving, while providing timely constructive vs. destructive criticism, is deeply appreciated by students. Asking students or residents to self-reflect on the improvements they need to make, shows the students the clerkship cares about helping them to become competent OB/GYNs. Finally, avoid telling students or residents "how it was" when you were in their position — often with a verbalized or implied statement that it was tougher "back then". Students and residents are concerned about mastering their current educational challenges and are not interested in the past.

In 2005, Bienstock and Laube wrote an article about how to recruit medical students into OB/GYN. Foremost, they concluded that clerkships can be improved by writing clear learning objectives for each session. Further, the relative importance of each objective needs to be stated, and the assessment of each objective needs to be clearly explained. Having students exposed to good OB/GYN role models during their basic science years of medical training gives them an early, positive exposure to the discipline. Furthermore, instructors need to give very organized lectures which can be understood by undergraduate medical students who have no clerkship experience. All too often, the author of this chapter has seen faculty or residents (in any specialty) give the freshmen or sophomore students a lecture that was the equivalent of a grand rounds presentation. The lectures were too detailed and contained far too many PowerPoint slides to be shown in a 50 minute period. Student frustration was compounded by the lecturer not emphasizing key, important concepts.

The development of OB/GYN Student Interest Groups (SIGs) can help stir excitement in OB/GYN. Setting up an OB/GYN display during medical school orientation, which is manned by a dynamic resident or faculty member, attracts student attention to your discipline. If other specialties have these SIGs and your OB/GYN department doesn't, it is missing a valuable opportunity to influence interested medical students into sustaining their initial interest in OB/GYN. Furthermore, developing a well-structured OB/GYN elective will maintain student interest, and help sway those students who are considering OB/GYN, along with other specialties, to enter an OB/GYN residency.

9. The future

In 1998, Jacoby and colleagues accurately predicted that within the US, females would soon constitute the majority of OB/GYN physicians. This prediction is becoming reality in many nations. If the increasing number of patients in the aging population is combined with the decreased productivity of female OB/GYNs, especially in their child-bearing and child–rearing years, then there will be a shortage of OB/GYNs (Pearse et al., 2001). Laborists,

midwives and FM physicians can only accommodate part of the increased obstetric load, and their use varies widely between countries (Jacoby et al., 1998; Scott et al., 2010; Weinstein, 2003). In addition, the predicted shortage of OB/GYNs will reduce the number of OB/GYN physicians many aging women use as their primary care provider. Therefore, OB/GYN residency programs must take into consideration the need for teaching various primary care skills (including geriatric issues) to their students so that every OB/GYN can be prepared for the aging female population (Frank et al., 1999).

10. Conclusions

There are several major points which need to be considered by OB/GYN residency programs. First, the student population is changing and there are increasing numbers of students who desire specialties with controllable lifestyles. Therefore, enticing students into an OB/GYN program, that is considered to have a non-controllable lifestyle, needs to be started early in their medical school career. Organizing OB/GYN SIGs which expose medical students to good role models is important. Ensuring that faculty and residents make a positive impression upon students in the OB/GYN clerkship will help overcome the decline in OB/GYN interest that occurs during undergraduate medical education. Furthermore, the recent perception that males are not welcome in the profession has to be aggressively overcome.

Second, students and residents must be made fully aware of the varied roles an OB/GYN may have to assume. These future OB/GYNs must be prepared for the obstetric, surgical and increasing primary care roles they may need to provide. Finally, departmental chairs must be aware of the burnout and emotional exhaustion suffered by many of their residents and faculty. Increasing career satisfaction by reducing burnout will be challenging.

Evidence that the empathy of students is declining needs to be taken into account. Therefore, OB/GYN residency programs need to ensure that good physician/patient communication skills are continually reinforced, and that cynicism will not be tolerated. Every academic institution needs to have a review board who addresses breeches in professionalism. Each OB/GYN program needs to ensure that every medical student and resident receives equal opportunities to practice skills and obtain career advice. In this regard, ensuring that OB/GYN departments are not overly dominated by a single gender or ethnic group will help guard against perceived discrimination, as well as provide the students and residents with role models they can emulate.

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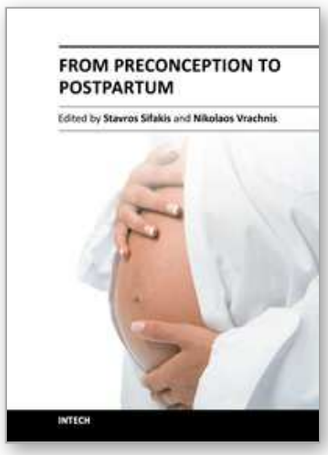

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