



Ethics of Surgical Training in Developing Countries

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view

Ethics of Surgical Training in Developing Countries

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For Peer Review

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Abstract

The practice of surgical trainees operating in developing countries is gaining interest in the medical community. While there has been little analysis about the ethical impact of these electives there has been some concerns raised over the possible exploitation of trainees and their patients. An ethical review of this practice shows that care needs to be taken to prevent harm. Inexperienced surgeons learning surgical skills in developing countries engender greater risk of violating basic ethical principles. Advanced surgical trainees who have already achieved surgical competence are best qualified to satisfy these ethical issues. All training programs need to develop a structured ethical review for international electives to protect their trainees and their patients from harm.

Peer Review

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3 Text

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6 Introduction

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8 “If you are not confident in doing the surgery safely, then there will not be an
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10 opportunity for you in the OR.” I was told this during my first week of a 9-week surgical
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12 elective at a busy hospital in Africa. My preceptor and I were discussing a patient with
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14 possible glaucoma in his only seeing eye. Without any possibility for appropriate follow-
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16 up my preceptor wanted me to perform a trabeculectomy in his good eye to preserve his
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18 vision. I was nervous about performing the surgery, even though I was a fifth-year
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20 resident who had performed plenty of surgery in North America. In Africa, most of the
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22 surgical cases were difficult with advanced disease. In addition, the hospital staff was too
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24 busy to provide a long orientation. My preceptor was telling me that his hospital and
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26 Africa, in general, was not a place to learn to operate. If I did not already have sufficient
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28 skills to operate independently then I should not be in the OR.
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34 The discussion with my preceptor highlighted for me some of the ethical issues
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36 surrounding surgical training in developing countries. What right did I have to operate on
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38 these patients? And what was the ethical impact of practicing medicine in a foreign
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40 culture? Like many other traveling physicians, an international elective seemed like an
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42 excellent opportunity to see large volumes of advanced pathology, provide good surgical
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44 opportunities, and at the same time provide benefit to the local population. However, I
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46 learned that there was also a greater opportunity to cause harm. This paper seeks to
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48 explore what are the ethical principles surrounding surgical trainees operating in poorer
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50 countries.
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The practice of surgical trainees operating in developing countries is gaining interest in developed countries (1, 2). Trainees are completing international electives at different stages of their training. Some are pre-clinical medical students, while others are licensed surgeons during their fellowship training. Hospitals that receive medical trainees have varying degrees of resources at their disposal to guide their foreign trainees. Some have rigorous acceptance protocol (including CV, references, prerequisite experience) and well structured curricula with graduated supervision. Other hospitals have minimal resources, expect trainees to practice independently and depend on the trainees to help manage their heavy case load.

Trainees in foreign environments have ethical obligations to act in the best interests of their patients(3). Wherever trainees are learning surgery there is a concern for the impact on quality of patient care. In developing countries, this concern is magnified as there is often a greater ratio of patients to health resources. Many local surgeons are already overwhelmed with patients. As a result, trainees may lack adequate clinical supervision in developing countries.

The lack of health resources has been cited in the past as an encouragement for students to go and operate in these underserved areas. The operative principle seems to be that some surgery, however expert, is better than none. Raja and Levin disagree and counter that the lack of available resources in a society makes a greater imperative for getting surgery done right the first time(3). Poor surgical outcomes will burden the health system with increased iatrogenic morbidity. It is important for surgical trainees to provide services at an appropriate level or standard of care(4).

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International institutions that accept trainees need to assess and develop surgical competence in their foreign trainees(5). This should start at home training programs exposing trainees to surgical skills and decision-making prior to any elective experience. Often, different techniques are used in developing countries and these need to be taught to trainees with appropriate supervision. On site, trainees need mentoring to promote surgical competence in their new setting. An organized approach to trainee development would help to protect elective trainees from operating beyond their level of competence in an international elective(6).

There is a concern that international electives may foster a poor sense of professionalism, one of the six key competencies identified by ACGME (5, 7). In developed countries, it can sometimes be difficult for trainees to find adequate surgical experience. Often, surgeons working in a competitive environment are unwilling to let beginning trainees learn to operate on their patients. International electives can be appealing both for the trainee and the residency program. It seems to provide an ample opportunity for residents to learn to operate. However, this practice may teach trainees that patients from other cultures can be used for surgical training. This may reinforce the undesirable view that some patients are more valuable than other patients(8). It also unfairly distributes the risk of training beginning surgeons to developing countries and contributes to the ethos of the global health inequity.

International electives of course can also have a positive impact on the professionalism of trainees(9, 10). While on elective, trainees come face to face with the severe global health inequity that is currently present. What is occasionally heard in the 6 pm news can become very personal and have a face. These experiences can teach

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3 Western Physicians to become better advocates for the poor around the world. Previous
4 surveys have suggested that trainees who go on international electives are more likely to
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6 volunteer in the future(9, 10).
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10 Trainees may also impact on the volume and quality of the surgical output in a
11 hospital(3). An experienced trainee operating independently may increase the surgical
12 output and increase the efficiency of a centre. A novice surgeon will require greater
13 supervision and may decrease the output of the host hospital in an area that is likely
14 already underserved.
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22 When a community contributes to a student's learning a certain amount of
23 reciprocity may be implied(2). Trainees on international electives and their training
24 programs should recognize their obligation to their patients and the local health
25 community. For example, trainees from developed countries will often bring resources to
26 the international hospital. This can include surgical supplies, and increasingly money.
27 Financial and resource benefits distributed to the international health system can be
28 reallocated to meet the local needs.
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39 This paper supports international surgical electives. The benefits to the local
40 patient population, surgical trainees and to their respective health communities can be
41 substantial. Care can be taken to minimize harm. The following recommendations can
42 help achieve positive elective experiences:
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- 48 1. Trainees should have achieved an appropriate level of surgical
49 competence in their home program prior to their elective.
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- 51 2. The training program and student should also prepare themselves for
52 the different ethical dilemmas that will be encountered in this new
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3 setting. Guidelines and resources should be identified to help students to
4 practice surgery conscientiously.
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8 3. On arrival to an elective site, students should have proper orientation,
9 graduated supervision and on-going evaluation. After the elective, the
10 trainee should have a debriefing session to review his/her experience
11 with his/her training program.
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13 4. A written contract clarifying expectations between the training program
14 and host hospital can help ensure that the trainees' experience will
15 follow ethical practice. This contract would bind the training program to
16 send only adequately experienced trainees who are prepared for an
17 international elective. The contract would also bind host institutions to
18 provide appropriate support for their visiting trainees. National
19 regulatory bodies could also require such a legal contract prior to
20 providing a medical license to visiting international trainees.
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22 5. International training programs should be structured to foster benefit to
23 both the home institution and the foreign site.
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41 Inexperienced surgeons learning surgical skills in developing countries risk
42 violating basic ethical principles. Experienced resident surgeons who have attained
43 'competence' are best qualified to satisfy these ethical issues and provide mutual benefit
44 to all involved. However, proper orientation is still necessary to help the trainee to adapt
45 to his/her new situation.
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