

Exposure of Medical Students to Surgery: The Nepean Summer Vacation Surgical Program

Negin Sedaghat, B App Sc (phty), MB, BS,* Janice Mondy,*[†]
Guy D. Eslick, DrPH, PhD, FACE, FFPH,*[†] and Michael R. Cox, MB, MS, FRACS*[†]

*Department of Surgery, Nepean Hospital, Penrith, New South Wales, Australia; and [†]The Whiteley-Martin Research Centre, Discipline of Surgery, The University of Sydney, Sydney Medical School, Nepean, Sydney, New South Wales, Australia

BACKGROUND: Methods to increase the exposure of junior medical students to surgery have been described and developed by academic and clinical surgical departments. Most methods have exposed students to surgery within a simulated environment. The Summer Vacation Surgical Program is a method which exposes junior medical students to the clinical environments of surgery.

METHODS: A retrospective study was performed of surveys completed by medical students after each Summer Vacation Surgical Program from 2008 to 2011. Responses were both quantitative and qualitative. All qualitative responses were read by 3 independent researchers from which category headings were generated. All data were accounted for and analyzed using these categories.

RESULTS: One hundred and seven medical students completed the Summer Vacation Surgical Program between 2008 and 2011. Fifty-five medical students completed the voluntary survey (response rate = 51.4%). The highest-scored responses were demonstrated for meeting learning needs and helping with career choices. Three category headings were generated from the qualitative responses, which consist of placement structure, learning experience, and career decision-making. From these categories it was demonstrated that respondents perceived positive learning environments and improved generic and surgical skills. Some respondents also clarified their career choices and progressed their career development.

CONCLUSIONS: An intensive exposure to the spectrum of surgical practice may assist junior medical students in their career decision-making and planning, while also providing other learning opportunities valued by students. Prospective studies are needed to assess the influence of such exposure on career choice and applications to surgical training. (*J Surg* 69: 580-587. © 2012 Association of Program Directors in Surgery. Published by Elsevier Inc. All rights reserved.)

Correspondence: Inquiries to Michael R. Cox, MB, MS, FRACS, The Whiteley-Martin Research Centre, Discipline of Surgery, The University of Sydney, Nepean Hospital, PO Box 63, Penrith, NSW 2751, Australia; fax: +61 2 4734 3432; e-mail: coxmr@bigpond.net.au

KEY WORDS: student, medical, teaching, education, surgery

COMPETENCIES: Patient Care, Medical Knowledge, Professionalism, Interpersonal and Communication Skills, Practice Based Learning and Improvement, Systems Based Practice

INTRODUCTION

Recent surgical opinion in Australia and New Zealand calls for academic and clinical surgical departments to lead the way in medical student education by promoting the surgical perspective, establishing the value of surgical educators, and encouraging surgical services to engage medical students with the learning opportunities they provide.^{1,2} The literature has also demonstrated that such leadership from surgical departments has important implications toward a medical student's career choice and development.³ Medical students progressing to a career in surgery have had early exposure to surgery and surgeons, particularly during the preclinical years.^{3,4} Mostly, students make an early and definitive decision to pursue their interest in surgery.⁵ Furthermore, the amount of exposure in the preclinical years to a specialty is proportional to applications for that specialty.^{5,6} These findings, in the context of worldwide and local trends demonstrating a decline among medical students in selecting a career in surgery,⁷ have potentially important implications for the future of the surgical workforce. Interestingly in Australia and New Zealand, medical students have expressed a desire for earlier exposure to surgical specialties, identifying a need for the development of basic surgical skills, learning about a career in surgery, as well as early exposure to surgeon mentors.⁸ This call for a greater presence of surgery from medical students is not surprising as a study of 300 first-year medical students in the United Kingdom had revealed that none of the students had exposure to surgery before entering medical school and are not exposed to surgery until the final years of medical school.⁹ Therefore, from all perspectives—student, surgeon, workforce, and evidence-based practice—it is clear that surgical departments need to identify effective meth-

ods of increasing the exposure of medical students to surgery earlier within the course of their studies.

Initiatives described in the literature, mostly from North America, have exposed preclinical medical students to information about a career in surgery and/or instruction in surgical skills and theater etiquette within a controlled environment.^{3,10-13} The influence and role of early exposure to the day-to-day clinical environments of surgery is less clear. Furthermore, it has been identified that learning experiences in surgery may be maximized by focused “mini-rotations” in surgical subspecialties,¹⁴ which raises the possibility of implementing such placements from the first year of medical school. To increase the exposure of first- and second-year medical students to the discipline of surgery, a “Summer Vacation Surgical Program” was developed in 2008 by the Department of Surgery at the Nepean Hospital, a clinical school of the University of Sydney, Australia. To the author’s knowledge, this is the only program of its kind in Australia. Additionally, no published reports of similar programs were retrieved from the literature search. This study describes the Summer Vacation Surgical Program structure and evaluates medical student learning outcomes and immediate influences on career decision-making.

METHODS

Summer Vacation Surgical Program

The University of Sydney Medical School curriculum in Australia is a 4-year graduate entry medical degree leading to the award of a Bachelor of Medicine/Bachelor of Surgery (MBBS). Students enrolled in the medical degree program must have a Bachelor degree (minimum) in any qualification upon commencing studies. The 4-year course includes weekly clinical experience based in teaching hospitals/community clinics from the first year, regular problem-based learning exercises in small groups, traditional lectures, and research. In years 1 and 2 of the curriculum, students are based at the university with weekly clinical school participation (which involves a structured program of supervised patient contact in hospital/clinic settings). In years 3 and 4, students are based at a clinical school for further in-depth exposure to clinical practice. This involves a number of full-time medical and surgical placements. Generally, years 1 and 2 are considered preclinical years and years 3 and 4 clinical years. It is during the third year that students are first exposed formally to surgical practice. Upon graduation from medical school, Australian medical graduates are required to complete a minimum of 2 postgraduate years (also known as prevocational training)—internship and residency—before applying for vocational (specialist) training.

The Nepean Hospital is a teaching hospital of the Nepean Clinical School at the University of Sydney, Australia. Traditionally, very few medical students were exposed to surgical patients or attended the operating theaters at Nepean Hospital. Methods of increasing the exposure of first- and second-year medical students to the discipline of surgery was investigated by

the Department of Surgery at Nepean Hospital. From February to September 2008, informal discussions were held with operating theater staff, surgical consultants, and their teams, as well as medical students, to identify how to increase the exposure of medical students to surgery early in their medical career. After these discussions, the concept of vacation surgical terms was formed. The surgical consultants of each surgical specialty/subspecialty were then approached formally and provided with a philosophy of the term. A weekly timetable was developed for each surgical specialty which was circulated to all first- and second-year medical students at the Nepean Clinical School. Medical students voluntarily enrolled in the program and were subsequently allocated to surgical terms of their choice by the program coordinator on a “first-come, first-serve” basis. The first Summer Vacation Surgical Program was then held over a period of 10 weeks from December to January during the annual summer vacation period of 2008/2009.

Since 2008, the Summer Vacation Surgical Program has been held annually over the summer vacation (December to January) at the Nepean Hospital over 10 weeks. First- and second-year medical students are placed for a minimum of 1 week, and maximum of 2 weeks, during this period with surgical teams at Nepean Hospital. Medical students choose from a number of surgical subspecialties—acute surgical unit, vascular/thoracic, neurosurgery, ear, nose, and throat, orthopedics, plastics, urology, upper gastrointestinal, breast/endocrine, and colorectal. Each subspecialty exposure is of 1-week duration. [Table 1](#) provides an example of a 1-week timetable for students which includes meetings, rounds, clinics, rooms, and operating theater times. These activities cover the spectrum of surgical exposure in the public and private sector. Before commencing the placement all students are required to complete a scrubbing, gowning, and gloving course as well as a theater competency course both of which are formally assessed.¹⁵ The courses cover topics such as theater etiquette and culture; how to scrub, gown, and glove, as well as how to unscrub; aseptic technique; behavior in theater if scrubbed or unscrubbed; perioperative attire; standard precautions and use of personal protective equipment; patient privacy and confidentiality; and patient consent. The courses include both practical and didactic components of teaching. Assessment of skills and knowledge is competency-based. Students are required to pass the assessment to proceed with the placement. In addition to the term timetable and courses, other preplacement preparation may be set by the surgical specialty departments, such as specific prereading and/or department manuals. At the close of each Summer Vacation Surgical Program, students are asked to complete a survey.

The summer vacation period was selected as this was a period where students could spend an entire week involved in the discipline of surgery free from other academic commitments or distractions. The Summer Vacation Surgical Program is therefore an elective which students may choose to complete only if they are interested. Although the program is not compulsory, students are able to qualify the program toward an independent learning activity which is a compulsory requirement of the University of Sydney Medical School curriculum.

Download English Version:

<https://daneshyari.com/en/article/4298164>

Download Persian Version:

<https://daneshyari.com/article/4298164>

[Daneshyari.com](https://daneshyari.com)