"Ethics teaching is as important as my clinical education": A survey of participants in residency education at a single university

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Abstract

Introduction. In 1995, the Royal College of Physicians and Surgeons of Canada and the College of Family Physicians of Canada mandated that in order to be accredited, all residency programs include bioethics education in the curriculum. We assessed the University of Toronto's response to this mandate.
Methods. We surveyed Bioethics Coordinators and Chief Residents from the University's 67 residency programs regarding teaching methods, resources, goals and objectives, course content, and suggested improvements.
Results. All respondents reported that ethics education is important, worthwhile, and should stay in the curriculum. Ninety-eight percent of Coordinators reported that ethics was taught in their programs. Seventy-nine percent of Chief Residents felt that ethics teaching was as important as clinical education. Amount of time spent teaching bioethics ranged from 1.5 to 9 hours/year; fifty-five percent of programs spent 4 hours or less. There was some discordance between topics taught and ethical issues faced by residents. Formal evaluation of ethics education took place in only 46% of programs.
Conclusions. Postgraduate bioethics educators at the University of Toronto have implemented bioethics teaching in almost every program, and the importance of this teaching is validated by their residents. We identify a number of challenges, including matching session topics to student need and administering appropriate course evaluation.

Introduction

In 1995, the Royal College of Physicians and Surgeons of Canada (RCPSC) and the College of Family Physicians of Canada (CFPC) set out four objectives for bioethics education in postgraduate programs: 1) to integrate bioethics skills and knowledge into the clinical practice of residents in accredited programs; 2) to assist postgraduate specialty and subspecialty programs in teaching bioethics to their residents; 3) to develop model curricula for use within these programs; and 4) to develop methods to evaluate the bioethics knowledge, skills, and attitudes of residents.[1] These objectives were linked to residency program accreditation.[2,3] In 2003, the RCPSC set out guidelines for bioethics education in accredited programs.[4] Although the development of curricula is left to the discretion of each residency program, the RCPSC published web-based bioethics curricula in 1997 as a model for teaching bioethics in postgraduate specialties.[2] Concurrently, the Pediatric Ethics Network project (PedEthNet), a national multi-disciplinary collaboration of Canadian bioethicists and pediatricians produced, "The Good Pediatrician: an ethics curriculum for use in Canadian pediatrics residency programs."[5] Both resources are promoted by the RCPSC as useful tools to meet educational objectives.

Although residents face ethical dilemmas related to their clinical practice and to the behaviour of their clinician teachers on a daily basis,[6,7,8] it is not clear whether the challenges a trainee confronts are adequately addressed using formal education. The North American literature indicates that bioethics is being taught in postgraduate medical programs; however, the nature of the education varies widely.[9,10,11] In an effort to assess the response of University of Toronto (U of T) residency programs to the RCPSC and CFPC requirements, we undertook an investigation of the current state of bioethics teaching for residents at our institution.

Methods

At the U of T, there are 67 subspecialty residency programs and approximately 1,100 residents. Each program must identify one faculty member to act as Bioethics Education Coordinator (herein referred to as "Coordinator"), who is responsible for ensuring that residents receive bioethics education. The Coordinator may be a physician from the program or a non-physician with formal bioethics training who is internal or external to the program. In some cases, one person acts as the Coordinator for more than one residency programs. Therefore, the total number of Coordinators at U of T is 55. The overall curriculum for all residency programs is directed by a clinician-ethicist (Dr. Alex V. Levin) who provides advice, holds seminars, and supplies teaching aids. While 16 of the Coordinators are formally trained in bioethics, the majority of the remaining Coordinators have participated in teaching workshops and seminars at the Joint Centre for Bioethics (JCB). The JCB is a partnership between the U of T and 15 healthcare organizations. Its membership is composed of a network of over 180

multi-disciplinary professionals who study health-related topics through research and clinical activities.

A questionnaire was sent to the Coordinator of each residency program by email, along with a cover letter explaining the nature of the study. Each Coordinator was given the option to respond by letter mail, email, fax, in-person interview, or telephone interview. The same method was used to contact the Chief Resident of each residency program, using a version of the questionnaire designed to examine the perception of bioethics teaching from the perspective of a resident. (Questionnaires are available upon request to the Corresponding Author).

Questionnaires were administered over a two-year period, beginning in June 2001. The questionnaires focused on teaching methods and resources, goals and objectives, course content, and suggested improvements. The questionnaire was comprised of both short-answer and check-box responses. The subjects were given a two-week period to complete the survey. If an email reminder sent two weeks after receiving the survey failed to elicit a response, potential participants were contacted by telephone.

Descriptive statistics were used to analyze and present the data. As this data collection was conducted for the purposes of quality assurance and curriculum assessment, and was reported as anonymous aggregate data, Research Ethics Board approval was not obtained.

Results

The Coordinator response rate was 76% (42/55). The Chief Resident response rate was lower (57%, 37/64, p= 0.05). Not all respondents answered every question.

All respondents felt that ethics teaching was important to residents and should remain in the curriculum. Almost all Coordinators (98%, 41/42) indicated that ethics was taught in their program(s). Seventy-nine percent (27/34) of Chief Residents felt that ethics education was as important as clinical training (Figure 1). The most common reasons for the importance of ethics teaching cited by both Coordinators and Chief Residents were that it provided residents with the tools and skills to: 1) identify, 2) analyze, and 3) deal with ethical issues.

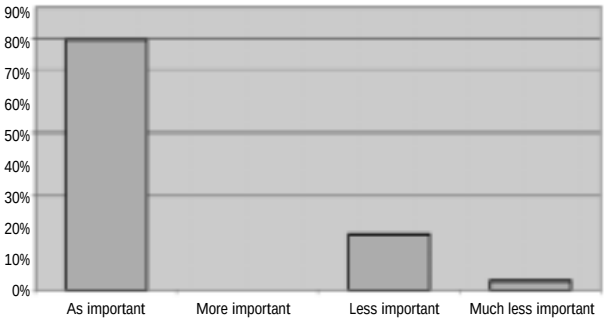

Figure 1. Importance of ethics teaching as compared to clinical teaching as ranked by Chief Residents.

The Coordinators were asked about which ethics topics were taught in their programs, while the Chief Residents were asked to list the ethical issues that they most often face at work. The results were ranked and compared. Although informed consent and end-of-life issues were ranked high by both teachers and students, Table 1 illustrates some discordance between what is being taught in the programs and what the residents consider to be their most important ethical challenges. Family issues are identified by 35% of Chief Residents, but taught in only 13% of programs, while research ethics is ranked third by Coordinators and sixth by Chief Residents.

	Ranking*	
Issue	Issues Residents Face	Issues Covered in Curriculum
End of Life	1	1
Consent	2	2
Family Issues	2	8
Disclosure†	3	10
Medical Industry	4	9
Resource Allocation	4	4
Research Ethics	6	3

* a lower number indicates a higher priority
†includes error, breaking bad news, and truth-telling

Table 1. Ranked list of ethical issues.

Coordinators devote between 1.5 and 9 hours per year to formal bioethics teaching. However, the median is below 4 hours per year (Figure 2). Sixty-nine percent (22/32) of Coordinators felt that the current amount of ethics teaching was sufficient. Almost the same percentage of Chief Residents (67%, 20/30) felt the same way.

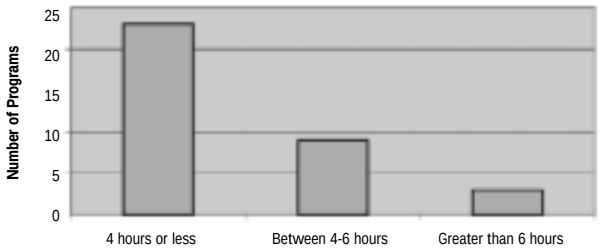

Figure 2. Total amount of time spent teaching ethics in postgraduate programs at the University of Toronto per year.

Based on the responses to the questionnaires, the most common method for teaching ethics at U of T is the case-based, small group discussion (95%, 36/38). Eighty-seven percent (32/37) of Chief Residents felt that this was the most effective teaching method, because it was relevant, realistic, and practical (74%, 20/27) and because it was interactive and encouraged participation (33%, 9/27). Eighty-two percent (23/28) indicated that the least effective methods were didactic lectures (82%, 23/28) and open-ended discussions (14%, 4/28), because they were boring (47%, 8/17), quickly forgotten (24%, 4/17), and not relevant to clinical practice (4/17). Over one-third (37%, 10/27) of Chief Residents felt that there was little that could further improve the effectiveness of teaching.

The majority of programs (80%, 33/41) had sessions taught by a formally trained bioethicist (either a physician from the residency program or elsewhere in their own hospital, or a non-physician from the JCB). The remainder of the programs utilize teachers who are physicians (attending staff) that are not formally trained in bioethics, including Program Directors. Three programs reported that attending staff had conducted their sessions with the assistance of someone with formal bioethics training.

Eighty-two percent (28/34) of Coordinators felt that their residents were better able to identify and deal with ethical issues that arose in clinical practice because of their ethics education, although formal evaluation of ethics education is performed by less than half (46%, 17/37) of the programs. Similarly, Chief Residents felt that formal ethics sessions had helped them to recognize (81%, 26/32) and deal with (85%, 22/26) ethical issues. The majority (69%, 22/32) of Chief Residents reported that they did not undergo any formal evaluation of their ethics learning.

Discussion

Our assessment of ethics teaching within the 67 residency programs at the U of T identified three key findings: 1) bioethics teaching occurred in almost every program, and was considered to be valuable by teachers and students; 2) there appeared to be some mismatch between the educational agendas of staff and ethical issues faced by residents; and 3) both staff and students indicated that they felt that ethics teaching had a positive impact, but there was a lack of formal evaluation to confirm this impression.

The mismatch between what is being taught and the ethical issues that residents face most frequently suggests that the formal bioethics curriculum may not adequately represent the resident experience. The formal curriculum is not addressing the challenges found within the informal and "hidden" curricula, as described by Hafferty and Franks.[12] Some components of ethics education must be participant-driven and training stage-specific.[8] A relatively simple survey, like the one developed by Malhotra, could be effective in determining what issues residents would like to see addressed in their bioethics teaching program.[13] However, residents should not be the only arbiters of their bioethics curriculum. In developing a bioethics teaching program, more attention should be paid to ethical dilemmas made by trainees in the context of medical training.

Despite the impression of teachers and students that bioethics teaching has a positive impact, there was limited formal evaluation to externally validate these impressions. While teachers and students may have the capacity to successfully evaluate bioethics education, these findings indicate that physician-teachers lack the appropriate methods to do so. Similar findings are reported in North American medical schools, where only 48% of Deans indicated that students, moral reasoning abilities are formally evaluated through case-based essay exams or Rest's Defining Issues Test, and only one-third reported formal evaluation of students, behaviours in ethically-difficult situations.[10] Blackmer's survey of nine Canadian Physical Medicine and Rehabilitation residency programs identified similar methods of evaluation, such as the use of Observed Structured Clinical Examination stations with standardized patients, rotation-specific evaluation, and written exam questions.[9] PedEthNet suggests adapting, where appropriate, current methods of medical education assessment, such as written and oral exams, patient examinations (both real, and standardized), In-Training Evaluative Reports, and self-assessments, to evaluate a resident's ability to manage ethical issues. However, each of these methods has limited suitability for evaluating all aspects of a resident's ethical knowledge and behaviour.[5] The development of appropriate evaluation instruments for ethics education remains a challenge for residency programs.

Inconsistency in the amount of time devoted to bioethics training is an issue that appears in many assessments of bioethics teaching across the United States and Canada.[9,10,11,13] In a survey of the Deans and Course Directors of American and Canadian medical schools, Lehmann found that lack of time in the curriculum and in faculty schedules were two of the top three perceived obstacles to increasing bioethics teaching time.[10] A survey of 134 medical schools in the United States reported anywhere from 5 to 200 hours devoted to teaching bioethics over four years to medical students, with 63 schools in the 5-to 40-hour range.[11] Surveys within individual specialty programs also found great variation in the amount of time spent teaching ethics at the post-graduate level.[9,14,15] In the model curricula for residents published by the RCPSC, it is suggested that the indicated specialties designate at least ten hours to cover identified bioethics topics.[16,17,18,19] Other published specialty curricula suggest devoting between 1 and 3 hours per subject, while covering 6 to 10 subjects over the course of a resident's training.[20] Even within the same university with central coordination, the considerable variation in the amount of time spent teaching ethics in our residency programs indicates a lack of consensus about the appropriate amount of time that should be designated to formal ethics teaching. The time assigned for teaching bioethics in most of our programs seems insufficient to cover the range of identified ethical issues. However, two-thirds of Coordinators felt that ethics teaching time was sufficient, and only one-third of Chief Residents would like to have more. This might indicate that their needs are being met outside the formal curriculum. Further investigation is required in order to determine the optimal time that should be allocated for formal bioethics teaching, as well as the appropriate mix of formal and informal learning sessions.

The limited pool of trained bioethics teachers covering all 67 programs may explain the lack of time devoted to bioethics in individual programs. In a 1994 survey of 256 graduate and undergraduate obstetric and gynecology programs, it was reported that 29% of programs had faculty trained in ethics, and the amount of time devoted to ethics teaching was low relative to the list of ethical issues.[14] Eighty-six per cent of medical schools in North America have at least one full-time ethics teacher, and those with a dedicated ethics faculty member were twice as likely to have a mandatory introductory ethics course.[10,11] Silverberg reported that the majority of ethics teachers in American medical schools are ethicists, PhDs, or physicians.[11] In a survey of all accredited general surgery residencies in the U.S., it was found that those programs with a faculty surgeon with expertise or special interest in ethics had a greater number of ethics teaching

activities.[21] A group of dedicated expert and interested teachers is vital to the continued growth and sustained excellence of bioethics teaching within residency programs. Developing strategies to improve bioethics expertise in faculty may help to increase the time spent on bioethics education and the quality of that education.

Variations on the case-based, small group discussion are the primary methods of ethics training reported in both medical schools and individual specialties.[10,15,22] It is also a popular method within suggested curricula.[5,9,16,17,18,19,23] The effectiveness of alternate forms of bioethics teaching, using standardized patients, debates, narratives, movies, and other creative techniques, might be explored to strengthen bioethics educational programs.

There are some limitations to this study. There may have been responder bias with more responses from those who liked bioethics, and fewer responses from programs not in compliance with the new requirements. Since our study focused on a single institution, our findings may not be representative of bioethics education programs in other settings. However, many of the themes we identified have been encountered in other North American institutions.

This study describes the successes and challenges faced by residency programs at the University of Toronto in complying with the mandate for bioethics education from the RCPSC and CFPC. Furthermore, this study highlights the need for further work on determining methods of evaluating the impact of bioethics education. The mismatch between curriculum and ethical issues most prominently faced by residents needs further exploration and remediation.

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