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ABSTRACT

A team at the University of Connecticut Health Center developed a model ethics and law curriculum for Hospital Ethics Committee (HEC) members. A multi-disciplinary project team composed of philosophers, lawyers, physicians, and social scientists developed a 7-day intensive bioethics/health law/medicine curriculum. The team designed the curriculum around three interrelated areas: committee structure and operation, analytic techniques, and topical issues. When the curriculum was in place, 47 participants from across the nation attended the seminars in three groups. Following the seminars, a working conference was convened for all 47 participants. Two significant outcomes were the production of a new bi-monthly journal, "HEC Forum," in which the essays written by the participants will be published, and the establishment of a national HEC network. To assess the impact of attendance on the seminar participants, information was gathered through the administration of scored pretests and posttests, and the completion of post-seminar evaluation forms by the participants, and informal feedback sessions following each seminar. Comparison of pretest and posttest performance showed that the test scores of 73 percent of the new HEC members improved, though only 44 percent of those with an intermediate amount of experience and 50 percent of the most experienced participants showed score increases. Contains 11 reference notes. (JB)

IMPROVING HOSPITAL ETHICS COMMITTEES (HEC): EDUCATING ACROSS THE HEALTH PROFESSIONS

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PROJECT SUMMARY:

"Improving Hospital Ethics Committees (HEC): Educating Across the Health Professions" was initiated with the support of a 2-year award from FIPSE. A principal goal was to develop a 7-day intensive bioethics/health law/medicine curriculum for hospital-based health professionals who serve on HECs. Forty-seven participants from across the nation were selected and divided into 3 groups. Following the completion of the seminars, a working conference was convened for all 47 participants. Two significant outcomes: (1) the production of a new bi-monthly journal, H E C Forum, in which the essays written by the 47 participants will be published, and (2) the establishment of a National HEC Network. The extensive evaluation of the project reveals that the participants are now better prepared to serve as preceptors for their own HECs.

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PROJECT PRODUCTS:

H E C FORUM: An Interdisciplinary Journal on Hospitals' Ethical and Legal Issues (6 issues 1989 completed)

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Introduction

Concern that increases in the size, scope, and complexity of modern medicine might overwhelm patient decisionmaking has led to the widespread introduction of Hospital Ethics Committees (HEC) in the United States. Typically, these new multidisciplinary committees are charged with considering the ethical dilemmas encountered in the care of patients. While the members of such committees are generally well equipped to understand the technological issues associated with complex treatment decisions, few have had any formal training in moral philosophy, health law, or associated disciplines. In 1987, the U. S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE) awarded support for the creation of a model ethics/law curriculum for HEC members. This paper describes the development, implementation, and impact of this project.

Background

The HEC movement emerged in the late 1970s and early 1980s in response to a series of controversial legal cases involving the provision, withholding, or removal of life sustaining treatment. In the most widely publicized of these cases, the New Jersey Supreme Court authorized the removal of an apparently life-sustaining respirator from the comatose 21-year-old Karen Ann Quinlan. In doing so the Court noted the utility of "hospital prognosis committees" in arriving at, and possibly obviating the need for, legal resolution of difficult treatment decisions.[1] Another widely publicized case in 1983, which involved the death of an infant whose parents declined treatment for a correctable birth defect, led to new federal regulations regarding infant care and the encouragement of a specialized form of the HEC: the infant care review committee.[2]

By the mid-1980s key governmental and professional groups were formally advocating the creation of HECs to help resolve critical treatment decisions for incompetent and incapacitated patients. In 1983, a presidential Commission appointed to study ethical problems in medicine and biomedical and behavioral research recommended that health care institutions such as hospitals, hospices, and nursing homes, explore "administrative arrangements for review and consultation, such as 'ethics committees,' particularly for decisions that have life-or-death consequences for incompetent patients."[3] By 1985, the American Academy of Pediatrics and the Federal government had both published guidelines for the formation of Infant Care Review Committees.[4,5] By early 1987, the Steering Committee of the American Medical Association adopted the position that each health care facility should establish a permanent ethics committee,

composed of health professionals and lay representatives from the general community, to provide ethical guidance to protect patients' rights and responsibilities.[6]

In response to this encouragement, the proportion of American Hospital Association members with functioning HECs burgeoned from an estimated 1% in 1981 [7] to 25% in 1983 and to 60% in 1985.[8]

Despite emerging guidelines, the rapid growth in the number of HECs across the country meant that, operationally, most new committees were faced with "finding their own way." In early studies and self-reports [9, 10, 11] committee members, chosen largely on the basis of their interests and organizational responsibilities rather than their formal training, expressed numerous concerns about the new HECs, including: their own preparation for service on a HEC, the ability of committee members to work independently and effectively in a multidisciplinary setting, and the legal liabilities that might be associated with committee membership. Amid these concerns, the need for preparatory and on-going education was a recurrent theme.[12]

Project Objectives

With FIPSE support, a multidisciplinary project team composed of philosophers, lawyers, physicians, and social scientists was assembled in September, 1987 to address this need. The overall goals of the project were: (1) to develop and implement a model health care ethics/health law curriculum responsive to the special needs of HEC members, and (2) to determine which committee members (if any) actually benefited from exposure to the new curriculum.

Curriculum Development

Based on the team members' previous research, their experiences with HECs in Connecticut and California, and further review of the literature, a decision was made or organize the new curriculum around three interrelated areas: committee structure and operation, analytic techniques, and topical issues.

In the first instance, three sessions were developed to address "Procedural Problems" relating to the HEC (e.g., its mandate, authority, composition, and operating practices), methods for dealing with an "Absence of Consensus," and strategies for maintaining "Professional Integrity" in the face of complex decisionmaking. In the second instance (analytic techniques), six sessions were developed to provide participants with essential concepts required for more effective consideration of HEC cases ("Theoretical and Applied Ethics," "Moral Theories," and "A Legal and Ethical HEC Framework"), as well as concrete steps for applying these concepts ("Ethical

Analysis," "Medical-Legal Analysis," and "Case-Analysis"). Six additional sessions were developed to illustrate the application of these principles to the cases most likely to confront an active HEC (e.g., cases involving the determination of "Death Under Criteria," cases involving "Advance Directives" pertinent to the use of life-supporting technology, and similar cases).

It was hoped that, in combination, these fifteen secessions would prepare HEC members to more accurately identify the relevant biological, medical, social, psychological, legal, and economic facts associated with the cases coming before them and to more effectively analyze the ethical implications of alternative courses of action.

Design goals underlying individual sessions and the curriculum as a whole included compactness, practicality and variety. Ultimately, the fifteen core sessions were welded into an intensive one-week seminar which could be readily offered for testing at health care institutions around the country. Attempts were made to emphasize the applicability of course material and to employ a variety of learning mechanisms (with material in morning sessions covered through case-oriented discussions, and afternoon sessions given over to more formal presentations by the seminar faculty). The core sessions were supplemented with opportunities for informal feedback, acquisition of relevant literature skills, and contact with local HEC members. One core session (the "Case Analysis" session) was devoted entirely to case presentations by participants. Finally, a detailed syllabus with supporting readings, handouts, and bibliographies was prepared to further learning both during and after completion of the seminar.

Implementation

The model curriculum was offered three times during the initial two-year project period. The first seminar was offered to 15 participants in Farmington, Connecticut in April, 1988; the second to 16 participants in Berkeley, California in August, 1988; and the final seminar to 16 participants in Miami, Florida in February, 1989. The seminars were conducted at area hospitals and university campuses. To ensure continuity in seminar instruction, the two philosophers on the project team (Co-Directors of the project) organized, attended, and presented at all three seminars. Medical and legal preceptors were recruited locally in advance of each seminar and were given ample opportunity to review and discuss the course syllabus.

Participants were selected from a pool of 150 applicants responding to program descriptions published in the Hastings Center Report, distributed through relevant journals, and sent to hospitals known to have HECs. Applicants were required to document sponsorship by their respective HECs and a high probability of continued membership on the committee for an additional twelve months. The Connecticut seminar was limited to applicants with less than one year of HEC service, the Miami seminar to applicants with one to tthree years of service, and the California seminar to applicants with four or more years of service. The project provided the seminar free of charge to participants, along with per diem expenses and, in some instances, assistance with travel expenses. Attendance was limited to one member from any one HEC. In all other respects, the participants were selected so that each seminar group would display the mix of members typical of an actual HEC.

Distribution of the 47 seminar participants by gender, profession, employment, HEC tenure, and service as committee chairpersons is presented in Table 1. As shown in the Table, a sizable majority of the participants were male and employed full-time by their committee's hospital. Just over half (51%) served as chairpersons of their committee. About two-thirds of the participants (64%) were drawn from the traditional patient care disciplines of medicine (43%) and nursing (21%). Representatives of the clergy ranked third in representation (15%), with the remaining participants distributed evenly among the fields of education and administration, law, and social work. The Table also reflects the decision to organize the seminars by HEC experience, with about a third of the participants being (31%) "recent" HEC members with less than one year of experience, another third (34%) two to three year committee veterans, and the remaining third (34%) experienced committee members with four or more years of service. Overall, the figures show that, apart from the the artificial distribution of HEC experience among the participants and the high proportion of committee chairpersons, the individuals chosen as seminar participants were not unlike those found on HECs across the nation. Examination of individual seminar group membership showed that this was true of these groups as well.

Evaluation Strategy

The relatively small applicant pool available for the selection of seminar participants, coupled with the logistic problems involved in matching an applicant's location and scheduling needs to one of the three seminars, precluded a hoped for experimental evaluation design. To assess the impact of attendance on the seminar participants, information was systematically gathered

through several mechanisms including: the administration of scored pretests and posttests, the completion of post-seminar evaluation forms by the participants, and informal feedback sessions following each seminar.

Information on the impact of the seminars on the participants' knowledge of subject matter, ability to apply concepts presented, and literature skills was obtained through the administration of a single 1-hour essay examination at the beginning and end of each seminar. The test was organized into three parts reflecting the seminar's content. The first part requested participants to identify and state questions relating to ethics committee procedure in 7 areas including: the organizational base or location of the committee, its charge, its membership, the case selection process, the documentation of committee activities, the disclosure of committee deliberations, and committee authority. The second part of the test presented a challenging hypothetical case which might come before a HEC and requested participants to formulate questions and statements which should be considered by the committee members. In the third part of the test, participants were asked to identify journals and books which they would consult in analyzing this case.

In developing the tests, project team members identified suitable answers for each question; assigning 63 points to the organizational questions, 27 points to the case analysis, and 10 points to the literature source question. After substituting codes for the personal and "pretest/posttest" identifiers on the examinations, they were read and graded by a single team member who had not been directly involved in the seminar teaching. In preparation for this responsibility the grader reviewed the curriculum thoroughly and discussed model answers with other team members.

Data on participant satisfaction with the seminars was collected by means of a 4-page form given to participants at the conclusion of each seminar. The form contained 42 structured items that asked the participants to rate the seminar's content and approach (7 items), organization (7 items), subject matter (17 items), quality of instruction (6 items), and relevance to their HEC and other professional activities (4 items). A final item requested an overall rating of their seminar experience. Additional open-ended questions sought more general evaluations of the seminar and possible areas for improvement. Participants were provided with return-addressed, pre-stamped envelopes which enabled them to return the questionnaire directly to the project evaluator. The response rate for the three seminars ranged from 90-100%.

Quantitative evaluation data were computerized and statistically analyzed by the project evaluator (R. Lusky). In the case of the examinations, the participants' raw scores were reviewed, their pretest/posttest scores characterized in terms of percent changes, and mean pretest and posttest scores established for relevant participant subgroups. Analysis of variance (ANOVA) and multiple comparison techniques were then employed to evaluate subgroup differences in performance at the beginning and at the end of the seminar. Paired-difference t-tests or signed-rank tests were used to evaluate the significance of changes in subgroup performance over time. The participants' ratings of their seminar experience were characterized in terms of simple percent distributions. In addition, mean rating scores were used to rank order the fifteen core sessions by their utility to the participants. Finally, participants' comments from the post-seminar evaluation form were reviewed and analyzed for content, and illustrative comments especially noted.

Findings

Examination of the pretest scores showed that variation among participants was associated with differences in professional background and experience on a HEC. Table 2 compares the pretest performance of participants by age, professional background, employment, and HEC leadership. Mean pretest scores are presented for the three components of the test and the test as a whole. Overall, the Table reveals a remarkable uniformity in the preparation of the participants when they arrived at the seminar. The mean scores on the total test were virtually the same for males and females, for those employed by the hospital and those employed elsewhere, and even for HEC chairpersons and regular members. Variation in performance on the pretest is most evident in the area of professional background where, for example, mean scores for the total test ranged from 65.7 among social workers to 84.3 among lawyers. Similar variation can be found on each section of the test, with no discipline consistently achieving the highest (or lowest) scores on all sections. While this apparent association between professional background and pretest performance is consistent with the belief that the disciplines bring complementary strengths and weaknesses to HECs, its importance may be exaggerated in the Table. Close examination shows, for example, that the mean pretest scores for physicians, nurses, and the clergy (accounting for 79% of the participants) all fell within a five point range (72.4 to 76.1). Moreover, the observed differences in pretest performance by profession (like the other differences shown in the Table) failed to achieve statistical significance using the ANOVA procedures.

In contrast, the association between HEC experience and pretest performance was both pronounced and statistically significant. As shown in Table 3, the average pretest score of new HEC members was 63.2, compared to average pretest scores of 75.3 among those with intermediate

(1 to 3 years) experience, and 81.4 among the most experienced HEC members. This 18.2 point spread proved statistically significant when the ANOVA procedures were performed ($p=.0003$). Multiple comparisons showed that the mean pretest score of the "recent" HEC members was significantly below those of the more experienced groups ($p=.05$). Inspection of the three groups' performance on each part of the examination showed that, in almost all instances, performance on the pretest increased steadily with greater HEC experience. In the case of the HEC structure and analysis portions of the test, the "recent" HEC members again performed at a level significantly below the more experienced HEC members.($p=.05$)

Comparison of pretest and posttest performance showed that the test scores of nearly three-fourths (73%) of the new HEC members improved over the course of the seminar, with an average improvement of 11.5 points (from 63.2 to 74.7). This change proved to be statistically significant ($p=.0173$) and distributed across the entire examination. While the mean scores for individual sections of the test all improved from 15-20%, statistically significant improvement was limited to the material on HEC organization and functioning (43.1 improved to 51.2, $p.=.04$). Based on the methods used to select participants, the nature and timing of the testing procedure, and the relative isolation of the participants during this intensive seminar, it seems unlikely that selection biases, external events, or even recall of the pretest could have contributed to improvements of this magnitude.

By comparison, only 44% of those with intermediate HEC experience and only 50% of the most experienced members improved their pretest scores. The mean scores of HEC members with 1 to 3 years of experience failed to increase appreciably (less than 4%) and the mean scores of those with at least four years of HEC experience actually declined by 8% (from 81.4 to 74.9), with most of the decline concentrated in the 10-point literature portion of the test (8.3 down to 5.19). Since it is unlikely that the experienced members' knowledge of literature sources actually declined during the seminar, these declines may be due to chance factors (none of these declines were found to be statistically significant), or to problems in the administration of the post-test (the literature question was the last test question administered during the last hour of the course, and several experienced HEC members either failed to answer the question or referred the reader "to their pretest").

Together, analysis of the pretest and posttest scores suggests that experience is the primary factor associated with a HEC member's grasp of relevant knowledge, skills and issues; and that the one-week seminar was effective in bringing "recent" members up to the level of the more experienced members (especially in the statistically significant area of HEC organization and

functioning). Observed differences in posttest scores of the three groups were minimal and failed to achieve statistical significance ($p = .78$).

At the same time, participant ratings and comments from the post-seminar evaluation form suggest that the more experienced HEC members, as well as the "recent" members, may have benefited from the seminar in ways which were not evident from the pretest/posttest scores. In all, 95% of the participants rated the value of their seminar experience as "High" (34%) or "Very High" (61%). Ratings were generally favorable in all three seminar groups: with 60% of "recent" participants, 53% of those with 1 to 3 years of HEC experience, and 71% of the most experienced members judging the value of their seminar experience to be "Very High." With one exception, ratings from all professional groups were uniformly "High" or "Very High." Ratings from the clergy were somewhat less favorable, with two of seven representatives of the clergy (29%) rating their experience as "Fair" or "Low."

As shown in Table 4, overall satisfaction with the seminar was reflected in participant ratings of the 15 core sessions. On a rating scale of 1.0 (Very Low) to 5.0 (Very High), all of the sessions were rated in the "High-Very High" range. In general, however, sessions providing specific analytic techniques were most appreciated by the participants. These were followed by sessions on organizational and operational issues, sessions emphasizing theoretical frameworks, and topical sessions.

The importance which the participants attached to the analytic methods was also reflected in their responses to open-ended questions. Of five features identified as especially beneficial, the coverage of analytic methods was the most often mentioned. Another valued feature involved the chance to, as the participants put it, "...be with others in the same boat", "...share experiences, problems, and solutions with a promise of collaboration in the future", and, "...confirm that our committees are actually doing pretty well." A third valued feature of the seminar, as the participants described it, was, "the chance for total immersion in the subject", of "having six days to focus in on this important part of our work." The two remaining features of the seminar singled out as particularly useful by a number of participants were its "comprehensive perspective" and "assistance it provided in clarifying committee responsibilities."

When asked about the "least beneficial aspect of the course" and about "areas for improvement," some participants responded in terms of their specific needs (e.g., "needs of small hospitals were not addressed", "clinical issues should be covered in greater depth", or "additional coverage of spiritual concerns needed"). Most often, however, participants expressed concerns

about operational aspects of the seminar. These included the need for more economy in assigned readings, distribution of course materials ahead of time ("...regardless of evaluation!"), and the desire for a better balance between lecture and discussion with more opportunities for participants to "learn from each other."

Summary and Conclusions

Overall, the project described in this paper appears to represent a considerable success in the field of postsecondary education, moving from the identification of a population with special educational needs to the implementation of a well-received program in a two year period. The extensive curriculum developed for the project seems to have been appreciated by participants and, in the case of relatively new members, to have improved their readiness to participate in committee work. Even in the case of more experienced HEC members, participation may have had significant, if unmeasureable, benefits. As one experienced HEC member noted, "It was a very stimulating, challenging, exhausting week and one I would recommend to others." These sentiments were echoed by another experienced participant who indicated that, "In the brochure the seminar looked like it might turn out to be the 'same old thing,' but it turned out to be a challenge and a chance to go home and begin again at a 'higher level'." Beyond its immediate benefits to individual participants, the project has led to the completion of 21 participant papers on procedural and bioethical issues, and the founding of a new journal for HEC members in which they will be published (HEC Forum, Pergamon Press, Oxford and New York).

For the project faculty, the challenge ahead will be not only to respond to participant concerns, but to adapt the curriculum for presentation "on site" at hospitals across the country. While the move from formal demonstration to full-scale implementation will allow new flexibility, care must be taken to ensure that any changes do not sacrifice the program's clearly documented strengths. Ultimately, achieving a portable, economically viable, and equally worthwhile program is likely to prove a challenging task. Given the hundreds of newly established HECs across the country which might benefit from such a program, the challenge appears to be one worth accepting.

Notes

1. In re Quinlan, 70N.J. 10, 355 A2d 647 (1976).

2. Rosenblum and Gant, "The Legal Response to Babies Doe: An Analytical Prognosis, I", Issues in Law and Medicine 31 (1986).

3. President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research: Deciding to Forego Life-Sustaining Treatment, U.S. Government Printing Office, Washington, D.C. (1983).

4. American Academy of Pediatrics. "Guidelines for Infant Bioethics Committees," Pediatrics 74(2)(1984) pp. 306-310.

5. U.S. Department of Health and Human Services Federal Register 50 (72) (April 15, 1985) pp. 14893-94.

6. Boyle, J.F., et al. "Health Policy Agenda for the American People." Journal of the American Medical Association 227 (9) (March 6, 1987) pp. 1199-1210.

7. Youngner, S.J., et al. "A National Survey of Hospital Ethics Committees." Critical Care Medicine 1: (11):902-05 (November, 1983).

8. American Hospital Association. "Hospital Ethics Committees Surveyed." Hospitals (May 16, 1984) p. 52.

9. Kushner, T. and Gibson, J.M., "Institutional Ethics Committees Speak for Themselves." In: Cranford, R.E. and Doudera, A.D. (eds.) Institutional Ethics Committees and Health Care Decision Making (published in Cooperation with the American Society of Law & Medicine) Health Administration Press, Ann Arbor, Michigan (1984) pp. 96-106.

10. Rostain, A.L. and Parrott, M.C., "Ethics Committee Simulation for Teaching Medical Ethics," Journal of Medical Education 61(3) (March, 1986) pp. 178-81.

11. American Hospital Association. Values in Conflict: Resolving Ethical Issues in Hospital Care. Chicago: American Hospital Association (1985).

Table 1

Characteristics of Participants

	Number	Percent
GENDER (N=47)		
Male	28	59.6
Female	19	40.4
PROFESSION (N=47)		
Medicine	20	42.6
Nursing	10	21.3
Clergy	7	14.9
Education/Administration	4	8.5
Law	3	6.4
Social Work	3	6.4
EMPLOYMENT (N=47)		
Hospital	39	83.0
Other	8	17.0
HEC TENURE (N=47)		
Less than 1 year	15	31.9
2-3 years	16	34.0
4 years or more	16	34.0
HEC LEADERSHIP (N=47)		
Chairperson	24	51.1
Member	23	48.9

Table 2

Pretest Scores: By Gender, Profession, Employment, and Leadership

	Mean Score on Pretest			
	Structure	Analysis	Literature	Total Test
GENDER (N=47)				
Male	48.2	18.6	6.4	73.1
Female	50.1	17.0	7.1	74.3
PROFESSION (N=47)				
Medicine	49.9	17.6	5.8	73.3
Nursing	50.4	17.0	8.7	76.1
Clergy	46.0	19.3	7.1	72.4
Education/Admin.	44.3	17.3	7.5	69.0
Law	56.0	21.7	6.7	84.3
Social Work	44.3	18.0	3.3	65.7
EMPLOYMENT (N=47)				
Hospital	49.2	19.3	6.5	73.1
Other	47.8	17.7	7.3	74.3
HEC LEADERSHIP (N=47)				
Chairperson	49.1	18.8	5.8	73.8
Member	48.8	17.1	7.6	73.4

Table 3

Pretest/Posttest Scores, by Seminar

	Mean Test Score	
	Pretest	Posttest
SEMINAR: HEC MEMBERS LESS THAN 1 YEAR (N=15)		
Structure	43.1*	51.2**
Analysis	15.1*	17.5
Literature	5.0	6.0
Total Test	63.2*	74.7**
SEMINAR: HEC MEMBERS 2-3 YEARS (N=16)		
Structure	51.8	52.5
Analysis	17.1	19.3
Literature	6.6	6.3
Total Test	75.5	78.5
SEMINAR: HEC MEMBERS 4 OR MORE YEARS (N=16)		
Structure	51.6	49.6
Analysis	21.6	20.0
Literature	8.3	5.2
Total Test	81.4	74.9

* Shown by ANOVA and multiple comparisons to differ significantly from pretest scores in remaining seminars, p=.05 or better.

** Shown by Paired-Difference T-Tests to represent a significant improvement over performance on pretest, p=.05 or better.