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Original Research

Ethical clinical training (ECT) during the first rotation and its relation to students' satisfaction and personal growth

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ABSTRACT

Clinical instruction should provide students not only with knowledge and skills, but also with ethical clinical training (ECT). In the first rotation, the students are exposed for the first time to the actual behaviors of the practice in a hospital ward (the "hidden curriculum"). Based on the theory of Virtue ethics, we hypothesize that effective rotation should combine the students' personal satisfaction with positive experience regarding ethical and professional conduct. The objectives of this study were: (1) To report students' perceptions of ECT using quantitative and verbal data. (2) To examine the relationship between ECT and students' professional and personal satisfaction during the first rotation. We used a sample of 150 Tel-Aviv University medical school students, trained in 21 affiliated internal medicine wards, 88% of which responded to a questionnaire that addressed students' views on ECT and reports on ethical events they encountered, as well as students' professional satisfaction and personal growth in relation to background characteristics.

According to quantitative and verbal descriptions, ECT level was high in the majority of the wards. Students identified a range of events relating to ECT, especially in the wards which excelled in ethical instruction. The contribution of ECT to students' satisfaction with the professional aspects was significant. The students' background characteristics were not connected with their satisfaction level. The results confirm that highly positive ethical instruction in the clinical phase is effective. Students identified and internalized ethical events and were more satisfied with the training in wards that focused on ethical issues. We suggest putting more resources into the improvement of ECT and into the study its effects in other rotations.

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INTRODUCTION

In this paper, we took on the preliminary study of the extent to which students internalized ethical clinical training (ECT) as manifested in apparent behaviors of physicians towards patients and students during their training [1]. Classical virtue ethics theory teaches that ethics is linked with personal growth. In the world of work behaviors, even though the individual may often experience frustration, he or she may enrich as a person [2]. We therefore hypothesized that a strong relation may exist between students' views of the ECT in the ward and their sense of professional satisfaction, as well as their personal growth while being studying in a clerkship. In other words, we assumed that witnessing unethical conduct towards patients or colleagues might

be associated with cognitive dissonance and frustration, thus lowering the level of students' personal growth and satisfaction during their training in the rotation. According to current literature, greater students' satisfaction results in better educational outcomes [3].

Therefore, we documented students' reports of ethical and non-ethical events. We also examined the ways in which students were being trained toward ethical behaviors and how this related to personal growth and professional satisfaction during their rotation. We focused on students' first clinical rotation (clerkship) in internal medicine, a critical point during medical training where theory and practice merge, and when teaching through role-models becomes substantial [4-

6]. Inevitably, this phase may be fraught with gaps between principles proclaimed by trainers and their daily medical work [7], and possible discordance between formal and informal instruction ("hidden curriculum") [8,9]. In fact, this hidden curriculum may overshadow explicit instruction [1]. Exposure to inadequate ethical behavior may result in a loss of personal commitment to the values of medicine, emotional flattening and changes in ethical integrity, and thus lessen students' satisfaction. The double standard of "do as I say, not as I do" or, most notoriously, "this is the way we do things around here" is known to lower students' own moral standards as well as their level of satisfaction [10]. However, it should be noted that, we examined solely the students' points of view with no intention to objectively evaluate the ethical conduct of physicians in the wards.

The curriculum at Tel Aviv University, Medical School (TAUMED) spans a total of 7 years (3 pre-clinical years + 3 years of clinical rotations + 1 year of internship). During the various rotations, students are divided into study groups of 6-7 individuals, supervised by a tutor (senior physician), who guides their training and discussions [11,12]. Over the past 20 years, professionalism, ethics and bio-social subjects have been introduced into the pre-clinical curriculum (22 hours per semester for 3 years), mainly in the form of theoretical knowledge. Recently, the curriculum in areas of ethics has been modified and partially shifted to the clinical years. It now requires that in each ward, the tutor will receive a special "training for professionalism" in preparation for his/ her tutorship, to aid in the development of students' sensitivity to the ethical aspects of clinical care in addition to their clinical competencies. The strategies to teach clinical ethics include using the ward's physicians and health professionals as role models, as well as discussions of ethical dilemmas with physicians and among the students. Last but not least, the students are required to address ethical, social and cultural issues as part of the management of "their patients". We therefore assumed that rotations led by tutors that have undertaken this preparatory training and are committed to this purpose would increase students' satisfaction.

Study Aims

We asked whether putting the focus on ECT contributes to students' professional satisfaction and improves their personal growth during their training. We examined the relation of students' ECT training to their level of satisfaction as well as to their background characteristics. In order to reassure students' comprehension of ethical issues, we asked them for verbal descriptions of ethical events that they encountered.

We focused on two aspects:

1. Reporting of students' descriptions of ECT (by quantitative and verbal means).
2. Examining the relations between ECT and students' satisfaction (professional and personal growth). The possible effect of students' background characteristics was also tested.

METHODS

The Sample: The clinical internal medicine training setting includes 21 internal-medicine wards, in 7 medical centers, (affiliated with the Sackler School of Medicine at Tel-Aviv University -TAUMED).

During 2009, 150 students at the end of their first rotation in internal medicine were studied, with a responding rate of 88% (138 students). Over half of the students were women; the frequent age range 25-29; most of the students had previously underwent 2-3 years of compulsory military service; 80% of them did not possess other academic degrees. The majority were working part-time outside of the hospital to support themselves financially.

The questionnaire: A written anonymous questionnaire (in Hebrew), pre-tested for clarity and reliability by the researchers, was given to the students, accompanied with explanations of the research purposes and an informed consent. The use of students' questionnaires data was deemed exempt from the full IRB review committee by the faculty authorities. The questionnaire included 14 closed-type items (on a Likert scale from 1=not at all to 4=very much). Of these items, 8 addressed both students' personal growth and professional satisfaction from the rotation, and 6 reported the events and activities concerning ECT. Five additional items included students' background characteristics: age, gender, military service, academic background and work outside the hospital. In an open question, students were asked to describe events, which led them to introspection on ethical behaviors. These descriptions provided verbal data for a better understanding of the students' perceptions and internalization of ethical aspects during their training.

Data Analysis: Data analysis was performed using the following approaches: (1) factor analyses for defining the two depended variables 'professional satisfaction' and 'personal growth'. (2) T-tests to compare two groups of wards according to their level of ECT: group 1= higher level of ECT, group 2= lower level of ECT. (3) Variance analyses to exclude a possible effect of background characteristics. (4) The qualitative method of content analysis was used to analyze the answers to the open-ended question.

RESULTS

ECT level in the various wards

Numerical report

Most students reported high levels of ECT in the wards (Table 1).The majority (83%) rated 4 (on a scale of 1-4) the volume of events of witnessing "Considerate attitude towards vulnerable patients". Additionally, 65% of students rated "Raising ethical dilemmas of patients by the physicians" with the highest frequency score. Nevertheless, 18% of the students reported very frequent events (rated 4) of "Unprofessional behavior of physicians towards their patients". ECT means were calculated for each of the 21 wards, indicating differences of the levels of ECT. Therefore, we divided the wards into two groups: 10 under average low in ECT (hereafter: 'low-ECT'), and 11 above average in ECT (hereafter: 'high-ECT'). Using T-test to compare those two kinds of wards, the results showed significant differences on 5 out of the 6 items concerning ECT (Table 1).

Verbal report

In order to understand the extent to which students identify and internalize the concepts of clinical ethics

and their application in daily clinical work, we asked them to describe, in their own words, events concerning ethics that they encountered during their stay in the wards. Our aim was to find out whether students that attended clerkships in wards that invested more in ethical education have become more aware of events involving ethical dilemmas than students in the other wards. Therefore, we divided the students' remarks according to the two ward groups: 80 students in 'high-ECT' and 54 in 'low-ECT' wards. A total of 165 events' descriptions included a variety of ethical aspects. In the 'high-ECT', students presented 103 events (62% of all events). In the 'low-ECT', students presented the other 62 events.

The issues raised: autonomy and consent to treatment; conduct and respect for patients; considerations of allocation of limited resources to treatment of patients; communicating bad news to patients and their families and students' personal feelings. The majority of the remarks on issues of autonomy of patients and communicating bad news were raised by students trained in 'high-ECT' wards, whereas, the majority of the remarks on respect for patients were raised by students of 'low-ECT' wards.

Table 1. Numerical descriptions of 'ECT': students' reports (in %)*, means and SD in 'low-ECT' and 'high-ECT' wards#.

Item describing 'ECT'	1*	2*	3*	4*	M (SD) All N=134	M (SD) 'Low-ECT' N=54	M (SD) 'High-ECT' N=80
Physicians raised ethical dilemmas of patients	5	8	22	65	3.47(.83)	3.09(0.99)	3.73*** (0.59)
Cases of unprofessional behavior of physicians towards patients.(opposite direction)	18	28	25	29	2.66 (1.09)	2.48 (1.18)	2.78 (1.01)
Discussions on patient's social-cultural problems.	16	21	20	43	2.89 (1.13)	2.63 (1.09)	3.05**(1.12)
Students' witnessing considerate attitude towards vulnerable patients	2	8	8	83	3.73 (.67)	3.55 (0.87)	3.85**(0.45)
Students' group deliberations on their ethical behavior and the staff's.	13	14	26	47	3.06 (1.07)	2.76 (1,23)	3.26**(0.91)
Special student group-tutor discussions on ethical issues.	14	18	28	40	2.94 (1.07)	2.43 (1.08)	3.27*** (0.93)

'low-ECT= 10 wards under average in ECT; 'high-ECT'= 11 wards above average in ECT

*Students' reports (in %) of frequencies of such events as experienced by students on a scale of 1=not at all to 4= very often.

p<0.05 *p<0.01 in t-tests

Autonomy and consent to treatment: This was the most frequently described issue (85 cases). The cases described various ethical dilemmas performing

interventions on dying or demented patients, while it was impossible to get consent, performing invasive examinations on unconscious patients or those

suffering from cognitive impairments, resuscitations of patients despite "Do Not Resuscitate" (DNR) orders, treating patients who clearly could not benefit from the treatment and the dilemma of euthanasia. In addition, students mentioned cases of young and mentally capable patients who themselves or their families refused treatment.

Issues of respect and conduct to patients: Most (75%) of the 30 cases described, were reported by students of 'low-ECT' wards. For examples, regarding the issue of students' presence at the ward, they asked: 'Is it in accord with patient rights?', 'Does it violate doctor-patient confidentiality?', 'Does it cause stress to patients?', 'Isn't it embarrassing for a female patient to undress in front of a group of students?'. As well, students wondered whether they may receive a gift from a patient, or should a student report it when a patient harassed her or see a wrongdoing towards a patient. Students emphasized physician misconduct such as reacting angrily toward patients, gossiping on hospitalized celebrities, a woman-doctor who referred to a patient as being "too fat", questionable relations between doctors and pharmaceutical companies. Another issue that was raised was of nurses complaining of excessive workload and its effect on treatment.

Priority assignment of limited resources: A total of 24 comments touched upon the issue of providing quality yet costly treatment to various types of patients (e.g., who should cover the healthcare expenses of very old people or illegal immigrants). Students also addressed the questions of prioritizing patient care and the allocation of scarce resources, dilemmas of investing efforts in patients considered as "not contributing to society", or the ways to deal with a lady who does not want to die at home and wants to stay in the hospital

while burdening the national health budget.

Communicating bad news to patients and families: Students reported 23 cases of such events.

Students' personal feelings: Few students expressed their personal feelings such as in the following statements: 'It was unpleasant to treat old patients', 'This experience was not easy for me, to see old patients suffering', 'We should discuss more ethical dilemmas, and I suggest that senior physicians will share with us their first time experience on the ward. It could have eased my own feeling of stress'.

The relationship between of ECT and students' professional satisfaction from their training and personal growth

The dependent variables ('professional satisfaction' and 'personal growth') were rated high by the students ('personal growth' mean 3.44, SD 0.68, 'professional satisfaction' mean 3.24, SD 0.61 on a scale of 1-4). T-tests were carried out to compare students in 'high-ECT' to 'low-ECT' wards in regard to the dependent variables ('professional satisfaction' and 'personal growth'). This revealed significant difference in students' professional satisfaction with the training (table 2). Students in 'high-ECT' wards were more satisfied. Yet, no significant difference was found between the students' 'personal growth' in the two ward groups.

To eliminate a possible effect of other variables, we carried out variance analyses, which revealed no significant effects of any of the students' background characteristics: age group, gender, academic background, military service and extra work out of the hospital on the students' 'professional satisfaction' and 'personal growth'.

Table 2.T-tests comparing students' means of 'professional satisfaction' and 'personal growth' between 'low-ECT'* and 'high-ECT'* wards

Dimension of satisfaction	M (SD) 'low-ECT' n=54	M (SD) 'high-ECT' n=80	t
Professional satisfaction	2.94 (0.70)	3.44 (0.44)	5.10**
Personal growth	3.42 (0.67)	3.46 (0.69)	0.38

* 'low-ECT'= 10 wards under average in ECT; 'high-ECT'= 11 wards above average in ECT ** p< 0.01

DISCUSSION

The results of this study reveal students' views on ethical clinical training (ECT) in the ward when confronted with actual dilemmas through immersion in clinical reality. We hypothesized that the more the ward staff behaves ethically and is involved in ethical

teaching and discussion of ethical dilemmas with the students (i.e., the higher the ECT), the more the students would express overall satisfaction and high personal growth. The results assert the contribution of ECT to students' professional satisfaction. However,

we found no evidence of ECT effect on students' personal growth. The association found of professional satisfaction with ethical training is in accordance with current concepts of teaching medicine [1], meaning, teaching medical facts and skills to perform medical procedures to the future physician, are not sufficient [8].

Interestingly, the findings show no relationship between ECT and students' 'personal growth'. We suggest two possible explanations for this finding. Today, rigorous selection criteria of candidates for our medical school are based heavily on strong character and personal qualities believed to contribute to good medical practice [13]. Additionally, most of the students entered medical school after two to three stressful years of military service, which demands them to deal with high level of responsibility and provide them with traumatic experiences. These circumstances may have resulted in higher resilience and high personal growth *a priori*.

This study used two approaches to examine students' perception of ethical conduct in the wards. The closed-items part of the questionnaire enabled us to identify the nature and strength of the relationships between ECT, 'professional satisfaction' and 'personal growth' in the two kinds of wards ('low-ECT' and 'high-ECT'). The open part of the questionnaire allowed us to investigate the ways in which students perceive and verbally express themes of medical ethics.

In both approaches, students reported that medical personnel in a majority of the wards behaved ethically. The numerical data prove the benefits of investing in ethical education in the clinical phase of the training. The verbal data shed light on students' perceptions of ethical cultural aspects, pointing out cases of misconduct in the wards, discussing debatable issues and stressing the need for guidance in professional life. Students in both 'high-ECT' and 'low-ECT' wards expressed criticism of ethical conduct at the wards in their comments but there were differences in the issues raised in the two kinds of wards. Relatively more students in 'high-ECT' than 'low-ECT' wrote comments concerning issues of patient autonomy and informed consent, considerations of prioritizing of limited resources, the delivery of bad news to patients and their families, and expressed criticism on physicians' ethical behaviors. Our conclusion is that since more focus and more effort have been put on teaching and discussing those ethical issues in 'high-ECT' wards, the students were able to better note such events during their clerkship. On the other hand, students in 'low-ECT' wards expressed unattended frustration by reporting cases of disrespect to patients and the unwanted effects of students' presence. Such aspects, that probably were not part of the official curriculum, are manifestations of

the "hidden curriculum". Example for such a case is the report on a physician who reacted with anger when confronted a patient who refused to accept the students' presence during a medical procedure. Such events can explain the students' lower level of satisfaction from the clinical training in 'low-ECT' wards in comparison to students from 'high-ECT' wards. Thus, students' open remarks bolster the findings from the closed part of the questionnaire.

It should be noted that in the majority of their comments, students mentioned topics which had been discussed theoretically in ethics courses during pre-clinical years. For example, students reported difficulties in keeping patients' legal rights [14] when confronted with the clinical reality. Thus, the verbal results are a testimony to the students' clinical application of ethical theoretical knowledge taught in the preclinical curriculum.

A notable limitation of this study is that the study was carried out in one cohort of medical students and focused exclusively on the internal medicine clerkship. It is therefore difficult to generalize the conclusions to other medical schools and other clerkships. We therefore recommend that additional studies will be conducted in other schools and rotations, to either challenge or substantiate these preliminary results.

REFERENCES

1. Satterwhite RC, Satterwhite III WM, Enarson C. An ethical paradox: the effect of unethical conduct on medical students' values. *J Med Ethics* 2000;26:462-65.
2. Slote, M. *From morality to virtue*. Oxford university press, Oxford, 1992.
3. Brainard AH, Brislen HC. Viewpoint: learning professionalism: a view from the trenches. *Acad Med*. 2007;82(11):1010-14.
4. Feudtner C, Christakis DA, Christakis NA. Do clinical clerks suffer ethical erosions? Students' perceptions of their ethical environment and personal development. *Acad Med*. 1994;69:670-79.
5. Wright S, Kern DE, Kolodner K, Howard DE, Brancati FL. Attributes of excellent attending-physician role models. *N Engl J Med* 1998;339:1986-93.
6. Kenny N, Mann KV, MacLeod H. Role-modeling in physicians' professional formation: Reconsidering an essential but untapped educational strategy. *Acad Med*. 2003;78:1203-10.
7. Wooliscroft J. Medical student clinical education. In: Norman G, Van der Vleuten C, NECIle D. (eds.) *International Handbook of Research in Medical Education*. Kluwer Academic Publishers, Dordrecht, 2002.

8. Hafferty FW, Franks R. The hidden curriculum, ethics teaching, and the structure of medical education. *Acad Med.* 1994;69:861-71.
9. Lempp H, Seale C. The hidden curriculum in undergraduate medical education: Qualitative study of medical students' perceptions of teaching. *BMJ* 2004;329:770-73.
10. Rabow M, Gargani J, Cooke M. "Do As I Say": Curricular discordance in medical school end-of-life care education. *J PalliatMed.* 2007;10(3):759-69.
11. Borkan JM, Weingarten MA, Schlank E, Fadlon J, Kornitzer S, Notzer N, Ronen A, Abramovitch H, Lehmann S, Smidt-Afek N, Fainaru M. A model for educating humanistic physicians in the 21st century: The new medicine, patient, and society course at Tel Aviv University. *Educ for Health* 2000;13(3):346-55.
12. Notzer N, Abramovitch H, Dado-Harari R, Abramovitch R, Rudnik A. Medical students' ethical, legal and cross-cultural experiences during their clinical studies. *Isr Med Assoc J.* 2004;7:58-61.
13. Ziv A, Rubin O, Moshinsky A, Gafni N, Kotler M, Dagan Y, Lichtenberg D, Mekori J, Mittelman M. "MOR": A simulation-based assessment center for evaluating the personal and interpersonal qualities of medical school candidates. *Med Educ.* 2008;42(10):991-98.
14. Patient's Right Act, 1996. Available via wami.haifa.ac.il/reference/legislation/Israel/Israel1.htm (Accessed 01 February 2013).

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