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**Exploring the “Hidden Curriculum” in Emergency
Medicine Training Programs**

by

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ABSTRACT

Introduction

The Emergency Department (ED) is popular with learners. Amid the chaos we teach, sometimes oblivious to messages sent and lessons taught. This exploration of the 'hidden curriculum' is a glimpse at the some of the content of this curriculum in two postgraduate Emergency Medicine (EM) programs. The objective of this study was to stimulate reflection on the importance of role modeling in medical education and hopefully to moderate the content.

Methods

A survey and subsequent focus group interviews of faculty and residents in two Emergency Medicine (EM) training programs was conducted. The surveys were mailed in October 2005 and the focus group interviews conducted in May 2006.

Results

The main focus of the hidden curriculum messages were inter- and intra-disciplinary disrespect in the provision of care. Messages also related to patient care in the form of lack of respect, laughing at patients, and blaming them. Other elements identified included gender issues, lifestyle expectations and financial concerns.

Conclusions

The perceived content of the hidden curriculum was different for faculty and residents. We must heighten role-modeling consciousness

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STATEMENT OF THE TOPIC

When students enter a school of medicine they begin to be “educated” to be physicians both socially and academically.

“Medical education has not changed substantially . . . students are still expected to assimilate large amounts of basic science and apply that knowledge as they are taught practical aspects of patient care. And young physicians still learn largely by observing more senior members of their field.”

(Groopman, 2006)

Students with a broad spectrum of education, experience and maturity undertake medical education. This spectrum has increased in breadth as medical schools now accept candidates with training other than the traditional science degree and academic grades have ceased to be the sole route to eligibility to enter medical school. Despite this change, there remains some expectation of conformity in deportment, dress and attitude among these students both socially and academically once admitted to a school of medicine. In North America, after an initial period of mainly classroom-based instruction, their education is moved to settings such as clinics and hospitals where the teaching is largely apprenticeship based. Although this is likely constructive in enhancing a solid growth and clinical application of their scientific medical knowledge, exposing learners at a very early stage in their development to situations where there is sometimes lack of consideration for the humane aspects of patient care has been shown to be deleterious to their moral and personal growth. (Patenaude, Niyonsenga, & Fafard, 2003c) “. . . medical education is not just learning about becoming a physician, it involves learning how to ‘cease’ being a layperson”. (Hafferty, 1991)

The process of educating physicians is very complex and reaches far beyond the curricula set forth by medical schools. There are well-defined objectives and assessment tools to evaluate scientific knowledge and technical skills. In the realm of socialization and professionalism, however, specific learning objectives and evaluation criteria are less developed. Traditional values are stressed didactically, but may receive little or no attention in clinical teaching, a situation of particular concern.

“...North American medical education favors an *explicit* commitment to traditional values of doctoring- empathy, compassion and altruism among them- and a *tacit* commitment to behaviors grounded in an ethic of detachment, self-interest and objectivity.” (Coulehan & Williams, 2001a)

Philip Jackson coined the term “hidden curriculum” in his book *Life in the Classroom*. (Jackson, 1968) The concept had been discussed by others previously; however, it had not been labeled until this work was published in 1968. The hidden curriculum includes messages given to learners, other than those of the formal intended curriculum. For example, in medicine, the teaching of scientific knowledge and technical skills is intended; the hidden curriculum might include messages pertaining to perspectives on race and gender, power and authority, sexual orientation, and appropriate behaviours, among other things comprise the content of this curriculum. (Hafferty, 1991; Posner, 1995) Transmission of the hidden curriculum is accomplished though spending time with students, socializing with them and incorporating them into our lives complete with value systems and perspectives on the less tangible aspects of our professional behaviour both at work and outside of it. Institutions and educational planners have little or no control

over some of its content; however, we can modify our attitudes and behaviors and our reactions to the behaviors of others, changing the elements of the hidden curriculum once we are aware of some of its content. (Jackson, 1968) This research explores the nature of the hidden curriculum in postgraduate training programs in Emergency Medicine (EM). In addition to messages that may not be intended, we may also discover hidden curriculum messages that are positive and that we wish to promote through inclusion in the official curriculum. Reynolds aptly states that:

“ the ‘education community’ and ‘learning climate’-the context or learning environment of education or training- strongly influence learners’ development of appropriate values, attitudes, and skills.” (Reynolds, 1994)

I have not found reports or studies of the hidden curriculum specifically in EM training programs, the topic explored in this thesis. The education literature and that on professionalism in medicine have begun to explore this topic.

RESEARCHER'S PERSPECTIVE

My interest in the hidden curriculum in EM developed through observations made over 18 years of practice as an Emergency Physician (EP). Teaching and observing others teach and work as faculty members, I have witnessed many behaviours role modeled by EPs, some excellent and others less so. I am interested in the perspectives of faculty; however, I believed that some comparison and contrast with those of EM residents would add another dimension to this work.

The involvement of EPs in education has been longstanding; however, along with the development of academic departments and EM as a specialty in the last three decades, EM has focused on improving pedagogical methods and optimizing students' experiences while in the Emergency Department (ED).

The ED is very popular with both undergraduate and graduate students as there is ample undifferentiated pathology for learning and immediate staff supervision at all times. The ED is also a very important place for the delivery of the hidden curriculum. As part of their education, students also learn how to "be" a professional; be part of a team, treat patients and their families, break bad news, and deal with difficult patients in the ED.

Working in this chaotic and stressful environment can lead to joking and comments about such things as patients and staff from other departments.

Other elements of the hidden curriculum including lifestyle expectations such as travel, fancy cars, and playing golf might also be formed in this manner, in addition to valuing a lifestyle where family and fun are afforded little or no time. Messages that are given through exposure to jokes about a patient's obesity, derisive comments about race or

gender, or allusions to a poor work ethic in other team members or staff from other departments, also all impact learners to varying degrees.

Emergency physicians increase their susceptibility to err when we allow our assumptions about patients to influence our clinical impression based on what we believe is most likely or typical for this patient, e.g. narrowing or altering our differential diagnosis in the case of representativeness errors, where we actively seek only the most prevalent disease patterns. In each of these situations physicians expose themselves and their patients to error resulting from impressions or stereotypes.

Stereotyping patients based on such information and the influence of information transmitted casually when providing a patient's history to others could lead to increased error in some cases. For example, mistakes such as representativeness error, Sutton's slip, triage cueing and other types of errors in clinical practice could be increased by this information.

In Sutton's slip, we "go for the obvious", accepting our first impression without consideration or exploration of other possibilities. It would be possible to dismiss a complaint such as knee pain in an obese patient, and attribute it to obesity without giving due consideration to a broad differential diagnosis, once that stereotype has been made.

In triage cueing, we accept someone else's assessment of the severity of a patient's illness. This is based on what the patient feels is wrong, the area of the ED that patient is assigned to by the personnel at triage, the tests that the nurse who assessed the patient ordered prior to physician assessment, among other things. (Croskerry, 2003) When information or clinical impression affects patient care in this way, EPs can err in

providing superficial assessments or in the direction of conducting excessive ancillary evaluations that are not clinically indicated for a particular patient.

The hidden curriculum in the ED is not all negative; there are also many positive messages transmitted this way, such as ED physicians staying to help out after a shift ends when patients are waiting for a long time to see a physician in the ED, or spending significant time on education and academic pursuits in the interest of better patient care.

The following quotation from Project Professionalism 2002 describes attitudes and behaviors sought in professionals:

“To act as a professional, a physician must demonstrate integrity, service, compassion, conscientiousness, commitment to clinical and scientific excellence, and appropriate behavior toward colleagues.” (Arnold, 2002)

Training in medicine includes far more than is explicitly stated in the curriculum.

Students are socialized into the role of physicians; a process both positive and negative.

“In few specialties are ... unspoken, non technical competencies so important as in the profession of emergency medicine”(Rosenzweig, 1991)

Curricula in ethical decision-making and behavior, and in professional conduct, lose their power when juxtaposed against clinical conduct by educators and physicians repeatedly demonstrating contradictory message. Physicians in the ED, and indeed throughout the healthcare network, sometimes act unprofessionally e.g., those who practice intimidation, harassment, or are disruptive to the delivery of excellent patient care.

Learners receive a dichotomous message in the ED: one of ethical and moral conduct and professional behaviour juxtaposed with callousness, jokes and sometimes disrespect for

staff and patients. This is doubtless confusing for many students. Students are exposed to many of our interactions during a work shift: the good, the bad and the in-between.

“Every interaction within the training program shapes and molds behavior; the underlying culture dictates what values are important.” (Wong, 1999b)

What are the causes of this situation? Do the numerous demands made simultaneously on ED staff contribute? Does the fact that family physicians and other specialist physicians have the opportunity to review our work with the benefit of hindsight lead to unprofessional comments? Perhaps we make comments in anticipation of their potentially derogatory view of the care we have provided, or the comments may be made by services outside EM. If, for example, the internal medicine service has assessed a patient referred by EM and their opinion does not concur with the EP’s diagnosis or treatment plan, derogatory comments could ensue. In EM, rationing empathy, an unintentional attempt to reserve some for those who need it most, is also a possibility, especially when patients present with conditions perceived to be self-inflicted. Are these attitudes generated through socialization in medicine or does EM attract physicians with these personality traits? Does the institutional, political and social situation within the ED, the hospital and beyond impact the hidden curriculum? Do all professional groups and all medical fields have a hidden curriculum? Does the hidden curriculum lead us to stereotype patients and lead to making errors in our clinical practices?

There is a paucity of literature to date on the specific topic of the hidden curriculum in EM and little more in the broader medical literature. A considerable body of research on this topic is found in the education literature, and there is ample recent literature in both medical education and in EM on the importance of professionalism to the practice of high

quality medicine. In the past, although some attention was paid implicitly to professionalism in medicine through extensive apprenticeships, the focus for change has been more explicit in recent years.

Teaching professionalism has come to the forefront with the CANMEDS 2000 project and is integral to the Four Principles of Family Medicine. (College of Family Physicians of Canada, 2007; The Royal College of Physicians and Surgeons of Canada's Canadian Medical Education Directions for Specialists 2000 Project, 1996) The CANMEDS 2000 project brought forth seven aspects of professional behavior or roles so critical to the practice of medicine that the Royal College of Physicians has made these accreditation criteria for all training programs nationally. The seven roles of the CANMEDS program are: medical expert, communicator, collaborator, manager, health advocate, scholar and professional. The four principles of Family Medicine have long been part of accreditation for Family Medicine Programs and include the key elements of professional conduct. The four principles of Family Medicine include: skilled clinician, community-based physician, resource to a defined practice population, and the centrality of the patient-physician relationship.

This focus on professional roles and behaviours beyond medical expertise has indeed been a global phenomenon, with almost simultaneous interest throughout the developed world. This is an aspect of medical education whose time has come. (General Medical Council, 2003) Teaching, evaluating, and evaluating the teaching of professionalism are difficult undertakings. The subjective nature of these behaviours and the personal nature of feedback provided about them, in addition to the lack of well-studied and tested

teaching and assessment tools, provide a sufficient challenge to deter many ED teachers from addressing these important areas of professional formation.

INTRODUCTION AND DEFINITION

There are several definitions of the hidden curriculum in the education literature. I have adopted the following definitions for their comprehensiveness and applicability to the specific area studied in this research project.

When defining the different types of curriculum we can separate them into five types: formal, informal, null, extra and hidden curricula. (Posner, 1995) The formal or official EM curriculum includes all planned learning experiences in EM for students studying medicine. The formal and informal curricula overlap. The informal curriculum includes the explicit teaching that is actually delivered to a particular group of learners in EM which may differ from that of another group. The null curriculum includes the subjects consciously omitted from the curriculum; the nature and scope of this null curriculum can indicate the importance, or more commonly the lack of importance, attributed to these subjects at a particular institution. The extra curriculum includes all non-compulsory activities in which students participate such as sports, musical endeavours and leadership roles. The curricula are influenced by students, teachers, and students' personal background and experience and will be experienced differently in the same program by different students, introducing another variable into this equation.

The following quotations attempt to define the hidden curriculum. In the first definition, Wong details the scope and importance of this topic:

“ Some educators have commented on the importance of the ‘hidden’ or ‘informal’ aspects of medical training that occur on the wards, in the clinics, on the elevator, and even at social gatherings outside the hospital-any place where physicians come together and cope with life. Every interaction within the program

shapes and molds behavior; the underlying culture dictates what values are important.” (Wong, 1999a)

To further describe the content area of the hidden curriculum I have used the following definition:

” . . . hidden curriculum is not generally acknowledged by school officials but may have a deeper and more durable impact on students than either the official or operational curriculum. . . messages of the hidden curriculum concern issues of gender, class and race, authority, and school knowledge, among others.”(Posner, 1995)

The following definition, in my opinion, best describes the hidden curriculum explored in this thesis.

"The hidden curriculum consists of a set of modeled professional values (morals), behaviors and attitudes which lie outside and often contrary to the formally stated curriculum of medical education, but which nonetheless strongly influence and shape the professional behavior and attitudes of future physicians.” (Bullock, personal communication, 2007)

In the medical education literature Hafferty emerges as a leader in the area of the hidden curriculum. His work provides not only a definition of the hidden curriculum, but the impact of this curriculum on students and the implications this has for the learning of ethics, and the concept of serving a community. Hafferty has also shared his reflections on curriculum reform in light of this erosion of values. He believes that attempting to change the curriculum without first acknowledging and carefully examining the entire curriculum would lead to inevitable failure to effect any real changes in the educational

process. His challenge to educators is to reconstruct the learning environments rather than modifying the formal curriculum from its current position within education. (Hafferty, 1998b)

There has been increasing interest in the explicit teaching of professionalism in medicine over the past decade. Formal teaching sessions in this area are now part of undergraduate medical education curricula and at the postgraduate level in programs across all specialties. The importance of adherence to the principles of professionalism in clinical settings is vital in emphasizing their importance in practicing excellent medicine. Role modeling is also a central element in professionalism. This is where we fall short of the ideal. (Kenny, Mann, & MacLeod, 2003i) “. . . effective teaching of professionalism remains elusive and students pick up lessons on professionalism through hidden curricula that run through our education system.” (Baernstein & Fryer-Edwards, 2003)

OVERVIEW OF EVOLVING THEORY

As far back as the first century, we have documents attending to the caring aspects of our profession. I am, of course, referring to the Hippocratic Oath; the first written document referring to professionalism and commitment of physicians. Although likely an expectation even prior to this, since the adoption of the Hippocratic Oath, physicians have been expected to tend not only to the clinical needs of their patients but also to care for them. To this day, this oath is formally taken at the completion of training.

In 1847, when the American Medical Association adopted its code of ethics, it set forth standards and the ‘scientification’ of medicine began.

“...Scientific knowledge serves as a Rosetta stone for understanding other forms of human discourse.” (Coulehan & Williams, 2001b)

This quote emphasizes the importance current medical education and practice attach to the scientific aspects of each of these. This step was necessary in the development of respect for the profession and in the delivery of acceptable care by physicians as a group. The Flexner Report in 1910 sought to provide more structure for medical education in the United States with the goal of developing common national objectives and setting standards for the education of medical professionals. In this process, although this was not specifically Flexner’s intent, a shift occurred toward scientific and technical content rather than the humanistic aspects of practice. (Flexner, 1910) The development of science-based medical education that ensued, overshadowed the need for growth in the human and professional aspects of medical care. The scientist physician model became pervasive, and remains so as physicians have strived for greater foundation in evidence-based practice in the second half of the 20th century.

Not until the 1960s, with the advent of socialized medical care, did society feel the freedom to question the values and professionalism of physicians who did not possess the humanistic values that had been neglected progressively over the last century. Perhaps the population has gained assertiveness in our publicly funded systems, where there is generally an expectation to respond to societal needs as one of the deliverables.

In this review of the relevant theory, I will begin with the current theory of planned learning and the hidden curriculum, and then address social and cognitive aspects of learning. These will be followed by aspects of theory of apprenticeship, role modeling and tacit learning, the review will conclude with professionalism.

In *Life in the Classroom*, Jackson focused on the social and psychological aspects of school in general. (Jackson, 1968) He discussed the school experience in a broader way. By looking beyond academic learning and exploring concepts including socially-accepted learning and the transmission of norms and values, this book served to introduce the notion of learning as a social experience, attaching importance to the influence of the way in which it is planned and delivered.

The term hidden curriculum has since been further described by Hafferty, Portelli and more recently Posner. (Hafferty, 1991; Portelli, 1993; Posner, 1995) Posner includes in his definition aspects of schooling some do not consider; influences such as the administration and parents of students who also play a role in their professional development, are part of his hidden curriculum. In his work, Hafferty (Hafferty, 1991) states that the current hidden curriculum in medical education warns students against being too reflective and introspective, and that true reform cannot be achieved until both reflection and introspection are facilitated from within the educational model. In his

definition, most non-explicit aspects of the educational experience were to be included. The fact that this part of the curriculum is hidden not only leaves educational planners and program directors without any control over its content, but also implies that it is kept hidden due perhaps to the inappropriate nature of its content. We know, for example, that in public education systems there are hidden curricula, some of which are deleterious for certain groups of children more so than for others. This does not mean that the entire hidden curriculum in public school systems is negative either; rather, we should be aware of this content to ensure the intentional inclusion of the positive and eclipse of the negative elements wherever possible. Some feel that the hidden curriculum is consciously present and that the values and attitudes conveyed in educational settings are not accidental even when not set out in the formal curriculum.

“(the presence and importance of the hidden curriculum) . . . is consistent with the long-accepted theory that there is a ‘hidden curriculum’ behind the explicit curriculum in higher education. It is set up to give strong messages about power, authority, control, obedience, hierarchy and related behaviors.”(Takala, Hawk, & Yannis, 2001)

Learning is always contextual. The social and cognitive context of any learning experience affects the way in which students integrate the information formally presented. (Lave & Wenger, 1991) Appropriate use of skills learned, the importance of collaborative and team efforts, as well as individual commitment to the provision of care for society as a whole are influenced by the messages learned in the hidden curriculum. Physicians are but one piece of the social and healthcare network and as such their education should include concepts such as community, service, patient safety, and respect

for patients and colleagues. Examination of the socio-cognitive aspects of learning provides some insight into the importance of the information we provide our students. “Learning is used to regulate feelings and thoughts as well as actions, and humans are ‘watchers’ and ‘listeners’ as well as ‘thinkers’. They learn from observing others’ actions and their consequences as well as from acting on the world.” (Bandura, 1986) This important quote stresses the importance of the social aspects of learning and the potential we have to influence students in the delivery of messages other than those of scientific and clinical content. An example of hidden curriculum is the following: physicians and other health professionals face time challenges in caring for elderly patients, causing the transmission of negative hidden curriculum messages toward this group of patients when the ED is very busy. Without explanation and caution, students might interpret our frustration out of context and see this group of patients as undesirable and slow paced. In fact, these patients are delightful and some of the most interesting, in addition to carrying, as a group, the greatest risk of serious medical illness and inappropriate discharge from the ED.

There are certainly positive elements in the hidden curriculum that, if exposed, educators could actively integrate into the formal and the operational curricula. In their study of students’ moral development, Patenaude et al. discovered that many students actually regressed and very few made progress in their moral reasoning during their medical training. (Patenaude, Niyonsenga, & Fafard, 2003b) This startling finding leads educators to want to rid their teaching milieu of any factors that might negatively affect the moral development of students. Thoughtless comments made in the clinical setting such as: “she’s *how* old and pregnant?” when caring for a teen in the ED can colour a student’s view

of this patient and sometimes affect patient care and the compassion and empathy with which physicians interact with her.

“More information is required as to the nature of socialization in medical education and the nature of the tacit knowledge we convey in our observed activities at work. . . . not ridding the environment of “contaminating” values but rather one of recognizing their presence and working with them- including taking steps to counter whatever elements are deemed (at the time) to be unwarranted or undesirable.” (Bennett, 1990)

Some argue that greater attention must be paid to the development of structured goals and objectives in teaching the principles of medical ethics, in addition to integrating these concepts into clinical teaching and providing opportunities to apply these concepts during training. The pendulum had swung from the Hippocratic ethics, focused on sound moral character, to the application of ethical principles involved in solving difficult and challenging situations at one point in time and for individual and specific situations. It has now started its inevitable return toward the goal of developing physicians with sound moral character and ethical principles. When formally taught and reinforced in the curriculum, on the basis of which students will make medical decisions, the impact of these concepts will be augmented. The social nature of medical education gives importance to this aspect of the theory.

Prior to medical education being framed and organized into medical schools at the end of the eighteenth century, apprenticeship was the teaching and learning method for physicians and for many other professionals. Apprenticeship is one of the older models in educating medical doctors. In this learning model, small but frequent alterations to a

learner's knowledge base and applications of this knowledge are achieved through exposure in a practical setting over time, cumulatively providing coverage of the breadth of training required for proficiency in the area of study. (Vanderstraeten, 2002)

“According to cognitive psychology, the learning occurs as changes to our schemas—those cognitive maps that we build to help us make sense of the world.” (Kenny, Mann, & MacLeod, 2003h)

Thus in the apprenticeship model, the social and cognitive aspects of learning are coupled and the introduction of new concepts is socially situated in the context in which it will most likely be applied. Current medical training follows a path including serial short apprenticeships, providing opportunity for students to compare and contrast different practice styles. Without some support and guidance in selecting appropriate practice techniques and attitudes, students may emulate practices observed in preceptors based on personality rather than quality of care. There is ample opportunity for the hidden curriculum to surface in the apprenticeship model; in fact, it would be a loss to remove all the unwritten learning from such a model in medicine as many important aspects of clinical care are learned in this model.

In addition, the widespread maxim “see one, do one, teach one”, is sometimes taken literally and historically and has been used extensively in the apprenticeship model in medical education. In this model, students are expected to observe a procedure once, perform it the next time, and teach the procedure the third time they encounter it. This approach lacks opportunity for practice, questions, reflection, the inclusion of error as a possibility in clinical practice, and offers no second chance to gain confidence in many areas of medical practice. (Vozenilek, Huff, Reznick, & Gordon, 2004) The absence of

serial, supervised social and ethical experiences and discussion of the appropriate application of a test or procedure is lost in this model and we have done well to erase this from our teaching repertoire. Apprenticeship continues to contribute significantly to the education of health professionals and molds some of the attitudes and behaviors that make up the hidden curriculum.

Role modeling uses people in their roles as professionals as examples for others. There are both positive, “good” role models, and negative, “bad” role models. In the medical education literature the term is generally understood to be positive unless otherwise stated. (Wikipedia, 2007) Role modeling is key to learning roles in society both within and outside medicine. Role models must have an acute awareness of their potential to influence students and actively seek opportunities to model positive behaviours whenever possible. Congruency between what one does as a role model and what one practices is key in maintaining credibility and securing the importance to students of areas such as ethics, professionalism and patient respect and advocacy. The influence role models have as senior practitioners of medicine and supervisors can elude them; however, students seek models to emulate in joining the community of physicians.

“We know that what is modeled for medical students is sometimes heroic and sometimes horrific”(Kenny, Mann, & MacLeod, 2003g) “ We should be mindful too, that mimicry forms a significant part of learning. Learners will mimic and incorporate system values and behaviour modeled by their clinical teachers.” (Croskerry, Chisholm, Vinen, & Perina, 2002a) “Physician role models affect the attitudes, behaviours and ethics of medical learners and foster professional values in trainees.” (Wright & Carrese, 2002b)

Role modeling has been suggested as a key element in the achievement of excellence for students and faculty alike. Examination of both the hidden and null curricula, in addition to reflective practice, is important to developing and maintaining excellent role models in medicine. Writers emphasize that the role model(s) used should demonstrate excellence and that all relevant and important information be presented or discussed with the learner. (Jagsi, Shapiro, Weissman, Dorer, & Weinstein, 2006) In addition to this, the information should corroborate other learning within the program and, ideally, promote reflection and discussion for maximal effect. Bandura states that all learning involves some type of social interaction. His work pre-dates the onset of computer and web-based learning so we do not have his opinion on the social nature of these teaching modalities. For observational learning, four elements must be present: attention to the model, (Bandura, 1986) retention of details, motor reproduction and motivation and opportunity, all of which are present in medical education. The clinical setting provides students with the opportunity to collect data through the observation of others' actions and the reaction to them, developing an impression and defining personal goals for success as physicians. Bandura's earlier and oft cited work with Bobo dolls demonstrates the effect of role modeling on children exposed to violent behaviours; this work demonstrates the potential impact of role modeling. (Bandura, ROSS, & ROSS, 1961b)

Problem solving is one area of medicine that is not well taught using solely observation. For example a student in the ED, observing a staff physician without significant interaction, would have difficulty deciphering the decision pathways navigated in solving complex problems.

“ . . . up to 20% of undergraduates may not have achieved sufficient maturation to be able to think at the conceptual level required for problem solving.” (Macpherson, 2002)

For this reason, many medical schools now use problem-based learning for undergraduates as this method involves students more actively in learning than did previous teaching methods where reading, listening and observational learning dominated the process. Careful attention to teaching problem solving must be paid in faculty development, as experienced clinicians are often unable to explain the steps required to make their diagnosis. This challenge must be met to provide problem-solving techniques applicable to a broad range of medical presentations and situations rather than a single solution for each of several scenarios.

This learning through observation without discussion of the concepts in depth is also the case in tacit learning. This is another aspect of learning theory that underlies the hidden curriculum. Tacit learning includes the codes of conduct students acquire through the socialization process of medical education. or, “ . . . those aspects of the curriculum and the socialization process that instill professional values and identity without explicitly articulating those issues.” (Coulehan & Williams, 2001c) Perhaps the solution to ensuring that the appropriate messages are heard is the notion of role modeling consciousness.

This concept is an important addition to the previous theory in this area. Awareness of oneself and attention paid to the details of practice demonstrated in addition to discussion with students, no doubt, would constitute significant progress.

The continuous and insidious nature of the content of the hidden curriculum may differ from the explicit curriculum. The formal curriculum teaches the virtuous behaviours and attitudes required to deliver excellent care, whereas the tacit learning experience in the

clinical setting can demonstrate a different set of behaviours as being acceptable. “This conflict between tacit and explicit values distorts medical professionalism.” (Coulehan & Williams, 2003) This view is widely agreed upon in the literature. The fact that we, in medical education, are not explicit about teaching professionalism and that we have few firm objectives and often no evaluation method for these physician skills and characteristics, must draw attention to this area for development. The possibility of significant variance between the content taught explicitly and that demonstrated in the clinical setting must be addressed specifically in an area so fundamental to the provision of excellent clinical care.

Tacit learning can be constructive or distressing and students with similar academic knowledge sets and exposures can have learned very different value sets. Furthermore, Coulehan and Williams believe tacit learning is more than neutral. “. . . tacit learning favors the development of three characteristics, or traits, that make it difficult to be a caring physician. The first is *detachment* the second is *entitlement*. . . and the third is *non-reflective professionalism*.”(Coulehan & Williams, 2001f) In the first of these, *detachment*, students distance themselves and acquire cynicism as coping strategies to survive the challenges of clinical training. This positions them as part of a force against patients as a group. The second trait, *entitlement*, is felt to result from working long hours resulting in a feeling that society owes them a significant debt. The last worrisome behaviour is *non-reflective professionalism*, which consists in conscious adherence to professionalism while basing decisions in values at odds with its tenets.

It is evident, in the literature, that some experts in education have strong views of tacit learning. If this is important and valuable information why have we not included it in the

formal or the operational curriculum? Perhaps it is also hidden from the teachers and course developers.

Reflection is another important practice that can be effectively used in teaching.

Reflecting on one's practice alone or with students can be a very effective teaching method. "Engaging in reflective practice requires individuals to assume the perspective of an external observer in order to identify the assumptions and feelings underlying their practice and then to speculate about how these assumptions and feelings affect practice." (Roth, 1989)

This practice can open the door for students to reflect but also grants them permission to question decisions and statements in addition to admitting the possibility of error. The potential for gaining insight and balancing the hidden curriculum in this model is enormous and largely untapped.

Professionalism is the trust society accords us as physicians and is earned based on the history of medical practitioners, and the belief that medical practitioners will act in each patient's best interest to the best of their ability. This trust is based on the assumption that there is an acquisition of knowledge and skills, the establishment of standards and maintenance of skills, each of which will be monitored by a professional body. This is the societal contract that Eliot Friedson criticized the American Medical Association for their failure to meet in 1970. "It was the profession's own failure to regulate itself in the public interest that created the legal, economic and political pressures of the past twenty-five years." (Friedson, 1988) "To act as a professional, a physician must demonstrate integrity, service, compassion, conscientiousness, commitment to clinical and scientific excellence, and appropriate behavior toward colleagues." (Adams, Schmidt, Sanders,

Larkin, & Knopp, 1998) There are a few fundamental principles in educating for professionalism, not the least of which is a cultural change at the institutional level.

“While the application of this theory will vary with the type of curriculum, the institutional culture and the resources available, the principles outlined should remain constant.” (Cruess & Cruess, 2006)

To conclude, an apt quote to describe professionalism is the following: “*Our character is what we do when we think no one is looking.*” *H. Jackson Browne* as cited in Larkin.

(Larkin, Binder, Houry, & Adams, 2002c) It is likely wiser to further explore this area and first determine the elements of socialization and reflect on these, to better frame students’ experiences in clinical medicine. We will never “cleanse” clinical medicine of the hidden curriculum and I do not believe this should not be our aim. Socialization is a normal process in any professional education. We have thus far not given it sufficient consideration given the important role it has been shown to play in the development of professionals. Professionalism is the newest theoretical element in this discussion and is the term most physicians today would use to describe the humanistic and socially conscious aspects of excellent physicianship.

The hidden curriculum is pervasive in all areas of medical training, and theory regarding its nature and impact is evolving. As certifying bodies have incorporated professionalism in their accreditation standards we can expect explosive growth in this body of knowledge as educators strive to teach and evaluate these aspects of clinical performance.

This exploration of the nature of the hidden curriculum for postgraduate students in Emergency Medicine will hopefully influence and mold the reflection we, as EM

educators, have on our words and actions and on the potential negative effects careless role modeling in this domain can have on these young physicians.

LITERATURE REVIEW

A literature review was conducted on the topics of hidden or informal curriculum, socialization in medicine, moral and ethical development, apprenticeship, situated learning, role modeling, observational learning, tacit learning and professionalism. From this literature selected references appropriate for this focused topic were selected. Much of the literature I have read is not included in the body of this work in any detail, nor is it in the reference list. I have nonetheless gained insight into a wide variety of perspectives and opinions as well as current thought regarding medical education through reading this literature. In addition to this, I have read several books for background information in the areas of qualitative research, mixed methods and the social aspects of general education. The following have been selected from the sum of the literature reviewed in medical education, in education, in sociology and in medicine pertinent to the hidden curriculum.

Hidden curriculum

In the literature on the hidden curriculum, Posner, Hafferty and Portelli are key to understanding this concept. In his work on curriculum and curriculum study Posner (Posner, 1995) clearly outlines the definition and implications of the hidden curriculum. Hafferty and Franks note the recent focus of the technical aspects of medical education to the detriment of the development of humanistic and professional characteristics, setting the latter in a light of lesser importance. (Hafferty & Franks, 1994)

No doubt the intention was not to omit these important issues, but rather focus on the scientific aspects of medical care. However, over time this lack of focus on the humanistic aspects of the practice of medicine has led to imbalance between these two elements.

The following quote from Portelli's work demonstrates his view of the scope of this challenge. He describes the hidden curriculum as "the sum of the total of unofficial institutional expectations, values and norms aimed at by educational administrators, and perhaps teachers and to a lesser extent parents, and which are initially completely unknown to the students.' (Portelli, 1993)

Work in other fields on hidden curriculum and incidental learning by Callaham focused on small business and included a significant positive perspective on this issue. In this work, the impact of incidental learning for small business operation was explored and there were signs of improved performance with exposure to informal content. (Callaham, 1999) Interestingly, in contrast to the bulk of literature on incidental learning and the hidden curriculum, Marsick and Watkins set forth a model to enhance informal and incidental learning. (Marsick, 2001)

Another perspective on the hidden curriculum is brought out in a paper by Finn on the engagement of students in their academic endeavours in which the variability in student engagement reflects their acceptance of existing dominant views. This work suggests that in addition to the hidden curriculum within the school or university, there is a hidden curriculum among the students. This is significant, as it reports an established relationship between student engagement and academic achievement. (Finn, 1993)

Socialization in medicine

The social nature of learning, including that in medicine, implies a requirement for integration of curriculum into the broader societal social structure. Learners must not only learn to practice medicine, but also position being a physician within society with regards to responsibilities, privileges, and the practice of medicine. Attempting to

uncouple the social and cognitive aspects of medicine is akin to denying the social and ethical implications of scientific work on eugenics. Takala's paper reflects on the impact social and political influences have on ethical professional practice and the influence these have on the application of clinical ethical principles. (Takala et al., 2001) We cannot deny the importance and influence of societal norms and expectations on appropriate decision-making and on the nature of the decisions we must make in medical practice. "There is good reason to believe that the socialization process in residency is reflected in subsequent practice behavior." (Markakis, Beckman, Suchman, & Frankel, 2000)

Open and semi-open education systems are discussed - systems in which students have some control over the content and focus of their education- and also how the internet and distance education programs will affect the socialization of education. Eventually each student will practice in a defined context; we must strive to provide them with guiding principles to make appropriate decisions for their particular circumstance.

In Hafferty's (Hafferty, 1998a) article on the structure of medical education, he concludes with four recommendations to address the hidden curriculum in medical schools. Firstly, a heightened awareness of students' backgrounds; secondly, an awareness of the hidden curriculum and its potential effect on education; thirdly, the compulsory presence of willingness by faculty, to adhere to appropriate social and ethical conduct and finally, the provision of 'real-life' opportunities for students to apply moral and ethical decision making principles. These recommendations would integrate social and cognitive learning in medical education and demonstrate the inadequacy of scientific knowledge and

technical proficiency without the humanistic characteristics that tie them to societal needs.

The pace at which we live and society's preoccupation with technology may also contribute to the deficient time allocated to the humanistic aspects of care.

“We need to slow down the pace of clinical care so that physicians have enough time to heal, teachers have enough time to teach, and learners have enough time to learn.”

(Ludmerer, 2000)

Moral and ethical development

In this area of the literature, work by Feudtner suggests frightening erosion of ethical development among medical students, and attempts to provide insight into the causes for this regression. Feudtner's research points to elements of the hidden curriculum and socialization in medical school as major contributors to this phenomenon. (Feudtner, Christakis, & Christakis, 1994) Of particular concern is the fact that students reported discomfort and guilt regarding their ethical behaviours, particularly after having witnessed similar reprehensible or inappropriate behaviours among staff physicians.

This concern regarding exposure to poor role modeling in the clinical setting is heightened by work by Bissonette et al. documenting that, despite the universal inclusion of medical ethics in curricula across the United States, results from a questionnaire suggested a retardation of moral sensitivity in the course of medical education. In conclusion he suggests that the current clinical experiences may be canceling out the ethical teaching provided. (Bissonette, O'Shea, Horwitz, & Route, 1995)

In her work on the ‘moral compasses’ of medical students, Swenson called for frank support of ethics in medical education coupled with longitudinal integration of ethics in medical curricula. (Swenson & Rothstein, 1996a)

Interviews conducted by Coulehan et al set out to examine medical students’ responses to the conflict presented in an explicit commitment to a set of values and a tacit demonstration of other behaviors.(Coulehan & Williams, 2001d) They discovered characteristics of students that appeared to offer an “immunization” of sorts to this erosion of ethical principles during medical school. Student characteristics found in non-traditional medical students: religious, women, older, and those having additional life experiences prior to studying medicine seemed to offer some immunity to the tacit curriculum. This could support the recent inclusion of broader admission criteria for acceptance to medical school.

Another finding of interest in this area is that of Fitzgerald, suggesting that students with a greater number of credits in their college major had the highest degree of concern for their patients. (Fitzgerald, 1999) The well-described ‘pre-med syndrome’ in which students study and work diligently with disregard for balance or social needs often accumulating large numbers of credits in a scientific undergraduate program would be protective were this true. Central to this syndrome however, are self-absorption, heightened interest in prestige and money as well as social insensitivity. (Clark, 1982; Green, 1989; MacFarland, 1987) Despite the accumulation of numerous credits, this syndrome would not seem likely to co-exist with the other factors found by Coulehan to offer protection or immunity to the erosion in ethical principles.

Many students seeking entrance to medical school deliberately reduce the number of credits they take in order to obtain top grades and to gain a competitive edge. This situation, in contrast to the previous, would fit well with Coulehan's findings about those suffering most from ethical erosion. Further study in this area is required to accurately delineate the situation.

Recent work by Patenaude showed a leveling off of the moral reasoning process in medical students at a threshold below that expected for their age. This paper called for further research to help differentiate the influences involved. (Patenaude, Niyonsenga, & Fafard, 2003a)

In summary, this literature suggests that students strive and some struggle to adhere to the values of the medical community they are joining. Despite the inclusion of moral and ethical principles in the formal and operational curricula, exposure to the hidden curriculum in the clinical setting that contrasts with the taught values and behaviours will at least confuse students and perhaps even promote attitudes and behaviours that are unprofessional and not patient focused.

Despite this research, we have no assurance that the hidden curriculum is totally responsible for the ethical erosion or the aforementioned stall in moral development found among medical students. Many other factors such as lack of leisure time, stress, heavy workload, and exposure to illness and death are only a few of the other significant situations encountered by medical students encounter that could influence their development.

Apprenticeship

Apprenticeship has long been a model for educating doctors. Societal organization and the evolution of medical education have altered the nature of this apprenticeship.

Students are apprentices with a large group of physicians, exposing them to many role models. The institutional nature of medicine today creates pressures previously not present for physicians. Long wait-times, overcrowding, and fiscal cutbacks are daily stressors in physicians' lives. Another important facet of medical evolution is that of specialization within medicine and indeed within general practice. The change from a very humanistic and caring medicine with centrality of the patient to one largely based in science, has resulted from these along with innumerable other societal changes. “. . . person-oriented, or relationship-oriented, care demands an additional set of knowledge, skills, and attitudes not captured in a specialist-oriented academic curriculum.” (Coulehan & Williams, 2001e)

“Medical schools now tend to operate in specialized areas; the apprenticeship is no longer concerning the general care of the patient; it is, presently quite narrow.” (Stead, 2004)

Despite an increased focus on primary care in medical education, we have seen little shift of student training toward communities and non-hospital sites that are more apprenticeship based. According to Dornan, we must strive to re-apply the old fashioned apprenticeship of Osler and Flexner in the context of medical education for the 21st century. (Dornan, 2005)

Observational Learning

Observational learning theory is central to the conveyance of the messages in the hidden curriculum. Learning in clinical settings as is seen in clinical observerships, clerkship and residency can provide ample exposure to medicine not explicitly taught. Students are frequently in these positions as they are expected to learn and deliver care in the current system. Bandura's Bobo doll experiments demonstrate the potential impact of exposure to specific behaviours. (Bandura, ROSS, & ROSS, 1961a; Wright & Carrese, 2002a) In these experiments, Bandura exposed 24 girls and boys individually to aggressive behaviours and compared their aggressiveness to that of an age and sex matched group of 24 control children. The boys and girls exposed to aggressive instances were significantly more likely to inflict aggression on the Bobo dolls in a play setting than were the controls. This experiment conducted with children between 3 and 6 years of age is widely referred to as the Bobo doll experiment and serves to demonstrate the impact of exposure on future behaviours.

Role modeling, a form of observational learning, is defined and recognized as a keystone of the development of professionalism in physicians. (Hicks, Lin, Robertson, Robinson, & Woodrow, 2001a; Kenny, Mann, & MacLeod, 2003f) The following statements emphasize the importance of the nature and quality of these interactions:

“Program faculty, as a group, must set the standard for behaviors and then adhere to them. Faculty members serve as role models for resident professionalism. Residents cannot be expected to perform in a more professional manner than those leading them.” (Larkin, Binder, Houry, & Adams, 2002b)

“A conceptual model of role modeling that emphasizes the importance of strong clinical skills, consistency of good verbal and non-verbal behavior, and “role model consciousness” has been suggested.” (Kenny, Mann, & MacLeod, 2003e)

“Several studies and editorials suggest that students’ clinical experiences constitute an ‘informal’ or ‘hidden’ curriculum. Clinical teachers who act as negative role models, especially those who show unethical behavior toward patients, are the most frequently cited problematic aspect of this hidden curriculum.” (Hicks, Lin, Robertson, Robinson, & Woodrow, 2001b)

Role modeling in medical education is thoughtfully reviewed in an article by Kenny et al. (Kenny, Mann, & MacLeod, 2003d) This article not only describes the challenges of excellence in role modeling in the 21st century, but also reviews the literature and describes the considerations required to develop faculty recruitment and development in this area.

In research on effective role models, Wright interviewed and sought insight into role modeling from highly regarded physician role models. He also introduced the notion of role modeling consciousness (Wright, 2002) describing it as: “. . . within the domain of personal qualities were interpersonal skills, a positive outlook, a commitment to excellence and growth, integrity and leadership qualities.” (Wright & Carrese, 2002f) These are the desirable attributes of excellent role models; the hidden curriculum may present another set of personal qualities some of the time. Due to the informal and unstructured nature of the role modeling relationship, especially in EM, role modeling consciousness must play an important role in effective teaching. “The informal,

unarticulated role manifestations, the professional modeling unassumingly performed by attending physicians and senior house staff, is far more powerful in transmitting values and attitudes to medical students than any of the formal, explicit desiderata of their teaching.” (Churchill, 1975; Wright & Carrese, 2002e)

Hesketh brings forth a need for greater faculty development. (Hesketh et al., 2001) Most physicians involved in medical education today have little or no training in educational theory or practice. This article outlines a twelve step comprehensive framework to educate professional medical educators.

The importance of this aspect of medical education is evident in the article by Swenson.(Swenson & Rothstein, 1996b) Faculty development is an important step in the provision of high quality medical education.

Tacit learning

Coulehan describes the conflict between tacit and explicit components in the medical curriculum.(Coulehan et al., 2003) He discusses the protective pre-medical conditions and recommends increased exposure to formal ethics teaching in addition to a longitudinal ethics curriculum, the teaching of ‘soft’ topics, a focus on reflective practice, and a multidisciplinary approach.

Professionalism

The final aspect of the literature I explored is that of professionalism. Attention to the development of professional attitudes and behaviours in medicine is not new. The “scientification” of medicine beginning in the 19th century and accelerated by the Flexner Report, set science as the underpinning and only key element to excellence in medical practice. In the 20th century, the volume of published literature on medical

professionalism has followed the same growth curve as has interest in this topic.

Historically, interest was solely in the humanities and the art of medicine, whereas the notion of professionalism encompasses both the scientific and the humanistic characteristics for the practice of high quality medicine. Examples are given chronologically below: “They (young physicians) are too ‘scientific’ and do not know how to take care of patients.” (Peabody, 1984)

“The whole art of medicine is in observation, as the old motto goes, but to educate the eye to see, the ear to hear and the finger to feel takes time, and to make a beginning, to start a man on the right track is all we can do. We expect too much of the student and we try to teach him too much. Give him good methods and a proper point of view and all other things will be added as his experience grows.” (Osler, 1932; Wright & Carrese, 2002c)

“Aristotelian virtues of *temperance* and *phronesis*, give way to the practice of professionalism in the form of punctuality, accurate charting, concern for patient rights, and respect for patients and co-workers, illustrating some of the components of what professionalism embodies in EM.” (Larkin, Binder, Houry, & Adams, 2002a)

More recently, there has been explosive growth of literature to include all of the facets of professionalism, and an attempt to further define them and the ways in which we develop them. This activity in medicine has escalated in the last decade and is now included in accreditation standards for teaching professionalism in Canada (CANMEDS 2000), in the US (Accreditation Council on Graduate Medical Education (ACGME, 2000)), and indeed throughout the developed world. (General Medical Council, 2003) These standards are

proving difficult to teach and still more challenging to evaluate, due to the limited information and tools available. This is, in part, due to the subtle nature of some components of professionalism, and the difficulty of providing non-personal feedback on these components. The other challenge we currently face is that physicians practicing and teaching medicine today were not explicitly schooled in professionalism; the literature suggests that there must be education in professionalism for faculty to ensure the presence of strong role models for students. (Cruess & Cruess, 1997; Wright & Carrese, 2002d) Feedback and formal assessment on professional conduct can become personal and faculty may avoid addressing this facet of clinical performance assessment of students due to discomfort with the issues or fear of repercussions in the feedback they receive on their teaching. (Bandiera et al., 2005)

This has created a situation where the ways in which professionalism is “taught” are being explored and scrutinized more than ever.

“The ethical learning acquired by habit and by conforming to the surrounding culture might be optimized and improved by addressing weaknesses within the hospital environment. Unethical practices such as the use of derogatory language when referring to patients could be firmly discouraged, and acts of moral integrity and honesty could be rewarded consistently.” (St Onge, 1997)

Currently physician educators are expected to model and teach professionalism. Many still feel this will be imparted to learners automatically. Others remain unsure of assessment and feedback tools in these areas.

GOALS OF THE RESEARCH

The purpose of this research was to explore the hidden curriculum in the Emergency Medicine Training programs. As demonstrated in the personal perspectives, definition and current theory sections above, this is an important part of what we teach our students and remains unexplored to date. It is also my hope that presentation of data and conclusions from this research will create a “*Hawthorne effect*”. (Wikipedia, 2007)

The process of reviewing and considering their personal inventories of hidden curriculum could stimulate some faculty to reflect on the tacit messages they convey to residents working with them in the ED and the learning that results.

METHODS

Following ethics approval at Mount Saint Vincent University and at each of the other participating institutions, I explored the nature of the hidden curriculum in postgraduate training at two campuses using initially a survey, followed by focus group interviews. Data were collected from both faculty and residents. Data collection from the educators without concomitant collection from the resident group would have produced incomplete data and would not have provided adequate insight into learner perspectives in this matter. (Casteter & Heisler, 1977)

The population and setting studied includes Emergency Physicians (EP) and residents EM currently working and teaching at a tertiary care center (Site A) and at a regional care center 424km away and in another province (Site B). Both of these are training sites for residents in EM. Staff-physicians at these training sites are certified in EM. Students are an integral part of daily work in these EDs and they range from second year medical students to final year residents in EM. For the purpose of this research, learners involved in this study were limited to EM residents, qualified physicians who are acquiring further training in the field of EM. Two parallel training programs are run at these sites: a one-year intensive program for those with a background in Family Medicine, and a five-year program to train specialists in EM. Both were included in the resident group. Residents in both programs were invited to participate regardless of their current rotation or training site. Staff members trained in either training program and from either training site were invited to participate.

The instruments included an initial survey and subsequent set of focus group questions. The survey was chosen to collect information on an ill-described topic in EM. Initially

broad information was sought and further detail brought out in the focus group interviews. Using data from the survey, guiding questions were written for the focus group interviews as suggested by Stewart & Shamdasani. (Stewart & Shamdasani, 1990)

The focus group interview is useful to explore broad topics and uses interpersonal interaction and discussion to gather important information while permitting details and further explanation as required complementing that provided spontaneously. The two methods were used sequentially as the questions used to guide the focus group discussions were developed using data collected from the survey.

Survey

A survey instrument was used to collect baseline data. The survey consisted of a brief definition of the hidden curriculum with one example provided. An open table was provided for participants to fill in their perceptions of elements of the hidden curriculum in the ED and the possible effect of these messages. The definition on the survey was based on Posner's five types of curriculum. (Posner, 1995) This definition was felt to describe the hidden curriculum best for participants unfamiliar with the concept. The instrument was reviewed by three faculty members to verify for clarity in the definition and overall intent of the survey. (See Annex 1 for invitation letter and Annex 2 for surveys) The survey tool used for the faculty and for the residents differed only in the introduction; definitions and tables were identical. The surveys were administered using a modified Dillman method. (Dillman, 2000; Woods, 1995) In adherence to this method, invitations were sent by e-mail to all members of each group with the survey as an attachment, and sent again two weeks later to those who had not yet responded. Four weeks after the initial e-mailed survey, a paper copy was sent by conventional mail to all

non-respondents. Surveys were returned by fax, e-mail internal mail or by conventional mail.

Consent for the survey was implicit in its completion and this was stated in the invitation letter. The confidentiality procedure included returning surveys to an administrative assistant from the department of EM, who assigned a numerical identification number to each completed survey. This was intended to minimize the potential concerns among residents in either training program, with regard to repercussions due to non-participation or due to the nature of their responses, and, to prevent any repercussions for non-participants or suppression of specific responses. All survey data were maintained confidentially, and no publications will include names or identifying information of the respondents. The survey data included some quantitative demographic information; otherwise the data collected were qualitative. Despite this some residents and some EPs chose not to participate.

Coding was undertaken by the researcher and also by a senior professor with extensive experience in qualitative research. The data were coded using an iterative process looking for themes with each coder reviewing information independently and then together to find common areas and making sense of the data. Through the process of coding the survey data, five focus group question themes emerged; these themes were used to write guiding questions for focus group interviews. This allowed for more detailed information to be collected in these areas without limiting the collection of data in other areas.

(Huston P, 1996) The data from resident surveys and staff physicians' surveys were used together to develop the five guiding questions. This was done after careful review of the data from each group. The themes were similar with one issue arising only among the

residents and another only in the faculty group. It was felt that each of these issues would serve to generate important discussion in the both groups and each of these issues was included in the guiding questions along with the common themes. (Stewart et al., 1990) The same questions were used to guide the focus group interviews for both groups. The questions are included in Annex 3 of this document.

Focus group interviews

Focus group interviews were first described by Rice in 1931, and were named “focus groups” in the 1940’s by Merton.(Merton, Kiske, & Kendall, 1990) In his article on focus groups, Cunningham stresses their importance in collecting data one would otherwise be unable to gather:

“Interviews are felt to be an important part of any action research project as they provide the opportunity for the researcher to investigate further, to solve problems and to gather data which should not have been obtained in other ways.” (Cunningham, 1993)

The focus group interviews were conducted four months after the survey mailings were completed. All members of both the staff EP group and the resident group were invited to participate in these interviews regardless of their participation in the survey. The interviews were booked for both site A and site B; however, due to very low availability of faculty for the interview at site B, the focus group interview there was cancelled and the interested faculty were invited to participate in the site A focus group interview with reimbursement of travel expenses. The entire group of residents was at site A obviating the need for a resident focus group interview for residents at site B. Each of the focus group interviews was booked for one hour, with the room available longer to allow for extra time. Joint interviews between residents and staff physicians would make the

groups larger than is recommended for effective focus groups in addition to possibly affecting the information collected at each interview, as the resident group would be interviewed with the faculty and this cross-fertilization could alter the content and depth of the discussion. (Kreuger, 1988)

In each of the focus groups there were 10 or fewer participants to allow for active participation from each physician. In keeping with Morgan's idea, twelve physicians were invited to allow for a 20% attrition rate. (Morgan, 1988) To avoid any sense of intimidation an experienced focus group facilitator, conducted both focus group interviews using the guiding questions with a permissive approach for the discussion. To assure anonymity, the individual with expertise in conducting focus groups was at arm's length from the department of EM at either campus, to ensure freedom to discuss any information that would arise in the course of the interviews.

Written consent was obtained from each of the participants at the outset of each interview and it was explained that participants were free to leave the interview if they felt uncomfortable at any time. (See Annex 4 & 5) The consent forms were placed in a sealed envelope and given to an administrator for confidential safekeeping. As a staff member who teaches the resident physicians in the ED, I felt it was prudent to shelter participants from any sense of obligation. To avoid any sense of intimidation, and to ensure anonymity, the researcher was not present at the site of the focus group interviews. Residents and faculty were interviewed in separate groups at discrete times on the same day to avoid any sense of pressure to participate from the staff physicians. The focus group discussions were audiotaped. The tapes were transcribed and edited for accuracy by the focus group moderator who also added information on interactions and body

language to the transcripts. Once this was complete the data were reviewed, coded and entered into tables. The same iterative coding process was used for this data set as was used for the survey data. The tapes are currently in locked storage. There will be no further access to the tapes at any time, however they will be kept in storage for five years in accordance with the rules pertaining to the conduct of research. The researcher has not had access to the list of faculty or resident participants. Given the modest scope of this project, data were analyzed manually. The focus group moderator and the administrators both signed confidentiality agreements with regard to the contents of this study prior to the study start date. Data analysis was carried out using mixed methods. (Creswell, 2003) The survey responses have been analyzed using both quantitative and qualitative data, and the focus group data were analyzed using qualitative methods.

Confidentiality

Assurance of confidentiality included the return of surveys to a member of the EM administrative staff. All demographic information was removed from the surveys prior to the researcher accessing them. At no time has any faculty member, including the researcher, been made aware of the participation status of the resident physicians. Although the researcher is a member of the EM faculty group, this individual did not participate in the focus group interviews. The resident and physician focus group interviews were held at the same location; however, neither the researcher nor the other EM faculty members were aware of the time and location of the resident interviews which were conducted by an experienced focus group and an administrative assistant from the department of EM. Recordings of the focus group interviews for both groups were transcribed by administrative staff and reviewed by the focus group facilitator for

accuracy and detail. At no time were these tapes made available to the researcher or to others than those mentioned above.

Ethical approval

Ethics board approval was obtained from the both clinical and affiliated academic institutions. Finally, approval was obtained from the Mount Saint Vincent University ethics review board as this thesis is for a degree at that university. All of these have been renewed as appropriate for the duration of the research. (See annex 6)

RESULTS

Survey Results

Surveys were distributed to 11 residents and to 46 faculty members. The return rates for faculty and residents were 5/11 (45%) and 11/46 (24%), respectively.

The data from the surveys were coded and, based on emergent themes, were then classified into the five categories listed below. These five categories were used to develop the guiding questions for the focus group interviews with both students and staff physicians. The categories are: 1) inter- and intra-professional issues, 2) patient centered issues, 3) healthcare system issues, 4) job and lifestyle issues and 5) positive elements of the hidden curriculum.

The responses are listed in Table 1 below. Responses have been recorded verbatim.

Where colloquial language might be confusing, I have paraphrased statements in parenthesis.

Most of the reported hidden curriculum content was negative, however there were some positive contributing items recorded.

Table 1: Survey Results of Residents and Staff Physicians

* The number of + symbols indicated the number of times this issue was raised.

Content Category	Participant Responses
1) Inter or intra-professional Issues	Our service is the only one that understands good care +++++*
	Negative impression of Family Physicians +++
	Consultants (other specialists) don't want to work +++
	Stereotyping of consultant services +
	CCFP(EM) physicians are second class docs(doctors) +
	Radiologists obstruct patient care (by refusing tests)
	Other institutions dump (send patients they don't want to care for to another area) patients in our ED
	ED docs (doctors) don't know as much as specialists (from other services)
	Off service residents (those not in the ED at the time) need to gain insight into how their service 'treat' the ED staff
	Other services (everyone except the ED staff) should provide care for all work in their specialty when their patients are admitted without beds and in the ED, freeing the ED physician to care for new patients
	Negative attitude towards residents in other disciplines
	There is an inherent difference in the value of physicians' work (some physicians' work is more important than that of others)
	Abusing the powerful position of physicians within the medical team

Content Category	Participant Responses
2) Patient Issues	Our service (EM) is the only one that understands good (patient) care +++++
	Intoxicated patients are losers +
	Elderly patients are clogging the ED- I didn't train for this +
	Street people (indigent patients) are all losers +
	Dismissive attitude toward patient pain scores (visual analog scale used to rate pain for patients)
	Patients are stupid, unable to distinguish emergencies
	Repeat visits (to the ED) are a waste of my (the ED physician's) time
	Psychiatric patients are not ill
	Removing perceived hierarchy in patient care (the physician is in control expecting patient compliance)
	Winning over the students to ensure better service in the future. Physicians trying to please students to entice them in to EM practice or to gain favour with them for better service when we call them while placing the patient second
	Patients with addictions do not have pain
	A patient wait of 12 hours is acceptable
	Psychiatry patients are undesirable and manipulative

Content Category	Participant Responses
3) System Issues	Discussion of system (healthcare system) issues while working and/or teaching
	A patient wait of 12 hours is acceptable
	Patient flow (movement of patients both in and out of the ED) is not important
	Admitted (patients admitted to the hospital under another specialty) patients are clogging the ED

Content Category	Participant Responses
4) Specific Job/Lifestyle Issues	ED docs (doctors) are not paid enough
	Temper EBM (evidence based medicine) by allowing residents to order whatever they want to satisfy their curiosity
	Clinical EM is not a sustainable career choice
	It's OK to handover (pass on the next ED physician at the end of a shift) incompletely worked-up patients
	Delaying (patient disposition) decisions for others to take the risk
	Patient flow (movement of patients both in and out of the ED) is not important
	Managing beds (administrative function for the ED physician is to manage the flow of patients into and out of the department) is more important than managing patients
	Patients of other services (admitted patients for whom there are no beds remain in the ED and are cared for by the ED physician) are not our responsibility
	Managing medico-legal risk is more important than patients
	Teaching is not as important as seeing patients
	Documentation is not important
	Academic activities (research, administration and teaching) are not as valuable as clinical work
	Speed and efficiency are not important in patient care
	Sleep is not important for shift workers

Content Category	Participant Responses
5) Positive Hidden Curriculum	Taking extra time with patients to educate and communicate
	Team members can help- you don't have to know it all
	Medicine is not only for "dweebs" (awkward, ineffectual person; specifically connotes physical inadequacy)
	Respecting patients complaints and taking them seriously

Focus Group Results

Focus groups interviews were scheduled as described in the methods section above and each interview group was led through the five questions developed from the survey data.

The resident focus group included 5/10 (50%) residents and the staff focus group included 11/23 (48%) staff physicians. The denominator used for the staff physician focus group is the number of staff physicians at site A as the number of physicians available at site B was too small for a successful focus group interview. Time and distance precluded participation of site B physician in the focus groups interviews at site A. Audiotape transcriptions from both focus group interviews were coded and categorized into Tables 2 and 3 below. Once again, the responses have been recorded verbatim and included in the tables to facilitate reading of this document. (See Annex 1)

The resident group was largely preoccupied with patient-care issues as they are transmitted by the hidden curriculum. Issues surrounding patient respect and fair distribution of resources also surfaced in the resident group. Patients who were elderly, poor, intellectually challenged, or those who lacked personal hygiene were felt to be treated differently in some cases. Certain complaints were viewed in a poorer light than were others from the residents' perspective. There was felt to be some avoidance of patients, if they or their families demonstrated conflict with the healthcare team.

Of importance is that residents were acutely aware of the fact that staff physicians were on call for other services while working clinically in the ED and viewed this behaviour as unacceptable and unfair to the patients and students in the ED. Comments made by staff physicians about remuneration for their work during their ED shifts also figured prominently in the resident discussion. Residents felt that the presence of only one

physician role model for academic physician mothers and few ED physicians who are women with academic portfolios despite a preponderance of women residents in both programs was an issue; this issue did not emerge from the staff interview. This paucity of role model mothers with children in academic EM is important for the women residents, but perhaps even more so for more junior women students making career choices. Interactions with nursing staff were more strained for the women resident, a perception shared by resident participants of both genders. Finally, the absence of older ED physicians was discussed by the resident group; senior ED physicians in this group and indeed in many groups across the country are 40-50 years of age, young by almost any standard.

Staff physicians felt a strong camaraderie between the staff and residents and among the staff physicians regardless of their training route; many academic centers do not enjoy this level of collegiality. The transcripts included lots of laughter and collegiality for both of the groups interviewed. Data collected differed somewhat between the surveys and the focus groups. Temporally, they were undertaken sequentially and four months apart. The practice patterns and interests of each faculty group are different in each of these centers, although both are groups of EPs. Of note is the fact that the faculty based at site B work in a community hospital while site A faculty work in a tertiary care hospital. The latter are faced with long wait times for patients to access care, numerous referrals from other cities and provinces in addition to strong academic and research foci. This difference is of note as no faculty members from site B were able to participate in the faculty focus group interview.

Table 2: Focus Group Results of Residents and Staff Physicians

Content Category	Nature	Behaviour
Inter-professional	Stereotyping	Orthopaedics- want to operate and not see new patients
		Psychiatrists are lazy
Intra-professional	Nursing	Services dumping patients on one another
		Nurses give female residents a hard time
		More grief from senior nurses
Patient care messages	Stereotyping patients	Using names such as “candy ass man” or “pretty little mothers”
	Frequent visitors of the ED	Different and less careful assessment of this group of patients
	Disposition problems: can't go home	Focus on disposition becomes central to the encounter when patients are elderly but not 'sick' enough to require medical admission
	Intellectually challenged patients	Superficial assessments and inadequate discharge instructions
	Ageism	Patients felt to be too old to treat, or ineligible for certain procedures
	Socio-economic status	Less patient-focused and more disposition-focused care. Not felt to be a money issue but a disposition or intellectual challenge issue
	Patients with poor hygiene	Avoidance of these patients
	Psychiatric patients	Toxicology- patients who have taken overdoses do not require attention
		Overdoses are self-inflicted so patients deserved to suffer
	Chronic pain sufferers	Under-assessment as they are challenging to treat and sometimes dependent on narcotics
	Professional “hidden” messages	Avoidance of certain patients
Family personality getting in the “way” of care		Avoidance of patients whose families are annoying or interfering by waiting until they go home or out
Lifestyle issues	Physicians “on call” for other things while working in the Emergency Department	Double dipping or income boosting. Working a shift in the ED while taking call for poison control, occupational medicine, the air ambulance or taking trauma team call
	Lifestyle of ED docs	Lifestyle won't get any easier after your residency
		Pressure to take on lots of unpaid work as staff
	Until a few months ago only one female staff with children	Many female residents with one role model for staff-mother who is academic
	Do as I say- not as I do	Preaching balance, yet working all the time and having little or no free time for leisure
	Few older staff physicians	No role model for retirement or moving to another career in this group
	Shift-work	Gets harder with age, children and time
Timing	Handover at shift change	This is where much of the hidden curriculum is transmitted

Content Category	Nature	Behaviour
Intra-professional	Receptiveness to referrals	Comments about the appropriateness of sending physicians' referral patterns
		Comments on referrals from certain outside hospitals
	Looking for beds	Difficult interactions between ED staff physician and residents or staff from consulting services when beds are few
	Negative messages about admissions- like the ED doc or another service is shirking so they must see the patient	Multiple referrals to different services each trying not to admit the patient. (services in our hospital have an assigned number of beds and 'not admitting' a patient is viewed as a positive contribution to that specialty service)
	Docs trying to protect their turf, knowing that in a tertiary care center they could need a bed later	Lack of cooperation in admitting patients to reduce their waits in ED
	Refusing to admit complicated patients	Being so specialized that they feel unable to care breadth of disease for patients with a greater number of comorbidities
	Disrespect for ED docs on other rotations	Hidden curriculum of the ED physicians suspected by other services after patients have been admitted
Inter-professional	Nursing	Communication that is not respectful or professional between team members
	Nurses being unprofessional in pressuring trainees for decisions	Overcrowding may contribute to this: patients wait long, families ask nurses what the plan is and they pressure trainees
	Nursing wanting their patient seen and sorted out faster	Lack of understanding by other healthcare team members, of what else the trainee or physician might have been busy doing
	Negative interactions between learners and nursing staff	Lack of understanding that this a great place for teaching and that teaching is often very rewarding
	Difficulty obtaining tests on patients in the ED	Other services giving friction to ED docs for ordering tests
	General disrespect for the ED staff	Continuous struggle to be heard and respected at meetings within the hospital
	Lack of understanding of ED docs	Inconsistency of the ED docs as a group due to the eclectic nature of the group
Patient care messages	Blaming the patient	When beds are tight we sometimes blame waits and shortages on patients
	Frequent fliers – drunks, toxicology cases	Eye rolling, statements, underassessment of this patient group
	Dealing with drunks	Nursing staff exerting pressure to send these patients for incarceration to sober up
	Recurrent visits- this patient group tends to be marginal and have a higher rate of mental illness than the general ED population	Underassessment or demonstrated frustration with these patients
	Social factors	Patients with communication barriers or who are unemployed, receive social assistance or disability pensions
	Toxicology cases	Perception that this is self-inflicted, so deserves a lower level of care
	Psychiatric patients	Treating psychiatric patients as if they only need to be seen if they're psychotic, then instructing them to return before they take and overdose or if they feel worse

Content Category	Nature	Behaviour
	Psychiatric patient avoidance	Leaving these patients on the chart rack and seeing others first, or taking all the psychiatric patients and having learners see other patients implies that this aspect of medical care is not important
	Chronic pain sufferers	Comments or references to the pain medications required for certain medical conditions
	Bad referrals	As most specialties rotate through the ED at some point, they have the opportunity to learn why we may consult services for seemingly “inappropriate” patients
	Incomplete assessments	Rotation in the ED provides a broader understanding of the time required to carry out complete assessments and the reasons for referral before completion
Professional “hidden” messages	Assumption that residents on other services are ‘above’ the ED doc	Residents sending patients to the ED and asking us to complete procedures to save them time
	Other specialists presenting ED misses when they present rounds for the ED	Gives the impression that they never miss things and we don’t do a very good job
	Messages from family and friends regarding EM	Are you planning to specialize in something? (implications that EM is not a specialty)
	Career and lifestyle comments	Reference to the frequency of ‘burnout’ among ED physicians
	Shift work	Shift work gives the impression of being easy after the 24-hour schedules learners do on other services. The issue with shift work is that its fine for a month but for life it controls you
	Shift length	6-9 hour shifts sound short, without consideration that we don’t stop, eat, drink or ever finish on time.
	Teaching and excellence	Lack of celebration for excellence in care or in education and poor marketing of these skills throughout the system
	Staff and learner closeness	ED Staff are close to their residents Socially, and between the 2 training programs
Lifestyle issues	Camaraderie between training programs	There is a good understanding between the groups and among the staff regarding the need and goals of each of the training programs

DISCUSSION

The socialization process for students and residents in medicine has been the focus of numerous sociologists increasingly over the last half century. Phillip Jackson first identified the hidden curriculum in the 1968 as “tacit ways in which knowledge and behavior get constructed, outside the course materials and formally scheduled lessons”. (Jackson, 1968) This gives an impression of effortless learning and could easily be seen as a potentially positive curriculum, which may be the case in some situations; however, the content can be very skewed and little is known about the actual content of this learning in EM.

In exploring the nature of the hidden curriculum in EM training programs at our two campuses, we discovered both positive and negative components. In their article on the impact of medical education on students, (Coulehan et al., 2003) note that there are differences in the susceptibility of students to the effects of the hidden curriculum and to some of its insidious messages. It is of note that none of the reported hidden curriculum messages in the inter-professional or the intra-professional category was positive. Mostly this content states or implies incompetence or laziness on the part of the other medical services or team members. This will be discussed in greater detail in a later section of this document.

In the focus group results the importance of inter-professional and intra-professional hidden curriculum in the ED was significant.

It is interesting to consider that we practice in an area where there is a constant and high degree of analysis by other health care professionals of the care we have delivered; yet, we actively engage in the denigration of others for their skill and efforts. Perhaps this

somehow makes us feel more competent. The deleterious effects such comments can, if overheard or repeated, have on a team are also significant. This is especially true in the ED, where teamwork is crucial.

The stress of overcrowding was again evident in this discussion and was felt to lead to some of the disrespect and lack of teamwork among physicians and between the ED physicians and nurses. The lack of beds available for admission was felt to contribute to the avoidance of social issues, toxicology patients and certain types of presenting complaints on the part of the ED physicians. Fiscal pressures were also perceived to contribute to the waiting lists for out patient services, again impacting the ED in the negotiations required to access tests for some patients.

In a system rife with cutbacks and ED overcrowding due to admitted patients (Abu-Laban, 2006b; Schull, Lazier, Vermeulen, Mawhinney, & Morrison, 2003) it is unsurprising that system frustrations have surfaced in the survey.

Lifestyle issues are more heterogeneous, likely more a function of the individual perspectives and perhaps financial situation and length of time in EM practice. Many of these focus on money matters, and this sub-group of answers was mostly from the resident survey results.

There are some positive messages in the hidden curriculum too. The importance of teaching and academic endeavours is well demonstrated. Accepting and welcoming input from other team members certainly sends a strong message about teamwork and inter-professional respect to students. Care and consideration for patients and serious consideration of their complaints is key element in patient respect.

This area requires more exploration, and is beyond the scope of this research.

A sense of the hospital administrators' and other specialty services' disrespect for ED challenges draws a common thread through the physician group interview. There is a sense of disrespect from other services within the hospital and even from residents on other services. When residents from other services within the hospital refuse to see patients or question the appropriateness of a consult by a staff EP, the ED team may doubt their choice of specialty as they feel this disrespect.

This type of message is reinforced by the presentations of cases missed by the ED physician from a critical standpoint at rounds for other specialty services. Often the fact that a patient's diagnosis was not made until hours or days after admission to a specialty service is not emphasized. Also cases diagnosed by the ED physician are frequently presented on another service as excellent work by the admitting team of that service despite the fact that the ED physician made the diagnosis.

This lack of understanding and respect even carries over into the personal lives of ED staff and residents when family and friends ask what specialty they will pursue even after they have completed a residency and certification examination in EM.

The fact that many specialties are remunerated at a much higher rate than are Family Physicians or Emergency Physicians also sends a message about the value of the work done by these physicians.

Some political changes in the institution where most of the residents and staff were working may have influenced the results and affected some of the differences between the surveys and the interviews. One other factor that could account for the difference between the survey compared with the focus group data is the anonymity of a survey and

the peer pressure in a focus group carried out combining colleagues with CCFP(EM) and RCPSC certifications.

We have limited data on the ‘immunizing’ characteristics among our resident group and must strive to minimize the hidden elements wherever possible. Of note is the fact that despite significant overlap in the resident and staff data sets, there were elements brought forth by the resident group that were seemingly invisible to the staff physicians. These will, of course, be the most challenging to address, as reflection alone will not suffice to provide the information required for change. Discussion of the main themes and findings are presented below. Categories are based on the guiding questions that emerged for the survey and were used to generate discussion in the focus group interviews.

In the following sections detailed discussion on each of the questions used for the focus group interviews is completed.

Inter-professional and intra-professional messages

In this section data relating to intra-professional issues are reviewed and discussed.

Issues of the intra-professional hidden curriculum between the ED and the department of Family Medicine (FM) were more significant in the survey than in the focus group interviews. This is significant in Canada today where the shortage of Family Physicians (FP) is a national problem, as nearly 4.8 million Canadians have no family physician, and one of the training streams in EM accepts graduates from the FM programs who would otherwise provide more general care in FM. The CCFP(EM) aims to provide additional training for Family Medicine graduates planning a practice including Emergency Medicine. This issue was noted by the Canadian Federation of Medical Students in their article on fostering increased interest in Family Medicine. (Avinashi & Shouldice, 2006)

EM constitutes the safety net for patients without a Family Physician in Canada, providing care for this group of patients, but there is also a shortage of ED physicians. These workforce shortages have resulted in a keen awareness of the important roles FPs and EPs have in the healthcare system. Temporally, the department of FM had ceased to accept admissions from the ED immediately prior to the survey. Four months later when the focus groups interviews were conducted, this situation was no longer new. The two data sets were collected sequentially four months apart and during that time period, tension between the department of Family Medicine and the department of Emergency Medicine eased while the pressures of hospital overcrowding escalated.

As the focus groups included both CCFP(EM) staff and residents who are Family Medicine trained, and the RCPSC staff and residents who are specialty focused, this may have influenced the openness with which participants were willing to discuss issues pertaining to Family Medicine or those specific to the specialty training route.

In tertiary care hospitals and similar milieus, where students gain most of their clinical experience and medical socialization, the pervasive heightened respect for specialists and sub-specialists over generalists impacts them at a very early stage in their evolution into physicians.

In both the surveys and focus group results, lack of respect for EM physicians and FPs surfaced, suggesting an insidious message of disrespect for all facets of primary care. There was far more attention to this issue in the survey than in the focus group data. I believe this can be attributed largely to three causes. First, was the timing of the data collection. Disrespect for each of these groups emerges as a theme in both the survey and the focus group interviews, although more prominently in the survey data. As noted,

political tension may have colored the importance of the inter-professional hidden curriculum between the EPs and those in FM in the survey. Secondly, the site B staff physicians participated in the survey but not in the focus group interviews. Possibly there are issues that are significant at one campus and not at the other, further explaining the difference in information collected. As previously noted, the groups are not homogeneous and there are significant contrasts in their practices. Lastly, in the focus group interviews staff and resident physicians from both the CCFP(EM) and RCPSC training programs and certification routes were interviewed together. The lack of anonymity in using this method with colleagues may have moderated the expression of some of the attitudes and feelings in the discussion. This would have a particularly strong influence on discussions around the respect and collaboration between the two training programs.

Another intra-professional problem encouraged though the hidden curriculum is one of disrespect for physicians in other specialties. This was perceived to be present both in the ED in dealing with other specialties, and during off-service rotations from other specialists discussing their EM colleagues' care in a negative perspective. Comments made in the ED insinuating that EM physicians are the only practitioners who know how to provide good patient care, or are the sole physician group interested in providing good care and that others are lazy or disinterested in patients, send inappropriate messages to young physicians in training. One staff physician who works in both the ED and the Intensive Care Unit noted the marked increase in respect received when working in the Intensive Care Unit in interactions with other consultants as compared with interactions while working in the ED.

Inter-professional elements of the hidden curriculum dealt mostly with relationships with the nursing staff in the ED. There was an undercurrent of disrespect for the nursing staff that some physicians expressed as contributing to the hidden curriculum. Nursing staff, perhaps in response to the gridlock caused by hospital overcrowding, often pressure residents and staff for increased throughput of patients. Education from both staff physicians and the nursing staff is eclipsed from the process and learning opportunities are missed by the residents in this situation. Any attempt at interdisciplinary training is lost in this setting due to extrinsic pressures and teamwork is, unfortunately, kept at a minimum. In this situation, both the patient and the medical staff lose the benefit of collaboration between these professions. This is true at the time of care and through the prospective loss of learning opportunities for healthcare professionals on an ongoing basis. Residents are robbed of the opportunity to benefit from team-based learning and of the benefit of the nursing staff's experience in EM.

It is interesting that of the two salient factors in the hidden curriculum one is a perceived lack of respect for us by other specialties, and the other is the sometimes contemptuous perception we have of them.

Patient care

Arguably, the most important aspects of the hidden curriculum are those pertaining to patients: respecting patients and providing them with excellent care. Messages in the hidden curriculum indicating the permissibility of laughing at patients or treating their complaint lightly in certain situations are very present. The patient-focused content of the hidden curriculum may be most critical from an educational perspective.

In Wear's article on making fun of patients, she discussed the impact of this type of comment on physician development and well-being. (Wear, Aultman, Varley, & Zarconi, 2006) Both the extent of the impact these messages have on the care patients receive in the ED and the potential cumulative and lifelong effects they may have on student physicians remain unknown. The immediate effects on patient care could include lack of empathy, poor quality care or underassessment, or 'representativeness' error as a direct result of stereotyping. Wear recommends heightened vigilance in this area for faculty and suggests faculty development for residents in this area as well.

In the focus groups, patients most often targeted included underprivileged subgroups of the population such as the mentally ill, patients with intellectual challenges, morbidly obese patients, unclean patients, those with conditions perceived to be due to self-neglect or self-abuse such as overdoses or self-mutilation, and patients with certain types of conditions such as chronic pain or other conditions difficult to treat in the Emergency setting. Ageism was raised in the residents' focus group, suggesting that the elderly were felt to take more time and present to the EDs more readily. Although the care delivered was not seen to be the issue, comments and body language often make it clear there are too many elderly patients to be assessed and they are seen to be a burden on an already stressed system. Admission for this group of potentially complex patients seemed to be more problematic than for other groups, likely due to the greater length of stay in this subset of the population. (Lang et al., 2006) Another group of patients who were targeted for disrespect were those who visit the ED frequently, so called derogatorily "frequent fliers", and those for return visits. Sometimes superficial assessments were felt to have been demonstrated in the care of this group as compared with other patients, introducing

once again, the possibility of introducing a representativeness error. (Croskerry, Chisholm, Vinen, & Perina, 2002b)

Finally, with regard to patient care, physicians resorted to blaming the patients when things are very overcrowded or do not work out. Neither overcrowding nor high volumes and acuities in the ED can be attributed to patients.

It is our role to see patients who decide they have a medical problem requiring urgent attention. Patients will always define their urgency to present to the ED for medical attention. No other specialty or profession seeks to decrease their clientele or their ability to serve patients in order to accommodate other practitioners working in their department.(Abu-Laban, 2006a) Other authors have also written about the tendency for ED staff to blame patients for overcrowding despite evidence that ED users are more likely to be in poor health or to have experienced a disruption in regular care. (Weber, Showstack, Hunt, Colby, & Callaham, 2005)

System issues

System issues were more prominent in the focus group results. This may be the result of the timing as the ED was far more overcrowded at the time of the focus group interviews. In addition, the ED at site B overcrowding is far less significant an issue and this group were unable to participate in the interviews.

In Emergency Medicine we accept patients even when other departments are full and refusing to accept patients, causing increasing stress when overcrowding is at a high level. There is a feeling that other services within the hospital fail to understand our situation when the ED is overcrowded and this is demonstrated by the following. For example, the standard nurse to patient ratio in the Intensive Care Unit (ICU) is 1:1, in the

ED it ranges from 1:3 to 1:5 and is sometimes stretched well beyond this. When a patient in the ED requires admission to the ICU, and the ICU has an empty and ready bed but will require an additional nurse to achieve their 1:1 ratio, the patient will wait in the ED with 1:4 nursing care until the 'proper' ICU ratio can be provided in that unit. This is true even if the nurse to patient ratio in the ICU where that patient is to be admitted would be 1:2 for a short time, providing a much more intensive level of care to the patients than the ED could provide. This is but one example of a clear lack of understanding of the ED situation when overcrowded.

Other services within the hospital have some control over the number of patients they care for in their department. In the ED, we do not have this luxury and must care for everyone who presents to the ED regardless of our daily census or staffing. Another example of lack of consideration of the ED and for patients, is the presence of stretchers in the ED halls where patients can sometimes remain many hours and even days. Other services do not accept the presence of admitted patients in beds in the hall, they must reside in the ED hall until there is a bed in a room on that service even if they are in the hall in the ED. This occurs when the department is very busy or when there are several admitted patients in the ED. The fact that no other services are 'allowed' to have beds in the hall for patient care, despite the presence of admitted patients in hall-beds in the ED for more than 24 hours, also speaks to this area of concern. The workload implications for ED staff, when the ED is already very busy, are obvious. The implications for our ability to provide high quality care for patient involved in these unfortunate situations are also self-evident. And finally the lack of privacy and rest for this group of admitted patients is truly appalling.

Blaming patients and frustration with the healthcare system are two common outlets in these situations. A feeling of helplessness and passive acceptance may result from this situation sending messages about the futility of trying to change the system for the better. This is the tacit learning that Coulehan writes about.

Lifestyle

In EM, as in most other areas in medicine, the majority of staff physicians are white, affluent and men. In Canada in 2004, only 16% of the graduates from the RCPSC residencies were women. This creates a different perspective for residents in these programs about the feasibility of this work for women physicians. The number of residents who are women is on the rise and with relatively few women as role models for these students, mentorship and role modeling will be at a minimum. This arose as an issue in the resident focus group. They astutely pointed out that at the time of the study there is only one staff physician who is a mother among more than fifty ED physicians. All others were men with or without children or women without children.

From a social perspective there were issues in several areas of life. The notion that EPs are not true specialists was prominent among the staff physicians to a much greater extent than among the resident group. This is perhaps attributable to the emergence of television shows focused on ER and the escalating popularity of this training among students and residents. EM is a new specialty comparatively speaking and the initial cohort of trained EP is still young giving the appearance of 'burn-out' in statistics across specialties. This appears not to be a significant issue for EPs in a recent study. (LeBlanc & Heyworth, 2007) Further enhancing this perception is the fact that, prior to the availability of training many young physicians sought EM work immediately after completing their

training, allowing time for decision-making regarding their career choice, never intending to practice EM more than temporarily. Staff physicians might, however, be more aggressive in defending their position as ‘true specialists’ as a result of this situation. Residents felt that staff physicians making comments on their incomes was inappropriate and sent a message that this would not be a sustainable or financially rewarding career. This was noted in both the survey and the focus group interviews. Residents also felt that physicians taking call for other jobs such as toxicology or air ambulance while in the ED, sometimes taking them away from patient care, was poor from a lifestyle perspective, in addition to diminishing the importance of their clinical work. These issues did not emerge in the staff physician interviews.

These silent but important role modeling actions were not noticed by any of the staff physicians in either the survey or the focus groups. The resident group felt supported by the faculty in striving for a reasonable lifestyle; however, role modeling was sorely lacking as the staff physician group worked long hours often neglecting other aspects of their lives such as family, sleep and physical fitness. This too, only surfaced in the resident data set.

Positive elements

The positive elements of the hidden curriculum include some aspects of role modeling that provide important positive messages to residents and other students working in the ED.

When physicians spend time with patients at the bedside, are empathetic or caring toward patients in challenging situations despite significant contributing lifestyle choices made by those patients, or demonstrate excellent communication skills in dealing with patients

and their families, residents receive important messages about respecting patients and the provision of excellent care.

Physicians who stay late after their shift to provide continuity of care for very ill patients or to reduce the waiting time for patients in the ED, provide examples of where the hidden curriculum becomes a positive force toward enhanced professionalism.

Attendance at rounds, conducting EM research, quality assurance studies, injury prevention projects and providing high quality continuing medical education all demonstrate community involvement in addition to contributing to resident teaching and providing strong role models for them.

The fact that in the ED, in contrast to other services and training programs, the staff physician is always present when residents and other students are working, and more than one physician works simultaneously in the ED, creates a strong sense of camaraderie within the ED. The physician teamwork aspect of ED care likely contributes to this as well. This is of significant importance as the degree of interaction between the resident group and the staff physicians is notable and residents appreciate this relationship.

Limitations

The study has several limitations. Firstly, the survey addressed a topic not often discussed within either of these physician groups. Despite a description of the concept of hidden curriculum in the survey, a few physicians and residents required further clarification of the information sought in this survey. This may have led to some confusion in what to report. The nature of the responses did not suggest this as a problem however, response rates may have been decreased as a result of this frustration. Secondly, the delineations of this study did not include non-medical staff such as Emergency nurses, paramedics,

nursing attendants or most importantly patients. Thirdly, staff and educators from other departments were not included for this initial research. The study focused on the physician staff and the resident physicians, as the literature concurs that they are the key individuals in this phenomenon and as such, the obvious starting point for research in this area. Data collected from such a heterogeneous group as physicians, nurses, social workers, and paramedics although interesting would be vast and might prove difficult to manage in an area with little data currently available. This focused delineation may constitute one of the limitations of this research. Additional perspectives would be relevant; however, the difficulty in data collection with this broader group in focus groups would create unmanageable numbers for this study. Some additional perspectives within the groups excluded have no doubt been missed and will be the focus of further research. Lastly, the survey might have had a higher response rate had there been an initial information session to review the topic, given its obscure nature.

The simple act of admitting fallibility is new to the practice of medicine. This undertaking is one that allows us to review cases, whether good or bad, and reconsider actions and outcomes in the interest of improving one's practice. Some aspects of the hidden curriculum may surface and be discussed in this exercise. The positive elements of the hidden curriculum could be included in the formal curriculum were the former exposed. This would allow us to formalize their inclusion in the curriculum thus ensuring the delivery of these messages to all residents during their educational experience.

The impact of the positive hidden curriculum is unknown, however, sending strong messages about the importance of professionalism and commitment to excellence can only provide a constructive educational experience for learners. The use of a survey and

focus groups has provided two very rich and interesting sets of data in this area of medicine that has yet to be delineated in the literature. The early exploration of a social-medical field is best conducted using qualitative or mixed methods. (Creswell, 2003)

More qualitative data could be collected at a later date using this study as a baseline.

We must continue to explore the area of role modeling and professionalism in medicine.

Congruence between the formal, hidden and role modeled curriculum should be emphasized both to send and reinforce the sought behaviours. We transmit messages from the hidden curriculum to students daily as we work with them to improve their clinical and technical skills.

Greater attention to the messages transmitted in the hidden curriculum is clearly required.

CONCLUSIONS

One becomes a physician by following the lead of preceptors in “a process of mimetic identification”. (Parsons, Kinsman, Bosk, Sankar, & Ubel, 2001) The presence of a strong hidden curriculum in EM training programs is especially significant as this setting is not one that fosters the development of strong doctor patient ties. Kenny et al have stated that “many dimensions of the impact of negative role modeling and related communicated values on medical learners are overlooked” and we continue to provide these role models for learners.(Kenny, Mann, & MacLeod, 2003c) Although serious efforts are being made to help students develop professional identities and maintain them, the real focus at this time must be in faculty development in order to moderate negative role modeling and recognize the impact poor behaviors have on learners.

Some of the discussion might sound harsh and critical of EM physicians but this is not the intent of this research. Other specialties have yet to discover their hidden curricula and this reflection on EM is the first step in directing change. One cannot reflect on facets of practice that have not been identified.

The initial step in reflective physicianship is an inventory of practice.

Possible faculty development sessions could include the presentation of this in research at rounds. Also discussion of cases in EM for review of potential for hidden curriculum elements would be an interesting exercise. Another potential method of detecting the hidden curriculum would be to shadow staff physicians or residents for a shift and provide feedback at the end of that shift.

The simple fact of considering the hidden curriculum in responding to the survey and the willingness to discuss this in the focus group interviews, demonstrated openness to reflection and willingness in this group of physicians to examine our behavior.

Additional work is required to determine the extent of the hidden curriculum through the EM training curriculum in addition to other specialties. This research constitutes merely a snapshot. This information could serve to heighten insight for other specialties or departments but would not be generalizable to their practice or setting. New research would be required to ascertain the nature of the hidden curriculum in other areas of medicine.

It is in our best interest as educators and members of the public to offer consistent and appropriate messages to our students and the existence of a large hidden curriculum might not be congruent with this goal. How to change education and the content of the hidden curriculum is not clear at this time. Some have opted for heightened attention to undergraduate identities for students, others are focused on the CANMEDS roles or the Four Principles of Family Medicine at the residency level. I am unable to comment on the effectiveness of their approaches.

I believe that there is sufficient information to begin faculty development in this area while continuing to study the hidden curriculum. With reflective and self-conscious physicians as preceptors and role models, would not most learners be better exposed to the ‘art of medicine’? Can patients wait for the next generation of physicians to graduate or should we attempt to rescue those in training now?

In a recent article on role modeling, the notion of “role model consciousness” was suggested. (Kenny, Mann, & MacLeod, 2003b) Results and conclusions from this

research will be presented at departmental education rounds for the group participating in this study at each of the sites studied and serve as an additional stimulus for this introspection as well. Wider dissemination of these results and further elucidation of the situation will also be undertaken. Residents and physicians will be invited to attend these presentations regardless of their participation decision or to their formal attachment to the ED or their participation status for this research.

Hopefully, this research will heighten awareness and serve as a trigger for physician educators to reflect on their behaviours while teaching, in their non-clinical activities, in their leisure time, and to reflect on how they might influence residents. (Kenny, Mann, & MacLeod, 2003a)

Considerable attention should be afforded the role models and messages we are providing for students learning medicine. This is the minimum attention we can ethically place on this important and prevalent aspect of medical formation.

Clearly more research is required.

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Annexes (ethics documents and analysis)

Annex 1

(Invitation letter for Physicians)

Dr. Constance LeBlanc
Associate Professor
Department of Emergency Medicine
Dalhousie University, Halifax, NS

Survey on Hidden Curriculum (Physicians)

I would be very appreciative if you would provide your opinion on the following topic. I am collecting this data for a research project. The Emergency Department is very popular with undergraduate and graduate students as there is ample undifferentiated pathology coupled with immediate staff supervision. As part of their education, students must also learn to “be” a professional; be part of a team, treat patients and their families, break bad news and deal with difficult patients. Exposure to jokes about patients’ obesity, derisive comments about race or gender, messages about lifestyle expectations or allusions to a poor work ethic in other departments all impact learners. There are also many positive messages transmitted this way such as staying late to help out, following up on patients or interest in academic Emergency Medicine. Information transmitted in this way is called the **hidden curriculum**.

I am trying to identify the **hidden curriculum** at Dalhousie in the CCFP(EM) and FRCP programs. We communicate many messages to the residents in our actions and attitudes that are not part of the *Official Curriculum*. Your answers will be kept confidential and you may respond by printing and faxing this form to (902) 494-1625.

Curriculum can be divided into the five concurrent categories described below:

- **Official-** written curriculum in the programme’s documentation.
- **Operational-** what is actually taught a) content, b) learning outcomes.
- **Hidden-** not acknowledged by faculty (sometimes denied) messages transmitted about ethics, gender race, attitudes, lifestyle, social status, professional behaviour, respect, etc in our actions and in our attitudes.
- **Null-** material omitted from the operational curriculum.
- **Extra-** not the official curriculum, but not counted: sports, committees, clubs, etc.

Here are a few examples of hidden curriculum.

Hidden curriculum	Example of transmission	Possible Effect on Students
Fee for service docs seeing ankles before MI’s	Seen in the ED by residents in some programmes. Doesn’t have to be taught or discussed to be part of the curriculum	Money is more important than taking care of sick people Empty the waiting room before the next shift starts!
That many ED patients do not need to be in the ED and know it – deliberate system abuse	Explicit and implicit in our statements particularly during times of ED volume overload	Negative attitudes towards certain types of patients / complaints
Negative stereotyping	Often discussed based on	May have direct negative impact on

of family docs based on referral patterns	selection bias of poorly managed or inappropriately referred patients	CCFP EM/FRCP trainees in view of their base training program. Attitud indirectly transmitted to patients – may interfere with subsequent pt/d interaction. Undermines collegiality
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Please list what you believe are the most significant **hidden curriculum items in Emergency Medicine training CCFP(EM)/FRCP** at Dalhousie University (add more on the other side if you like)

Hidden curriculum	Example of transmission	Possible Effect on Students

Annex 2
(Invitation letter for Residents)

Dr. Constance LeBlanc
Associate Professor
Department of Emergency Medicine
Dalhousie University, Halifax, NS

Survey on Hidden Curriculum (Residents)

I would be very appreciative if you would provide your opinion on the following topic. I am collecting this data for a research project. The Emergency Department is very popular with undergraduate and graduate students as there is ample undifferentiated pathology coupled with immediate staff supervision. As part of their education, students must also learn to “be” a professional; be part of a team, treat patients and their families, break bad news and deal with difficult patients. Exposure to jokes about patients’ obesity, derisive comments about race or gender, messages about lifestyle expectations or allusions to a poor work ethic in other departments all impact learners. There are also many positive messages transmitted this way such as staying late to help out, following up on patients or interest in academic Emergency Medicine. Information transmitted in this way is called the **hidden curriculum**.

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Curriculum can be divided into the five concurrent categories described below:

- Official- written curriculum in the programme’s documentation.
- Operational- what is actually taught a) content, b) learning outcomes.
- Hidden- not acknowledged by faculty (sometimes denied) messages transmitted at ethics, gender race, attitudes, lifestyle, social status, professional behaviour, respect, etc in our actions and in our attitudes.
- Null- material omitted from the operational curriculum.
- Extra- not the official curriculum, but not counted: sports, committees, clubs, etc

Here are a few examples of hidden curriculum.

Hidden curriculum	Example of transmission	Possible Effect on Students
Fee for service docs seeing ankles before MI's	Seen in the ED by residents in some programmes. Doesn't have to be taught or discussed to be part of the curriculum	Money is more important than taking care of sick people Empty the waiting room before the next shift starts!
That many ED patients do not need to be in the ED and know it – deliberate system abuse	Explicit and implicit in our statements particularly during times of ED volume overload	Negative attitudes towards certain type of patients / complaints
Negative stereotyping of family docs based	Often discussed based on selection bias of poorly managed	May have direct negative impact on CCFP EM/FRCP trainees in view of

on referral patterns	or inappropriately referred patients	their base training program. Attitudes indirectly transmitted to patients - may interfere with subsequent pt/f interaction. Undermines collegialit
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Please list what you believe are the most significant **hidden curriculum items in Emergency Medicine training CCFP(EM)/FRCP** at Dalhousie University (add more on the other side if you like)

Hidden curriculum	Example of transmission	Possible Effect on Students

Annex 3
(Focus Group Questions)

Focus group Questions

1. What are the main areas where you see inter-professional negative hidden curriculum?
 - a) Inter-professional
 - b) Intra-professional

2. What are the main areas where you have observed patient related hidden curriculum?
 - a) Psychiatry
 - b) Toxicology (ethanol, other)
 - c) Socio-economic status

3. When and how have you been exposed to job related hidden messages specific to being an Emergency Physician?
 - a) Documentation
 - b) Medico-legal risk
 - c) Challenges
 - d) Academic vs. clinical

4. Where have you witnessed lifestyle messages through the hidden curriculum?
 - a) Remuneration
 - b) Hours of work
 - c) Expectations

5. Can you think of any positive messages you receive through the hidden curriculum?

Annex 4
(Invitation for Focus Groups)

Good afternoon all

Do not reply to Dr. LeBlanc

The survey portion of the study by Connie LeBlanc " The Hidden Curriculum" is now completed.

The next step in the study will be the focus group sessions. The interviewer will be Bruce Holmes. They will be held on May 17th from 9:30-11:00 in the resource room at the HI site. These groups require a minimum of three people. The residents and the faculty will be interviewed separately.

Please let me know if you plan to attend the focus group. Please note YOU can still attend the focus group if you did not fill out a survey. Thank you for your consideration in attending the focus group session. If you have any questions please do not hesitate to phone me.

Fruit, muffins and coffee will be served.

Corinne Burke
Research Coordinator
Department of Emergency Medicine
Phone [REDACTED]
Fax [REDACTED]

Annex 6 (Ethics Approval Letters and Renewals)



Capital Health

Research Ethics Board

Room 118, Centre for Clinical Research
5790 University Avenue
Halifax, N.S. B3H 1V7
Phone: [REDACTED]
Fax: [REDACTED]

October 18, 2005

Dr. Constance LeBlanc
Department of Emergency Medicine
Room 354, Bethune Building

ATTENTION: *Corinne* Ms. Corinne Burke

Dear Dr. LeBlanc:

“FINAL APPROVAL”
October 18, 2005 – October 18, 2006

RE: Exploring the “Hidden Curriculum” in Dalhousie University’s Emergency Medicine Training Program.
Our File #: CDHA-RS/2005-159

Thank you for responding to the concerns of the Research Ethics Board and for forwarding a copy of the clarifications requested regarding the protocol.

I have reviewed your amended consent form on behalf of the Board and note that all requested changes have been incorporated. I am now pleased to confirm the Board’s full approval for this research submission at the Capital Health. This includes approval for:

The Documentation available for review included:

- The Research Protocol, dated July 11, 2005, Version 2
- The Revised Patient Consent, Version 2, dated July 11, 2005
- Letter of Support
- Ethics Approval Submission Form
- Survey on Hidden Curriculum (Physicians)

Approval by the Research Ethics Board is for scientific validity and ethical acceptability; it does not include any administrative considerations for the use of hospital resources. A copy of your submission has been forwarded to the Centre for Clinical Research; they will discuss any resource requirements with you.

Healthy People, Healthy

The Research Ethics Board for the Capital District Health Authority complies with the Tri-Council Policy Statement, the ICH Harmonized Tripartite Guidelines: Good Clinical Practice and Division 5 of the Food and Drug Regulations.

The Research Ethics Board for the Capital District Health Authority complies with the Tri-Council Policy Statement, the ICH Harmonized Tripartite Guidelines: Good Clinical Practice and Division 5 of the Food and Drug Regulations.

The Board would remind you that, in accordance with ethical guidelines, once a study has been approved, the investigator assumes responsibility to submit an annual progress report on the anniversary date (October 18). **October 18, 2005 – October 18, 2006**

If you do not have your Annual Approval approved prior to the Anniversary date you are working outside the approval of the Capital Health Research Ethics Board and the study is subject to suspension.

The Board should also be made aware of any:

- ❖ Serious adverse events.
- ❖ Changes to the initial submission or closure of the study within 90 days of the event.
- ❖ Should any material be designed for advertisement or publication with a view to attracting patients, the Research Ethics Board should review it first.
- ❖ Approved studies may be randomly audited, should your research be selected for audit, the Board will advise you and indicate any other requests at that time.

This letter is in lieu of the Health Canada Research Ethics Board Attestation Form.

For future correspondence concerning this project, it would be helpful if the Research Ethics Board assigned file number (CDHA-RS/2005-159) is referenced.

Yours very truly,

RESEARCH ETHICS BOARD

Keyonk Penekian, MD
Co-Chair

/jm

RECEIVED
SEP 21 2006

Request For Annual Approval

Please attach additional pages if required.

REB File No.: 2005-159

Title of protocol: Exploring the "Hidden Curriculum" in Dalhousie University's Emergency Training program

Principal/Qualified Investigator: Dr. Connie LeBlanc

Research coordinator and phone #: Corinne Burke, [REDACTED]

Address where correspondence is to be sent: 353 Bethune VG Site
1278 Tower Road
Halifax, Nova Scotia
B3H2Y9

Anniversary Date (Date of Full Approval): 2005/10/18
(yyyy/mm/dd)

The following summary of activity is provided with a request for continued approval for the period commencing 2006/10/18 2007/10/18
(yyyy/mm/dd) (yyyy/mm/dd)

1. During the past year, the following numbers of local patients were:
 - a. Screened:
 - b. Enrolled: online survey
 - c. Withdrawn:
2. Total number of patients enrolled in the study locally: online survey
3. Is recruitment ongoing? Yes No
4. What is the expected closure date for this study? October 2007
5. Is there a Data Safety Monitoring Board (DSMB)? Yes No
6. Have there been any SAEs during the past year? Yes No
7. If YES, have they been reported to the REB? Yes No
8. If applicable, please attach a copy of the most recent DSMB report. If there is a DSMB and there is no report attached please explain why: Not applicable, online survey
9. During the past year have there been any changes to the protocol? Yes No
10. What is the current version of the protocol? Version 2, July 11, 2005
Date of REB approval: ~~October 18, 2005~~
NOVEMBER 30, 2005 gm

For Office use only

To: Principal Investigator/Qualified Investigator- Annual Approval has been reviewed and approved by the

Capital Health
Signature: [REDACTED]

Date: 2006/09/25
(yyyy/mm/dd)

Print Name: [REDACTED]
Chair, Research Ethics Board

11. During the past year have there been any changes to the consent form? Yes No

12. What is the current version of the consent form? Version 2, July 11, 2005

Date of REB approval: ~~October 18, 2005~~

NOVEMBER 30/05 JM

13. During the past year have there been any changes to the Investigator's Drug Brochure/Product Monograph? Yes No

14. What is the current version of the IDB/Product Monograph?

Date of REB approval:

15. During the past year, has there been any literature that may be relevant to the risks of the research? Yes No

If, yes, briefly describe:

16. During the past year has this study been audited by an external regulatory agency?

Yes No

If yes, a copy of the audit report, if not previously submitted, shall be provided to the REB

Signed: _____

(Principal/Qualified investigator)

Date: _____

(yyyy/mm/dd)

2006/09/20

Print name: _____

(Principal/Qualified investigator)

The Research Ethics Board for the Capital District Health Authority complies with the Tri-Council Policy statement, the ICH Harmonized Tripartite Guidelines: Good Clinical Practice, and Division 5 of the Food and Drug Regulations from Health Canada.

This statement is in lieu of the Health Canada Research Ethics Board Attestation form.

Contact Information:

Capital Health Research Ethics Board
Room 118, Centre for Clinical Research
5790 University Avenue
Halifax, NS B3H 1V7
Tel: (902) 473-5726
Fax: (902) 473-5620

For Office use only

To: Principal Investigator/Qualified Investigator- Annual Approval has been reviewed and approved by the Capital Health _____

Signature: _____

Chair, Research Ethics Board

Date: _____

(yyyy/mm/dd)

2006/09/20

Print Name: _____

Chair, Research Ethics Board

JM

Version 5
rev Oct 12, 2004

EXAMINING COMMITTEE SIGNATURES

Chairperson:

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Professor, Division of Medical Education
Faculty of Medicine, Dalhousie University
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Signature: _____

Member:

Dr Blye Frank

Professor, Director Division of Medical Education
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Member:

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Signature: _____