

CAN HUMANITIES MAKE BETTER DOCTORS?

TOWARDS AN INTEGRAL APPROACH IN MEDICAL

HUMANITIES EDUCATION

By

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AUTHOR'S DECLARATION

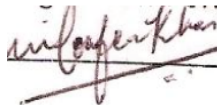
I, the undersigned **Nilofer Khan Habibullah**, hereby declare that I am the sole author of this thesis. To the best of my knowledge, this thesis contains no material previously published by any other person except where due acknowledgement has been made. This thesis contains no material, which has been accepted as part of the requirements of any other academic degree or non-degree program, in English or in any other language.

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Date: 20 June 2016

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A handwritten signature in dark ink, appearing to read 'Nilofer Khan', written over a horizontal line.

ABSTRACT

This thesis applies the integral education approach, derived from Integral Theory developed by Ken Wilber, to mitigate challenges faced in medical humanities teaching to medical students. Key challenges addressed include the lack of clinical relevance in medical humanities teaching, pedagogic quarantine of humanities disciplines from mainstream medical education courses, and a lack of clarity on how learning outcomes emerging from the medical humanities may be evaluated. Pursuant to this, Lindblom's 'muddling through' successive limited comparisons policy strategy is also presented with elements of integral education. Empirical analysis from the Medical Humanities Initiative at University of California, School of Medicine, Irvine, is situated on the integral education typology to illustrate the use of integral education principles. Three encompassing policy recommendations are proposed for integral medical humanities education, i.e. structural policy-level changes for an integral medical humanities education, engaging humanities and pedagogy experts in curriculum design, and embracing novel non-metric means of evaluation with patient feedback for assessing learning outcomes. These recommendations provide a guide in developing a robust integral education policy framework for the medical humanities in training medical students.

Keywords: Medical humanities; medical education; integral theory; integral education; higher education policy; medical ethics.

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DEDICATION

To my late mother, Shakila Banu, for your continued light and presence in my life.

*To all medical students and physicians who persevere in kindness and empathy in their practice
of medicine.*

CHAPTER 1- INTRODUCTION

“Oh, you cannot be a Mother Theresa. You need to learn smart tricks of this trade. The culture of medicine is different in practice today. The Hippocratic oath is an embellishment and you need to see the practice of medicine for what it is: a trade.”

So said my teaching physician during my first clinical clerkship when I was a spry medical student.

1.1 Defining the Medical Humanities:

A good bulk of current literature on medical humanities is focused on articulating its constituent disciplines, motivations, concerns, philosophical aspects and pedagogic styles on the subject. Medical humanities, if listed by discipline, include the humanities (literature, philosophy, ethics, history and religion), social science (anthropology, cultural studies, psychology, sociology, health geography) and the liberal arts (literature, theater, film, and visual arts) with its application to medical education and clinical practice for provision of wholesome medical care. Shapiro (2009) provides a pedagogic definition:

“The medical humanities use the methods and concepts of one or more of the humanities disciplines, teach students critical reflection aimed toward a more humane practice, and are by nature interdisciplinary and collaborative.”
(Shapiro, 2009: 954)

Evans (2008) provides three manifestations of medical humanities as:

“...an academic field of intellectual inquiry, a dimension of medical education, and a source of moral and aesthetic influence upon the daily praxis of organized clinical health care.” (Evans, 2008: 56)

1.2 Significance of the Medical Humanities and Gaps in Literature:

The wheels of change for enhancing empathy and reflexive skills in physicians with the medical humanities were set in motion at least 20 years ago with a surge in the number of major medical journals publishing content on pedagogic aspects of the medical humanities starting from the late 1990s (**Figure 1**). The value of medical humanities and narrative medicine has been recognized for its humanistic development in medical education (Derksen, Bensing et al., 2013). In Aristotelian terms:

“...medical humanities improves health care [praxis] by influencing its practitioners to refine and make their judgments more complex [phronesis] in clinical situations, based on deep and complex understanding [sophia] of illness, suffering, personhood, and related issues” (Jakusovaite, 2014:78)

Narrative-based medicine, or using story-telling to recognize that patient encounters are personal, gained momentum parallel with evidence-based medicine (Greenhalgh, 1999). Yet, we have fallen short of synergism between both and evidence demonstrates that didactic and evidence based learning in medicine does not necessarily relate to deeper understanding and reflective attitudes among health professionals, hence the danger of systematic erosion of empathy and humane attitudes are very real among young physicians (Pedersen, 2009). The discussion on developing communication skills, empathy and compassion continues to evolve. Coupled with this evolution, there is growing recognition that the inclusion of the medical humanities in conceptualizing medical concepts can help with medical professionals thinking broadly beyond organic terms towards more creative and reflective engagement with the practice of medicine. Medical humanities have been attributed to develop critical

conceptualization of personal and professional values, and reflexive and reflective capacities of empathy, collegiality, and teamwork (Wear 2009; 153-156).

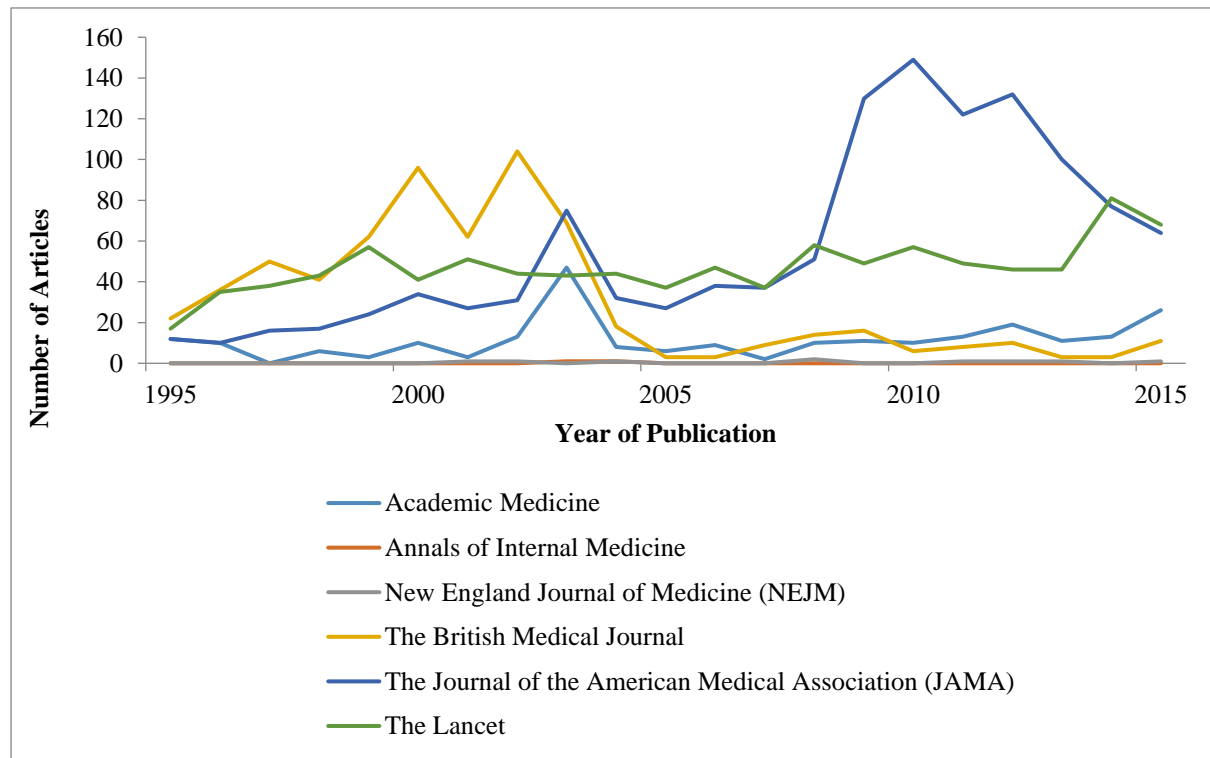


Figure 1: Number of Articles Published with Medical Humanities Content or Relevance between 1995 and 2015 from the Top 6 Medical Journals and Academic Medicine. Articles were found through the publication database using the keyword “medical humanities” to identify relevant articles.

While the utility of liberal arts and humanities in medicine has been established, literature is sparse on how we can go about developing its application and learning in a clinical context. In other words: *how do we measure the immeasurable?* Shapiro (2009) contends that there should be ethical imperative with existential reflection to reform medical humanities and their concepts be used to investigate illness, further querying whether the content of medical humanities and the way it is taught the problem. A common contentious issue is that almost half of humanities courses taught are low in clinical relevance (Jakusovaite and Balzeviciene 2007). In an attempt to discern this theory-clinical application divide, Wachtler (2006)

defines two components of medical humanities curriculum; instrumental and non-instrumental. The instrumental function is said to improve clinical practice such as improved ability in visual clinical skills with the use of visual arts (Bardes et al, 2001). The non-instrumental function entails general education and development to think beyond the biomedical perspective. Both scholars note that medical students lack an integral theoretical structure for clinical relevance of humanities education in medical training. The other common approach has been to list humanities and arts disciplines, and incorporating classes into the medical education curricula. However, disciplinary listing is contested to be incomplete with little to no information on how they feed into each other for applied medical scholarship due to the absence of ‘intellectual challenge’ (Brody, 2009).

With regards to curriculum design policy and the extent of engagement of physicians with humanities experts given the inter- and multi-disciplinary nature of the medical humanities, there is the problem of a unidirectional power differential where medicine is accorded a superior status for its practical utility than the humanities that has further compounded the problem (Wachtler, 2006). This further expands the problem of a quarantined approach for medical humanities teaching. A quarantined approach does not optimize applied learning and medical students’ intuitive capacities cannot be assessed. A new pedagogical approach that combines cognitive and affective elements is needed (Stempsey, 1999). Such an approach will build on the urgency of professional need and clinical utility of medical humanities, which will make it more appealing to study for medical students.

While pedagogic considerations of the medical humanities continue to be increasingly explored with a number of medical education journals publishing content (**Figures 2 & 3**), discussion on building cohesive relevance, application and evaluation of the medical humanities into clinical practice, both in academic and clinical teaching, are limited. Most of

the current medical humanities education policy analysis centers on the timeless debate of the ways humanities practitioners can build clinical integration of the subject.

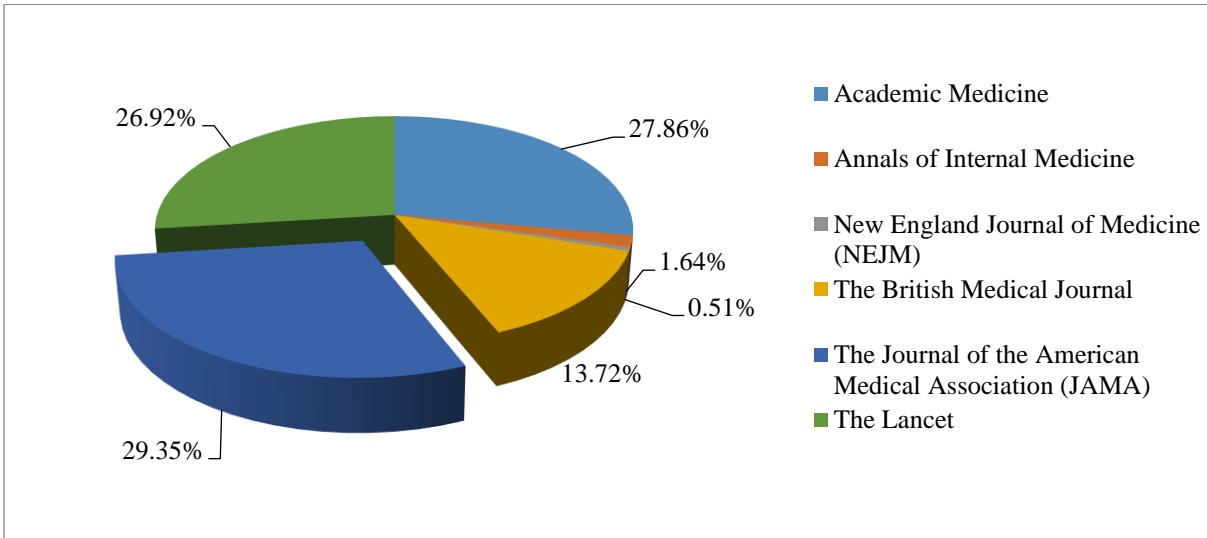


Figure 2: Comparison of Medical Humanities Articles in Top 6 Medical Journals and *Academic Medicine*. The figure compares the frequency of articles with medical humanities content out of the entire publication database between 1995 and 2015 amongst the medical journals.

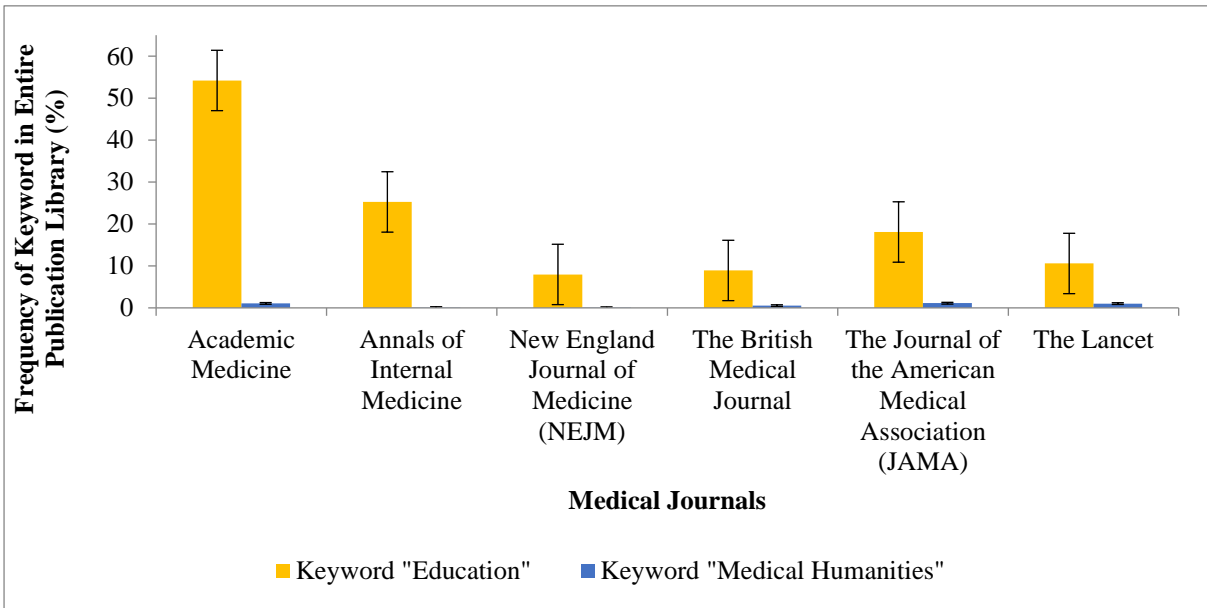


Figure 3: Comparison of Articles in Medical Journals Discussing Education vs. Medical Humanities. The figure compares the six highest-ranking medical journals with the frequency of the terms “medical humanities”, and “humanities” found in their published articles between 1995-2015. *Academic Medicine* was included for its prevalence of articles focused on medical education. The journals have the highest journal impact factors amongst all medical journals, referring to the annual number of citations an article receives. The compared journals and their respective impact factors are: New England Journal of Medicine (NEJM), IF = 55.873; The Lancet, IF = 45.217; The Journal of the American Medical Association (JAMA), IF = 35.289; The British Medical Journal (BMJ), IF = 17.45; Annals of Internal Medicine, IF = 17.810; and Academic Medicine, IF = 2.934. IF values taken for 2014/2015 from ResearchGate.

Several methods have been proposed. One is to ensure special continuous training sessions for medical academics involved in the teaching of medical humanities (Jakusovaite et al 2014: 81). This is said to develop applied clinical scholarship of the humanities and liberal arts in medicine, which is currently lacking (Gillis, 2008). Such an effort should also be accompanied by the determination of impact on medical students learning, which is also an under-researched area in the medical humanities discourse (Bleakley, 2015).

1.3 Thesis Research Question and Rationale:

Having considered the aforementioned gaps in literature, one can appreciate the need for grounded systematic research that goes beyond the rationalist reductionist approach. There is a need to develop systematic medical education policy research to inform an integrated framework to reconcile the grey area between academic learning and developing clinically relevant reflexive and intuitive capacities among medical students with the use of the medical humanities. Research should qualitatively analyze different implementation policy pieces of the medical humanities jigsaw puzzle; beginning with tracing back to its established significance that the medical humanities helps develop intuitive and reflexive capacities of medical students that continues to steer the current global medical humanities discourse. A truly integral approach in its teaching and evaluation is merited.

This is where I surmise that integral education can help. There are increasing number of educational programs that are applying aspects of integral education with the goal to assess missing pedagogical and evaluation aspects. One such program is that of the Integral Studies Department, at John F. Kennedy University (Esbjörn-Hargens, 2007). Propelled by practitioners of integrative medicine, recently, there has been a growing momentum in the use of integral theory in health care, particularly to apply its use in cultivating internal states of awareness as part of professional development (Gratix, 2012; Schlitz, 2008; Wilber, 2006).

How can medical humanities advocates and educators use integral education to tactfully combine conventional and emerging approaches in medical humanities teaching to foster inquiry and self-awareness whilst strengthening its applied clinical relevance? What would the pedagogic and medical education policy rubric to measure goals of medical humanities teaching look like?

This thesis aims to address these questions using integral education, drawn from Integral Approach developed by Ken Wilber (Esbjörn-Hargens, 2007). I will use the integral education framework to analyze how the current discourse on medical humanities translates into medical education policies, including medical humanities curricula design. Using an interdisciplinary approach with elements of medical anthropology, philosophy and social cognition, this thesis will use theoretical concepts from integral education with empirical material contextualized to the integral education typology. Accompanying analysis on medical education policy implications in context of the medical humanities is also presented. The policy aspects of my analysis are drawn from ‘muddling through’ based on successive limited comparisons, a policy management approach defined by Lindblom in 1959. Given the dynamic, multifaceted and evolutionary nature of the medical humanities, I propose that managing its pedagogic and medical education policy complexities is best tackled with an integral education approach within successive limited comparisons policy strategy. Unless otherwise mentioned, medical curriculum considerations discussed are applied to United States’ graduate-level four-year Doctor of Medicine (M.D) program structure.

1.4 Thesis Structural Outline and Methodology:

This thesis is structured into five chapters. Each chapter opens with a detailed preface on its contents and rationale. Presented below is an outline.

The first chapter presents a brief overview of literature on the significance of the medical humanities, its recognition, and gaps in the discussion. The research question and rationale are also presented therein. The second chapter provides a brief geographic overview of medical humanities and its teaching across medical schools in context. Summative analysis gleaned from case studies from medical schools in the United States, Canada, and Europe is presented here.

The third chapter, the heart of this thesis, presents an introduction to Integral Theory and the successive limited comparisons policy strategy, followed by its application using integral education framework in the medical humanities context. The last section of this chapter constructs insights in context of integral education, gained from ethnographic and empirical field notes developed from my thesis research visit to the Medical Humanities Initiative, University of California, Irvine School of Medicine (UCI) in May 2016. Empirical data was collected using in-depth interviews with the program Director, 1 former Dean, 5 physicians and 7 non-physician humanities experts engaged with the initiative. A focus group was also convened, comprising 4 first-year medical students and 1 fourth-year student. The focus group was semi-structured with a balanced mix of open-ended, think-back and closing questions to gauge medical students' perspectives on the medical humanities in practice at UCI and beyond. Empirical data gathered was qualitatively analyzed in context of the integral education model.

The fourth chapter provides further policy-oriented analysis applying the successive limited comparisons policy strategy and principles of integral education. Three policy approaches are discussed pertinent to curriculum design, engagement of humanities and pedagogy experts, and evaluating medical humanities learning outcomes. The final chapter is the conclusion to bind together key points addressed in this paper.

For literature review, an assortment of primary and secondary literature was drawn from search databases PubMed Central, EMBASE, Cochrane Review, MEDLINE, and the institutional database. An array of key medical education reform policy documents, reports, curriculum frameworks was used. Keywords used include “medical humanities +/- interventions +/- challenges +/- medical education reform +/- medical humanities pedagogy +/-medical education curriculum +/- integral theory +/- integral education”. Qualitative content analysis of medical humanities curriculum documentary materials was used.

Chapter 2 – Regional Status of the Medical Humanities

This section provides a brief narrative overview of the medical humanities discourse and teaching at medical schools in North America and Europe. Information presented is drawn from a review paper by Lam et al. (2015). This section is not meant to be a comprehensive analysis or detailed review of pedagogic tools in each region; rather, it is intended to provide a quick contextual summary of status and positioning of the medical humanities within the national curricular structures of medical schools. For sake of succinctness and resemblance to medical program structures used in this project, I limit this section to North America and Europe where growing number of medical schools have been introducing humanities components in their medical education curricula. For each region discussed, I will especially point out two aspects: a) *what* the medical humanities entails; and b) *how* these medical schools have introduced the humanities in curricula, i.e. by way of electives, and/or integrated means of teaching, among other ‘styles’. It is intended that this section will bring a birds-eye perspective on status of the medical humanities as a befitting prelude to the following chapter on successive limited comparisons policy strategy and integral education applied to the medical humanities.

2.1 North America

Hallmark to the growing recognition of the medical humanities within medical schools in the United States is the Association of American Medical Colleges (AAMC)’s endorsed changes to the 2015 Medical College Admission Test (MCAT) to be inclusive of the social sciences and the humanities (Colleges AoAM, 2015). In 2011, 69 of the 133 accredited medical schools required medical students to enlist for a medical humanities course (Banaszek, 2011).

In terms of what entails medical humanities in context of medical schools in the United States, it is notable that most medical schools introduce humanities disciplines as electives gradually during the first two pre-clinical years of the four-year Doctor of Medicine (MD) graduate program. Subsequently, for the clinical years of training, integrated approaches are used within the clinical curriculum. Development of communication skills, cultural competency and collaborative capacities by means of pedagogic tools that enhance self-awareness feature prominently as a goal for these medical humanities course components, which may also form a part of bioethics courses. In terms of teaching styles, common curriculum methodologies for teaching medical humanities are depicted in **Table 1**, however most programs do not adopt one, rather a combination of all or two to three methodologies to teach medical humanities (Doukas, 2010). This is meant to enhance medical students' exposure to a multitude of facets of the medical humanities, whilst allowing them to personalize their own experiences to 'learn' ethics and values. Evaluation is not always metric as it is with other didactic courses of medical education, rather is amenable to the quality of the evolving nature of subjective experiences and insights gained from interaction with patients.

Lam and colleagues (2015) reviewed course calendars of 17 Canadian medical schools and noted that only 3 medical schools had no humanities-related courses on their online course catalogues. The Canadian 'approach' to the medical humanities is very much similar to that of the United States by which it addresses the need to link cognitive and affective approaches in the practice of medicine by using disciplines of the humanities to bridge that link. Historically noted to work in isolation, it is now apparent that 'medical humanists' are engaging within their own medical school and broader science communities to leverage multi-faceted development and scalability of their programs (Peterkin, 2008).

In terms of teaching styles, with the Human Values Program at University of Manitoba as an example, Canadian medical schools typically provide medical humanities modules in concert with their courses on medical ethics, notably addressing the literary arts, social psychology and spirituality in the medical practice (Lam et al., 2015). Narrative medicine, the practice of reading, writing, and telling stories to explore patient and care-provider perspectives, features prominently in pedagogic tools used in the medical humanities. Instances where integration of the medical humanities was noted, humanities components were included as a part of required medical courses in community health.

Pedagogic Styles	Components
Argument-based	<ul style="list-style-type: none"> - Case studies derived from disciplines such as social anthropology, social sciences and sociology; especially applied to medical ethics and ethical considerations in research. <p>E.g. Problem-based critical reasoning learning modules.</p>
Narrative-based	<ul style="list-style-type: none"> - Constructing personal narratives from medical student/physician experiences for building insight and introspective reflections; - Argued to build empathy towards patient and their caregivers; <p>E.g. Clinical clerkship modules include roundtable discussions with peers and/or essays written by medical students derived from clinical experiences.</p>
Creative-based	<ul style="list-style-type: none"> - Translate medical student/physician personal narratives and experiences into visual art and imagery; an extension of insight and introspection to develop empathy and perceptive healing. <p>E.g. Creative writing, visual arts, performance arts and theater in grief and bereavement.</p>
Historical-Based	<ul style="list-style-type: none"> - Exploration of contemporary medicine, its evolution and changing dynamics; assumed to enhance critical appraisal and improvement.

Table 1: Common Teaching Styles for the Medical Humanities. Adapted from: Doukas DJ, McCullough LB, Wear S. Reforming medical education in ethics and humanities by finding common ground with Abraham Flexner. List 1. Acad Med. 2010;85:318–323.

2.2 Europe

Lam and colleagues (2015) reviewed 5 articles on European programs and found 3 that specifically used literary arts in medical education. There is a strong predilection for the regional medical schools to include liberal arts disciplines, such as performing and fine arts, as a key component of the medical humanities to hone communication skills and hone reflexive attitudes among medical students. The review also found that medical ethics and philosophy also featured on medical humanities curricula often. Lack of uniform medical humanities curriculum across European medical schools and a need for standardized curricula has been acknowledged (Dusek, 2003).

In the United Kingdom, more than a dozen medical universities have included the medical humanities and most undergraduate medical programs offer either mandatory or optional courses. There are a growing number of universities that offer separate Master's courses in the field, not always under the auspices of a medical school. A growing number of schools of arts are offering programs in the medical humanities, and apply multi-faceted lens, such as application of critical theory, philosophy of medicine, among others. In terms of teaching of the medical humanities, elective courses are predominantly derived from the liberal arts, as the regional trend, and mandatory courses are integrated into medical ethics and community medicine.

Chapter 3 – Integral Theory & Successive Limited Comparisons Policy Strategy in Medical Humanities Education

“What we remember are the stories of our patients, in all their complicated, colorful, and chilling detail. If medical humanities can help us connect more with those stories, then let’s call in the humanities cavalry, even if there will never be a clinical trial to demonstrate clear and compelling benefit. Lots of what we measure in medicine is unimportant, and lots of what is important is unmeasurable” (Ofri, 2015; 4)

Opportunities and constraints faced in teaching the medical humanities are traceable, to a large extent, to the decisions made by medical education program directors, the extent of engagement of humanities experts during the curriculum design and teaching process, and medical humanities course content. With variable pecuniary and non-pecuniary costs involved in constructing a medical humanities program from-scratch and its institutionalization within medical training, it becomes essential to zoom in on the issue of dissecting different elements of an integrated-approach in the teaching of the humanities in medical education. Such an analysis becomes even more relevant to sustain the medical humanities movement and applying a carefully crafted incremental development-approach geared at re-thinking medical humanities curricula within the unique needs and contexts of medical schools.

This chapter explores the utility of integral education, derived from Integral Theory developed by Ken Wilber in 1995, as a form of strategic analysis to assess the gap towards a more cohesive and structured teaching and evaluation of the medical humanities. I propose that managing complexities associated with medical humanities teaching and its applied use in development of empathic intuitive and reflexive skills among physicians-in-training requires an inclusive and integrated approach, with ‘muddling through’ of education policy,

defined by Lindblom in 1959, as decisions made based on successive limited comparisons given the evolutionary nature of the discipline.

The first section of this chapter justifies the need for an integral approach in education juxtaposed with the successive limited comparisons strategy in context of the medical humanities. Next, the Integral Theory is used as a tool to go beyond the three conceptual issues defined in medical humanities literature, i.e. development of empathy, professionalism and self-care, for those engaged in medical humanities curricula development and medical students. It will be argued that given the multidisciplinary nature of the medical humanities, an integral approach to medical humanities is an appropriate tool to use to go beyond the conventional siloed rational choice approach that currently predominates. This assertion implies that medical schools have traditionally set out to include humanities components in their teaching by ‘rationalizing’ its use with the hope that it will expand critical thinking skills and deepen self-reflection among medical students. These are vital and relevant teaching components, however, the medical humanities discourse needs to expand beyond this rhetoric and evolve as truly holistic.

3.1 The Medical Humanities as An ‘Unmeasurable’ Discipline and Opportunity it Presents:

Literature on review studies commonly points to interventions focused on three areas: medical humanities use to enhance empathy, professionalism, and self-care in medical students (Wershof Schwarz et al 2009,377). While conceptual issues are clearly defined, the interaction between these variables, small population samples, and study design have often been cited as confounding enough to reduce the scope of measuring impact of the medical humanities (Bleakley, 2015). Studies have noted that empirical studies of impact proffer reductionist approaches, where the instrumental tools used for evaluation do not cater to the

‘immeasurable’ medical humanities and that “*the medical education establishment should be challenged to continue investing in immeasurable outcomes*” (Belling 2010; 940). That said, in evaluating the impact of the medical humanities in medical education, there is a particular need to apply strategic analysis that is different from conventional ‘scientific’ analysis, which can be myopic and synoptic in acknowledgement of its aspiration to be complete. Instead, concerted efforts should be placed into developing stylized cohesive methods to teach medical humanities that are the most clinically relevant in the practice of modern medicine. This so-called gap, i.e. an evidence-based approach towards teaching the clinical sciences and the toss-it-into-the mix approach of medical humanities teaching has contributed, in part, to continued marginalization while being cognizant that medical humanities ‘defy easy metric appraisal’, as demonstrated by a key-informant review study of medical humanities provision at fourteen Canadian medical schools (Kidd and Connor, 2008).

The very impetus for developing medical humanities curricula or humanities course components is shaped by the need to develop empathy, altruism, compassionate care towards patients, and refine clinical communication and observational skills among medical students. These are attributes that include consideration of several aspects of an individual, including but not limited to, emotional, interpersonal, and cultural motivations, meandering off from the oft-trodden path of conventional forms of medical education which tend to focus on acquisition of knowledge, development of technical skills, furthering cognitive and reasoning abilities and individual scholarship. The so-called ‘soft skills’ acquisition and reflexive capacities develop that the medical humanities sets out to develop does not lend itself to being easily measured. This has been widely contested in the literature for being one of weakest chinks in the medical humanities advocacy chain, however, this can instead be seen as an opportunity since it leaves room for creative and innovative incubation of teaching designs and ensuing medical education policy reform regulations.

3.2 Towards the Integral Medical Humanities Approach With Successive Limited Comparisons Policy Strategy:

3.2.1 Lindblom's Successive Limited Comparisons Policy Strategy Explained:

Before I delineate the integral medical humanities approach, I will discuss the successive limited comparisons strategy that will be an encompassing basis for the approach.

Strategic analysis is understood as a process to develop informed and thoughtful choice of methods for problem simplification (Lindblom, 1979). A core premise of the successive limited comparisons strategy, also referred to as the 'branch' method, is that policymakers cannot factor in all variables and their multiplicity of a complex scenario, rather using a series of successive limited comparisons to achieve goals. The rational choice decision making strategy, which has been the predominant color of the current medical humanities movement in medical education, entails that we select options that maximize the goals, i.e. building on reflexive capacities and communication skills among medical students for example, and devising curriculum that works best given the unique training program structure and resources available at the medical school. This results in specification of all ends that are distinct from the means. Ends in this context refers to the values and goals of training that the medical school sets out to pursue with its courses on the medical humanities and not the particular outcomes that actually emerge in medical students competencies as a result from participating in these courses. Means refers to the methods by which the medical school chooses to structure its medical humanities courses, for example, humanities discipline-oriented electives, patient simulation sessions, use of during humanities components such as poetry during on-the-ward clinical training, etc. among others. Therefore, in root decision-making model, there is a clarification of objectives prior to the actual empirical evaluation of

alternative means and methods to develop medical humanities curricula. This may have contributed, in part, to widening the already existing gaps that are two-fold: development of clinically relevant medical humanities courses that steer away from passive learning, and assessing outcomes from its application.

In contrast, the successive limited comparisons approach—also referred to as the branch decision-making model—builds on successive limited comparisons whereby the clarification of value goals and empirical evaluation are closely intertwined, rather than being distinct separated as in the case of root decision-making model. Such analysis should be arrayed as a continuum building on, foremost, the compassionate and reflective medical care narrative and incrementally add to the already existing pedagogic models and evaluation tools used to assess the ability of medical students to apply skills honed in their clinical training. In the rational comprehensive style of policy planning, a step-wise process of problem definition, formulation of viable policy options, operationalization and weightage of policy criteria is used. Precedent to this, policy-makers have to define desired goals and set policy objectives that meet these goals. With varying goals and values that have emerged in medical humanities teaching due to pedagogical discipline-oriented and instrumental teaching styles in the medical humanities, it becomes even more challenging to develop medical humanities programs that cohesively bind all values and objectives together. Due to this, certain features stand out more than others in a medical humanities program. For example, several medical schools prominently develop exercises to use narrative, communication and storytelling as means to ‘teach’ empathy, while other skills such cultural competency and self-care may have relatively less space in already-packed medical humanities curricula. Most of the medical humanities discourse is about modeling behaviors in medical students as clinicians. Three basic categories of the intervention emerge: modeling behaviors and reflective

capacities for improved care, social and culturally competent communication skills, and using the humanities as means to explore.

If we are to apply a simple successive limited comparisons strategy analysis of the medical humanities, we can break it down into the two following core considerations:

- A. *Ends and means are intimately intertwined*: This entails that we assess our ends, understood as values and goals the medical humanities curriculum aims to achieve, drawing from consideration of the means contemplated to achieve them. This is so because policies are understood to branch off from the current discourse incrementally and typically only a few means to achieve those ends are considered. For example: the common assumption that implementing a medical humanities course component entails that adequate exclusive space be carved out from an already constrained medical education curriculum may contribute to the lack of comprehensive exploration of synergistic integration of humanities as the means to achieve the specific ends of the curriculum. In other words, when both means and end are considered in tandem, there is only incremental departure from the status quo. Thus the name, “branch method”, where each policy branches off to another.
- B. *Evaluation of the means is not encompassing*: The successive limited comparisons policy strategy suggests that a full and comprehensive implementation analysis is not always feasible, especially when several complex values, means and objectives are involved, as in the case of the medical humanities teaching. In such a scenario, means are often selected based on general consensus among actors involved rather than by scrutinizing indicators that emerge from a traditional cost-benefit analysis. That said, the ambiguity in medical humanities teaching be embraced as an opportunity, rather

than a detriment in medical education, as suggested by Bleakley who professes that a key role of the arts and humanities in culture is to educate for tolerance of ambiguity and that transposition should be made to medical education (Bleakley, 2015).

Therefore, using constructivism and deducing an integral conceptual framework to specifically analyze how the current medical humanities discourse feeds into medical education policies is a key component to develop comprehensive teaching and evaluation methods in the medical humanities. The framework should map out up to key domains of medical humanities teaching (e.g. similar to the narrative-based, arguments-based, historical-based, and historical-based learning tools and exercises as developed by Doukas et al). While several conceptual curricula models have been developed, such models have not been universally tested and applied. Testing the framework using interpretivism qualitative methodology will help ‘universalize’ such a typology. This will contribute to bridging the theory-clinical application divide by using patient stimulation models to test physician responses and quality of care.

3.2.2 The Integral Medical Humanities Approach:

Situating the medical humanities such that it uses both conventional and holistic ends and means to mitigate fragmented approaches that either quarantine its application or are removed from clinical relevance can be understood by applying the Integral Theory developed by Ken Wilber.

Since the medical humanities discourse has been predominantly led by medical schools in North America, where medical education is at a post-graduate level, with a clear distinction between pre-clinical teaching (first two years) and clinical training that forms the last half of the medical curriculum of a four year Doctor of Medicine (M.D) degree program, a prescriptive framework of medical humanities cannot be adopted for medical schools across

the world. Medical curricula can be structured over a course of six years (as with most medical schools in South & Central America, Africa, Asia and parts of Europe), or four years (as seen in North America). In such a context, medical humanities teaching, curriculum design and evaluation is a dynamic evolving process, where one size does not fit all. Furthermore, humanities are understood differently in various regional contexts. For example, in the British medical humanities context, medical humanities is heavily focused on applying humanities-oriented exercises for patient therapy, such as art therapy for terminally ill children. Curriculum integration of the medical humanities is not prominent in this context, contrary to North American medical schools where there is growing momentum to nurture reflexive and perceptive skills with humanities among medical students during their training. Therefore, constructing a curriculum model that is versatile enough for appropriate adaptability, and yet structured enough that it fosters ease of implementation and monitoring, is a key criterion.

Integral education, drawn from Integral Theory, provides a valid typology to work with. It is understood as an innovative approach to knowledge synthesis based on an all-quadrant, all-level framework (AQAL), its five elements and Integral Methodological Pluralism (Esbjörn-Hargens, 2007). With four dimensions of objectivity, inter-objectivity, subjectivity, and inter-subjectivity, it combines several methodological approaches, including phenomenology and empiricism, resulting in avoidance of building up from pre-existing ontological relationships and offers cross-cultural and multi-disciplinary scholarship with application (Esbjörn-Hargens, 2007). As a result, pedagogic models can be built by analyzing participatory relationships of multiple dimensions applying varied methods of inquiry. In the medical humanities, these participatory relationships include medical students motivations and behaviors, medical education policy framework of the program, engagement of medical education and humanities experts in curricula design, collective attitudes and expectations

towards the medical humanities, among other variables that constitute these participatory relationships.

3.3 Integral Education in the Medical Humanities:

In this section, I will outline dimensions of each element of the Integral Theory model, and demonstrate its use in the design of medical humanities curricula. The dimensions are cognizant of most, if not all, participatory relationships and possibilities that medical humanities education entails. During the analysis, I will draw examples from my empirical research during May 2016 at the Medical Humanities Initiative, University of California, Irvine School of Medicine, conducted under mentorship of Dr. Johanna Shapiro, Director, Program in Medical Humanities & Arts, Family Medicine. It is beyond the scope of this paper to discuss all potential combinations of dimensions; rather, I wish to use this opportunity as a precedent to open up conversations among medical humanities advocates and curriculum directors to utilize different combinations and elements of the Integral Theory that may fit in context of their curricular needs to propel the medical humanities movement further in a cohesive and tangible results-driven direction. With several modalities considered, the model may to help move beyond the three conceptual issues defined in medical humanities literature, i.e. development of empathy, professionalism and self-care.

3.3.1 The Integral Medical Humanities in Practice:

The Integral Theory, euphemized as all-quadrants all states (AQAL), is a meta-model that can be used to clarify core components of the medical humanities curriculum. Esbjörn-Hargens (2007) proposed that its application to design pedagogic tools and curriculum, called integral education utilizes five elements, i.e. quadrants, levels, lines, states and types that are understood to bring together multiple aspects of reality cohesively. The core premise is inclusivity of all of these elements for thorough comprehensive understanding and

encompassing participatory engagement with reality. It provides a cohesive rubric to design pedagogic tools, curriculum and address micro-policy reform considerations that are to be taken to implement a medical humanities curriculum. When taken together, the quadrants rubric provides insight into missing variables of medical humanities teaching and further aspects and teaching dimensions can be considered based in evolving lines of development.

Integral education, when applied to medical humanities teaching, covers the following three over-arching approaches:

- Incorporating *individual interpersonal aspects with internal realities* such as values and motivations. This includes assessment of medical students and medical humanities educators' motivations, values and expectations.
- Incorporating *community and social considerations of medical humanities teaching with external realities* such as medical education systems, policy reform aspects, infrastructural and resource considerations, measuring outcomes, impact on patient-care, among others.
- Addressing *multiple ways of acquisition of skills given the multi-disciplinary nature* of the medical humanities. This entails coordinating perspectives from the quadrants, i.e. subjective, objective, inter-subjective; and types with multiple styles of learning of medical students.

The above-mentioned approaches will entail a coordination of perspectives drawn from the constituting elements of Integral Theory. In the section below, I will place an increased emphasis on two of the five elements of integral education, i.e. quadrants and types. These two elements are particularly relevant to needs of medical humanities education in that it configures closely with modalities of medical humanities. Other elements of integral education may also be elaborated and applied to the medical humanities, however, it is beyond the scope of this paper to discuss all five elements of integral education in detail.

- *Quadrants*

All quadrants refer to different perspectives of reality and experience, combining interior and exterior of individuals and collectives; with all quadrants applicable to the teacher, students, and the classroom (Esbjörn-hargens, 2007). Exploration of individual mental, emotional and spiritual capacities, collectively referred to as educational experiences, constitute the upper left quadrant; physical artifacts and pedagogic exercises, collectively referred to as educational behaviors, are part of the upper right quadrant; collaborative community considerations with group culture, referred to as educational culture, form a part of the lower left quadrant, and institutional structural facets with systemic education policies are considered in the lower right quadrant.

The key consideration is that there is no ontological and epistemological priority and that all of these components are overlapping in nature; coordinated perspectives applicable to medical education policy tenable to the use of the humanities. Esbjörn-hargens summarizes the key dimensions of integral education in the *Twelve Commitments of Integral Education* and the *Twelve Ways of Knowing* that can be used to define the scope, goals and practice-oriented evaluation of an educational program. Elements of both are combined together in **Figure 4**. With three broad levels of complexity under each. Each level can be used to develop pedagogic exercises accordingly. The rubric is helpful in that it helps assess curricular components that are being underemphasized or left out.

UPPER LEFT / “I” Quadrant <i>Educational Experiences</i> Contemplative Inquiry Critical Reflection Somatic Knowing	UPPER RIGHT/ “It” Quadrant <i>Educational Behavior</i> Skillful Action Practical Application Active Observation
LOWER LEFT/ “We” Quadrant <i>Educational Culture</i> Connective Encounters Perspective Embrace Ethical Participation	LOWER RIGHT/ “Its” Quadrant <i>Educational Systems</i> Ecological Flourishing Social Sustainability Global Dynamism

Figure 4: Esbjorn-Hargens Twelve Commitments and Ways of Knowing in Integral Education (Esbjörn-Hargens, 2007) that can be applied to define the scope, goals and practice-oriented evaluation of a medical humanities program.

When applied to medical humanities teaching and education policy reform, aspects of the top left and top right quadrants especially apply to medical students learning and directly impact how students’ perceive patient care and the role of the humanities in making them astute care-providers. The lens is also applied to educators to understand their own role in the classroom. The two quadrants below depict a pluralistic perspective rather than an individual one. The lower left quadrant, in particular, is largely informed by medical, ethical, social and cultural context of implementing medical humanities education. The lower right quadrant encompasses a systems theory-approach, demonstrating interconnectedness with several structural, institutional and systemic policy reform considerations that apply to implementation and monitoring and evaluation of the medical humanities curricula.

<p>UPPER LEFT</p> <p><i>Internal Subjective-Individual</i></p> <p><i>[both medical students & educators]</i></p> <p>Contemplative:</p> <ul style="list-style-type: none"> ○ <i>Note-taking for reflection and observations;</i> ○ <i>Regular self check-ins to assess learning and progress;</i> ○ <i>Meditative exercises.</i> <p>Critical Reflection:</p> <ul style="list-style-type: none"> ○ <i>Defining expectations of skills and insights gained from taking a humanities course component;</i> <p>Somatic</p> <ul style="list-style-type: none"> ○ <i>Practicing regular self check-ins to acknowledge vulnerabilities;</i> ○ <i>Seeking social support and nurturing extra-curricular interests.</i> 	<p>UPPER RIGHT</p> <p><i>External Objective- Individual</i></p> <p>Skillful</p> <ul style="list-style-type: none"> ○ <i>Critical review capacities;</i> ○ <i>Examining one's own biases.</i> <p>Practical</p> <ul style="list-style-type: none"> ○ <i>Finding practical means to broaden understanding of healing and its psychosocial aspects;</i> <p>Active</p> <ul style="list-style-type: none"> ○ <i>Journaling one's experiences staying in touch with self.</i>
<p>LOWER LEFT</p> <p><i>Internal Inter subjective Group- Cultural</i></p> <p>Connective</p> <ul style="list-style-type: none"> ○ <i>Critical inquiry and collaborative learning;</i> ○ <i>Critical inquiry applying other concepts and disciplines;</i> <p>Perspective</p> <ul style="list-style-type: none"> ○ <i>Sharing common aspects with others;</i> ○ <i>Using the patient's point-of-view to understand illness and healing.</i> <p>Ethical</p> <ul style="list-style-type: none"> ○ <i>Cultural competency;</i> ○ <i>Sensitive of diverse populations and their needs.</i> 	<p>LOWER RIGHT</p> <p><i>External Inter-objective Group- Social</i></p> <p>Ecological</p> <ul style="list-style-type: none"> ○ <i>Interconnectedness with disciplines.</i> <p>Social</p> <ul style="list-style-type: none"> ○ <i>Shared decision-making;</i> ○ <i>Reforming organizational ethics and culture.</i> <p>Global</p> <ul style="list-style-type: none"> ○ <i>Promoting best practices and lessons learned with community at-large.</i>

Figure 5: Quadrant section of the Integral Model as applied to medical humanities education policy reform. Examples are listed under each quadrant. Quadrants are a key element of the Integral Theory, contextualized with integral education here. Items from each can be used to assess the presence or under-developed/absent components of medical humanities curricula.

Application of the quadrants of the Integral Theory can be broken down into aspects encapsulated in the model. For example: addressing the state of medical students values, insights, motivations and expectations juxtaposed with those of the educators involved in the teaching of medical humanities electives can be grouped under the upper left quadrant. Assessing bed-side manner, body language, communication skills with reading, writing, and pedagogic tools of learning can be included under the upper right quadrant. The lower left quadrant can be used to address the state of medical students' application of intuitive and reflexive skills honed within the reference of patient-physician relationship, especially around illness narrative, cultural perceptions of disease, group value of the medical humanities, among others.

- *Types:*

Integral education calls for at least one type of learning style be incorporated per quadrant (Esbjörn-hargens, 2007). Of special importance in the medical humanities teaching are the sensory styles of learning in the upper right quadrant; personality styles in the upper left quadrant, and narrative styles of writing in the lower right quadrant. Personality types such as Enneagram and Myers-Briggs personality styles are taken into account¹. Illness narrative has formed an important constituent to medical humanities teaching with storytelling, academic prose and personal narratives being used as different 'styles'. Given the multi-faceted nature of the medical humanities that places an emphasis on soft skills development, pedagogic tools that are tailored to different predilections and styles of learning of medical students goes a long way to develop medical students' awareness and reflexive capacities to foster responsive

¹ - The Enneagram Type is defined as "a geometric figure that delineates the nine basic personality types of human nature and their complex interrelationships". A psycho-spiritual typology, the Enneagram helps understand overall pattern in human behavior (The Enneagram Institute, available from <https://www.enneagraminstitute.com/enneagram-faqs/>).

- The Myers Briggs Types are 16 personality types, "The essence of the theory is that much seemingly random variation in the behavior is actually quite orderly and consistent, being due to basic differences in the ways individuals prefer to use their perception and judgment" (The Myers & Briggs Foundation, available from <http://www.myersbriggs.org/my-mbti-personality-type/mbti-basics/>).

engagement in medical humanities learning. Furthermore, wholesome care giving is rendered more meaningful to medical students when depicted using integral methods for cultural competency training, personal inquiry and critical appreciation of healing and disease.

3.4 Applying the Integral Medical Humanities Approach: The Case of the Medical Humanities Initiative, University of California, Irvine School of Medicine

“The medical humanities tide is turning. There is a need to re-brand and make a seamless integration of the medical humanities in our education as physicians-in-training. Why compartmentalize a discipline that informs our innate reflexive capacities crucial to our role as healers?”

(A first year medical student at UCI)

3.4.1 General overview and structure of the program:

In this section, I will present insights gained from my field trip in context of elements of integral education gained from the program in Medical Humanities and Arts at the University of California, Irvine, School of Medicine (UCI), and the Medical Humanities Initiative. It is important to note that both are separate entities within the medical humanities academic community at UCI.

The School of Medicine formally recognized the program in Medical Humanities and Arts in 2000, and housed jointly under the Office of Medical Education and the Department of Family Medicine. The program was initiated towards fulfillment of the Medical School Objectives Project criteria of professionalism, with a special focus on development of humanism, empathy, altruism and self-reflection (Andersen, Cohen et al; 1999).

Incorporated primarily in the first and third year of medical education, the Medical Humanities Initiative at UCI is an inter-school collaboration between the schools of arts, humanities and medicine, which envisions the development of holistic understanding of health and healing. Besides developing physicians-in-training capacities astute with wholesome care, the initiative also aims to promote a model of health care that is patient-centered, culturally sensitive, and responsive to community needs. Led under the committed leadership of a Director formally trained as a clinical psychologist, the initiative engages with physician and non-physician faculty, drawn from the humanities, to develop curriculum content, design, teaching and evaluation. Both programs define medical humanities as the use of humanities and arts-based teaching materials into medical school and residency curricula (Shapiro and Rucker, 2003).

3.4.2 Integral Education Approach Applied to the UCI Medical Humanities Programs:

I will apply three lens derived from the integral education approach to the UCI Medical Humanities Initiative, i.e. **four dimensions**, and two of its five elements, **quadrants** and **types**.

Embodied within the concept of narrative competence, both the initiative and the School of Medicine's program in Medical Humanities and Arts work closely together. It can be noted that the pedagogic tools of the programs reconcile conventional means of medical humanities teaching whilst also developing critical inquiry through self-reflection and experiential approaches. When analyzed under the four dimensions of integral education (**Figure 6**), three dimensions especially apply to the initiative, i.e. conventional pedagogic styles of empirical science contribute to *objectivity*, holistic approaches with emphasis on self-reflection and inquiry related to *subjectivity*, and building narrative competence and cross-disciplinary collaboration contribute to *inter-subjectivity*. With a goal of promoting holistic education

policy framework of health, healing and well being with patient-centered care, the initiative also lays emphasis on faculty development, which is a key component in integral education to develop educator capacities and awareness. When juxtaposed with the integral education dimensions, this helps to see how educator, medical students, the classroom and the institution co-develop or transform cohesively towards the goal of shaping pedagogy relevant to applied medical humanities learning and fostering facilitative medical education policy that accommodates such interventions. This promotes an understanding of the medical humanities educator's own transformation (subjectivity), reflective dialogue that builds shared pedagogic and policy intervention goals with medical students and institutional structure in mind (inter-subjectivity), and positioning collective for medical education reform and evaluation of the medical humanities teaching within institutional needs (objectivity).

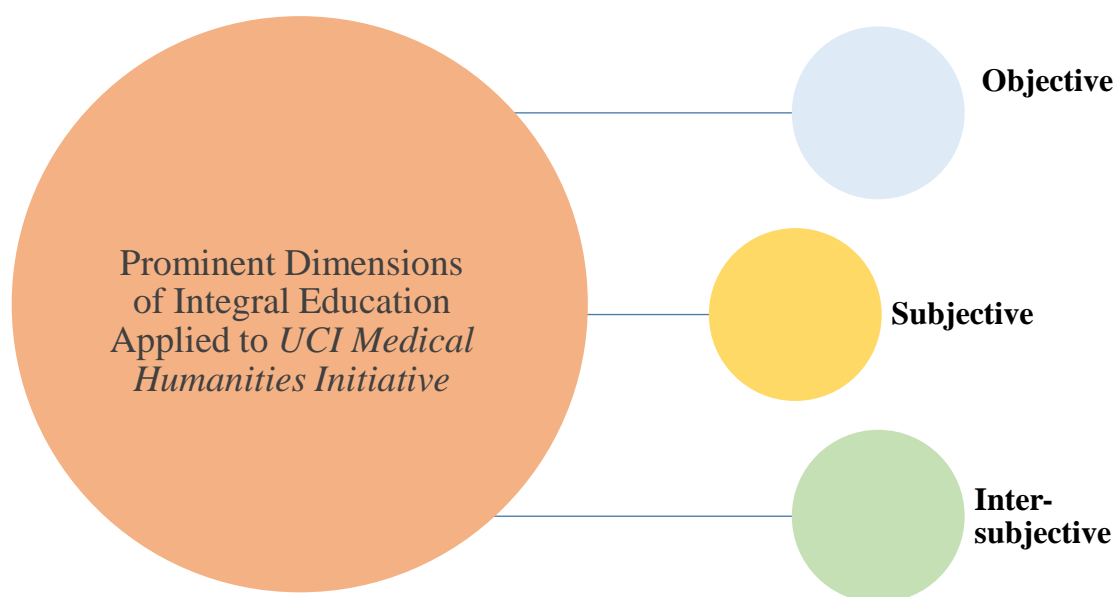


Figure 6: Dimensions of integral education when applied to the Medical Humanities Initiative at UCI. Out of the four dimensions of integral education, three, i.e. objective, subjective, and inter-subjective components are the most prominent at the initiative.

For discussion on the quadrants element of integral education, it is important to note the core objectives of the programs. Objectives centered around development of medical students skills for interpretation of patients language and behavior; development of communication skills; enhancing empathy; whole-person understanding of patients, and promotion of self-reflection on experience, among other core values. The core objectives are mapped out per each quadrant of integral education elements (**Figure 7**). Medical humanities tasks and activities assorted across the quadrants contribute to rich pedagogic array, crucial for a multifaceted discipline such as the medical humanities. Typically, activities of the first upper left quadrant (the “I”) include those that are introspective and promote individual reflection. Activities such as writing reflection pieces, meditation, student-developed creative projects, point-of-view writing exercises, among others, can be attributed to this quadrant. The upper right quadrant (the “It”) consists of practical skills and active observation emerging from both sensory and intuitive awareness. Inter-subjective dynamics can be attributed to the lower left quadrant (the “We”). Structural elements of the elective and course curriculum with institutional medical education policy considerations feed into the lower right quadrant (the “Its”).

To sum up, it is observed that several medical humanities course components relate closely with two or more of the Esbjörn-hargens seven commitments of integral education. Most prominently, educators, medical students, and the initiative engage through various transformative processes within the UCI community fostering awareness, collaboration, interaction and organization. The program also addresses multiple ways of learning the medical humanities and tries to incorporate a variety of tools and methods to facilitate a responsive space to nurture reflexive capacities among medical students and also its educators.

<p>UPPER LEFT / “I” Quadrant</p> <p><i>Educational Experiences</i></p> <p>Contemplative Inquiry</p> <ul style="list-style-type: none"> ○ Faculty and students both open to continued reflections. <p>Critical Reflection</p> <ul style="list-style-type: none"> ○ Meditations ○ Narrative medicine [patient and physician perspectives] <p>-</p>	<p>UPPER RIGHT/ “It” Quadrant</p> <p><i>Educational Behavior</i></p> <p>Skillful Action</p> <ul style="list-style-type: none"> ○ Communication skills and ‘reflexive learning’; <p>Practical Application</p> <ul style="list-style-type: none"> ○ <i>Plexus</i> publication to showcase prose and poetry contributions by students and faculty.
<p>LOWER LEFT/ “We” Quadrant</p> <p><i>Educational Culture</i></p> <p>Connective Encounters</p> <ul style="list-style-type: none"> ○ Critical inquiry and appraisal of illness and healing with group exercises. <p>Perspective Embrace</p> <ul style="list-style-type: none"> ○ Acknowledging cultural and social ‘gaps’ in care, and reflecting with patients’ point-of-view. <p>Ethical Participation</p> <ul style="list-style-type: none"> ○ Recognition that ethics should be a part of the medical humanities, and not the other way around; ○ Placing ‘virtues’ back into ethics and joining its cognitive and affective elements. 	<p>LOWER RIGHT/ “Its” Quadrant</p> <p><i>Educational Systems</i></p> <p>Ecological Flourishing</p> <ul style="list-style-type: none"> ○ Close collaboration between the medical school, schools of arts and humanities, and the initiative. <p>Global Dynamism</p> <ul style="list-style-type: none"> ○ Linking course components with other tools such as the Jefferson Scale of Empathy.

Figure 7: Partial listing of pedagogic method examples at the Medical Humanities Initiative, UCI, applied to integral education. Each quadrant represents core components with examples under each. Examples presented stand out in pedagogic design of the Medical Humanities Initiative. This is not a comprehensive listing.

Chapter 4 – Medical Humanities, Ethics and Integral Education: Policy Considerations

4.1 Medical Ethics Teaching: How close is it with the medical humanities?

The way forward in promoting ethics management as means to cultivate ‘humane’ physicians in the spirit of public service lies in addressing the need to reform medical education inside-out. A popular idea, sure, but an even bigger effort is to consistently be reminded of why is it we are aiming to reform medical education today?²

We know why. Surging health care costs, dwindling human and material resources, growing spectrum of financial conflicts of interest, broad personal motivations, growing complexity of physician-patient-health care institution nexus dynamics, deteriorating quality of patient care, strained health systems, and more, have all contributed to a toxic soup of counter-productive culture of medicine. This especially permeates in ethical and values-based considerations.

The wheels of medical education and ethics policy change can only turn when we reform medical education such that it is founded on the very same Hippocratic values that it was meant for; built upon its ensuing morals and ethical considerations. Values that are not simply passively taught, rather, actively advocated for and monitored for use in practice. With shifting dynamics between patients and physicians, where patient autonomy is taking precedence, this has also brought about a constellation of ethical considerations that merit more detailed thought and learning and not simply an ethics ‘handbook’. This is where the idea of situating ethics *within* the medical humanities comes in.

² Portions of this chapter were excerpted from my term paper for the mandatory Ethics and Public Policy course [Fall 2015].

Dimension	Examples
Cognitive	<ul style="list-style-type: none"> • Core knowledge • Basic communication skills • Information management • Applying knowledge to real-world solutions • Using tacit knowledge and personal experience • Abstract problem-solving • Self-directed acquisition of new knowledge • Recognizing gaps in knowledge • Generating questions • Using resources (e.g., published evidence, colleagues). Learning from experience
Technical	<ul style="list-style-type: none"> • Physical examination skills • Surgical/Procedure skills
Integrative	<ul style="list-style-type: none"> • Incorporating scientific, clinical, and humanistic judgement • Using clinical reasoning strategies appropriately (hypothetico-deductive, pattern recognition, elaborated knowledge) • Linking basic and clinical knowledge across disciplines, managing uncertainty
Context	<ul style="list-style-type: none"> • Clinical setting • Use of time
Relationship	<ul style="list-style-type: none"> • Communication skills • Handling conflict • Teamwork • Teaching others (e.g., patients, students, and colleagues)
Affective/Moral	<ul style="list-style-type: none"> • Tolerance of ambiguity and anxiety • Emotional intelligence • Respect for patients • Responsiveness to patients and society • Caring
Habits of Mind	<ul style="list-style-type: none"> • Observations of one's own thinking • Emotions • Techniques • Attentiveness • Critical curiosity • Recognition of and response to cognitive and emotional biases • Willingness to acknowledge and correct errors

Table 2: Defining and assessing professional competence (originally 'Table 1' extracted from Epstein and Hundert (2002)). Dimensions presented demonstrate key aspects that entail professionalism in medical care.

The Accreditation Council for Graduate Medical Education (ACGME) of the United States defines professionalism as being constitutive of the following dimensions of professional compliance. Spread across a gamut of competencies distributed over domains including

cognitive, technical, integrative, contextual, relationships-based, morals and habits of the mind, the following table (**Table 2**) provides a comprehensive outline of the expectations of the what professionalism entails in medical practice. With the intention of being encompassing and comprehensive, the model tallies soft skills with core technical competencies. High road values of ethics, compassion and integrity may be applied, to a larger extent, in the domain of ‘Habits of Mind’ under this table. The heavy didactic focus of current medical education ensures that we measure technical acumen of medical students, however, there is no straightforward way to assess the development of their ethical values and refinement of moral compass. In a standard four-year Doctor of Medicine (M.D) education, the early formative years of medical education teach the meaning of ethical values and empathy with core basic sciences subjects, and it is expected that the subsequent final two years of clinical training imbue these values in medical students.

The table below discusses popular interventions in medical humanities curricula. There is growing recognition that the effort must begin even before we set out to reform medical education itself. A specific example in this context is the process of selecting prospective medical students. Typically, this process hinges on the student’s academic merit. Now, there is growing consensus that other parameters should be assessed, including emotional intelligence and the student’s very motivation to pursue medicine as a career. This helps, at least in part, to develop a generation of new physicians who are committed and are cognizant to the implications of empathy, values and ethics in the practice of medicine.

INTERVENTIONS	RATIONALE AND EXAMPLES
Student Selection Process	<p>- Focus on not only academic competency of prospective medical students, but also assess personal qualities, soft skills, emotional intelligence, motivation to pursue a career in medicine, and commitment, among others; tests may be a combination of several elements to get a wholesome picture of the student's qualities.</p> <p>E.g. Personal Qualities Assessment Tests [tried in medical schools United Kingdom, Australia, Fiji, Israel]</p>
Courses on Ethics and Values	- Didactic and problem-based learning courses on ethics, medical anthropology, humanism and arts, among other inter-disciplinary subjects with the intention to 'hone' and teach humanism and values to students.
Cognitive efforts [E.g. modeling]	-Emotional intelligence tests, modeling of best ethical behaviors by professional superiors and active application of learned ethics and values concepts into clinical practice.

Table 3: Popular interventions to teach ethics and values in medicine, adapted from Shapiro, J. et al. Medical Humanities and Their Discontents: Definitions, Critiques, and Implications Academic Medicine: February 2009 - Volume 84 - Issue 2 - pp 192-198 doi: 10.1097/ACM.0b013e3181938bca Medical Humanities.

4.2 Policy Recommendations for Ethics and Integral Medical Humanities Education:

Applying Lindblom's successive limited comparisons policy strategy contextualized with the commitments of integral education, the following policy aspects can be considered:

Recommendation 1. Structural revamp of medical humanities and true integration in medical education: As noted earlier, the very premise of medical education should be about nurturing physicians who practice patient-centered care. This inevitably mitigates conflicts of interest, ethical discordance, and fosters a system based on values. For this, it is important to build on the relevance of medical humanities in medical education. Integral education approach applied to the medical humanities, especially starting from basic sciences years to hands on clinical clerkship years will go a long way to ensure there is continued development, reflection and introspection to develop the high road of imbibing values and ethics in public service by doctors. Medical humanities courses should be made integrated into mandatory courses without compartmentalization and discipline-oriented segregation.

Recommendation 2. Engaging humanities and pedagogy experts for integral medical humanities education: It is imperative that humanities experts be engaged at an early stage during the development of integral medical humanities courses. With its early engagement with the schools of arts and humanities, the Medical Humanities Initiative at UCI stands out in this regard. Depending on how and when integral medical humanities components are to be rolled out, engaging pedagogy experts at an early stage of that process will also prove to be beneficial in terms of scalability, sustainability, consistency, and evaluation aspects of the integral medical humanities curricula.

Recommendation 3. Embracing that integral medical humanities is measured differently and that presents an opportunity to expand: When there is indeed the recognition, integration and quasi-implementation of humanities components into medical education curricula, there is the growing problem of ensuring consistent monitoring on the scope and outcome of the medical humanities tracks. Muddling through and reforming institutional policies such that non-metric means of evaluation are embraced to gauge critical inquiry skills that allow medical students to examine problems from several vantage point is key. The use of qualitative methods of evaluation, such as emotional intelligence and the Jefferson Scale of Empathy, can go a long way to gauge the utility of medical humanism tracks in medical education programs. Monitoring efforts must also include medical students in the process, i.e. inclusion of their perspectives, recommendations and feedback. This will ensure that there is not just utility of such programs, but also practical application into real-life ethical dilemmas. A review process will also help build continued learning from best practices and lessons derived from varied ethical considerations. This will be a key asset to ethics management practice that begins from the very start of a physician's career.

Chapter 5. Conclusion

The Way Forward Towards An Integral Medical Humanities Education

With growing recognition to do more to nurture reflexive and self-aware clinicians astute in communication skills, holistic care-giving and appreciative of patients needs, more and more medical schools are embracing the medical humanities as the way forward. However, these efforts have been marked with several challenges, including but not limited to, lack of clinical relevance in medical humanities teaching, pedagogic quarantine of humanities disciplines from mainstream medical education courses, lack of clarity on how learning outcomes emerging from the medical humanities may be evaluated, among other notable challenges.

Arising from the need for a true integration of the medical humanities, I contend that the integral education approach, derived from Integral Theory originally developed by Ken Wilber, is the Midas touch to foster this change. The research question of this thesis was to examine how medical humanities advocates and educators use integral education to tactfully combine conventional and emerging approaches in medical humanities teaching to foster inquiry and self-awareness whilst strengthening applied clinical relevance of the medical humanities. Pursuant to this, qualitative analysis on the pedagogic and medical education policy rubric contextualized with Lindblom's 'muddling through' successive limited comparisons policy strategy is also presented.

To answer the research question, first, I prefaced with a brief review of literature on the significance, common discontents, and current status of the medical humanities in North America and Europe, laying particular emphasis on pedagogic styles and key discontents. Further, elements of integral education as delineated by Esbjörn-hargens; quadrants, types

and dimensions, were applied in context of the medical humanities. Using transformative and integrative modalities from my case study, the Medical Humanities Initiative at UCI, I situated empirical insights on the integral education typology to illustrate the use of integral education in addressing integral educational approaches to map out adequate and under-addressed aspects of curriculum design for multi and inter-disciplinary subjects such as the medical humanities. Special emphasis was placed on transformation of medical students, educators and classrooms—a key design feature of integral education.

The proposed recommendations to foster integral medical humanities education, i.e. *structural policy-level changes, engaging humanities and pedagogy expert in curriculum design, and embracing novel non-metric means of evaluation learning outcomes*, are discussed for developing a conceptual integral framework for the medical humanities in clinical training. Integral evaluation from both ends; i.e. medical students perspectives, patient perspectives, and examination of interventional clinical teaching tools (narrative medicine, for example) will contribute to ensure comprehensive and inclusive means of evaluation. Special attention should be paid to enhancing the link between clinical practice-theory application, which will contribute to garnering greater engagement from medical students and program directors alike. Sophisticated monitoring and evaluation mechanisms that prove that the program is driving better clinical practice in young physicians-in-training will ‘incentivize’ and leverage further development of novel methods to teach medical humanities. This thesis is an invitation to develop an integral approach to medical humanities education for reflexive and astute physicians. An apt closing with Harvey Cushing’s words: *“A physician is obligated to consider more than a diseased organ, more even than the whole man—he must view the man in his world”*.

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APPENDIX

Appendix A: Raw Data

Journal Title	Impact Factor (2014-2015)	Total Number of Articles (1995-2015)	Keyword “Education”	Keyword “Medical Humanities”	Frequency of “Education” Articles (%)	Frequency of “Medical Humanities” Articles (%)
Academic Medicine	2.934	22904	12415	242	54.20451	1.056584
Annals of Internal Medicine	17.810	3212	811	2	25.24907	0.062267
New England Journal of Medicine (NEJM)	55.873	46794	3728	9	7.966833	0.019233
The British Medical Journal	17.45	124181	11072	646	8.916018	0.520208
The Journal of the Medical Association (JAMA)	35.289	108242	19576	1205	18.0854	1.092921
The Lancet	45.217	96768	10239	988	10.58098	1.020999

Table 4: Raw data used to generate Figures 1-3 in measuring the presence of journal articles in the medical humanities. Data was gathered from using keywords in the search engine Scopus and cross-referenced with the websites for each publication. IF values accessed from ResearchGate.