Peace-Through-Health

Theory and Practice of the International Pediatric Emergency Medicine Elective (IPEME)

By

Zachary Kuehner

BSc (University of Waterloo)

MSc Candidate (University of Toronto)

A thesis submitted in conformity with the requirements for the degree of Collaborative Master’s of Science

Departments of Health Policy, Management and Evaluation and International Relations

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Abstract

This thesis seeks to evaluate the International Pediatric Emergency Medicine Elective (IPEME) as a case study of a peace-through-health initiative. Using the reasoning of Scolnik (2006), IPEME is first evaluated in terms of narrow, short-term outcomes and subsequently considered in terms of the greater body of peace-through-health work. A novel evaluation tool was designed to examine change in students’ ethical and professional attitudes over the course of the four-week elective. Supplementary qualitative data was collected to shed light on evaluation findings and provide insight into the advantages and disadvantages of the IPEME curriculum. Ethics and professionalism were defined in terms of the WHO 5 Star Global Criteria for Global Doctors conceptualized by the World Health Organization (Boelen, 1996). This research discusses these findings in light of the study’s limitations and considers their implications for IPEME as a medical elective and for its contribution to the greater body of peace-through-health work.
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1. Introduction

The purpose of this thesis was to evaluate the International Pediatric Emergency Medicine Elective (IPEME) as a case study of a peace-through-health initiative\(^1\). Using a mixed-methods study design, the change in ethical and professional attitudes of participating students was assessed in terms of the WHO 5 Star Criteria for Global Doctors.\(^2\) The results of this attitudinal assessment, supplementary qualitative data from two questionnaires and written field notes, and a review of the relevant literature were combined to evaluate the learning experience provided by IPEME and subsequently assess the elective’s contribution (if any) to the greater body of peace-through-health work.\(^3\)

IPEME is an official medical elective hosted by the University of Toronto in cooperation with selected teaching hospitals in the Toronto area and with medical universities in the Middle East and Canada.\(^4\) Eight students from the Middle East and Canada travel to Toronto for this unique learning experience that focuses on health as a

\(^1\) The specific parameters of peace-through-health initiatives applied to this thesis will be discussed in Chapter 2. Arya et al define peace-through-health as “an emerging academic discipline to study how health interventions in actual and potential war zones may contribute to peace.” (Arya et al, 2009) Therefore, in the broadest sense, peace-through-health initiatives are “those ways that peace is advanced through work from the health sector.” (Arya and Santa Barbara, 2009) Examples include projects that seek to use the collaborative nature of medical work and the professional abilities of physicians to effect change in conflict or post-conflict regions, or initiatives that frame the effects of war as public health issues.

\(^2\) The WHO 5 Star Criteria for Global Doctors was conceptualized in 1993 as a normative set of characteristics that would enable doctors working in conflict zones to do so effectively and with compassion. These criteria are thought by many to represent a paradigm shift in medical practice and describe the adaptive physician of the future (Boelen, 1996).

\(^3\) The body of peace-through-health literature is limited. There are numerous examples of organizations that engage in various forms of peace-through-health work. However, it is still considered a burgeoning academic field (Jabbour, 2005). This analysis is thus intended to build on completed work and inform future peace-through-health projects.

\(^4\) The elective is a joint venture between the University of Toronto, The Hospital for Sick Children, Mount Sinai Hospital, Sunnybrook Health Sciences Center, the Jordan University of Science and Technology, Queen’s University Medical School, Schulich School of Medicine at the University of Western Ontario, Ben Gurion University, Tel Aviv University, and the University of Al-Quds (Field Notes, 2009).
vehicle for peacebuilding. For four weeks, participants are exposed to teaching related to pediatric emergency medicine and global health, while participating in leadership training activities that prepare them to practice medicine in conflict regions.

The impetus for this thesis stems from a growing need to assess the impact of peace-through-health initiatives and discern their role in peacebuilding processes (Jabbour, 2005). To do so, an initial clarification of terms is required since ambiguous terminology often leads to disagreement about the supposed mandate of such initiatives. Uncertainty about the definitions of ‘health’ and ‘peace’ reveals that their meanings change depending on the context and the end-goals in question. The World Health Organization’s definition of health as, “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity,” (WHO, 1948) is comprehensive and holistic, but is difficult to quantify and may not apply to all situations. For instance, in ‘peace-through-health’, ‘health’ may loosely refer to the ‘collaborative work of health professionals’ without reference to an operational definition of the term.

‘Peace’ is equally difficult to define. Galtung distinguishes between negative peace – the absence of war – and positive peace – restoration of relationships and reconciliation (Grewal, 2003), while the UN Charter refrains from any explicit definition. Peace-through-health projects do not assert a working definition of peace, although IPEME’s focus on collaboration complements Galtung’s definition of ‘positive peace’ that largely occurs during reconciliatory peace processes following an armed

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5 While it is unclear where IPEME may fit into the larger body of peace-through-health work, the elective’s collaborative, interdisciplinary approach is designed to use medicine to unite medical professionals from different parts of the world (and from opposing sides of a long-standing conflict) and thus considered by this thesis to be a peace-through-health initiative in the broad sense of the term.
6 The UN Charter does not explicitly define the term ‘peace’, but is assumed to defer to what Galtung would called ‘negative peace’, whereby peace is defined as the absence of war or violence (United Nations website).
conflict. The purpose of this analysis is not to debate the merits or applicability of ‘peace-through-health’ terminology, but it is important to understand from the outset that the terms ‘health’ and ‘peace’ are ambiguous and will be defined according to the context in which IPEME operates.

This analysis was designed to evaluate the attitudinal change of the eight students participating in the four-week elective, and as such can only speculate about the implications for broader conceptualizations of ‘health’ and ‘peace’ in the long-term. Furthermore, Chapter 2 will point out that using broad outcome measures for an elective like IPEME may be neither necessary nor desirable. Nevertheless, IPEME will be assessed in such a way as to make possible discussion about the broader impact of such collaborative medical electives on peace-through-health work.

This thesis is composed of five chapters. Chapter 1 introduces the analysis and provides a brief overview of the thesis procedure. Chapter 2 examines the relevant peace-through-health literature, describes the elective’s conceptual design, and provides justification for an attitudinal evaluation using the WHO 5 Star Criteria. Chapter 3 details the methods used to evaluate the elective (study design and data collection methods) and its subsequent data analysis procedures. Chapter 4 presents the results – quantitative and qualitative – and summarizes the study’s findings. Finally, Chapter 5 discusses the implications of these results for the elective and for the broader peace-through-health field. Limitations and future directions are also discussed in this chapter.

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7 It is difficult to decipher exactly where the peace process in the Middle East lies since war is not ongoing (although Operation Cast Lead, territorial occupation, and the constant threat of terror attacks may be considered war), but peace and reconciliation are by no means underway to any credible degree.
1.1. Summary of Literature Review

The literature review presented in Chapter 2 will distinguish peace-through-health initiatives from humanitarian relief missions and other medical work conducted in conflict regions and will situate IPEME within the body of peace-through-health work. The elective’s design and key concepts will also be discussed so that the context in which this analysis operates can be better understood. There are numerous projects conducted by governments, non-governmental organizations (NGOs), and International Organizations (IOs) that could be construed as peace-through-health initiatives (see Chapter 2). The literature review seeks to highlight the unique characteristics of peace-through-health initiatives, but will also note the areas where such projects overlap with other medical and/or peace work. To this end, the work of the International Committee of the Red Cross (ICRC), Medicines sans Frontiers (MSF), and the Canadian International Scientific Exchange Program (CISEPO) – the latter being a prominent example of a ‘peace-through-health’ NGO – will be compared and contrasted.

Locating IPEME within the larger body of peace-through-health work will be accomplished by separating peace-through-health work into two pairs of distinguishable characteristics: macro/micro and political/apolitical. This review will refer to Scolnik’s

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8 For the purposes of this analysis, ‘conflict region’ is meant to imply all regions where conflict is ongoing, has the potential to occur, or has recently occurred. As was previously mentioned the current state of ‘conflict’ in the Middle East is very difficult to decipher.

9 The terms “macro and micro” should only be taken to mean that this study sought to weigh the merits of larger initiatives, with goals such as peace and health, and those of smaller scale projects that use health as a bridge for peace, but focus on short-term goals and believe that health and peace can happen indirectly and incrementally.

10 The terms “political and apolitical/neutral” are extremely broad terms. For the purposes of this thesis and for peace through health, “political” is referring to the work of health professionals that takes an overt stand on issues that relate to a conflict. This political stance is thought to be embodied by the Peace-Through-Health Approaches described in Table 1. “Apolitical/neutral” simply refers to peace-through-health initiatives that let their work speak for themselves and believe that the cause of peace is ultimately better served by demonstrating that collaborative work can be accomplished with professionals from opposing sides of a conflict.
study of CISEPO, which sought to determine the viability of broad, macro-level peace-through-health initiatives versus that of on-the-ground, micro-level peace-through-health initiatives (Scolnik, 2006). The apolitical nature of CISEPO’s work will also be compared to the theoretical peace-through-health approach of academics from McMaster University, which is often highly political in nature. While this review simplifies the often complex nature of peace-through-health work it serves to clarify the sometimes differing philosophies within peace-through-health literature and highlight the unique nature of IPEME. A diagrammatic portrayal of these characteristics and their interaction will be presented to visualize these differences.

The final section of the literature review will provide justification for the evaluation of IPEME and include a brief description of the elective. The decision to evaluate the elective in terms of the WHO 5 Star Criteria and its subsequent connection to peace through health will also be discussed. The writing of Jabbour states that more impact assessments of peace-through-health work are required to assert peace-through-health as a legitimate field of academic study (Jabbour, 2005). Furthermore, as IPEME continues to gain recognition, it will become increasingly important for the elective to demonstrate tangible outcomes in both the short and long-term. Since its inception, IPEME has sought to evaluate its short-term outputs in a number of ways. The results of previous IPEME research and the principles of the WHO 5 Star Criteria will be used to justify the selection of such ‘global’ criteria for this analysis.

1.2. Summary of Methods and Data Analysis
Chapter 3 will describe the methods used to evaluate IPEME as a peace-through-health initiative and justify the choice of a mixed-methods approach. Three methods were used and the results triangulated to provide a comprehensive picture of the IPEME learning experience. First, the relevant literature was consulted to distinguish the goals and characteristics of peace-through-health work from those of other organizations with similar medical and/or peacebuilding mandates. The review was then narrowed to discuss the unique characteristics of IPEME within the peace-through-health literature and to justify its methods of evaluation.

The second method was to evaluate IPEME in terms of the WHO 5 Star Global Criteria. To this end, a novel testing session was designed which required students to answer a series of questions in response to six popular media clips that portrayed ethical and professional dilemmas faced by medical professionals. The video clips and questions were selected for their relevance to the WHO 5 Star Criteria (See Appendix D)\textsuperscript{11}. Responses were thus used as a measure of students’ attitudes with respect to these criteria. Testing sessions were conducted at the beginning and end of the elective and their results – which included responses to both closed and open-ended questions – were used to discuss ethical and professional attitudinal change over the course of the four-week elective.\textsuperscript{12}

The third method gathered supplementary qualitative data using two questionnaires and extensive field notes acquired through participatory observation.

\textsuperscript{11} Appendix D explains the process of selecting relevant popular media clips and designing the test questionnaire. Several factors were taken into account and a number of versions of the questionnaire were drafted.\textsuperscript{12} ‘Ethics’ and ‘professionalism’ are also ambiguous terms and, again, it was not the purpose of this thesis to define them. The WHO 5 Star Criteria were posited by the WHO and can thus be said to represent an international normative framework for the work of doctors in ‘global’ settings. ‘Ethics and professionalism’ summarizes what these criteria are thought to embody.
Similar to the questionnaires based on the WHO 5 Star Criteria, these ‘qualitative questionnaires’ were administered at the beginning and the end of the elective. However, questions pertained to broader topics of collaboration, the role of physicians, interaction between politics and medicine, and students’ experiences with the elective in general. Field notes were taken throughout the course of the elective and served to contextualize and saturate observed themes.

Analysis of responses to the ‘Video Clip Questionnaires’ used SPSS for closed questions and NVivo Software\(^\text{13}\) for open-ended questions. SPSS was used to determine if students’ attitudes had changed in terms of their responses to the video clips – and thus, in theory, with respect to the WHO 5 Star Criteria\(^\text{14}\) – by measuring quantitative differences on a visual analogue scale (VAS).\(^\text{15}\) It should be immediately noted that the small sample size of eight students precludes drawing definite conclusions. These results are instead used to discuss the IPEME learning experience in combination with other collected data. NVivo software was used to identify the presence of themes pertaining to the WHO Criteria within the open-ended answers. Data gathered from supplementary questionnaires and field notes was not formally coded or categorized, but was instead used to contextualize and support/refute the primary analysis where applicable.

\(^{13}\) NVivo is a well-known software program used for qualitative data analysis (QDA). This type of analysis can be completed manually by coding and sorting text. NVivo allows the researcher to highlight and code, compare and organize data obtained through qualitative means. Analysis of qualitative data will be discussed further in Chapter 3.

\(^{14}\) The connection between popular media clips and the principles of the WHO is not definite. Care was taken to choose clips that would challenge students to think about ethical and professional dilemmas related to the WHO Criteria, but this disconnect remains a limitation of this study.

\(^{15}\) The advantages and disadvantages of using VAS answer keys will be discussed in Chapter 3. VAS answer keys were chosen over Likert and Borg scales for a number of reasons that will be discussed in the following sections.
The elective’s small sample size makes results difficult to generalize. The mixed-methods approach was used in an attempt to compensate for this fact. By evaluating IPEME using a questionnaire that produced both quantitative and qualitative results – and was administered pre and post elective – it was possible to attain a sense of what students were learning from their time in Toronto. Supplementary qualitative data further saturated observed themes and established this analysis as a relatively comprehensive case study of a peace-through-health initiative. This thesis does not propose explanatory findings, but instead seeks to explore the IPEME learning experience in a number of different ways.

1.3. Summary of Results

Chapter 4 presents the results obtained from analysis of the ‘Video Clip Questionnaire’ in two parts: quantitative and qualitative results. Notable themes derived from supplementary qualitative methods are also discussed in this section and are interlaced throughout Chapter 5 when the implications of the evaluation results are discussed.

Analysis of visual analogue scales (VAS) revealed that while some students showed a trend toward significant attitudinal change, only one achieved the p<0.05 required for significance. Subsequent between-subject analysis showed no significant interaction of gender or nationality, although answers within nationality tended to be more similar than between. Examination of data trends also revealed that answers became

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This thesis uses evaluation methodology as well as case study methodology and subject to the limitations of an exploratory study (as opposed to explanatory).
more polarized between pre and post tests, although this could not be verified statistically.

Analysis of open-ended questions revealed intriguing results. At the most basic level, qualitative data analysis involves the identification, coding, and sorting of observed themes. Two methods are permissible to accomplish this task: coding and categorizing qualitative data and identifying themes as they become apparent, and, coding and categorizing according to a pre-determined set of themes/criteria (Halloway, 1997). The WHO 5 Star Criteria are well-defined and thus permitted use of the latter technique. Analysis revealed that references to communication increased the most between pre and post tests. As a group, students placed increased emphasis on explaining and justifying decisions to both patients and, in particular, other health care professionals (some students placed more emphasis than others but there did not appear to be a significant interaction of either gender or nationality). The substance of students’ answers was also interesting since, while little attitudinal change was seen by comparing VAS scores, qualitative data analysis revealed that students’ responses did indeed reflect the principles of the WHO 5 Star Criteria. Reference to ‘communication’ increased markedly, but students’ responses were seen to adhere to the WHO principles in both questionnaires.

Analysis of supplementary qualitative data focused on a number of important IPEME characteristics raised directly in ‘qualitative questionnaires’ and indirectly in field notes. Students emphasized the importance of the elective’s location\textsuperscript{17}, the decision to

\textsuperscript{17} This thesis has considered the city of Toronto to be a relatively “neutral” learning environment compared to the Middle East. It is recognized that Canadian medical students do not come from a conflict zone. Their experience would not necessarily be made easier by the multicultural climate in Toronto. Toronto may not be completely neutral and there is the possibility that the comfort offered by multiculturalism have been overstated by students and by this thesis. However, the term “neutral” has been used to convey that relative to a conflict zone, Toronto provides a free and open area for discussion and learning.
have all students live together in one location (even Toronto-based students), the novel subject of Global Health and the practical aspects of the curriculum, and the valuable nature of collaborative research projects to be continued after the elective’s completion. These results provide insight into important elective components and were used to discuss IPEME within the greater body of peace-through-health work. This supplementary data also covered a number of topics pertaining to the role of physicians in conflict regions, interaction with other students, the role of politics in medicine, and the influence of ethno-religious and cultural barriers in such a collaborative medical elective.\(^{18}\)

1.4. Summary of Discussion and Limitations

Chapter 5 discusses the implications of the study’s results for IPEME’s short-term outputs. Themes discussed in this section are saturated using supplementary data gathered from qualitative questionnaires and field notes. Limitations in study design and in the generalizability of findings are also discussed. The purpose of this analysis was to evaluate IPEME as a case study of a peace-through-health initiative. Peace-through-health initiatives were found to be different than humanitarian missions despite the fact that both operate under a mandate of peace and often provide medical services. IPEME was found to be an anomaly even within peace-through-health work since it possesses both ‘macro’ and ‘micro’ elements, but epitomizes neither. Politically, IPEME adheres to

\[^{18}\] Themes pertaining to these issues do not form part of the formal analysis of attitudinal change, but are simply intended to guide discussion about the future direction of the elective and its implications for peace-through-health.
the mandate of its umbrella organization – CISEPO – and refrains from inciting any formal political debate during the elective. Another significant difference is IPEME’s role as a medical elective. Peace-through-health initiatives are frequently project-related. While IPEME does foster working relationships and collaborative research, it remains a source of medical education, not practice\textsuperscript{19}.

The unique nature of the elective provides myriad opportunities for evaluation research. The ‘global’ nature of the WHO 5 Star Criteria was thought to make it a suitable choice as a tangible set of guidelines upon which to base attitudinal change. The criteria’s holistic approach to medicine complemented IPEME’s desire to produce doctors capable of practicing medicine and undertaking collaborative work in conflict regions. Results showed that students’ attitudes did not change significantly when measured on visual analogue scales. However, there were tendencies toward significant differences that perhaps hint at a lack of sensitivity in measurement, rather than a lack of learning on the part of students or a failure of the IPEME curriculum. Qualitative data analysis showed students’ responses reflected the principles of the WHO 5 Star Criteria and a marked increase was seen in discussions of communication when dealing with patients and other health professionals. These are not explanatory findings, however they suggest that, first, attitudinal change may not have been seen because students’ ethical and professional attitudes already reflected the principles of the WHO Criteria, and second, that IPEME’s focus on listening, understanding, and collaborating prompted students to consider the importance of communication with both patients and other

\textsuperscript{19} This distinction will be explained later in this thesis but this statement is meant to highlight the fact that while IPEME may be a peace-through-health initiative, it is a medical elective that provides formal education as opposed to a collaborative opportunity between practicing physicians or other medical professionals.
medical professionals (this is particularly intriguing because CISEPO places much emphasis on communication and promoting dialogue between physicians from opposing sides of a conflict)\textsuperscript{20}.

Despite the lack of demonstrable attitude change among students on the quantitative measurement scale, the substance of their answers remains extremely relevant. Responses to situations portrayed in the video clips reveal open-minded and holistic attitudes. It could thus be surmised that attitudes did not change significantly in part because they did not need to. Indeed, a number of students made it clear that their greatest learning experience came not from the ethical or professional training, but from exposure to other students, exposure to concepts of global health, and from practical skills training. It is thus possible that students’ ethical and professional attitudes were simply the least ‘changeable’ element. Four-weeks is an extremely short period of time in which to fundamentally change an attitude, especially given the open-minded attitudes of students before arrival. Further research into the elective should perhaps focus on different learning experiences. For instance, emphasis on global health as something novel and interesting suggests that perhaps less attention should be dedicated to evaluating attitudes that are difficult to change and to measure (and may not need changing) and instead attempt to assess what new skills and knowledge students are acquiring.

This section describes the principal limitations that may have precluded a visible change in attitudes over the course of the elective: internal validity of questionnaires, internal validity of questionnaires,

\textsuperscript{20} It must be noted that an appropriate ‘level’ of communication was not defined in this analysis. It is recognized that there are situations (especially in different cultural contexts) where informing a patient is neither necessary nor appropriate. The results of this analysis do not demonstrate that students would communicate more, but rather that they would more often consider the importance of communication based on presented circumstances.
testing bias, selection bias, research time, and sample size. The novel evaluation tool designed for this study – video clips and corresponding questionnaires – lacked internal validity and may simply not have had the sensitivity required to observe attitudinal change. It is also possible that testing and selection bias played a role in students’ responses. IPEME applicants undergo an extensive review process and are selected based on attributes compatible with the elective’s short and long-term goals. Therefore, students are likely to be very open-minded, thoughtful, and analytical to begin with (as was demonstrated) and aware of what is expected of them. While case studies are valuable for directing further research and raising important questions and concerns about current theories (Yin, 1994), such a small sample size – eight participants – renders statistical power virtually nil and precludes generalizability. The strength of the analysis, as previously mentioned, is in observing statistical trends derived from a number of methods and discussing their implications in light of other results.

Taken together, the results of this analysis present the International Pediatric Emergency Medicine Elective (IPEME) as a unique example of a peace-through-health initiative. Its location and emphasis on collaboration and cooperation make it an extremely interesting idea. The lack of consistent attitudinal change revealed by this analysis does not necessarily reflect poorly on IPEME’s educational programming, although a serious look should be taken at the curriculum if the elective wishes to change students’ “ethical and professional” attitudes in clinical settings. Improvements must continually be made, but it is clear from supplementary qualitative data that students are indeed learning something (although other learning outcomes were not formally evaluated). The fact that students’ attitudes concerning ethics and professionalism did not
seem to change significantly (at least according to the measurement used) is perhaps more indicative of the caliber of IPEME students and the stringency of the application process than of curriculum shortcomings or measurement difficulties.
2. Background and Literature Review

IPEME is a medical elective that purports to use health as a vehicle for peacebuilding. However, the meaning of terms like ‘peace’ and ‘health’ – as stated in Chapter 1 – is not always clear. In addition, peace-through-health initiatives are multifaceted and can take different forms. As a result, a number of assumptions accompany the designation. For instance, there is the implication that such initiatives claim to create peace (Jabbour, 2005). However, establishing a causal relationship between a program and a dependent variable as ambiguous as “peace” is beyond the scope of this thesis. As Scolnik implies in his study of the activities of the Canadian International Scientific Exchange Program (CISEPO), a partner organization of IPEME, study of peace-through-health initiatives can be convoluted by post hoc fallacy (Scolnik, 2006). Determining whether health leads to peace or vice versa is a difficult conundrum and it is not the intention of this thesis to solve it.

The intention of the following literature review is not to belabour terminology or claims of causality. Peace-through-health will be defined so as to understand the unique nature of IPEME within the greater body of work and to establish a theoretical basis for its evaluation. Justification for the evaluation criteria chosen will subsequently be offered followed by a detailed description of the elective’s design that can be found in Appendix B of this thesis.

2.1. What is peace-through-health?

A limited body of literature exists to define peace-through-health work. Arya and Santa Barbara define peace-through-health initiatives broadly as, “those ways that peace
is advanced through work from the health sector.” (Arya and Santa Barbara, 2009) This definition is indicative of the breadth of initiatives that can be included under the peace-through-health umbrella. The following literature review will attempt to further define peace-through-health not only by what it is, but also by distinguishing what it is not. To this end, this review will compare the work of CISEPO (a peace-through-health organization) to the work of well-known medical humanitarian aid organizations like the ICRC\textsuperscript{21} and MSF\textsuperscript{22}.

The concept of peace-through-health originated more than two decades ago (World Health Organization), but its emergence as a formal discipline in the field of international relations (and public health) is far more recent (WHO Website). To date, peace-through-health concepts are formally taught in only a select number of universities (e.g. McMaster University, University of Waterloo, and the University of Toronto) and the need for peace-through-health education in medical school curricula is only beginning to garner attention (Student BMJ, 2001). The idea of using health services and the actions of health professionals to facilitate cooperation, peacebuilding, and reconciliation between opposing groups has developed as a practice and as a theory, with practice contributing to theory and vice versa. However, consensus about the definition, applicability, and measurability of peace-through-health initiatives and their outcomes has not been realized and many challenges exist from both theoretical and practical perspectives (BMJ Editorials, 2001).

\textsuperscript{21} International Committee of the Red Cross
\textsuperscript{22} Medicines Sans Frontiers
Practical applications of peace-through-health work in conflict zones are not uncommon (Hess, 1997). However, it is important for the purposes of this analysis to distinguish between these projects and other medical work that takes place in conflict or post-conflict regions. While there is often significant overlap between peace-through-health work and medical humanitarian work – indeed, Rowson and Melf assert that delivering humanitarian aid is one way health professionals can create “mediation contexts” that lead to peaceful dialogue (Rowson and Melf, 2009) – there are differences that need to be clarified.

The International Committee of the Red Cross (ICRC) is the world’s largest non-profit international humanitarian organization. The ICRC is “an impartial, neutral and independent organization whose exclusively humanitarian mission is to protect the lives and dignity of victims of armed conflict and other situations of violence and to provide them with assistance.” (ICRC Official Website) Their mission is thus to assist victims of conflict by providing medical treatment and supplies. The work of the ICRC may create a “mediation context”, but unlike peace-through-health work, this is not its primary goal.

Medicines sans Frontiers (MSF) was created largely as a response to the adamant neutrality of the ICRC. The founders of MSF believed that, while important, neutrality in conflict regions has limits. The organization’s defining characteristic became their dedication to witnessing: “In carrying out humanitarian assistance, MSF seeks also to raise awareness of crisis situations; MSF acts as a witness and will speak out, either in private or in public about the plight of populations in danger for whom MSF works.” (MSF International Website) The organization’s mission to speak out against observed

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23 Examples include the MEHA project conducted by CISEPO, the coalition of Physicians for a Nuclear Free World, ‘peace days’ in El Salvador, etc.
atrocities in conflict regions has raised its political profile, and its use of medical humanitarian work as a means of speaking out against egregious crimes closely resembles the ‘peace mandate’ asserted by Arya and Santa Barbara (Arya and Santa Barbara, 2009). However, MSF’s goal is to protect the dignity and human rights of those affected by conflict. Their goal is not to mediate tensions between opposing groups or facilitate lasting peace and cooperation through the actions of health professionals. In this way, it remains different from peace-through-health initiatives (Ibid).

The above distinctions are not meant to imply that health professionals working for either the ICRC or MSF cannot engage in peace-through-health work. In a recent book, Peace-Through-Health: How Health Professionals Can Work for a More Peaceful World, Arya and Santa Barbara assert that they are writing for health professionals working in numerous scenarios, including those engaging in humanitarian work (Ibid).

They present the following scenario:

You are a health worker or humanitarian aid worker in a country that has just had an earthquake. This disaster has occurred during a civil war between the government and ethnic factions in the province. Ongoing differences in religion, social class, economics, and urbanization were fueling the violent conflict.

You feel that you are too busy dealing with acute problems to think about abstract concepts such as peace.

Yet the issues intrude in your work anyway. Will you remain neutral? Will you cooperate with the government? Will you demonstrate solidarity with the population? Will you use armed guards to secure your aid so it can be delivered? Does the natural disaster offer any opportunities to deal with the violent conflict?

(Arya and Santa Barbara, 2009)

This excerpt highlights the potential overlap between peace-through-health work and medical humanitarian aid. However, the fact remains that ‘peace’ is not the ultimate goal of these organizations, and while peace-through-health work is manifested in many
forms, for the purposes of this analysis, organizations like the ICRC and MSF will not be considered under the umbrella of peace-through-health initiatives.

Another important distinction between peace-through-health initiatives and the missions of the organizations discussed above is their timeframe. The ICRC and MSF both respond to crisis situations and, while they often spend years in conflict and post-conflict regions, their mandates are intervention-based. Examination of the Canadian International Scientific Exchange Program (CISEPO), an organization that engages in specific peace-through-health work, reveals a distinct, long-term collaborative approach. CISEPO is a non-governmental organization (NGO) that “works with all people of good will who are willing to trust each other in the medical and public health sector. [The organization] believes that the health sector provides an ideal mechanism for multidisciplinary collaboration in which benefits accrue equally while confidence builds and people-to-people working relationships evolve” (CISEPO, Guiding Principles).

CISEPO’s projects bring medical professionals from opposing sides of a conflict (typically in the Middle East) together to work on common medical goals (Ibid). For instance, the organization’s first project took place in Jordan (at the behest of the late King Hussein) and involved Canadian, Israeli, Jordanian, and Palestinian doctors (CISEPO, MEHA Project). Their goal was to implement a region-wide screening program for congenital hearing loss, a condition identified by all parties as a serious medical and social problem in the region (Ibid). Not only was the screening program a success, but CISEPO was also able to demonstrate the willingness of medical professionals from ‘opposing sides’ of a conflict to work together peacefully. The organization continues such collaborative projects to this day.
This is just one example of an initiative specifically intended to foster peace using the actions of health services and/or the work of the health sector. For the purposes of this analysis, peace-through-health initiatives will be distinguished by such motivations – that is, their intentional use of the health sector for the purposes of peace and reconciliation – and their emphasis on mediating conflict directly or indirectly via the cooperation and collaboration of health professionals (Rowson and Melf, 2009).

2.2. Peace-Through-Health Characteristics

The peace-through-health project implemented by CISEPO in the Middle East illustrates the goals and collaborative nature of peace-through-health work, but is not meant to signify that this burgeoning field is homogenous. Similar to the nuances that exist between development and humanitarian organizations for instance, peace-through-health projects may take on different forms and/or possess conflicting mandates. This review will focus on two pairs of characteristics exemplified by peace-through-health projects: political versus apolitical projects and macro versus micro-level projects. Their separation will serve to illustrate project differences as well as highlight the unique nature of the International Pediatric Emergency Medicine Elective (IPEME) within the greater body of peace-through-health work.

2.2.1. The Role of Politics

The first dichotomy can be seen in how peace-through-health projects view their role politically. The aforementioned distinction between the work of the International Committee of the Red Cross (ICRC) and that of Medicines sans Frontiers (MSF) revealed
that humanitarian organizations can differ in their stance on neutrality. MSF’s commitment to witnessing and reporting atrocities naturally changes perceptions of their intentions. A similar distinction can be seen between the philosophy of the Canadian International Scientific Exchange Program (CISEPO) and that of the peace-through-health approaches developed by Neil Arya and Johanna Santa Barbara (Arya and Santa Barbara, 2009).

The nature of CISEPO’s work has historically been apolitical and humanitarian-focused. The organization has arguably achieved much of its success because of its ability to remain neutral in its work. Harvey Skinner, the present Chair of CISEPO, notes that, “CISEPO was invited by the private office of the late King Hussein to consider how a Canadian organization might facilitate cross-border collaboration between Arabs and Israelis.” (Skinner, 2005) Gaining the trust of political figures in the region has been essential for the organization’s long-term success in using common medical goals to facilitate cooperation and, ultimately, peacebuilding between Arabs and Israelis. CISEPO uses the ‘health sector’ as a vehicle for peacebuilding by establishing and maintaining cooperative relationships, contributing to health policy efforts, providing education and training, and conducting medical research in the region (Ibid).

To reiterate, the most important defining factor of the CISEPO philosophy of peace-through-health work is its ability to maintain positive relationships in the region and continue its successful work largely independent of the political climate. As Skinner notes, “…at times when interactions ventured into sensitive political areas, our Canadian colleagues played a respectful part in refocusing the discussion to address health needs and project activities. This common denominator enabled our partnership to work beyond
national confrontations and political disagreements. In tangible ways, our example of cross-border cooperation helps create a social infrastructure in the region for peacebuilding.” (Skinner, 2005). The root of CISEPO’s success in the historically volatile Middle East seems to be its philosophy that medicine, and thus the actions of medical professionals, is something different; something that can rise above the political sphere and lead by example. This type of peace-through-health work asserts that peacebuilding can be better accomplished by ‘doing’ rather than talking.

The difference between the CISEPO model and the philosophy of Arya, MacQueen, and Santa Barbara can be summarized in one question, “Can peace-through-health initiatives really afford to ignore politics?” (Jabbour, 2005). Jabbour states that, “Skinner and his colleagues seem to have answered yes, arguing that groups need to focus on cooperation itself rather than politics.” (Ibid) CISEPO’s achievements are undeniable and their work makes a strong case for an apolitical, cooperative approach to peacebuilding. But, as Jabbour asserts, “Avoiding politics is a political position too.” (Ibid). Neil Arya and his colleagues at McMaster University stress that war and structural violence are extremely detrimental to the health and well-being of individuals and communities (StudentBMJ, 2004). Physicians, therefore, occupy an extremely pivotal position to use their voice as medical professionals to effect change (Ibid). While their approach overlaps significantly with the CISEPO model – Arya et al also believe in building superordinate goals that opposing sides agree are important (Ibid) – Arya et al believe that apolitical cooperative work is not always enough.

The work of Johanna Santa Barbara, Graeme MacQueen, and Neil Arya forms the bulk of what can be referred to as ‘peace-through-health theory’. This theory was largely
developed at McMaster University and purports ten peace-through-health approaches.

These approaches describe ways in which health professionals can contribute to peace in conflict or post-conflict regions (McMaster University, 2004).

**Table 1: Ten Peace-Through-Health Approaches**

<table>
<thead>
<tr>
<th>Health-related superordinate goals</th>
<th>A superordinate goal is one that transcends the separate goals of parties to a conflict and that can best be achieved when the parties join efforts, e.g. ceasefire for immunization.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evocation and extension of altruism</td>
<td>When health care is extended to out-groups, we are sometimes able to resist the objectification and demonization that usually accompany war, e.g. Palestinian-Israeli health service partnerships.</td>
</tr>
<tr>
<td>Discovery and dissemination of facts</td>
<td>Health professionals are often in the best position to discover and make known the accurate information that is essential to a proper assessment of the situation and to counter propaganda, e.g. health in Iraq after Gulf War.</td>
</tr>
<tr>
<td>Redefinition of the situation</td>
<td>War can be portrayed as a game, a test of manhood, a competition of civilizations, a cosmic contest of good and evil. Health workers can promote different understandings of war, e.g. nuclear weapons as a public health problem.</td>
</tr>
<tr>
<td>Healing of trauma</td>
<td>Injuries caused by war can slow down a society's recovery. Health workers are at home in this healing role, but they may be even more effective if they can utilize methods of trauma-healing that are linked to social processes of reconciliation and peace building, e.g. Butterfly Gardens in Sri Lanka.</td>
</tr>
<tr>
<td>Contribution to civic identity</td>
<td>In cases where societies have been divided by identity conflicts, people who have an adequate and equitable health care system are strengthened in their sense of belonging to the society or the state that has provided it for them. They are less apt to join groups with competing claims on their identity, e.g. WHO work in Croatia.</td>
</tr>
<tr>
<td>Contribution to human security</td>
<td>An adequate and equitable health care system, which addresses people's basic needs, gives them an essential form of security. Lack of such security may lead to violence or war to achieve it.</td>
</tr>
<tr>
<td>Diplomacy, mediation and conflict transformation</td>
<td>If health workers develop skills in diplomacy, mediation and conflict resolution they will sometimes have unique opportunities to use these, e.g. Peacebuilding in Afghanistan.</td>
</tr>
<tr>
<td>Solidarity and support</td>
<td>All Peace-Through-Health (PtH) mechanisms involve solidarity and support for victims of war. But some include the direct accompaniment of victims or potential victims by health workers, as well as direct advocacy, e.g. Israeli Physicians for Human Rights.</td>
</tr>
<tr>
<td>Dissent and non-cooperation</td>
<td>When health workers are called on to collaborate in unjust wars or preparations for such wars, or in the development of inhumane policies or weapons of war, they can refuse to do so. They will have the support not only of a wide body of international law but also of declarations directed specifically at health workers.</td>
</tr>
</tbody>
</table>
Examining these approaches reveals a number of similarities between the two purported peace-through-health perspectives. Approaching peace-through-health work in terms of *health-related superordinate goals, evocation and extension of altruism, or redefinition of the situation* is compatible with the apolitical peace-through-health approach exemplified by CISEPO (Skinner, 2005). However, approaching this work in terms of *solidarity and support* (often direct advocacy), *discovery and dissemination of facts*, or *dissent and non-cooperation* is more contentious and certainly does not propose neutrality. Advocating for patient rights and access to treatment is not necessarily a political action. Medicines sans Frontiers (MSF) is an example of an organization that advocates on behalf of those it is trying to help, but maintains the neutrality characteristic of humanitarian organizations (MSF Official Website). However, to paraphrase a recent statement by former president of MSF International, James Orbinski, the problem is not advocating for changes to current conditions brought about by conflict; neutrality only becomes compromised when you begin to advocate against the pre-existing structures that spawned it (Orbinski, 2009).

The ten approaches can be considered a normative framework for peace-through-health work and will obviously not apply to all situations. As CISEPO founder Dr. Arnold Noyek recently remarked: “Your attitude to politics will change as soon as you get your first bomb threat” (Noyek, 2009). The imprisonment of three Sri Lankan doctors

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24 This thesis is not claiming that peace-through-health initiatives are black and white, but is simply using these distinctions to illustrate differences in the literature.

25 A normative framework can be distinguished from an empirical framework in that the former is intended to foster a paradigm shift in attitudes toward an issue. For instance, the shift in security discourse from national security to the more individually focused human security represents a normative shift. Not all security threats included under the human security umbrella can be addressed (this is seen by some as an empirical weakness) but the way in which the world thinks about security may be changed. Similarly Arya and Santa Barbara’s principles may not be applicable in all situations, but instead represent the potential influence of physicians working in conflict regions.
for allegedly falsifying the facts of the brutal crackdown on the LTTE[^26] by the Sri Lankan government is evidence that under the wrong circumstances even dissemination of facts can be extremely dangerous (Save the Doctors campaign, 2009). Regardless, Arya et al underscore the idea that everything is political, even medicine; in the famous words of Rudolph Virchow, “medicine is a social science, and politics is nothing else but medicine on a large scale.” (McNeely, 1992) When evaluating IPEME, it was important to at least consider the possibility that peace-through-health work cannot be assessed outside of its political climate.

### 2.2.2. Broad versus Focused Initiatives

In a case study of CISEPO as a peace-through-health organization, Scolnik examined the hypothesis that “narrowly-focused health-for-peace initiatives have a better chance for success than broader undertakings.” (Scolnik, 2006) His reasoning stemmed from the idea that the most effective way to achieve health-for-peace goals was to take action and implement focused projects rather than spend exorbitant amounts of time trying to quantify macro-level outcomes[^27]. Scolnik believed that “In narrowly-based projects, success may thus be defined as the attainment of specific health goals, such as the identification of children with hearing loss, but in broadly based proposals definitions may be focused on more abstract outcomes such as health or peace which are more difficult to quantify” (Ibid).

[^26]: LTTE stands for the Liberation Tigers of Tamil Eelam, a separatist group formerly based in the northern regions of Sri Lanka.
[^27]: The term ‘macro-level’ is used to signify those peace-through-health initiatives that do not take place on the ground and are meant to bring medical professionals from opposing sides of a conflict together using academic dialogue, conferences, and the like. The outcomes measures of these broader initiatives are much more ambiguous and thus difficult to define and quantify.
Scolnik’s thesis thus examined the apparent mutual exclusivity of macro- and micro-level peace-through-health thinking, specifically within the context of CISEPO. While in practice the line between macro and micro initiatives will often be blurred, analyzing the two separately allows for the identification of the advantages and disadvantages of each. In terms of this analysis, such examples are important for informing future assessments of peace-through-health initiatives. Jabbour asks the question: “Does the initiative reported by Skinner [referring to CISEPO’s MEHA project] contribute to peace?” (Jabbour, 2005) The answer, for all peace-through-health initiatives, is, maybe. It was these difficult conundrums that prompted Scolnik’s hypothesis that narrowly-focused projects with “well-defined, short-term, proximal goals” would be better for measuring progress and achieving health-for-peace goals (Scolnik, 2006). Such an approach will be taken with respect to the evaluation of IPEME. It is thought that evaluation of this small case study in terms of short-term, tangible goals may better enable speculation about its contribution to the larger body of peace-through-health work.

2.2.3. Diagrammatic Representation of Peace-Through-Health Characteristics

Figure 1 displays the possible interactions between the aforementioned peace-through-health characteristics. While they were treated in isolation, many peace-through-health initiatives will inevitably possess elements of each. For instance, Scolnik found that contrary to his initial hypothesis, smaller, short-term programs alone were insufficient for the progress of peace-through-health practices. He instead surmised that broad, macro-level discussion at the political and economic level were also necessary,
and argued that the way forward was thus a combination of the two, each contributing to the other (Scolnik, 2006). Scolnik’s work thus articulates a need for links between theory and practice with the ultimate goal of improving the quality, consistency, and positive impact of such projects (as well as their measurement) (Scolnik, 2006).

The following discussion paints the International Pediatric Emergency Medicine Elective (IPEME) as a combination of Scolnik’s broad versus narrow peace-through-health initiatives. IPEME is a multifaceted peace-through-health initiative that contains elements of the characteristics presented above in addition to novel attributes that make it a very interesting case study of a peace-through-health initiative.

![Figure 1: Peace-Through-Health Characteristics](image-url)

Figure 1: Peace-Through-Health Characteristics
2.3. The International Pediatric Emergency Medicine Elective

The International Pediatric Emergency Medicine Elective (IPEME) was launched in 2006. IPEME is an official medical elective hosted by the University of Toronto in cooperation with selected teaching hospitals in the Toronto area and with medical universities in the Middle East and Canada. Eight students from the Middle East and Canada travel to Toronto for this unique learning experience that focuses on health as a vehicle for peacebuilding. For four-weeks, participants are exposed to teaching related to pediatric emergency medicine and global health, while participating in leadership training activities that prepare them to practice medicine in conflict regions. (A detailed description of the elective’s curriculum can be found in Appendix B of this document).

2.3.1. IPEME as a Peace-Through-Health Initiative

The peace-through-health distinctions discussed above do not exist in isolation. In practice the lines between macro and micro and political and apolitical blur significantly. The reason for their separation in this review is to gain an understanding of the nuances in peace-through-health initiatives. From this understanding comes a greater sense of where IPEME fits, or should fit, into the larger body of peace-through-health work.

IPEME is unique in many ways. It is one of a limited number of peace-through-health initiatives not conducted in a conflict region. Because it takes place in Toronto, it may be said to contribute to a new branch in the burgeoning peace-through-health framework. It is far from clear, however, what role such programs have in peace-through-health theory. Rowson and Melf describe peace-through-health conferences and

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28 The elective existed in some form for three years before but did not take its specific focus until 2006.
educational sessions that occur outside of conflict regions, but these are typically designed to foster dialogue among experienced medical professionals (Rowson and Melf, 2009). IPEME is different because it recruits medical students interested in learning about collaboration and health as a vehicle for peacebuilding (among other subjects). In addition, Scolnik’s analysis of macro versus micro-level initiatives does not necessarily account for IPEME, since the program is technically ‘on-the-ground’, working with future practitioners and attempting to facilitate cooperation and understanding between members from opposing sides of a conflict, but is located outside of any conflict region. In addition, its focus on medical education and peacebuilding concepts make it somewhat broad in scope.  

The theoretical gaps identified by Jabbour apply to IPEME as well. The ability of peace-through-health initiatives to demonstrate tangible impacts is imperative and has been a goal of the elective since its inception. Arya affirms this difficulty, stating that “one of the major stumbling blocks to greater acceptance of this discipline has been the issue of assessment of the effectiveness of Peace through Health.” (BMJ Editorials, 2001) He further reiterates Scolnik’s concern that macro level indicators such as peace and health are difficult to quantify: “as yet there is no concrete evidence that these projects directly prevent war or mitigate its effects. It is also possible for well-intentioned projects to inadvertently do harm” (Ibid). Scolnik’s initial assertion that narrowly-focused initiatives produce more measurable outcomes may retain some validity. Indeed, IPEME’s diversity of learning experiences and unique collaborative focus provides a number of avenues to evaluate its short-term outputs. The challenge for this analysis is to

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29 IPEME is interesting because its outcome measures fall somewhere in between the broad, ambiguous goals of ‘health’ and ‘peace’ and tangible, measurable goals such as the number of children screened for congenital hearing loss (a goal of CISEPO’s MEHA Project).
first choose a characteristic to evaluate and subsequently link short-term outputs and observations to the larger body of peace-through-health work.

Each year IPEME organizers have tried to measure the impact of the project in some regard: In 2007 shifts in students’ attitudes (about medicine, about each other, etc) were documented using Prochaska’s Stages of Change (Verma, 2007). In 2008, the study was evaluated in terms of CanMEDS Competencies for Specialist Physicians, using questionnaires with answers assessed on a 5-point Likert Scale (Rama Krishna, 2008). IPEME directors and staff have sought to use as much scientific rigour as possible when assessing the outcomes of the elective although statistical power is and was severely limited due to the small sample size. This year, 2009, the program examined attitudinal change in terms of the WHO 5 Star Criteria for Global Doctors (Boelen, 1996). In addition to being core competencies for globally minded physicians, it is thought that these criteria provide an ideal model for physicians working in conflict zones and may thus speak to IPEME’s role as a peace-through-health initiative.

2.3.2. Evaluating Peace-Through-Health Initiatives

The reservations of Scolnik and Arya about the ability to assess broad peace-through-health outcomes articulate a need for evaluation of short-term, tangible outputs produced by peace-through-health initiatives. Taken together, these measurable impacts may foster academic discussion of peace-through-health work on-the-ground and ultimately contribute to peace-through-health discourse at a broader, macro-level. In addition, IPEME’s unique setting and focus on medical education arguably require a different type of analysis than projects that take place in conflict or post-conflict zones.
and are composed of experienced medical professionals. IPEME’s connection to CISEPO and design as a medical elective suggest that it may be a “training ground” for projects conducted by its partner organization.

IPEME operates in partnership with the Canadian International Scientific Exchange Program (CISEPO) and possesses similar notions of cooperation, cross-border medical work, and collaborative research (IPEME Website). CISEPO’s short-term goals can be examined in terms of number and quality of networks, collaborative research projects, and indicators of successful medical endeavours (such as number of children screened for congenital hearing loss) (CISEPO Website). In this sense, CISEPO’s measurable goals are not the attainment of peace or mediation of conflict; it is thought that this will occur indirectly (Ibid). The same is true of IPEME. Its goal cannot be, and arguably should not be, fostering peace. Instead, to use the term coined by the World Health Organization, its goal must be to use health as a bridge for peace (WHO, 1999). This terminology implies that there are many steps in the attainment of peace and that health can be used as a means of working incrementally towards it.

This analysis will argue that because peace is so difficult to quantify, peace-through-health initiatives should work within their context. CISEPO’s goals – to simplify – are to foster relationships among peaceful professionals and engage in collaborative medical work in conflict regions. Their success should thus be measured according to these goals. In the same vein, the goal of more political peace-through-health initiatives may be to advocate for the banning of landmines or the better treatment of political prisoners. Their success should also be measured accordingly. The point is that peace-through-health initiatives should not necessarily be assessed in terms of their ability to
foster peace. They must first be measured according to what they propose to do. This
does not mean that goals such as an increase in ability to conduct ACLS or cast or suture
will be used as outcome measures, this would be trivial. However, once important short-
term outputs have been evaluated it can then be discussed what relevance the results may
or may not have to the greater body of peace-through-health work.

2.3.3. IPEME, the WHO 5 Star Criteria for Global Doctors, and Peace Through Health

The International Pediatric Emergency Medicine Elective (IPEME) is an official
medical elective and a primary goal is thus to provide quality medical education. The
elective is intended to 1) Provide an introduction to the practice of PEM30; 2) Educate
participating students about Emergency Medical issues affecting children around the
world; 3) Develop the leadership skills of the participating students to take up leadership
roles in their future careers; and 4) Build a cooperative knowledge network between
Canadian, Israeli, Jordanian and Palestinian students (IPEME Website). In addition, its
multifaceted curriculum was designed with the idea of preparing students to practice in
conflict and post-conflict regions by exposing them to global health, conflict resolution,
and peacebuilding concepts (Ibid).

Similar to CISEPO and other peace-through-health organizations, IPEME must be
measured according to its goals and the context in which it operates. IPEME is a medical
elective that is intended to teach medical and life skills that prepare students to practice
medicine in conflict regions and further their interest in cross-border collaborative work.
As such, the elective should be measured according to these goals. As a medical elective,
it is important first and foremost to assess what students are learning from their time in

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30 PEM = Pediatric Emergency Medicine
Toronto; that is, what impact is the IPEME curriculum having on students in terms of their ability to consider the multitude of factors relevant to practicing medicine in conflict regions?

The WHO 5 Star Criteria for Global Doctors was chosen as the basis for evaluation because it is believed that the criteria’s notion of the ideal open-minded, critically aware global doctor complements the notion of the cooperative, worldly doctor capable of engaging in cross-border collaborative projects – according to CISEPO ideals – and participating in peace-through-health work in general (Boelen, 1996). According to Boelen, “the concept of the “five-star doctor” is proposed as an ideal profile of a doctor possessing a mix of aptitudes to carry out the range of services that health settings must deliver to meet the requirements of relevance, quality, cost-effectiveness and equity in health.” (Boelen, 1996). Engaging in cross-border collaborative work is thought to require a similar “mix of aptitudes” and these criteria may thus provide a framework to assess the learning experience of IPEME students.

The five criteria conceptualized by Boelen – that form the basis of this analysis’ evaluation of IPEME – are described in Table 2. The methods used to assess whether or not IPEME facilitates learning in terms of this notion of the “ideal doctor” will be described in the following section (Chapter 3). The WHO 5 Star Criteria provides, at the very least, a relevant set of established criteria upon which to assess IPEME’s ability to meet its interdisciplinary medical education goals. As Boelen states, “shaping the profile of the doctor of the future, such as the “five-star doctor”, offers a pragmatic opportunity for health care, medical practice and medical education interests to work together, with health for all as their common goal. Such a profile could develop as a point of convergence of these interests and the expression of a common denominator for their work.” (Ibid)
Table 2: The WHO 5 Star Criteria for Global Doctors

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care-provider</td>
<td>Besides giving individual treatment “five-star doctors” must take into account the total (physical, mental and social) needs of the patient. They must ensure that a full range of treatment – curative, preventive or rehabilitative – will be dispensed in ways that are complementary, integrated and continuous. And they must ensure that the treatment is of the highest quality.</td>
</tr>
<tr>
<td>Decision-maker</td>
<td>In a climate of transparency “five-star doctors” will have to take decisions that can be justified in terms of efficacy and cost. From all the possible ways of treating a given health condition, the one that seems most appropriate in the given situation must be chosen. As regards expenditure, the limited resources available for health must be shared out fairly to the benefit of every individual in the community.</td>
</tr>
<tr>
<td>Communicator</td>
<td>Lifestyle aspects such as a balanced diet, safety measures at work, type of leisure pursuits, respect for the environment and so on all have a determining influence on health. The involvement of the individual in protecting and restoring his or her own health is therefore vital, since exposure to a health risk is largely determined by one’s behaviour. The doctors of tomorrow must be excellent communicators in order to persuade individuals, families and the communities in their charge to adopt healthy lifestyles and become partners in the health effort.</td>
</tr>
<tr>
<td>Community Leader</td>
<td>The needs and problems of the whole community – in a suburb or a district – must not be forgotten. By understanding the determinants of health inherent in the physical and social environment and by appreciating the breadth of each problem or health risk “five-star doctors” will not simply be treating individuals who seek help but will also take a positive interest in community health activities which will benefit large numbers of people.</td>
</tr>
<tr>
<td>Manager</td>
<td>To carry out all these functions, it will be essential for “five-star doctors” to acquire managerial skills. This will enable them to initiate exchanges of information in order to make better decisions, and to work within a multidisciplinary team in close association with other partners for health and social development. Both old and new methods of dispensing care will have to be integrated with the totality of health and social services, whether destined for the individual or for the community.</td>
</tr>
</tbody>
</table>

The work of Scolnik and Arya makes an argument for the evaluation of IPEME within its context as a medical elective. Furthermore, the above description of the WHO 5 Star Criteria argues that evaluating IPEME in terms of these criteria makes sense given the goal of the elective to bring together and train open-minded, versatile medical professionals. However, the subsequent connection between this criteria and peace through health is not immediately apparent.

The belief in this connection stems from concepts that have already been discussed in this chapter. While it was stated that this thesis would not belabour particular definitions of terms like ‘health’ and ‘peace’, certain ways of framing them provide
insight into the connection between the evaluation of IPEME – in terms of the WHO 5 Star Criteria – and peace through health.

The World Health Organization’s holistic conceptualization of health as more than the absence of disease aligns with peace-through-health notions of war as a public health problem and something that impacts the mental and emotional well-being of individuals in addition to their physical health (see Table 2). The WHO 5 Star Criteria also embodies this idea by holding doctors to a higher, more holistic standard than just treating patients (Boelen, 1996). Emphasizing that doctors must consider determinants of health, cultural factors, and environmental circumstances makes a case for congruity with peace-through-health concepts.

Galtung’s definition of “positive peace” relates to the WHO 5 Star Criteria as well. He asserts that positive peace includes not only the absence of war, but also the fostering of positive relations between conflicting or previously conflicting parties. The WHO 5 Star Criteria embodies this through its emphasis on physicians as both clinical and community leaders, holistic caregivers, and advocates for their patients. The WHO Criteria also relate directly to many of the Peace-Through-Health Approaches described in Table 1. The importance of fair and equitable health care in human security, diplomacy, tactfulness, and advocacy are all embodied in the principles of the WHO 5 Star Criteria.

The link between peace through health, IPEME, and the WHO Criteria is not always easy to see. However, the themes of versatility, collaboration, understanding, and a holistic view of peace and, especially, health that transcend them ultimately make the three worthy of integration.
3. METHODS

3.1. Research Purpose and Objectives

The purpose of this thesis is to evaluate IPEME as a case study of a peace-through-health initiative. The study will pursue this end by examining students’ attitudinal change in relation to the WHO 5 Star Criteria for Global Doctors (discussed in Chapter 2). The results of this evaluation, supplementary qualitative data obtained from two questionnaires and written field notes, and a review of the relevant literature will then be used to discuss the implications of these outcomes for IPEME as a peace-through-health initiative.

3.2. Choice of Study Design

This thesis examines a case study of a unique medical elective that seeks to use health as vehicle for peacebuilding. To accomplish this, the study employs a mixed-methods methodology. A novel evaluation tool was designed to examine students’ attitudinal change in terms of the WHO 5 Star Criteria for Global Doctors. Quantitative data and qualitative data obtained from this assessment were used to explore the impact of the IPEME curriculum on participating students with respect to ‘ethical and professional’ attitudes. Supplementary qualitative data obtained from questionnaires and field notes was used, in conjunction with a review of the relevant literature, to discuss the implications of IPEME for the greater body of peace-through-health work. Triangulation of methods served to strengthen the comprehensiveness of the results, improve their validity, and overcome some of the biases inherent in ‘single method’ studies (Denzin, 1978). Ethics approval was obtained for this evaluation research through the ethics
departments of the Hospital for Sick Children and the University of Toronto (a copy of the application form for each is available in Appendix J).

Although a detailed description of the limitations of this thesis and the measures taken to account for them will be discussed in Chapter 5, it should be noted that the small sample size provided that results derived from the evaluation be seen as a means of exploring what students learned. While students’ scores on the evaluation tool were analyzed using standard statistical analysis software (SPSS and NVivo), the sample size rendered statistical power too low to detect valid ‘significant differences’. The ‘quantitative’ results presented in Chapter 4 are thus discussed in terms of their trends and used in combination with qualitative data to explore the impact of the IPEME curriculum on its students.

3.3. Subjects

This analysis examined IPEME in terms of the attitudinal change of its participants. The elective selected eight medical students for participation in the four-week program: two Canadian, two Israeli, two Jordanian and two Palestinian students. Three male and five females took part. Their ages ranged from 23-28 years.

Subjects were not randomly selected or assigned. All eight students were chosen as part of the IPEME recruiting process, which selects students on the basis of academic merit, country of residence, interest in cross-border work, and interest in other aspects provided by the program (such as pediatric medicine, global health, and peace-through-health). Students were not required to participate in this evaluation and their selection for the program was in no way contingent upon their willingness to provide data for this
Once consent for research was obtained, students were assigned an ID to protect their privacy and ensure that only the researcher would have full knowledge of their scores and opinions.

**Table 3: Participant Coding**

<table>
<thead>
<tr>
<th>Student ID</th>
<th>Student Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPEM001</td>
<td>Male</td>
</tr>
<tr>
<td>IPEM002</td>
<td>Female</td>
</tr>
<tr>
<td>IPEM111</td>
<td>Male</td>
</tr>
<tr>
<td>IPEM112</td>
<td>Female</td>
</tr>
<tr>
<td>IPEM221</td>
<td>Female</td>
</tr>
<tr>
<td>IPEM222</td>
<td>Male</td>
</tr>
<tr>
<td>IPEM331</td>
<td>Female</td>
</tr>
<tr>
<td>IPEM332</td>
<td>Female</td>
</tr>
</tbody>
</table>

3.4. Consent

Participants were made aware at the beginning of the elective that various evaluation processes would be conducted throughout the four-week period. Voluntary consent was obtained to:

a. Utilize the data obtained from two questionnaires students completed during teaching sessions.

b. Utilize data from two supplementary ‘take-home’ questionnaires.

c. Take field notes throughout the duration of the elective.

d. Retain the option to interview IPEME teaching staff and organizers if necessary to saturate collected data.

e. Potentially approach participants in coming years in an effort to look at IPEME sustainability.
3.5. Research Setting and Role of the Researcher

Two research sessions (at the beginning and the end of the elective) took place in Room 618 of the Health Sciences building at the University of Toronto. Students were spread out around a large, square-shaped set of tables with a projector and screen at the front of the class. These sessions were the primary source of data on students’ attitudinal change with respect to the WHO 5 Star Criteria (the research procedure is described below). Students also responded to two questionnaires that were to be completed on their own time within four days of assignment. These questionnaires were distributed in envelopes marked with the ID of each student. The remaining research (participatory observation) took place in this classroom as well as in other settings (e.g. hospitals, field trips) depending on students’ location.

On the first day of the elective, the researcher informed participants that they were not required to participate in IPEME research and that, if they chose to participate, all data collected would be kept confidential and anonymous in line with the ethical standards of the Hospital for Sick Children and the University of Toronto. The role of the researcher in the elective was also explained.

The researcher moderated all research sessions and collected field notes based on participatory observation throughout the duration of the elective. The researcher made it clear at the beginning of the elective that while he would be present throughout the four-week course and would participate in a number of activities with students, his role was to observe and document, not to become an outlet for grievances or to develop personal relationships with students. The researcher sought at all times to retain adequate distance from students so as not to bias the data collected.
3.6. Data Collection

A combination of quantitative and qualitative data was collected to evaluate IPEME as a case study of a peace-through-health initiative. A novel evaluation tool was designed to examine students’ attitudinal change over the course of the elective in terms of the WHO 5 Star Criteria. Supplementary qualitative data was obtained via two take-home ‘qualitative questionnaires’, compiled field notes, and a review of the relevant literature.

3.6.1. Evaluating Attitudinal Change in terms of the WHO 5 Star Criteria

Students’ attitudinal change was evaluated in terms of the WHO 5 Star Criteria for Global Doctors. The criteria consisted of Caregiver, Decision-Maker, Communicator, Community Leader, and Manager (Boelen, 1996). Using the criteria as a guide, six video clips lasting up to five minutes each were selected from popular medical TV shows to convey a variety of dilemmas that medical practitioners may face. A total of 32 questions were developed and were designed specifically to address issues that related to the principles of the WHO 5 Star Criteria.\(^\text{31}\) (Appendix D and Appendix E describe the process of creating the Questionnaire)

Each answer key used a 10 cm visual analogue scale (VAS) anchored at one end by "strongly agree" and the other by "strongly disagree." Changes in students’ responses to the presented scenarios over the course of the elective were measured by converting the location of participants’ ‘mark’ on the VAS into an integer that could subsequently be analyzed as categorical and continuous data. An additional 16 questions required students to explain their answers. These “WHY?” questions formed the qualitative component of

\(^{31}\) With the exception of Community Leader
the questionnaire and were used to provide insight into analysis of continuous and categorical data. The time allotted for the video clips and questionnaire was ninety minutes.

3.6.2. Design of Evaluation Tool

The process of creating the primary evaluation tool (henceforth referred to as the ‘Video Clip Questionnaire’) that would ultimately serve to assess IPEME students’ attitudinal change began many months before the beginning of the elective. It was largely inspired by previous elective research that focused on the CanMEDs’ roles, an established set of characteristics that the Canadian Medical Association (CMA) believes should be aspired to by Canadian doctors regardless of where they practice (Frank, 2005).

The impetus for the 2009 testing method arose from a desire for a more globally applicable set of standards upon which to base the learning experiences of IPEME students. This new set of criteria needed to fulfill two conditions: pertain to the actions of physicians, and be ‘globally applicable’. It is important to recognize that any new criteria would inevitably face similar drawbacks as do the CanMEDs roles. Broad criteria, no matter how relevant for the research in question, are vague by nature. In addition, just as the CanMEDs roles could be seen as culturally imperialistic guidelines by which to judge the attitudes of medical students from other parts of the world, so too would a set of criteria developed by an international organization, although arguably to a lesser

32 The CanMEDs roles are a normative structure that, while useful as a guideline for physician competencies, remain vague and potentially Western-biased.
In the end, these limitations were seen as acceptable and were accounted for as much as possible.

IPEME students represented the first full pilot test group for the Video Clip Questionnaire. A small pilot test was conducted prior to the elective to ensure that wording was clear and that the time to complete the questionnaire was appropriate. Of the five subjects that completed the questionnaire beforehand, two were selected because English was their second language and they could thus provide some insight into the readability of the questions. Even such a small pre-test allowed the researcher to briefly test the ‘pivotal’ nature of the questions and establish some internal validity before study administration. Finally, conducting a pretest provided an external opinion about the applicability and quality of the video clips. IPEME staff had already viewed the clips so many times that it was important to present them to a more objective audience. In the end, several drafts of the Video Clip Questionnaire were completed to establish as much internal validity as possible. The final version of the Video Clip Questionnaire combined two types of questions, those answered on a Visual Analogue Scale (VAS) and a number of open-ended “WHY?” questions whereby students had a chance to briefly explain their opinions.

The decision to use a VAS answer key was somewhat arbitrary. Limited research has been conducted that measures attitudes in such a way. Visual Analogue Scales are

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33 Data from this study was presented at a Teaching and Learning Symposium at the University of Toronto on October 23rd. During the “lunchtime roundtable” one participant raised the issue of cultural imperialism with respect to the WHO 5 Star Criteria, particularly in terms of the “communicator” criterion. She pointed out that in many cultures open communication is not seen as acceptable or desirable and that the WHO Criteria may be imposing Western values of complete openness and transparency on cultures that do not share such principles. My response was that while the WHO 5 Star Criteria purports open communication as important for the ‘global doctor’, this thesis treated the criteria as normative and thus subject to limitations. Thus, desired results included not only adherence to the criteria, but also to see students thinking about their importance and considering their limitations (open-ended questions were included to examine such differences)
typically used for measuring pain (Gould et al, 2001). For instance, if a patient enters a hospital emergency room suffering from an ailment, the Triage nurse will likely ask the patient, on a scale of 1-10 how much pain they are in. It is also possible that the patient will fill out a questionnaire used to provide information to the nurses and doctors that will eventually be treating them. Such questionnaires assess pain using a Visual Analogue Scale, which provides the patient with a continuous line (free from numbered markings as with a Likert Scale) upon which an immediate judgment can be marked (Ibid).

IPEME staff chose this scale in part because of their belief that an attitudinal response to a scene presented in a video clip would be a gut feeling, and thus better reflected on a continuum. The VAS used in the questionnaire was modified slightly to complement the task at hand. Instead of being anchored on one end with 1 and the other with 10, IPEME’s VAS would be anchored on one end by “strongly disagree” and the other by “strongly agree”. Questions were phrased accordingly (i.e. in the form of a statement).

In order to obtain quality data from students in the limited time allotted for research, it was imperative that the questionnaire take no longer than an hour and a half to complete. As a result of these limitations and the desire to avoid participant burnout, not all questions included both a VAS answer key and an open-ended follow ups. Open-ended questions were reserved for the questions that IPEME staff (additionally informed by the results of the small pilot test) believed warranted additional explanation. Students were instructed to complete each “WHY?” question with a minimum of 1-2 sentences. It was thought that these open-ended questions would be extremely valuable for understanding the substance of students’ opinions. In addition, it was unknown how
sensitive a pre versus post comparison would be using the VAS answer key, since its use is relatively novel for this purpose. The open-ended questions would thus allow the research associate to see attitudinal change that might not be apparent using the VAS.

The final element was a synopsis of each clip that was read before viewing. These brief descriptions, each containing approximately 15 bullet points highlighting the major events of each clip, were designed to overcome any residual language difficulties and provide context. While clips were selected for their ease of comprehension, there was no way of knowing beforehand how well students would understand English, especially when watching fast-paced medical dramas. To avoid this bias as best as possible, a synopsis of the clip in question was devised to summarize, in as neutral a manner as possible, the events students were about to see. These synopses were read aloud by the research facilitator just before showing each clip. Care was taken to avoid any words or phrases that would bias students’ reactions to the clips. For instance, identifiers pertaining to race and religion were removed, as were “leading” terms. The purpose of the synopses was not to impose a value-based judgment on the scene, but to provide instructional scaffolding before clips were viewed.

Although the same video clips were shown both pre and post test, students were not informed that this would be the case. In the interim they underwent four-weeks of intense programming concerning a number of issues directly and indirectly related to the WHO 5 Star Criteria (Field Notes). When students filled in the questionnaires for the second time, nearly four-weeks later, the order of the clips and the directionality of the

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34 Pilot subjects commented that some parts of the video clips were difficult to understand. The level of language comprehension of IPEME participants was largely unknown prior to testing.
35 ‘Neutral manner’ simply means that ‘value-laden’ terms that may bias students’ perceptions of the clip were omitted.
questions were changed. It was hoped that the large number of questions, time lag between pre and post test, subsequent sessions, and reorganization of clips and questions would limit students’ recall of their previous answers.

Video clips portrayed the responses of physicians to a number of controversial professional and ethical situations. Popular media clips (medical dramas) were chosen for two main purposes: Visual Learning – similar to the idea of role-play, but potentially more engaging, and, Reliability of Testing – video clips appear the same to all participants for both pre and post test. (Appendix F provides a synopsis of all video clips and Appendix G provides a sample of the questionnaire administered)

3.6.3. Supplementary Qualitative Data: Qualitative Questionnaires

The original version of the IPEME consent form submitted to the Hospital for Sick Children included a request to conduct 15-minute semi-structured interviews at the beginning and the end of the elective. Students were to be asked a series of questions regarding their reasons for applying to the program, what they expected from their time in Toronto, their attitudes towards collaboration and their opinions about the elective as a peacebuilding initiative. It quickly became clear, however, that such semi-structured interviews would pose a problem for various reasons. Students were uncomfortable with being audio-taped and with a private interview so early in the elective. The research protocol was explained to them, but the process was extremely rushed and students were not able to ask questions or clarify the intentions of the study. Students were bombarded with information in the first days and consent forms were also being distributed for a

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36 The order of clips and questions was reversed and the colour of the test paper was changed in an attempt to limit any remaining recall. In the end, students seemed to recall little from the initial testing session (Field Notes).
Globe and Mail interview that was to take place at a later date. In the end, students said they were comfortable with being observed and interviewed, but not using any kind of recording device. The devised solution was to use the prompts from the semi-structured interviews as a template for a take-home questionnaire to be handed out at the beginning and the end of the elective. Completion time was approximately 30 minutes. These questionnaires provided useful additional information about students’ expectations and experience of the elective as well as their perceptions of the elective as a peace-through-health initiative.

3.6.4. Supplementary Qualitative Data: Participatory Observation

IPEME students gave consent for the research associate to attend the vast majority of their classes, hands-on activities, and social outings.37 In the beginning, some students were not comfortable with the prospect of being recorded at any point throughout their stay. The group subsequently decided that it was acceptable for the research associate to compile a series of “field notes” in the four-week period and record any quotations as long as they remained anonymous. The end result was approximately 30 pages (typed) of notes that served as a detailed, descriptive look at the elective from all angles. All information remained anonymous throughout and the majority of conversations were paraphrased or grouped into “themes” (though not analyzed using Qualitative Data Analysis). The substance of the lectures, attitudes of students, interaction between students and faculty, and general impressions about the nature of the elective were documented and used to further triangulate scientific methods used in this study.

37 Field Notes were taken for the majority of academic and social activities, providing a comprehensive account of the elective. Certain didactic lectures were missed, but it is thought that the more important “attitude changing” seminars were attended.
3.6.5. Integrating the Relevant Literature

The literature reviewed in Chapter 2 of this thesis was also integrated with findings from other data collection methods to discuss the implications of IPEME for the greater body of peace-through-health work. Chapter 2 sought to explore the variations in peace-through-health work and to identify gaps in the prevailing peace-through-health literature – such as the need for measuring impacts and for defining outcomes. IPEME was described as a novel peace-through-health initiative that could be said to possess ‘typical’ peace-through-health characteristics as well as novel characteristics (e.g. its role as a medical elective). The literature described in Chapter 2 was used in concert with the findings and subsequent insights derived from the evaluation of IPEME to discuss what role the elective may have in the larger body of peace-through-health work.

3.7. Data Analysis Procedures

Analysis of collected data was accomplished using a number of methods, keeping in mind the limitations of the study’s small sample size and consequent reliance on multiple sources to explore the learning experience provided by IPEME. Data collection methods described above reveal that the Video Clip Questionnaire, which sought to examine change in students’ ethical and professional attitudes over the course of the four-week elective, produced both continuous/categorical data as well as qualitative data from “WHY?” questions. While SPSS data analysis software was used to compare mean VAS scores between pre and post tests, statistical power was limited due to the small sample size. The ability to claim that differences between students’ pre and post test scores are significant was therefore limited as well. Quantitative data obtained from the Video Clip
Questionnaires (via the VAS) was analyzed using Chi Squared and t-tests as appropriate for categorical and continuous data. SPSS software was used to compare mean VAS scores between and within subjects and examined any possible interactions between scores and gender or nationality (while these tests were conducted, their findings are discussed as ‘trends’ rather than statistically significant findings).

Qualitative data obtained from the ‘WHY?’ questions in the evaluation tool were analyzed using NVivo software. While VAS scores were used to detect changes in mean scores between pre and post tests, comparing the responses to these open-ended questions was intended to provide insight into the substance of students’ answers and thus provide a different lens through which to examine attitudinal change. Transcripts were examined for themes pertaining to WHO 5 Star Criteria based on the definitions and key concepts conceptualized by Boelen (Boelen, 1996). The analysis thus served to identify key themes pertaining to the WHO 5 Star Doctor Criteria and to compare students’ responses at the beginning and the end of the elective. Limitations with respect to this method of analysis (most notably inter-rater reliability) will be discussed in Chapter 5.

Supplementary qualitative data was not formally coded or grouped, but was examined thoroughly so as to provide additional exploration of the IPEME learning experience. This data also aided in triangulation of methods, which improves the validity of results for case studies with such small sample sizes. Questionnaire responses and field notes from participatory observation were compiled to explore other important learning objectives for the elective as noted by students. This supplementary data was also used to aid the researcher in making connections between the evaluation of IPEME and the contribution of the elective to peace-through-health work.
4. Results

As a case study of a peace-through-health initiative, this analysis is intended to be exploratory, not explanatory. The findings reported in this section are the result of a specific assessment of the learning experience provided by the IPEME program. After examining the relevant literature it was determined that while peace-through-health initiatives are in need of increased evaluation so as to connect on-the-ground projects with broader peace-through-health principles, such evaluations must be done pragmatically (Jabbour, 2005). This section reports the findings of the novel evaluation tool (Video Clip Questionnaire) and supplementary qualitative data collection described in Chapter 3. The Video Clip Questionnaire included both quantitative and qualitative responses to a series of professional and ethical dilemmas (portrayed by six popular media clips). The evaluation sought to determine if students’ attitudes changed in terms of the WHO 5 Star Criteria. Supplementary data was used to provide insight into the results of the attitudinal evaluation and to discuss future directions and study impact. The mixed-methods approach to evaluating the IPEME learning experience was used to triangulate methods and thus add weight to the findings of this case study.

4.1. Quantitative Evaluation of Attitudinal Change in terms of the WHO 5 Star Criteria

The following subsections describe the analysis of continuous and categorical data obtained from VAS answer keys in both pre and post test Video Clip Questionnaires. A series of t-tests were used to discern any significant differences between students’ responses to questions in pre versus post tests. Differences between participants both pre and post test were also examined to see if students were responding differently to the
presented questions. Significant differences may suggest that the IPEME curriculum is indeed teaching students ethics and professionalism in line with the principles of the WHO 5 Star Criteria. Value judgments about whether change is positive or negative will not be part of this analysis. Evaluating the IPEME learning experience was accomplished instead by looking for relative changes. Visual analogue scales were chosen because they are not numbered, but instead represent a ‘continuum of agreement’. There were no right or wrong answers to presented questions. The purpose of this analysis was not to make value judgments about particular VAS scores, but to examine trends and differences in answers.

4.1.1. Within Subjects Analysis: Limited Attitudinal Change

Figure 2 below shows the results of the comparing of mean VAS scores between pre and post tests for all participants. Only participant eight (IPEM332) showed a ‘statistically significant’ difference between pre and post scores (p = 0.0170 < 0.05). While other participants (3, 4, and 5) showed a trend toward significance, the change in VAS scores between pre and post test was limited for the majority of IPEME students. No value judgment was made about the direction of change (i.e. greater or lesser mean VAS score), only the amount of change itself.
4.1.2. Between Subjects Analysis: No Significant Interaction of Gender or Nationality

Figures 3 and 4 below show mean VAS scores separated into pre and post values for each participant. There are significant differences in the mean scores of some participants, but results revealed no interaction between VAS scores and gender or nationality for pre or post tests. An interesting trend that arose when scores were separated into pre and post is participant responses tended to polarize in post test. For example – while not statistically significant – in the pre test, only two participants had a mean VAS score above six. In addition, none had a VAS mean score of 5 or below. The
**Figure 3:** Participant x VAS Score (mean) Pre Test

**Figure 4:** Participant x VAS (mean score) Post test
modified scale shown in Figure 3 demonstrates how participant responses tended to cluster in this 5-6 range.

Figure 4 above shows the polarization of participants’ VAS scores in the post test. The number of participants with a mean VAS above six doubled to four and two participants approached the seven-point mark. The results of these two graphs show a trend toward polarization of answers. The implications of apparent polarization for assessing learning in terms of the WHO 5 Star Criteria will be discussed in Chapter 5. A final note is that while no significant interaction was seen for gender or nationality, there were differences seen between participants’ mean VAS scores. This suggests that questions were not being answered the same by all participants which may speak to their pivotal nature.

It is important to note that an analysis of each individual question was not included in this section. The reason for this stems from the type of questionnaire being used and the purpose of the evaluation in general. The Video Clip Questionnaire was designed to examine attitudinal change. Because it has not been validated however, it cannot be said what a particular response on any given question would actually mean (e.g. if students were asked which patient should have priority in a particular situation, it could not be said definitively using this questionnaire what that particular answer would say about the student’s attitude). In addition, the purpose of the quantitative evaluation is to observe differences and/or changes in the score so as to identify learning free from judgment about particular answers.
4.2. Qualitative Evaluation of Attitudinal Change in terms the WHO 5 Star Criteria

All questions created for the purposes of assessing the change in professional and ethical attitudes of IPEME students were answered using visual analogue scales. However, a select number of questions (sixteen) also included open-ended follow up questions. The questions thought to benefit from further explanation were followed by a simple “WHY?” question. Students were thus given the opportunity to convey what they saw as the most important elements in analyzing these selected scenarios.

4.2.1. Marked increase in focus on issues of communication pre versus post test

The second part of the questionnaire, the qualitative component, was analyzed to compare the substance of students’ responses pre and post test. As described in Chapter 3, this would involve counting the total number of references to the WHO 5 Star Criteria for the pre versus post test questionnaire. The element of subjectivity was partially accounted for by conducting the process twice to strengthen the intra-rater reliability of the analysis. It was revealed that the number of ‘references’ to the WHO 5 Star Criteria (defined by the key concepts listed in Table 4) remain consistent between pre and post for four of five criteria. References counted for Care Provider, for instance, decreased from seventy-five to seventy-one between pre and post test for a proportional decreased of five per cent. The most noticeable result\textsuperscript{38} was the drastic increase in reference to the principles of ‘Communicator’. References to this criterion rose from fifty-four to seventy-six between pre and post, a forty per cent increase, putting it on par with the number of references to ‘Care Provider’.

\textsuperscript{38}
Table 4: References to Principles of WHO 5 Star Criteria Pre/Post

<table>
<thead>
<tr>
<th></th>
<th>Care Provider</th>
<th>Decision Maker</th>
<th>Communicator</th>
<th>Community Leader</th>
<th>Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of References</td>
<td>75</td>
<td>29</td>
<td>54</td>
<td>0</td>
<td>39</td>
</tr>
<tr>
<td>Pre/Post Difference</td>
<td>-4</td>
<td>+2</td>
<td>+22</td>
<td>0</td>
<td>-6</td>
</tr>
<tr>
<td>Pre/Post Difference</td>
<td>-5%</td>
<td>+7%</td>
<td>+40%</td>
<td>0</td>
<td>-15%</td>
</tr>
</tbody>
</table>

Table 5: Individual References to Principles of WHO 5 Star Criteria Pre/Post

<table>
<thead>
<tr>
<th></th>
<th>Care Provider</th>
<th>Decision Maker</th>
<th>Communicator</th>
<th>Community Leader</th>
<th>Manager</th>
<th>Total</th>
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<tbody>
<tr>
<td>IPEM001</td>
<td>8/6</td>
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<td>7/7</td>
<td>0/0</td>
<td>3/3</td>
<td>21/18</td>
</tr>
<tr>
<td>IPEM002</td>
<td>10/9</td>
<td>2/4</td>
<td>4/6</td>
<td>0/0</td>
<td>2/3</td>
<td>18/22</td>
</tr>
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<td>IPEM111</td>
<td>7/9</td>
<td>2/2</td>
<td>2/10</td>
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<td>16/25</td>
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<td>5/5</td>
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<td>9/3</td>
<td>30/25</td>
</tr>
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<td>0/0</td>
<td>3/4</td>
<td>19/21</td>
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<td>IPEM222</td>
<td>9/5</td>
<td>4/3</td>
<td>7/10</td>
<td>0/0</td>
<td>3/3</td>
<td>23/21</td>
</tr>
<tr>
<td>IPEM331</td>
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<td>8/7</td>
<td>0/0</td>
<td>4/3</td>
<td>16/20</td>
</tr>
<tr>
<td>IPEM332</td>
<td>5/9</td>
<td>2/3</td>
<td>5/10</td>
<td>0/0</td>
<td>2/4</td>
<td>14/26</td>
</tr>
<tr>
<td>IPEM441</td>
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<td>2/2</td>
<td>7/5</td>
<td>0/0</td>
<td>4/3</td>
<td>22/17</td>
</tr>
<tr>
<td>IPEM442</td>
<td>5/6</td>
<td>5/4</td>
<td>4/7</td>
<td>0/0</td>
<td>4/3</td>
<td>18/20</td>
</tr>
<tr>
<td>Total</td>
<td>75/75</td>
<td>29/31</td>
<td>54/76</td>
<td>0/0</td>
<td>39/33</td>
<td></td>
</tr>
</tbody>
</table>
Table 5 further explains the references summarized in Table 4. Almost all students increased the number of times they referred to an issue of communication between pre and post tests. Results show that IPEM111, IPEM221, and IPEM332 had the largest increase in focus on communication. Reference to other WHO 5 Star Criteria remained somewhat constant, with the exception of ‘Manager’ which decreased 15%. This decrease in reference to issues of authority and hierarchy did not seem to correspond with the increase in reference to communication. It can be seen that participants produced very similar numbers of total reference and were consistent between pre and post tests.

4.2.2. Participants’ Responses Reflect Principles of the WHO 5 Star Criteria

Responses to the selected open-ended questions were analyzed in terms of their reflection of the WHO 5 Star Criteria. This analysis was used to determine if the reasoning of IPEME students, as a whole, reflected the principles defined by the criteria. This not only served as a means of assessing qualitatively the manner in which students thought about the professional and ethical dilemmas portrayed in the video clips, but also as a way of assessing the internal validity of the pilot questionnaire. If students’ responses were perceived to reflect the WHO 5 Star Criteria, then the questionnaire was accomplishing its goal. Qualitative Data Analysis (QDA) using NVivo software revealed that the majority of responses reflected the values of the WHO’s ‘global’ medical practitioner. Table 6 provides a list of quotes from students, pre and post test, that show their adherence to the principles of the proposed criteria.
Table 6: Reference to the Principles of the WHO 5 Star Criteria (Boelen, 1996)

<table>
<thead>
<tr>
<th>Care Provider</th>
<th>Key Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Holistic treatment, patient-centered care, consideration of long-term effects, high-quality treatment.</td>
</tr>
<tr>
<td>Identified Excerpts</td>
<td></td>
</tr>
<tr>
<td>“The patient’s competence and autonomy were not assessed. They should have assessed patient’s wishes more carefully.” (IPEM001, Pre Test, C1Q1)</td>
<td></td>
</tr>
<tr>
<td>“They only thought of the short-term (relaxing the mother) but their choice didn’t even help improve the treatment response of the mom (all treatment options had been exhausted). They didn’t think of the baby at all. The baby is going to be living with his grand parents who may die after a few years later and the child will be left alone with the father. They could bring her a pet, not a baby!!” (IPEM112, Pre Test, C3Q3)</td>
<td></td>
</tr>
<tr>
<td>“The young teenage girl is the patient who is receiving the procedure. However, in this case the consent must come from all parties. Assuming the girl is healthy enough to carry the baby, the physicians must take into account the father’s position on the matter. Nevertheless, the teenage girl is the primary patient. This question is really hard…” (IPEM442, Pre Test, C3Q3)</td>
<td></td>
</tr>
<tr>
<td>“He didn’t know the patient at all, had never met her. He was discussing a very serious and personal and important topic and didn’t seem to give any consideration of how she would feel based on how he delivered the news.” (IPEM002, Post Test, C4Q1)</td>
<td></td>
</tr>
<tr>
<td>“He came for a consultation, he is not the main doctor who’s treating the patient. He shouldn’t have talk with her about her prognosis without knowing anything about her or about the case first.” (IPEM441, Post Test, C4Q2)</td>
<td></td>
</tr>
<tr>
<td>“The team seemed very biased in support of Jenna. They didn’t seem to be considering the situation from the perspective of the father (Jenna’s husband). Legally he would have a huge responsibility so needed to be one of the main people that the team was thinking about.” (IPEM002, Post Test, C3Q2)</td>
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</tbody>
</table>
**Decision Maker**  

**Key Concepts**

Treatment efficacy, weighing options objectively, justifying decisions ethically, allocation of resources according to need.

**Identified Excerpts**

“Although they might risk loosing both Patients, but if they didn’t treat Patient 1 first, they would have lost him for sure. Patient 2 was still breathing and he had a chance to live without immediate treatment.” (IPEM112, Pre Test, C1Q2b)

“I agree that the priority of care should have been given to patient 1 since his condition was worse. The priority of care has nothing to do with that man’s background, only based on his health condition.” (IPEM332, Pre Test, C1Q2b)

“I think it’s important to respect the wishes of the Patient especially about the baby but only as long as it doesn’t harm the mother. The senior Doc should have the responsibility because she knows the consequences that happen if she doesn’t take action. She also knows when she can listen to the patient and when not to. I know that it’s the patient’s life and it’s up to her but she may regret her choice later because she didn’t know the consequences” (IPEM112, Pre Test, C2Q4)

“All people mentioned can offer an opinion, but the ultimate decision lies first with the patient. If they show themselves to be incapable, then it becomes the doctor’s responsibility to save the patient’s life until they can make an informed, capable decision.” (IPEM001, Pre Test, C2Q3)

“Danger to patients is prioritized, so the more severe patient is treated first. The decision was obviously correct because both patients were fine at the end. Had patient 2 been given priority the team would have lost Patient 1.” (IPEM441, Pre Test, C1Q2)

“Patient 2 is not in real risk he was just stressed with all the situation around him he just need someone to relax him, one of doctors could focus on this patient and explain him what going on and the rest of the team can focus on the severe/complicated patient.” (IPEM331, Post Test, C1Q2)
**Key Concepts**

Listening, discussion, considering health determinants, patient-engagement, conversation level appropriate for the situation and culture.

**Identified Excerpts**

“Because their care was toward the young wife and they wanted to make her happy but they ignored the consequences with respect to the young husband and his future child. In spite of that it may be OK but at least they should think about it and talk to the young couple.” (IPEM111, Pre Test, C3Q3)

“The surgical consult wasn’t communicating well, it should be more concentrated about the possibility of performing the surgery or not, plus I agree that there should be a strategy for breaking the bad news and not killing the hope of the patient. So don’t lie to the patient, but give him the amount of info that he/she can analyze and that he/she expects.” (IPEM222, Pre Test, C4Q1)

“Patients’ values may be different than the doctor’s. It is best to provide them with all the information, including risks, benefits, and consequences of making a decision or not. Then they can make the decision that best suits their values.” (IPEM001, Pre Test, C4Q4)

“The communication started off well but there was obvious disagreement between the doctors. This is okay, however they should not argue in front of the patient because it makes it harder for the patient to process all the information. The doctors should leave the room and discuss what their collective opinion will be.” (IPEM441, Pre Test, C4Q5)

“I think that the doctor should be honest with the patient. The doctor shouldn’t make the patient delusional but if there is any thread of hope it is important to tell the patient about it because it will help him/her cope with their condition and it improves the patients’ mental and physical health.” (IPEM221, Pre Test, C4Q6)

“We are just providing the care, treatment, and facilities in the end of the day we are dealing with the patient’s life → the decision may affect them for the rest of their lives so they should make the decision in order to do so → we should try to give them as much info as we can.” (IPEM332, Post Test, C4Q4)
### Community Leader

**Key Concepts**

Public health, macro-level considerations, advocacy in the community.

**Identified Excerpts**

Student responses did not seem to venture outside of the realm portrayed by the relevant video clips. The implications of this omission will be discussed in Chapter 5 to follow.

### Manager

**Key Concepts**

Teamwork, leadership, communication (between health professionals), hierarchy of authority, delegation of duties and responsibilities in a productive way.

**Identified Excerpts**

“Though doctors should have their own opinion, one of the most important parts of working at the ER is teamwork – so even though their opinion don’t support the Senior’s opinion, they should act together (maybe try to change his mind, convincing him that they are right), to improve the team work and even out of respect to the senior doctor’s experience and knowledge (though he might be wrong and that’s why if they strongly disagree – they should try to convince him otherwise, but in the end they should work as a team).” (IPEM332, Pre Test, C1Q4)

“The primary care giver is the senior ER doctor, which makes the patient his responsibility. The junior doctor is there to help and support the senior doctor and to learn from him. The surgeon is only there for a consult and should not be discussing more than surgery with the patient. It is not his patient and by adding in his comments he is undermining the senior ER doctor’s abilities to care for his patients.” (IPEM441, Pre Test, C4Q2)

“Because he saw the patient first and it’s his job to deal with it and to consult any other Drs or to refer her…he is the one in charge.” (IPEM111, Post Test, C4Q2)

“Yes because the surgical consult got carried away and he needed to be stopped. Also, he was doing more damage and he didn’t respect the line where his job ends…he was called to help the ER Dr but he took over their job and made things worse.” (IPEM332, Post Test, C4Q3)
4.3. Supplementary Qualitative Data Emphasizes Other Important IPEME Characteristics

Examination of qualitative data collected via two ‘qualitative questionnaires’ and written field notes revealed students’ attitudes toward the learning experience provided by IPEME as well as toward a number of the elective’s key characteristics. Students were asked to comment on their expectations prior to coming to Canada and to reflect on what they gained/what challenges they faced throughout the course of the four-week program. This data, while supplementary, provided broader insight into what students felt they gained from their time in Toronto and what they believed to be the defining features of the elective. Such insight not only provided a means for reflecting on the design and results of the attitudinal evaluation discussed above, but also served to discern what aspects of the program are considered most relevant for young doctors preparing to practice medicine in conflict regions.

4.3.1. Hosting the Elective in Toronto is Important

The initial decision to host the elective in Toronto was primarily based on practical considerations. CISEPO, one of IPEME’s partners, is Canadian and it was thus logical to host such an elective at the organization’s headquarters. However, bringing students to Toronto was thought to serve other purposes as well. The tense political climate characteristic of the Middle East (in particular the Israel-Palestine region) would almost certainly have provided a different atmosphere had the elective taken place there. When asked whether they believed the choice of location to be significant, the majority of students responded yes: “Having it in one of those three countries [Jordan, Israel, and Palestine] may cause some restrictions because of the political situation. Also, the
students may feel that the program is biased to the hosting country. On the contrary Canada is a neutral country, away from the whole situation.” (IPEM112, QQ1, Q9). Neutrality was not the only characteristic emphasized. Indeed, many countries could be considered “neutral” in the political sense. For instance, in the past CISEPO has held collaborative conferences in countries like Cyprus if it was believed that the subject matter would be too politically tense or if there were seen to be problems with transportation in the region (CISEPO Website). The other critical factor provided by Toronto is summed up in the words of one student when discussing the choice of location: “I can’t say it will be unsuccessful or not effective if it was held in any of the mentioned countries [again, speaking of Israel, Jordan, and Palestine], for me I can learn in any place I present, but the idea of running this program in a city of multicultural backgrounds and huge diversity is amazing and suits the program, as I mentioned before it is a healthy environment to meet people from different countries and to learn together.” (IPEM222, QQ1, Q9) The implications of a neutral and diverse location for IPEME as a peace-through-health initiative will be further discussed in Chapter 5.

4.3.2. Living Together Fosters Relationships

IPEME students were not required to live together the first year the elective was run (in 2007). While the program was still largely considered a success, it was felt that students lacked something by being dispersed around the city. In response, the 2008 and 2009 electives required students to live together for the duration of their time in Toronto (Field Notes). The idea was to encourage students to do things as a group as much as
possible, to get to know each other outside of scheduled classes and activities and ultimately facilitate long-lasting professional and personal relationships.

The outcomes of this requirement are difficult to decipher. None of the students believed it was a bad idea and logistically speaking it was advantageous to have a common meeting place (Field Notes). The requirement for the Canadian students to live with the group regardless of whether they already lived in Toronto was also important because it automatically provided the students from the Middle East with sources of information about the country and maintained the perception that all members were committed to fostering relationships (Ibid). This was realized in terms of some very simple outings that seemed to have large impacts. For instance, one student wanted to go to the barber and was taken by one of the Canadian students (Ibid).

The downside to the living arrangement is the reality that eight adult, professional students will not move together as one entity. Some students found it difficult to coordinate departure times and by the end of the elective it was obvious that some were extremely frustrated by different cultural notions of punctuality (IPEM111, QQ2, Q3). Despite these small setbacks, being exposed to cultural differences, in this case, perceptions of punctuality, is arguably an important goal of the elective as well. Students believed that a common residence remained essential for creating an atmosphere of togetherness, even if students did many things independently (Field Notes).

4.3.3. Novel Learning Experiences and Teambuilding Emphasized

The diversity of the curriculum is described in Appendix B and Appendix C and is alluded to in Chapter 2 of this thesis. The combination of didactic lectures, Global
Health activities, conflict resolution seminars, hands-on activities, and social outings made for a dynamic and multidisciplinary learning experience (Field Notes). Feedback about the curriculum revealed that students found Global Health presentations and ‘hands-on’, practical workshops that included Advanced Cardiac Life Support (ACLS), casting, and suturing to be valuable learning components (Field Notes). A minority of students wrote that Conflict Resolution workshops were also valuable but did not elaborate (Ibid).

The overwhelming consensus seemed to be that novel Global Health topics as well as networking, friendships, and exposure to the intimacies of other cultures were the most important learning experiences. For instance, when asked about the most important lesson they took away from their time in Toronto, one student responded, “That we can have different points of view and opposite opinions in very sensitive and tense subject like the conflict in the middle east and have very passioned discussion by saying to each other how much we love them and respect them and that we are for the same purpose here and smile to each other.” (IPEM331, QQ2, Q2) This sentiment is reflected in the responses of most students who held that the connections they made were paramount and inspired them to seek out such collaborative opportunities as a way of making a difference: “If we put aside our background conflicts and think of a goal that we share in common and work towards achieving it, we can make the most difficult things happen.” (IPEM112, QQ2, Q2)
4.3.4. Peace-Through-Health Concepts Underrepresented

Appendix C describes the specific ‘peace-through-health’ components included in the four-week curriculum. The second week of the elective included an afternoon teaching session dedicated to discussion of health as a vehicle for peacebuilding (IPEME Curriculum, 2009). This teaching session included three different presenters from CISEPO who explained their philosophy of peace-through-health and the activities of CISEPO in the Middle East and parts of Africa (Field Notes). While presenters conveyed a powerful message about the ability of collaborative medical work to facilitate lasting peaceful relationships between ‘opposing’ sides of a conflict, the connection between these actions and the IPEME initiative did not seem to penetrate the minds of students. One student reflected that it was interesting “to touch the meaning of health can be a bridge for peace” but responses in qualitative questionnaires indicate that the novel concept IPEME may not have been reinforced throughout the elective. When asked in the collaborative nature of IPEME could be an inspiration for others to put their differences aside and work toward peaceful relationships, one student answered bluntly, “No – I think others see physicians/med students as different than them; meaning it’s easier for us to find things in common than others do.” (IPEM001, QQ1, Q13)

4.3.5. Importance of Collaboration and Cross-border Work

Throughout their time in Toronto, IPEME students were required to draft a collaborative research proposal to be continued as a cross-border research project after the elective was completed. When asked if they truly believed their research would continue upon returning to their respective medical schools, most students were
optimistic and believed that the design of their projects was conducive to their eventual completion. As one student commented, “Yes, since the aim of the project is for health in general, and since we’re working through university (I mean it’s not political, I don’t think there’s going to be a problem)…” (IPEM112, QQ2, Q6)

In addition, most students held that collaboration between medical professionals from opposing sides of a conflict would not and should not be subject to the political barriers apparent in other sectors of society. When asked if colleagues ‘at home’ would be supportive of their collaborative work, the majority believed that they would: “They will be very supportive and interested in the project particularly in my university that put big emphasis in the Arabs and Israeli relationships and collaboration and involved in many projects in Jordan and Palestine.” (IPEM331, QQ2, Q7) This sentiment is reflected in the responses of all IPEME students. Their perspective at the end of the elective seemed to be that their role as physicians is not just limited to treating patients: “Every experience you live will affect you some how and this experience made me more motivated to learn not only the pure medical knowledge but also about the global health issue and to think about the ethical issue in medicine. It made me realize more and more that medicine is responsibility.” (IPEM222, QQ2, Q5)
5. Discussion

The purpose of the research described in this thesis was to evaluate the International Pediatric Emergency Medicine Elective (IPEME) as a case study of a peace-through-health initiative. To this end, a mixed-methodology was used to evaluate IPEME quantitatively and qualitatively. The design of a novel evaluation tool served to evaluate IPEME students’ attitudinal change (‘ethically’ and ‘professionally’) in terms of the WHO 5 Star Criteria using quantitative data obtained from visual analogue scales and qualitative data from select open-ended questions. Supplementary qualitative data was obtained via two qualitative questionnaires and field notes taken throughout the elective. These additional sources of information served to saturate themes derived from the primary evaluation and help explain its results. The combination of quantitative and qualitative data collection methods ultimately served as a means of triangulation, thereby limiting some of the biases inherent in single method studies (Denzin, 1999).

It was not the intention of this research process to make definitive and far-reaching conclusions about the nature of peace-through-health initiatives. This thesis was instead designed to evaluate IPEME for what it is: a medical elective that uses health, or more specifically, health education as a vehicle for peacebuilding. The peace-through-health literature described in Chapter 2 reveals a number of variations in peace-through-health initiatives. Scolnik makes the distinction between broad, macro-level work that strives to foster measurable ‘peace’, and narrowly-focused, micro-level work that, while using health as a vehicle for peacebuilding, has tangible, more proximal outcomes that can be assessed (Scolnik, 2006). Using the logic of Mary Anne Peters in A Health to Peace Handbook, Scolnik justifies such projects as peace-through-health initiatives,
stating that “there is an acceptance and hope that building bridges to peace, and taking small steps to improve the relationships between increasing numbers of people on different sides of the divide through the creation of a network of knowledge and cooperation, will lead to the direction of peace in the long-term.” (Ibid) This logic reflects the impetus for the evaluation of IPEME students’ attitudinal change in terms of the WHO 5 Star Criteria for Global Doctors. While demonstrable change (or lack thereof) cannot be held as indicative of the elective’s success or failure as a peace-through-health initiative, it can be used to reflect upon the elective’s learning experience and the types of students it is recruiting. Insight into the workings of IPEME may then permit discussion about its place in the larger body of peace-through-health work.

Even though IPEME was evaluated as a narrowly focused initiative and presents an apolitical stance (in line with the work of CISEPO) with respect to peace-through-health work, it nevertheless required different analytical considerations than other initiatives, such as CISEPO’s MEHA project, described in Chapter 2 (CISEPO, 2009). As stated earlier, IPEME is a medical elective, not collaboration between experienced professionals. As such, its strength may be that it acts as a call for medical schools and other academic institutions to consider hosting such electives themselves, or, as has already happened, encourages peace-through-health teaching for medical professionals as well as political scientists and peaceworkers (BMJ Editorials, 2001). IPEME is also different in that it takes place in a culturally diverse but politically neutral location. IPEME participants held this to be one of the elective’s most important characteristics because it allowed them to feel comfortable and free to speak their minds (see Chapter 4). A potential drawback is that the neutrality of its venue combined with the neutrality of its
mandate could do a disservice to the inherently controversial nature of collaborative work between members of opposing sides of a conflict\textsuperscript{41}. The following sections discuss the learning experience provided by IPEME in light of evaluation results and subsequently consider the implications of the elective for the greater body of peace-through-health work.

5.1. Quantitative Evaluation of Attitudinal Change (Visual Analogue Scales)

Analysis of visual analogue scales revealed very little change in responses between pre and post-elective questionnaires. Results showed that one participant (IPEM332) showed a significant change in scores and four other participants showed a trend toward significant differences. The evaluation questions and their associated video clips were selected for their portrayal of scenarios that would reflect the principles of the WHO 5 Star Criteria for Global Doctors. The lack of significant change in students’ responses (discounting limitations in measurement) thus speaks to the possibility that students did not view the ethical and professional dilemmas presented in the video clips any differently after the four-week elective than they did at the beginning. Assuming that the connection between the substance of the video clips and the principles of the WHO 5 Star Criteria is legitimate (the limitations of this assertion will be discussed in subsection 5.5.), quantitative results obtained from visual analogue scales reveal that students’ thinking in terms of the WHO Criteria may not have changed over the course of the elective. There are three possible explanations for such findings: the IPEME curriculum failed to place sufficient emphasis on “ethics and professionalism” in clinical settings, the

\textsuperscript{41} This is not meant to be a statement of fact but simply a possibility observed by the researcher through extensive participatory observation.
evaluation tool was not sufficiently sensitive to detect attitudinal changes, or, perhaps, students’ attitudes with respect to ethics and professionalism in this context were already well-developed and were therefore not a principal learning outcome.

Further analysis of students’ scores revealed that there were observed differences among student responses both pre and post-elective (between participants). Post hoc analysis revealed, however, that these differences were not contingent upon nationality or gender (no interaction trends were observed). The fact that students answered questions differently does not speak to their attitudinal change in terms of the WHO 5 Star Criteria, but the fact that they produced different answers for many questions may be indicative of their pivotal nature. Since the questionnaire developed for this evaluation had not been formally validated prior to testing with IPEME students, this result adds to its internal validity\(^{42}\) (this will be further discussed in the following section on ‘Limitations’).

A final interesting finding produced by the VAS scores was the tendency of students’ answers to polarize in post test. While this observation could not be verified statistically, it seems clear from the results presented in Figures 3 and 4 that answers tended to shift from the ‘center’ of the scales to the poles. This cannot be said to be direct evidence of attitudinal change per say but may indicate a solidification of already present attitudes toward the scenes presented in video clips.

5.2. Qualitative Evaluation of Attitudinal Change (Open-Ended Questions)

The thirty-five questions – posed at the beginning and the end of the elective – were assessed according to responses on the visual analogue scales discussed above.

\(^{42}\) Internal Validity speaks to the ability of a measurement instrument to effectively (accurately) measure that which it purports to measure. In this case, it is the ability of the Video Clip Questionnaire to measure changes in students’ attitude.
Sixteen open-ended questions were also included in the video-clip questionnaire to provide additional insight into the thinking of IPEME students. Qualitative Data Analysis (QDA) using NVivo software revealed that students’ answers reflected the principles of the WHO 5 Star Criteria for Global Doctors. Using the criteria definitions described by Boelen (1996), a list of key concepts was used to identify relevant excerpts within open-ended questions (see Table 6). Results showed that students’ responses to the ethical and professional dilemmas presented to them reflected the principles embedded in the criteria of Care Provider, Decision Maker, Communicator, and Manager (Boelen, 1996).

The major exception to this rule is the fact that no responses addressed the criterion of Community Leader. The Community Leader criterion purports that the work of the WHO ‘global doctor’ will extend beyond the clinic to the community. This may be in the form of advocacy, involvement in public health concerns, and the like (Boelen, 1996). It was not a complete surprise that students’ answers did not reflect notions of community involvement because the video clips chosen were largely set in clinical and/or emergency room scenarios. It is also possible that that the IPEME curriculum failed to emphasize how work in a clinical setting often translates to the community as a whole, thus prompting students to answer solely within this “clinical box”. The absence of “Community Leader” should not be discounted as merely a failure of the evaluation tool and IPEME directors should consider whether the elective curriculum is indeed conveying the holistic view of medicine purported by Boelen. The positive aspect of these qualitative results remains that they show students were considering the many factors that Boelen believes a ‘global’ doctor must. They may also explain why significant changes were not seen between pre and post questionnaires according to the
visual analogue scale analysis. Students may simply have been open-minded and critical prior to arriving. Indeed, the selection process supports this notion\textsuperscript{43}, as do observations of students’ conduct throughout the elective (to be discussed below).

Quantitative results produced by examination of visual analogue scales at the beginning and end of the elective reveal little demonstrable change in terms of student attitudes to the presented video clips. However, coding of themes according to the WHO 5 Star Criteria revealed a large increase in excerpts pertaining to the \textit{Communicator} criterion in post test open-ended questions (Table 4 summarizes these results). The increase in references to this criterion may be indicative of an increase in student concern for making sure both patients and health care team members are informed in medical situations. As was described in Chapter 3, the clips selected for this evaluation were intended to present difficult, realistic ethical and professional dilemmas faced by medical professionals. Communication was an important theme raised throughout the elective in presentations on ethics, networking, conflict resolution, difficult patient scenarios, and psychiatry (see Appendix C) and forming networks and a space for dialogue is one of the core tenets of IPEME and its partner organization, CISEPO.

The results of this analysis do not presume causality, and it is with full recognition of this evaluation’s exploratory nature that they are presented. However, it is very interesting that of all the criteria, additional excerpts were seen in post test that addressed the need to at least attempt to convey as much information as possible given the circumstances present. Supplementary qualitative data supports the increased

\textsuperscript{43} Students are selected not only for their academic performance, but also for their interest in cross-border work, and interest in collaborating with medical professionals from other cultures. It is easy to see that such characteristics may complement the open-mindedness reflected both at the beginning and the end of the elective.
emphasis on communication (although this emphasis is placed more on cross-border collaboration and teambuilding). When asked how the elective may have an impact in the long run, one student replied: “I’ve learnt was about social and communication skills which are highly relevant to me as a doctor, that suppose to work with different kind of people and help them.” (IPEM332, QQ2, Q5). It may be no coincidence that the overarching idea of creating a space for dialogue and encouraging communication held by CISEPO is reflected in students’ learning experience provided by IPEME, its partner organization.

5.3. Supplementary Qualitative Data

Evaluation of students’ attitudinal change in terms of the WHO 5 Star was the primary means of assessing the International Pediatric Emergency Elective (IPEME) as a case study of a peace-through-health elective. While the questionnaires used for this evaluation were designed specifically for this study and thus lacked the internal validity required to claim causality, the process of designing the questionnaire, the focus on triangulating methods (quantitative and qualitative) (Denzin, 1999) and the relative responses of participants all served to provide insight not only into the sensitivity and validity of the questionnaire, but also – and more importantly for the purposes of this thesis – into the learning experience provided by IPEME. The results of the attitudinal evaluation reveal that students consistently assessed situations in accordance with the principles described by the WHO 5 Star Criteria (with the notable exception of Community Leader). However, the lack of significant attitudinal change (VAS scores) suggests that students may not be learning significantly more in terms of thinking about
ethical and professional dilemmas presented by the video clips. The limitations inherent in the choice of a ‘pilot’ questionnaire as an evaluation tool will be discussed in Chapter 5.5., but given the exploratory nature of this thesis, the possibility will be considered that students already possessed developed ethical and professional attitudes (at least in the sense evaluated). There also remains the possibility (though not heavily supported by supplementary qualitative data and field notes) that the IPEME curriculum did not sufficiently address ethics and professionalism so as to evoke significant change.

Supplementary qualitative data was collected for two purposes: further triangulation of methods and as a window into other aspects of IPEME not revealed by the limited testing of the Video Clip Questionnaire. It was noted that supplementary qualitative data was collected from two qualitative questionnaires (one at the beginning and the other at the end of the elective) and from field notes taken during participatory observation throughout the four-week elective. Compilation of questionnaire responses and field notes revealed a number of themes, some of which support the results acquired from the attitudinal evaluation and some that highlight other, perhaps more novel, learning experiences provided by the elective as well as certain shortcomings.

All students (even Canadian students) believed that the location of the elective was crucial. It was interesting (although perhaps not surprising) that reasons for the importance of the elective’s location in Toronto differed between students from Canada and those from the Middle East. The Canadian students identified practical, ‘medical’ advantages to hosting the elective in this location (Field Notes). It is true that the Canadian medical curriculum offers much more hands-on, clinical experience than those in the Middle East (Ibid). This was exemplified by the observed excitement from Middle
Eastern students at the opportunity to suture, cast, and learn advanced cardiac life support (ACLS). However, it was surprising that Canadian students believed the location of Toronto to be beneficial for “clinical aspects” (IPEM001, QQ1, Q3) while Israeli, Jordanian, and Palestinian students emphasized the comfort offered by Toronto’s multicultural dynamic. The emphasis on importance of location is not necessarily significant in itself, but it speaks to the ability of the elective to create a positive space for dialogue between medical students from different sides of a conflict. As one student remarked, “At the beginning, we were just colleagues that were working together, we didn’t know much about each other. Now, we’ve shared moments and experiences with each other. Our relationships are deeper and now we’re friends.” (IPEM112, QQ2, Q3).

The ability of a chosen location to provide opportunities for dialogue and relationship building is mirrored in the decision by IPEME directors to have all students (including Toronto-based Canadians) live together for the duration of their stay in Toronto. Chapter 4 described how a common residence did not yield a group of eight students traveling in unison, but succeeded in creating a sense of kinship and togetherness that once again provided the comfort level needed to foster professional and personal relationships: “Talking with people that are different from me in many aspects, living with them and spending so much time together, made me realize how important it is to be patient and try to understand others…” (IPEM332, QQ2, Q1). Given the nature of peace-through-health initiatives in general, the ability of the elective to set the proper stage for discussion and relationship building may be more important and more attainable than teaching ethics and professionalism.
The fact that limited attitudinal change was seen in terms of the WHO 5 Star Criteria suggests that students may not have learned much additional information in terms of how to think about/deal with ethical and professional dilemmas – although responding to the presented scenarios may have reinforced their attitudes (as may be exemplified by the ‘polarizing’ of post test answers). On the other hand, qualitative data analysis suggests that communication skills in difficult situations were highly emphasized throughout the elective as exemplified by students’ responses on the questionnaire. These findings in no way suggest that ethics and professionalism were the only subjects that IPEME sought to teach. As previously mentioned, there exists the possibility that the measurement tool was sensitive and that ethics and professionalism were simply not properly taught in the four-week elective. The most that can be said is that testing change ethical and professional attitudes in response to medical drama scenarios may not be the most effective means of assessing what students were learning, either because they were already well-versed in this regard, or because IPEME did not concentrate adequately on this area. Chapter 4 described what students felt they learned from their time in Toronto, which was said to be practical skills, teambuilding/understanding, as well as novel topics such as Global Health (Chapter 4.2.1).

Another aspect students identified as important was the elective’s focus on collaborative research. Chapter 4 describes how students viewed this element as an important way of sustaining relationships fostered during their time in Toronto: “I believe my self being persistent with the thing that I usually do and this project is really very important and may be can bring to some change and I feel that this project is like a mission and the little thing that we can take and do as part of this program” (IPEM331,
Students’ enthusiasm about completing their collaborative projects may have also been due to the fact that it was something novel for them. As one student noted, “the program gave me the chance to work on a research with international students and I found it a great responsibility, even though the program didn’t concentrate on the research doing aspect, and it expected that all the students have experience with researches – which is not true.” (IPEM222, QQ2, Q1) Similar to Global Health topics, students had not been overly exposed to research methodology (Field Notes). Introduction to this aspect of medicine was viewed as a very important component of the IPEME curriculum.

One of the purposes of obtaining supplementary qualitative data was to provide insight in the broader idea of IPEME as a peace-through-health initiative. Evaluation of students’ attitudinal change in terms of the WHO 5 Star Criteria was used to assess one possible learning experience provided by the elective: learning in terms of students’ perspectives toward common ethical and professional dilemmas faced by medical professionals. Supplementary data was used to examine what other learning experiences were seen to be important in an attempt to gauge where the strengths and weaknesses of the elective lie.

To provide added context to the research conducted in this thesis, the elective’s focus on peace-through-health was also assessed. Chapter 4 describes how field notes acquired through participatory observation show peace-through-health to be under-addressed in the IPEME curriculum. Despite an afternoon session dedicated to health as a vehicle for peacebuilding (see Appendix C), such concepts did not appear to be integrated throughout the four-week program. When asked questions that pertained to the sensitive
role of doctors in conflict regions, particularly when conducting collaborative work, responses were mixed. Some students commented on the cultural differences that need to be addressed and the diplomatic skills required when conducting such work. Others were less inclined to broach these topics and some even seemed dismissive of the controversial and sensitive nature of peace-through-health work. While directly teaching peace-through-health concepts is not necessarily one of the goals of IPEME, the method in which these concepts are approached is important for the elective’s evaluation as a peace-through-health initiative. Table 7 provides a diagrammatic summary of the discussion to this point. The section to follow will discuss the implications of this evaluation for IPEME as a case study of a peace-through-health initiative.
### Table 7: Summary of IPEME Evaluation

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Findings</th>
<th>Implications</th>
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<tr>
<td>Evaluation of Attitudinal Change</td>
<td>Little demonstrated change in terms of ethical and professional attitudes.</td>
<td>Evaluating the elective in this manner was meant to assess just one aspect of the IPEME learning experience. Because the WHO 5 Star Criteria reflect the ‘global’ characteristics needed to practice medicine in a conflict region, they were thought to provide a useful benchmark upon which to judge IPEME students. The lack of attitudinal change combined with demonstration of these criteria in open-ended questions suggests that students were already very open-minded and thoughtful upon arriving in Toronto. These findings are by no means conclusive as there remains a possibility that the elective curriculum simply was not equipped to teach ethics and professionalism in the manner defined by this evaluation. The increased focus on communication is interesting and may reflect the collaborative, relationship-building goals of the elective. The emphasis on communication is evident throughout the curriculum and supplementary qualitative data. It seems that ethics and professionalism in the settings presented in the video clips are not a significant learning outcome of the elective, but communication appears to be.</td>
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<tr>
<td>(Quantitative and Qualitative)</td>
<td>Tendency of answers to ‘polarize’ in post test</td>
<td></td>
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<tr>
<td></td>
<td>Qualitative Data Analysis demonstrates that communication is emphasized much more in post test questionnaire.</td>
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<td></td>
<td>Students shown to be analyzing scenarios presented in video clips in line with principles of WHO 5 Star Criteria.</td>
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<tr>
<td></td>
<td>No significant interaction of nationality or gender</td>
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<tr>
<td>Evaluation using Supplementary Qualitative Data (Qualitative Questionnaires and Field Notes)</td>
<td>Qualitative Questionnaires and Field Notes show that Location and Living Arrangements are crucial for fostering relationships and bridging initial differences in culture and religion.</td>
<td>Supplementary qualitative data supports the finding that communication skills were an important learning aspect of IPEME although the primary evaluation focused on clinical settings and admittedly failed to evoke the “Community Leader” criterion. Ethics and professionalism pertaining to clinical situations (as exemplified by the selected video clips) may not have been the most important learning experience provided by IPEME, especially since students seemed to be very ethical and professional from the very beginning. The true value of IPEME seems to stem from its emphasis on global health, teambuilding, cooperation, practical activities, and collaborative research. The lack of formal discussion about peace-through-health work does not necessarily take away from the learning experience of the elective and arguably does not end the debate about its role as a peace-through-health initiative, but better integration of such concepts should certainly be considered in the future.</td>
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<td></td>
<td>The most novel learning outcomes were said to be practical activities such as suturing and casting, cross-cultural learning, global health. Teambuilding and dialogue also thought to be highly important.</td>
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<td></td>
<td>Collaborative Research was seen as very important and as a means for sustaining personal and professional relationships.</td>
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<td></td>
<td>Peace-through-health concepts appeared to be underrepresented in the formal curriculum and this was reflected in students’ responses.</td>
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5.4. IPEME as a Case Study of a Peace-Through-Health Initiative

The results discussed above highlight many features of the elective that make it a unique and potentially valuable contribution to the greater body of peace-through-health work, but also emphasize room for improvement, particularly with respect to the proper integration of peace-through-health concepts. Chapter 2 of this thesis sought to define the various parameters of peace-through-health initiatives while recognizing that no single definition exists. The following sections discuss IPEME in light of the results of its evaluation in terms of students’ learning about ethics and professionalism, as well as with respect to supplementary qualitative questionnaires and field notes. While imperfect, the results of this thesis see IPEME as possessing core attributes of peace-through-health initiatives as well as novel attributes that make it worthy of future consideration.

5.4.1. IPEME as a ‘typical’ PTH Initiative

Chapter 2 described three primary ways of thinking about peace-through-health initiatives. First, they differ from humanitarian aid missions in that their goal is not to provide medical services to those afflicted by conflict, natural disasters, and so on. Peace-through-health initiatives instead use medicine, or the collaborative work of medical professionals, to facilitate dialogue, discussion, cooperation, and ultimately, peaceful relationships between opposing sides of a conflict. Secondly, it was said that peace-through-health initiatives may lie somewhere on a continuum between ‘neutral’ and ‘political’. Even these terms tend to retain some ambiguity since ‘neutral’ may mean something different depending on the context (e.g. political neutrality versus ‘neutral’ health advocacy). Finally, based largely on the work of Scolnik, peace-through-health
initiatives can be seen to operate on a continuum between broad, macro-level initiatives and narrowly focused micro-level initiatives (Scolnik, 2006).

IPEME possesses a number of these ‘typical’ characteristics. The elective operates as a peace-through-health initiative in that its goals are not at all to provide relief or medical care to those afflicted by humanitarian crises. As a medical elective its goal is ultimately to educate medical students in a variety of subjects. But its emphasis on fostering cooperation between health professionals from opposing sides of a conflict clearly places such an initiative as a peace-through-health initiative and not a medical-relief initiative.

Since IPEME is a partner of CISEPO, which has been considered by this thesis as an example of a peace-through-health organization with an apolitical mandate, it was thought from the beginning that the elective would conform to such a neutral stance. Indeed, the emphasis on relationship building through learning, understanding, and communication place IPEME at the neutral end of the political spectrum. Regardless of the personal political views of its participants, the elective focused heavily on the apolitical, Hippocratic ideals of medicine as a way of fostering a dialogue above politics. In this sense, the ability of doctors to put aside their ethno-religious differences and concentrate on the common bond forged by medicine was perhaps the elective’s primary theme, not teaching ethics and professionalism.

If it is easy to see that IPEME can indeed be considered a peace-through-health initiative, it is much harder to determine in what way it should be measured as such and how its contribution to peace-through-health work could be discerned. This thesis

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44 Reference to the Hippocratic Oath taken by all physicians around the world upon graduating from medical school.
effectively treated IPEME as a narrowly focused peace-through-health initiative, whose success would not necessarily be measured by its ability to foster ‘peace’, but instead by the learning experience it provided students. If the learning experience was shown to prepare students to practice medicine in conflict regions and foster relationships between members from opposing sides of a conflict then this success could be seen as indicative of a successful peace-through-health initiative. However, as the last four chapters have described, evaluation of one learning outcome (attitudinal change) is not sufficient to judge IPEME’s success as a peace-through-health initiative. This thesis explored only a small number of factors (e.g. ethical and professional attitudes, importance of location) in an attempt to provide insight into the workings of the elective.

5.4.2. IPEME as a ‘unique’ PTH Initiative

To further contextualize the findings of this study, supplementary data was obtained to provide insight into evaluation results. In this way, IPEME was also assessed in terms of the broad, macro characteristics that make it unique. Section 5.4.1 makes the case that in many ways IPEME is similar to other peace-through-health initiatives, particularly those conducted by CISEPO in the Middle East. However, as was described in Chapter 2, IPEME was seen to possess unique characteristics that made it both difficult and interesting to investigate. In many respects, the elective can be assessed in the same way as, say, some CISEPO endeavours. Instead of remaining concerned with whether an initiative is leading to peace, particular ‘peaceful’ outcomes can be selected for measurement. Questions such as, “Are relationships being built between members from opposing sides of a conflict?”, or, “Is medicine being used as a common bridge for
creating these relationships?” become important ways of measuring success. However, the results of this thesis reveal that IPEME is distinguishable in a number of ways and perhaps requires a different analysis.

The first and most obvious distinction is that IPEME is a medical elective. As a result, its goals must include education. In terms of peace-through-health, the elective presents an opportunity to teach students valuable skills that may serve them in their future practice and inspire them to engage in collaborative, cross-border efforts of the kind conducted by CISEPO and others. As an official medical elective, IPEME’s formal learning experience should perhaps be seen as equally important to its informal relationship building. It was for this reason that evaluation of IPEME was based on the WHO 5 Star Criteria. It was thought that the ‘global’ nature of their principles could be a valid source of insight into the types of students recruited for the elective and a means of identifying change in terms of ethical and professional attitudes.

The second, and arguably most important, characteristic of IPEME that makes it unique from other peace-through-health initiatives is its location. Very few (if any) peace-through-health initiatives take place outside of a conflict or post-conflict region. It is for this reason that it remains unclear exactly where IPEME lies on the macro-micro continuum of peace-through-health initiatives discussed in other sections (see Figure 1). According to CISEPO representatives, their operations have migrated to ‘neutral’ countries such as Cyprus if the political climate in the Middle East became too hostile (Field Notes). In addition, Rowson and Melf held that peace-through-health conferences often took place in locations outside conflict zones for the purposes of discussion and planning (Rowson and Melf, 2009). This thesis evaluated IPEME as a narrowly focused,
on-the-ground peace-through-health initiative because it used medicine (pediatric medicine) as a unifying factor for burgeoning health professionals from the Middle East and Canada. This is markedly different from a conference held between seasoned medical professionals who had engaged in previous collaborative work. However, because IPEME is located in Toronto and operates with an apolitical mandate, it lacks some of the important characteristics of a practical on-the-ground initiative, such as confrontation of the implications of this work on a daily basis.45

5.4.3. IPEME and Peace-Through-Health

This thesis has presented IPEME as a flawed but nevertheless unique initiative in the world of peace-through-health. The elective was evaluated in terms of measurable learning outcomes but also used supplementary qualitative data to provide insight into these results and identify other important aspects of the IPEME learning experience. Evaluating students’ attitudinal change involved assessment of students’ reactions to ethical and professional dilemmas in terms of the principles of the WHO 5 Star Criteria and sought to determine if these attitudes had changed throughout the course of the elective. Even though significant change in ethical and professional attitudes was not observed, qualitative analysis revealed that students’ responses did indeed seem to reflect the principles of the reference criteria. In addition, students showed a marked increase in their focus on communication skills even in difficult situations, a finding supported by field notes and responses to qualitative questionnaires. In terms of peace-through-health

45 This issue is raised in response to mixed student responses to questions pertaining to the role of physicians in conflict regions or how political to be. Some students had clearly given much thought to the implications of collaborative work with members of an opposing side of a conflict, while others seemed quite dismissive. It is for this reason that further facilitated discussion of peace-through-health work and the political implications of conducting such work may have been beneficial.
work, medical professionals will require the critical, open-minded perspectives demonstrated by IPEME students and it may therefore be testament to the quality of participants and the rigour of the selection process that very little change was observed.

However, student responses to qualitative questionnaires and data gained from field notes revealed that other aspects of student learning may have been equally, if not more important, to measure. Qualitative data reveals that students were very open-minded and aware of the numerous factors that affect ethics and professionalism in clinical settings. One subject about which students seemed to learn a great deal – which coincidentally is reflected in the one WHO Criterion not addressed by video clips – was health concerns outside of the clinical setting, in particular, global health. Almost all students listed Global Health topics as an area they had heard little about and were very interested in (Field Notes). The lack of quantitative attitudinal change in terms of ethics and professionalism and the lack of reference to the Community Leader criterion, should not be dismissed and may be indicative of IPEME curriculum shortcomings. However, as a whole, the evaluation conducted for this thesis seems to have demonstrated the ability, integrity, and professionalism of IPEME students. In essence, evaluation in terms of the WHO 5 Star Criteria succeeded in confirming that the elective is recruiting and fostering relationships between bright and open-minded professionals, and in showing that students began to see the increased importance of communication in practicing medicine. As a peace-through-health initiative, IPEME can be thought of as successful for this reason. However, the quality of relationships and emphasis on practical activities and global health may have been other tangible learning outcomes more worthy of evaluation and more directly connected to the motivation behind peace through health.
5.4.4. Conclusions

The evaluation of IPEME as a case study of a peace-through-health initiative revealed that students’ attitudes reflect the principles of the WHO and, while significant change was not seen, these results suggest IPEME students are very capable of adapting and considering the multitude of factors that arise when practicing medicine in conflict or post-conflict regions. In addition, it seems as though the elective’s emphasis on communication and listening, whether it be with patients or fellow health professionals, is being heeded. Supplementary data also shows how the elective’s neutral and multicultural location contributed to respectful discussion and the formation of professional and personal relationships between students and between students and IPEME staff. Taken together these findings paint the elective as a novel endeavour with the potential to foster dialogue and professional cooperation between aspiring physicians from the Middle East and Canada and teach novel practical and global health knowledge students may lack in medical school curricula. The International Pediatric Emergency Medicine Elective (IPEME) is unique and will require constant quality improvement, particularly in terms of measurement and integration of peace-through-health topics, but it remains a novel endeavour and a creative means of building on peace-through-health work nevertheless.
5.5. Study Limitations

This analysis sought to evaluate IPEME as a case study of a peace-through-health initiative by focusing primarily on students’ attitudinal change in terms of the WHO 5 Star Criteria. The assertion by peace-through-health authors like Scolnik and Arya that broad concepts like ‘health’ and ‘peace’ are inherently difficult to define was the impetus for the specific focus on the learning experience provided by IPEME. Based on the experience of Scolnik and the reservations of other peace-through-health experts, it was thought that IPEME’s contribution to the greater peace-through-health work could be best discerned by evaluating it for what it is: a medical elective. The reasoning was that once it was clear what learning experience IPEME provided, its impact as a peace-through-health case study could be better deciphered. However, the impact of the study is nonetheless inextricably linked to its limitations. Evaluating an outcome as ambiguous as attitudinal change is difficult and a number of limitations had to thus be accounted for in this analysis.

5.5.1. Limitations in Internal Validity

The study described above took pains to ensure triangulation of methods by employing a “mixed-methods” methodology (Denzin, 1985). The Video Clip Questionnaire based on the WHO 5 Star Criteria for Global Doctors described in Chapter 3 was designed specifically for the evaluation of IPEME. Chapter 3 notes that the questionnaire was tested prior to commencement of the elective to retain as much internal validity as possible. Five pilots subjects (Two were chosen as English as a Second Language (ESL) students) were tested to validate the pivotal nature of the questions and
to verify language appropriateness and ease of completion (use of scales and time limit). Modifications were made in light of feedback from these pilot subjects. Terms that were considered “leading” were rephrased and questions thought to be too simple or too complex were either omitted or reworded. The evaluation results from this thesis revealed that a range of attitudes were displayed on most questions and responses to open-ended questions indicated that students had no problem with grasping the nature of questions (see Chapter 4). Language barriers were an issue for presenting the video clips as well. Because many of the clips portrayed fast-paced medical scenarios, pilot subjects commented that certain conversations were difficult to completely understand. To address this, a synopsis highlighting the main points of each clip was read prior to viewing and clips were replayed or explained as needed.

Despite such measures, two threats to internal validity still existed. First, five pilots subjects is helpful, but not sufficient to ‘validate’ a measurement tool. As a result, the Video Clip Questionnaire can only be analyzed as a pilot-tested instrument, not as means of claiming causality. Triangulation of methods using quantitative and qualitative methods and supplementary qualitative data from questionnaires and field notes was used to account for limitations in such single method measurement (Denzin, 1985), however results produced by such a measurement tool remain largely speculative. The second issue concerns the connection between the WHO 5 Star Criteria and the content of the video clips and questionnaires. The definition of each criterion conceptualized by Boelen were used to select clips as well as interpret qualitative findings, however, it cannot be said that the evaluation tool embodied the WHO Criteria, but simply that the two are related. The Video Clip Questionnaire used to evaluate students’ attitudinal change in
terms of the WHO 5 Star Criteria is a novel evaluation tool that has been shown to produce interesting and defensible results. However, for its findings to be considered in any way conclusive, it must be further tested and refined.

5.5.2. Sample Size and Limitations in Statistical Power

The methodology of this thesis was in effect an evaluation of a case study. Limitations of this analysis in terms of evaluation are discussed above, but there are distinctive biases that arise when examining case studies, the most significant of which is external validity. It was noted that this thesis is an exploratory as opposed to explanatory study and it is thus not the intention of this research to generalize its findings to other peace-through-health initiatives – particularly since it is unique within peace-through-health work. Yin holds that in depth, focused study of a particular initiative is useful for providing insight into the conduct of a project and for informing theory (Yin, 2008). Thus, despite a sample size of only eight participants, the results of this study can be said to provide insight into a novel peace-through-health initiative and may thus, using Yin’s logic, contribute to the greater body of peace-through-health work. Nevertheless it must be recognized that the statistical power of the results presented in this thesis is low and that generalizability (external validity) based on such a small sample size is not possible. The strength of this study therefore does not come from its ability to claim causal relationships but from triangulation of methods that resulted in a multifaceted examination of a unique medical elective.
5.5.3. Selection and Testing Biases

IPEME participants were selected based on their academic abilities, personality characteristics, and interest in cross-border medical work (as exemplified by an essay and application form). A lack of random selection or random assignment is characteristic of exploratory case studies but must be addressed regardless. Two main subject biases must be discussed: selection bias and testing bias.

Selection bias was a pervasive threat from the very beginning and may partially explain the lack of significant difference in responses on the Video Clip Questionnaire and the fact that most answers, even in response to controversial questions, were thoughtful and empathetic in nature. Students were selected according to academic achievement, personal essays and interest in cross-border initiatives (Field Notes). In summary, they were pre-selected to be diplomatic, thoughtful, worldly, and mature. It is not insignificant to note that the majority of students were made aware of the program by a past participant and thus were very well informed, not only from the information letter and application form, but also from the experience of their colleagues. As a result, the chance of selecting students from the political extremes was limited. Because of the high caliber of students it was not surprising that little attitudinal ‘change’ was seen in response to the Video Clip Questionnaires. As discussed in previous sections, students most likely did not change their ethical and professional perspectives because they were already highly thoughtful students.

Testing bias was also potentially confounding. The reality is that IPEME is advertised as a peacebuilding elective (Field Notes). Students may not completely understand the implications of the term, but were aware that the basic premise of the
program was cross-border initiatives, collaborative work and peace (Field Notes). Thus, even before the elective began, their perceptions of what was expected of them may have biased their answers to the Video Clip Questionnaires. Supplementary qualitative data obtained at the beginning of the elective also supports this notion. In short, findings may have been biased by the fact that students answered what they believed IPEME researchers wanted to hear.

5.6. Future Directions: Sustainability and a Place for Politics?

The International Pediatric Emergency Medicine Elective (IPEME) has just completed its third official year of operation. It was noted in Chapter 2 of this thesis that the elective has taken measures to improve each year through feedback questionnaires and short one-on-one interviews (Field Notes). IPEME has succeeded in creating a novel and progressive program that is just beginning to garner the international attention (and funding) it deserves. It is clear that future IPEME programs must continue to refine the curriculum, improve the student learning experience, and integrate peace-through-health concepts. Variety in terms of learning experiences is a great thing as long as students do not lose track of the reason for the elective and the sensitive aspects of cross-border collaboration. To this end, IPEME directors must continue to look back at their original goals and think about how well they are adhering to them and/or if they require modification. At times it felt as though there were almost too many program objectives. Collaborative research, peacebuilding, pediatric medicine, and conflict resolution were just some of the subjects covered. Student feedback noted that while global health and practical sessions were extremely valuable, didactic lectures on pediatric medicine and
conflict resolution workshops were not as useful (perhaps because they were already well-versed in the subjects). While student opinions will likely change depending on the group, it is important for the curriculum to keep students’ attention so that the unique nature elements of the elective are underscored.

Future research should continue to focus on improving and refining the curriculum without making it mundane, and on assessing its long-term effects. This does not mean that outcome measures should shift from tangible learning outcomes such as attitudinal change to broader, peace-related measurements. Indicators of sustainability could include progress on collaborative research projects, and frequency of communication between past participants. For instance, IPEME directors have already begun planning an IPEME alumni conference to be held in 2010 (Field Notes).

A final aspect that has only been briefly mentioned is the place of politics. It was held that IPEME, like CISEPO, is an apolitical organization that believes in the positive effects of fostering relationships and building professional partnerships (CISEPO Website). However, the unique nature of IPEME may make this apolitical stance harmful to students’ learning experience. IPEME directors have elected to allow debate about the Arab-Israeli conflict to take place organically, and this happened to some degree (Field Notes). However, student responses to some politically charged questions reveal that some possessed very strong opinions about the role of physicians in conflict regions – opinions that may have been better expressed in moderated focus groups, for instance. This is not to say that IPEME should compromise its apolitical, relationship-building mandate, but if the elective wishes to use health as a vehicle for peacebuilding, it seems that students should be aware of what this means and further encouraged to express their
opinions. Without directly addressing the political nature of IPEME it may be easy to forget (or to never know) how progressive – and often controversial – such an elective is when located in a city like Toronto. CISEPO personnel, for example, are presumably reminded every day about the sensitive nature of their work by the fact that they are working in conflict/post-conflict regions. IPEME students should also be pushed to confront the reality of what they are doing.

5.7. Impact of the Study: Implications for Peace-Through-Health Work

The principle quantitative finding of this thesis is that limited change in ethical and professional attitudes was seen in response to a series of six medical scenarios that were designed to reflect the principles of the WHO 5 Star Criteria for Global Doctors. One participant did show a significant difference in VAS scores between pre and post-tests and three other participants demonstrated a trend toward significance. Regardless, attitudinal change in terms of the WHO Criteria was deemed to be limited. However, qualitative data analysis of open-ended questions revealed that IPEME students responded to ethical and professional scenarios in line with the WHO 5 Star Criteria and the majority showed a large increase in reference to communication in difficult situations. This finding was supported by supplementary qualitative data and further saturated the theme of communication emphasized throughout the elective (see curriculum description). IPEME should still reexamine its current curriculum if it wishes to establish itself as an initiative that teaches “ethics and professionalism” for clinical settings. However, a lack of demonstrable change in this area does not discount it as a peace-
through-health initiative, particularly in light of additional data that suggests an adherence to the principles of the WHO Criteria.

How selection and testing biases may have contributed to the lack of observed attitudinal change was discussed. It is important to remember that this evaluation was intended to assess one learning outcome of IPEME and cannot be used to consider the overall success of the elective as a peace-through-health initiative. Indeed, supplementary qualitative data revealed a number of other – perhaps more important from a peace-through-health perspective – aspects students believed to be important learning outcomes (such as location, networking/collaboration, global health, and practical skills). For the purposes of this analysis, the elective’s contribution to peace-through-health work was defined by its ability to produce a successful learning experience that could prepare students to work in conflict regions. While limitations in methodology exist, this thesis has shown IPEME to be an imperfect but unique type of peace-through-health initiative. In this light, this study may have an impact on the greater body of peace-through-health work (particularly IPEME itself) as well as the field of medical education.

It was stated that results of this thesis could not be generalized to other peace-through-health initiatives due to a lack of external validity. This is true for two reasons: the case study design precludes such external validity, and, IPEME is unique in its methods. The impact of this thesis on the greater body of peace-through-health work stems from its investigation into the novel nature of IPEME. The elective’s place as a medical elective that uses health as a vehicle for peacebuilding makes it unique. Its location in the neutral and diverse city of Toronto provides a place for open dialogue free from cultural biases, but at the same time may make it difficult to integrate peacebuilding
concepts when so far removed from a conflict or post conflict region. This thesis sought to evaluate one small aspect of the IPEME learning experience and in so doing showed the caliber of IPEME students and the ability of the elective to teach the importance of communication in difficult scenarios. It also showed that ethical and professional attitudes may not be the most relevant learning experience for the promising professionals chosen for the elective and may not be the most relevant learning objective for IPEME. Students emphasized the importance of relationship building and global health, two outcomes that may be more important to emphasize for a peace-through-health initiative with a ‘global’ mandate. The under-representation of peace-through-health concepts and the lack of discussion about what it means to be a doctor in a politically charged environment are limitations that may not be seen in initiatives that occur in conflict or post-conflict regions. These should most certainly be addressed. Ultimately, it is insights into such advantages and disadvantages of this burgeoning peace-through-health initiative that constitute the greatest impact of this thesis for peace-through-health.
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Appendix A: Contributing Organizations

IPEME is run under the auspices of the Peter A. Silverman Center for International Health (PASCIH), in partnership with the Canadian International Scientific Exchange Program (CISEPO) and the Hospital for Sick Children in Toronto, Ontario.

As mentioned, CISEPO is a non-governmental organization (NGO) that “works with all people of good will who are willing to trust each other in the medical and public health sector. [The organization] believes that the health sector provides an ideal mechanism for multidisciplinary collaboration in which benefits accrue equally while confidence builds and people-to-people working relationships evolve” (CISEPO, Guiding Principles). Traditionally, CISEPO’s activities have taken place in the Middle East, in countries such as Jordan (Ibid, MEHA).

The Peter A. Silverman Center for International Health (PASCIH) is the international health branch of Toronto’s Mount Sinai Hospital. PASCIH aims to address the health needs of an increasingly globalized world through “collaborative research and educational initiatives” and foster global health leadership through a sharing of knowledge and resources (PASCIH Website). Their role in facilitating health collaboration at both the local and international level has led to a number of groundbreaking initiatives, such as IPEME (Ibid).

The Division of Pediatric Emergency Medicine at the Hospital for Sick Children and the Emergency Departments at Sunnybrook Health Sciences Center and Toronto East General Hospital have also played a vital role in IPEME, providing staff and teaching facilities. The elective is co-directed by Abi Sriharan, the Executive Director of PASCIH, Dennis Scolnik, Staff Physician in Pediatric Emergency Medicine at the Hospital for Sick
Children, and Rahim Valani and Ari Greenwald of Sunnybrook Health Sciences Center and the University of Toronto, respectively.

Finally, the elective could not proceed without the endorsement and support of medical schools in Canada and the Middle East. This year students were recruited from Queen’s University School of Medicine, The University of Western Ontario, the Jordan University of Science and Technology, Tel Aviv University School of Medicine, Ber Sha’va School of Medicine in the Negev Desert, and Al-Quds University. All schools count IPEME as an official medical elective. Their support for such a unique and progressive program is truly indicative of the quality of medical training at each of these institutions.

The International Pediatric Emergency Medicine Elective (IPEME) brings eight medical students from various areas of Canada and the Middle East to Toronto, Canada for a four-week University of Toronto medical elective that takes place annually from July 20th to August 14th. The IPEME curriculum includes practical medical training in and out of hospital, conflict resolution workshops, focus groups pertaining to religion and ethics, and many other learning experiences. The students participate in the elective five days per week for approximately eight hours per day with hospital rotations taking place on weekends. In their free time they participate in a number of social activities and receive exposure to Canada’s largest and most cosmopolitan city. Even before their arrival in Toronto, students are required to conduct a small amount of fieldwork aimed at identifying potential cross-border issues. This work is used as a basis for two collaborative research projects (4 students per group) to be initiated over the course of the 4 weeks. Finally, all students (including those from Canada) are required to live together for the duration of the four-week elective.

Recruitment of IPEME participants is completed primarily by program directors in Toronto, Canada. In the beginning, it was the diplomatic influence of the Canadian International Scientific Exchange Program (CISEPO) that permitted an advertisement to be sent to select Israeli, Jordanian, and Palestinian medical schools. It has been three years since the inception of IPEME and seven years since the idea of bringing medical students from the Middle East to Canada for an official elective became a reality. The elective’s profile has increased substantially since the first attempt at such a program in
2003. IPEME now largely operates within its own network, and though still operating in close partnership with CISEPO, has established its own contacts in the Middle East and Canada. Particularly in the past three years, it has established its own network of alumni who pass the message of the program on to fellow students.

As a result, recruitment can be accomplished from IPEME’s Canadian headquarters at the Peter A. Silverman Center for International Health (PASCIH) in Toronto. The downside of word-of-mouth recruitment is that the elective tends to draw on the same population year after year, thus selecting a biased sample of students and a particularly biased sample of the respective national populations. However, it is not the object of the elective to obtain a representative sample of any of the populations included, nor is it attempting to bring those with extremist or fundamentalist views towards the political center. Recruiting already open-minded, interested medical students is one of the goals of the project.

Discussion about recruitment practices highlights the care that must be taken every step of the way when implementing such a multidisciplinary, cross-border project. The six Middle Eastern students participating in the 2009 program were recruited from four medical schools: Jordan University of Science and Technology, Tel-Aviv University, Al-Quds University, and Ber-Sheva University. Students are required to submit an application that includes official medical school transcripts and an essay regarding their reasons for interest in the program. The selection process is very rigorous and the students selected tend to be some of the very best their respective medical schools have to offer (Field Notes).
Students are notified of their successful application in early January and are required to complete a small amount of fieldwork prior to their arrival in Toronto. The focus of this research has varied from year to year but the ultimate purpose is to prompt students from Canada, Jordan, Israel, and Palestine to examine one particular issue in their communities. These issues are chosen based on the experience of IPEME and CISEPO employees in the region and their knowledge of common cross-border issues. Students prepare a 10-minute talk to be presented on the first day of the elective. This assignment serves to get participants thinking about cross-border issues from the very beginning. The ultimate purpose is for students to consider what inadequacies in their own country or medical curricula pertain to other countries in the Middle East and Canada.

The IPEME curriculum has been evolving for over six years. The core ideas are simple and parallel much of the work conducted by CISEPO in the Middle East. The idea is to bring talented medical students interested in cross-border initiatives together on a theoretically neutral ground (Toronto). As was previously mentioned, CISEPO operates under a “politically neutral” mandate. It credits its success to its ability to conduct its work peacefully and without judgment of the region in which they operate. They believe that the path to peace is multifaceted and that health professionals can play a vital role in the peace process by showing their ability to work together on goals that transcend cultural or territorial borders.

IPEME adheres to many of the same principles. While politics is by no means a tabooed subject of discussion, debate is left to happen naturally. IPEME differs from CISEPO initiatives in a number of other ways as well: IPEME participants are still
medical students (not experienced doctors), the elective takes place in Canada, not the Middle East, and the focus is largely on collaborative learning as opposed to cooperative work. Some of these differences are insignificant, but as whole, IPEME reads like a training camp for future CISEPO endeavours.

Using feedback from previous years and continuous insights from program directors and research associates, the 2009 IPEME curriculum was designed to provide students with the chance to grow professionally and personally. Didactic lectures were intertwined with focus groups and practical learning activities, as well as both formal and informal social activities. A detailed picture of the official curriculum is included in this Appendix, but the primary focus areas were: Pediatric Emergency Medicine, Global Health, Ethics and Professionalism, Conflict Resolution, and Hands-on learning.

Pediatric emergency medicine was taught primarily via didactic lectures and focused on a wide range of topics from child psychology to dermatology. Students were also privy to guided tours of some of Toronto’s (and North America’s) most sophisticated emergency departments. The difference in the quantity and quality of equipment was evidenced by the reactions of a number of students (Field Notes).

Global Health was presented to the students using a number of interactive question and answer periods facilitated by distinguished representatives from Medicines sans Frontiers, the Toronto Public Health Unit, the International Committee of the Red Cross, and many others. These sessions forced students to consider their role as doctors in a global context where ethical decisions and power relationships are never absolute and medicine does not end with the clinic or the hospital. These lectures were intended to foster thinking in terms of where a physician’s role may begin and end and what it means
to them to be a physician. As part of their Global Health education students were also introduced to epidemiology, public health, and peace-through-health concepts. The founder of CISEPO provided an introduction into what he saw as the role of doctors in conflict resolution and the importance of the work conducted by his organization. The emphasis on apolitical medical work was heavy, but students were given the opportunity to decide for themselves what role they would play in such situations. It is important to note that while the role of physicians in conflict regions was discussed in some detail, direct reference to the Arab-Israeli conflict was NOT made.

The terms ethics and professionalism are difficult to define. In this context they refer to a series of interactive learning sessions where students learned about and debated religious views as presented by hospital chaplains, difficult ethical dilemmas faced by physicians with respect to patients, team members, patient families, breaking of bad news, and more.

Conflict resolution workshops were added to the IPEME curriculum in 2008 (Field Notes). These workshops are one of the few resources contracted to take part in the elective. The majority of guest lecturers came from within existing networks. Conflict resolution workshops did not pertain specifically to medical settings, but were instead designed to address everyday personal conflicts and the factors that often exacerbate them.

Conflict resolution was also addressed within a hospital setting. Students would act out various scenarios with an IPEME facilitator and describe and analyze the actions of their peers. The facilitator would change the actors and the scenario in ad hoc fashion to keep the situation as unpredictable, and thus realistic, as possible. After each scenario,
participants were given the opportunity to discuss amongst one another the pros and cons of their colleagues’ interactions and discuss other hypothetical examples where interactions with patients can become heated and communication thus paramount.

The hands-on activities were less frequent but very valuable. Participants learned advanced cardiac life support (ACLS), participated in a casting and suturing workshops, and shadowed ER doctors at the Hospital for Sick Children. All of these activities were facilitated by IPEME directors and provided the students with valuable new skills and the confidence to do them well. These practical workshops provided something truly novel for the Middle Eastern students in particular, since medical students from Israel, Jordan, and Palestine seldom get such hands on experience before their residency begins (Field Notes).

While structure is necessary to gauge student attitudes and competencies, the importance of the informal aspects of the curriculum cannot be emphasized enough. The sheer fact that the students are required to live together is in itself groundbreaking. While students are not forced to eat or socialize together, the groundwork is such that this is very likely to occur. In addition to the living arrangements, students participate in a number of social activities that span the range of potential interests, including arts and music, sports, sightseeing, and so on. These activities increase the chances that students will feel comfortable around all members of the group, including IPEME staff.

The final piece of the puzzle was the aforementioned collaborative research project. Students were required to select a research topic that was simple, relevant and doable. The two groups of four are chosen arbitrarily by the program directors save that each group must have one member from each of the participating countries. Because
research methods are not necessarily focused upon in Canadian or Middle Eastern medical schools, the requirement for this project was limited to a literature review and basic study design. Regardless, if the seeds of collaboration can be planted in Toronto then perhaps with guidance projects and publications may result.
Appendix C: Summary of Field Notes

While not all details of the 2009 elective will be covered, the following provides a brief description of how the curriculum described above unraveled in practice. The details are based on extensive field notes and participatory observation. Students and staff may be quoted (anonymously) and/or paraphrased to add empirical weight to comments made.

Week 1:

The first week of the elective was an introductory week, whereby students had the opportunity to become accustomed to their new surroundings and lodgings and begin to get comfortable with the other participants. On the first day of the elective, IPEME directors made sure to facilitate ice-breaking activities and ensure that students knew what was expected of them and where they could turn if they encountered any difficulties or had questions.

Long before participants arrived in Toronto, IPEME directors had established a team of staff members that would work with the program in various capacities. To ensure that students had someone to turn to with any grievances, questions, etc at any point throughout the elective, a social coordinator (who was also a physician) attended all academic sessions, organized structured social events, and so on. IPEME also employed a coordinator to ensure that students would have access to facilities and transportation when needed. In addition, it was ensured that at least one additional “research assistant” was in attendance throughout the day to aid presenters with their lectures and coordinate students.
Because IPEME is only a 4-week elective and attempts to accomplish many things in this brief time period, there is little time for a warm up. Participants were given time to adjust in the first week, but work quickly piled up nonetheless. Students participated in approximately eight hours of structured activity on a daily basis in addition to an introductory banquet, the beginnings of their collaborative research project, and a take home “program evaluation” assignment for the first weekend to be completed in addition to hospital shadow shifts. All in all students had little time to breathe upon arrival and were forced to hit the ground running.

**Week 2**

By the second week students had become accustomed to their schedule to some degree and had taken the chance to explore their surroundings. Each week was designed to adhere to a similar framework: Pediatric Emergency Medicine on Mondays, Global Health on Tuesdays, Conflict Resolution on Wednesdays, a mixture on Thursdays, and practical activities on Fridays. The practical sessions were by and large the most popular sessions with students. Despite their busy schedule, students remained in good spirits as the long weekend approached. The timing of the elective around the Canadian Civic Holiday Weekend was not intentional, but became a blessing in disguise as it presented a perfect mid-elective break for students to decompress, catch up on work, explore Canada, and generally reflect on the first two weeks of the program.

IPEME had, in the past, planned a number of structured social activities, but their experience in recent years had informed them that students may prefer to organize social activities themselves and were thus prompted to let things happen more organically. This line of thinking is not in itself flawed, however with students being so busy, it may have
been too difficult for them to plan and coordinate a weekend trip without resources at their disposal (although two Canadian students were present).

**Week 3:**

The third week consisted of only 4 days of activities due to the Civic Holiday and included the greatest proportion of social activities, including a perennial trip to Niagara Falls. Students were also given a significant amount of free time in which to work on their collaborative research assignments, with topics having been tentatively chosen in the first week and expanded upon in the second. Students were doing exceptionally well socially by this point and many close friendships were developing. There was evidence of burnout however and the 1.5-hour lecture times were beginning to weigh heavily on students’ attention spans and, at times, punctuality. It was obvious that the quantity of work was too much even for these bright young students. They were not adept in research methods (especially the students from the Middle East) and were thus struggling to wade through the vague instructions given by IPEME directors. It was the intention of IPEME staff to keep the instructions for the research project somewhat open-ended so that, in effect, students could figure it out themselves and learn from the process. This may have been too much to ask however, since there was very little time for students to figure things out.

**Week 4:**

The final week of the elective was by far the busiest and most intense for students and staff. The myriad projects that commenced upon students’ arrival in Toronto were now coming to fruition and approaching their intended deadlines. In addition, there were
numerous sponsorship dinners and farewell parties that increased pressure on students’
time in their final days in Toronto. My own research was taking up a significant amount
of time as well with a follow up take home questionnaire in the last week and another
Video Clip session on the final day. Students were obviously finding it hard to complete
all of the tasks expected of them including program evaluation questionnaires, 1-on-1
feedback sessions, final research presentations, souvenir shopping, and the like.
Appendix D: Measuring Attitudinal Change using Visual Media

Having established the criteria by which to measure attitudinal change, the next step was to determine how to assess attitudes pertaining to them. The easiest method would have been to present the criteria for discussion and record students’ responses. The problem with such a method, however, is the tendency for testing bias. If the criteria are presented as the “WHO 5 Star Criteria for Global Doctors”, every student will know they should agree with what is being said. To avoid the trap of testing bias, it was decided that students should be presented with “real-life” scenarios and then be asked to judge the circumstances. The advantage of this method is that the WHO Criteria would not be explicitly addressed and thus some testing bias would be avoided. However, the problem thus became finding a way to draw out discussion about such themes.

To address the problem of presentation, it was important to reflect on exactly what kind of information was being presented. What are the WHO 5 Star Criteria? To what are they related? They are broad but important guidelines for the conduct of doctors in a global setting. It was felt that questions about how a doctor communicates with their team and with patients, how they interact in the community, how they make medical decisions and allocate resources and, indeed, how they view their role as a physician and a citizen of the world, reflect issues of professionalism and ethics.

Professionalism lacks a unilateral definition and ethics is a notoriously ambiguous topic. For our purposes however, this was inconsequential since we were not intending to impose one definition or the other, but wished to prompt students to consider the issues. Our attention was directed more at how it should be taught or portrayed in a classroom, since this is exactly what we would be doing. There is disagreement in the literature
about whether or not concepts such as professionalism and ethics can be taught at all. Many believe that ethical reasoning and professionalism are either inherent or are picked up along the way. Didactic lectures of the topics are commonplace in many medical schools, but there has been a large push toward teaching such concepts via “role-modeling”. It could be argued that hospital rounds and physician shadowing not only provide students with examples of medicine in practice, but also give them the opportunity to see physicians deal with ethical dilemmas and observe “professionalism” in practice. There are many good arguments for this type of learning save for the fact that if a student is paired with a poor mentor, then they may not get the kind of “standardized” ethics and professionalism training desired by medical educators.

It was in pursuit of a suitable teaching method that IPEME staff found a suitable testing method. Role modeling can be effective as a visual reference, but is not conducive to a classroom environment. Using drama or acting to portray ethical situations has been used in HIV/AIDS education, but is inconsistent and not suitable for pre/post comparisons. The quality of the portrayal naturally depends on the quality of the actors and since the IPEME program does not have the resources required to recruit a team of actors, the quality would suffer and detract from the validity of any findings. Secondly, consistency is required so that students may be exposed to the same scenarios at the beginning and the end of the elective.

It was agreed that popular media clips from medical dramas could serve as a consistent, real life dramatization of professional and ethical dilemmas. The wealth of television focusing on the medical profession rendered it relatively easy to acquire short clips portraying physicians in such situations. The clips were stored as computer files and
could thus be shown again at the end of the elective or replayed for clarification. The
final task was to determine which clips to show, their length, and the types of scenarios
that were applicable to the WHO 5 Star Criteria.
Appendix E: Criteria for Selection

Pertain to the WHO 5 Star Criteria

The process of deciding if Caregiver, Decision-Maker, Communicator, Community Leader, and Manager were being conveyed in the video clips was long and arduous. From the beginning it was apparent that certain allowances would have to be made. The most difficult part of selecting clips was finding any that would pertain to the theme of Community Leader. The majority of medical dramas from which clips were selected took place in hospital (or at least clinical) settings. Although many episodes allude to the “community” it was difficult to find clips where doctors were directly active in it. As a result is was decided that the “Community Leader” criterion would be peripheral and the other criteria would take precedence. If students extended their responses to physician activity in the community then this would be a bonus.

Efficient

The IPEME curriculum allotted limited time for research activities. Evaluation of students’ attitudinal change would have to be completed efficiently. As a result, the clips selected had to encompass all of the WHO Criteria in a small timeframe. This meant that the clips had to be “content-dense”. Fortunately, medical dramas are called “dramas” for a reason. The clips selected convey the urgency of the situation and the accompanying dilemmas quite effectively.

Similar to the need for the clips to be dense in content and convey their message efficiently, clips needed to be short in length. Covering 4-5 different themes in the span of 30 minutes would require multiple clips, each with their own dilemma. As a result the scene needed to start and finish in a maximum of five minutes.
Pivotal

The scenarios presented in each of the clips needed to make students think. The purpose of the clips was to push students in their thought processes and make them genuinely consider what they were seeing and how they might react in a similar situation. Clips were thus chosen for their representation of a scenario in which there is no right answer. It was particularly important that there be no right answer according to any medical or legal definitions. Clips could therefore be judged by students’ opinions alone.

Independent

Clips needed to be chosen from different medical dramas, or at least involve different characters each time. The reason for this decision was so that students viewing the clips would not develop a connection to any of the characters involved that would ultimately bias their impressions. If for instance, characters were to be present in multiple clips, there is a chance that students would determine the validity or illegitimacy of a character’s actions based on previous scenarios instead of objectively assessing their conduct.

Culturally Neutral

IPEME students come from a variety of regional, ethnic, religious, and socioeconomic backgrounds and although it was inevitable that different students would more strongly identify with particular scenarios, IPEME staff painstakingly selected clips to be as culturally neutral as possible. Clips would not address issues specifically related to the Middle East or any particular religious conflict. It was thought that in so doing, students would be more apt to assess scenarios objectively.
Language Appropriate

The scenarios needed to fulfill the content and length requirements were typically fast-paced and dramatic. In addition, because clips focus on dilemmas and difficulties with communication, etc, characters were typically arguing and thus speaking quickly. When choosing clips, IPEME staff had to be careful to select clips where the dialogue was easy enough to understand. While all students had a very good grasp of the English language, there was still a need to make sure that all students could understand.
Appendix F: Synopsis of Video Clips

IPEME Video Clip 1:

- A woman enters the Emergency Room complaining of breathing problems.
- She informs the ER senior doctor (young man) and the ER resident (woman) that she had recently been diagnosed with lung cancer.
- The woman’s son arrives shortly after carrying an envelope with his mother’s CT scans and imaging results.
- The ER doctors request a surgical consult.
- The surgeon reviews the scan, noticing that the cancer is in her lungs, brain, and bones and is very advanced.
- He tells the patient that surgery would only cause pain and suffering and would not prolong her life.
- The surgeon then asks the patient if she had considered her wishes for end-of-life care.
- The ER staff physician interrupts, saying that they will wait to hear the opinion of an oncologist.
- The surgeon ignores him and further suggests that the patient consider a program designed to make patients comfortable throughout their remaining days.
- The ER resident doctor halts the conversation by suggesting that this topic be discussed at a later time. All three doctors leave the patient and her son.
- The ER staff doctor confronts the surgeon, saying that the patient barely had time to process the idea of cancer, let alone what she intended to do with her remaining days.
- The surgeon responds that he did not intend to lie or sugar coat his prognosis.
**IPEME Video Clip 2:**

- A young girl, age 17, is dying from cancer.
- She has tried every treatment option but will only live for two more years.
- Her doctors have known her since she was a child.
- As her dying wish, the young girl wishes to have a child, which will be raised by her parents and her 17-year old husband.
- All the physicians agreed to give the girl her wish and are doing IVF.
- The practice administrator, however, was unaware of this decision and questions if it is the right decision.
- The doctors tell her to stay out of it.
- Later on, the practice administrator speaks with the groom and father-to-be about his thoughts on the whole situation.
- The groom reveals that he wants to go to college and that he had not considered what would happen when his wife dies.
- In the final scene of the clip, the groom breaks down and confesses that he cannot go through with the procedure.
- The young girl says that she will proceed on her own.
- The doctors tell her that without her husband’s consent his sperm cannot be used.
IPEME Video Clip 3:

- A pregnant woman is experiencing breathing problems from a blood clot that moved to her lungs.

- The ER staff doctor presents two treatments:

1. A clot-buster called TPA that has a 1% chance of killing the mother, but a 10% chance of killing the baby (Treatment #1).

2. A vena cava stint that takes longer to work but is safer for the baby (Treatment #2).

- The pregnant woman and her husband both agree to try Treatment #2 because it is safer.

- But before the mother can get Treatment #2 her condition gets worse.

- The senior physician says that another blood clot has moved into the mother’s lungs and her breathing will get worse and kill her if no action is taken.

- The Senior Doctor again suggests Treatment #1.

- The pregnant woman and her husband both say NO

- The ER staff physician carries out the procedure against their will.

- The procedure works.

- The ER nurse confronts the physician about her decision.

- The senior physician replies that she did not need consent to save the patient.

- She said it was the same as shocking a patient if they went into Cardiac Arrest.
IPEME Video Clip 4:

- Patient #1 enters the Emergency Room (ER) with a broken leg and superficial burns.

- He is moved into a treatment room so he can be examined.

- Patient #1 informs the doctors that they should leave him alone.

- The Senior Doctor ignores his request and proceeds to cut open the man’s shirt.

- While cutting, the Senior Doctor punctures a bag containing an unknown white powder.

- Patient #1 informs the doctors that they have just released a deadly biotoxin.

- The Senior Doctor orders the team to remain in the room.

- The Senior Doctor orders that the man be treated.

- With no morphine in the room, the man screams in pain due to the incision.

- This alerts Patient #2, previously hidden behind a curtain, who had been admitted for asthma.

- Patient #2 (asthmatic patient) worsens his breathing and the team considers intubation.

- At the same time Patient #1 goes into shock from the pain and enters Ventricular Tachycardia.

- Members of the team question the Senior Doctor’s decision to treat Patient #1.

- Patient #2’s (asthmatic patient) condition gets worse and the team must choose which patient will receive scarce medical supplies.

- The Senior Doctor defends his decision.

- The scene ends as the team uses a defibrillator to bring Patient #1 back to life and the condition of Patient #2 (asthmatic patient) improves.
Appendix G: Video Clip Questionnaire

IPEME Video Clip Questionnaire

The following questionnaire is intended to assess your impressions of events presented in the Video Clips.

There are no right or wrong answers.

Please answer as honestly and accurately as possible.

Please answer each question on the scale provided with a distinct mark on one of the levels of agreement.

If you wish to change an answer at any point please make it clear which answer you wish to keep.

Please complete all WHY questions as thoroughly as possible (1-2 sentences minimum).

Answers will remain confidential and only the researcher will know the source of the answers.

This questionnaire in no way affects your completion/success in the elective.

If you have any questions about the content of any clip please ask for clarification.

Thank you for your participation!
CLIP 1:

For reference:

Patient #1:
Man on stretcher
Enters the Emergency Room (ER) with a broken leg and superficial burns.

Senior Doctor:
Dr. Gates in green scrubs
The young man giving instructions to other doctors in the ER.

Junior Doctors:
Those assisting the Senior Doctor

Patient #2:
The patient with asthma sharing the room with Patient #1
Questions:

1. The doctors were right to ignore the request of Patient #1 not to cut open his shirt (Man on stretcher with broken leg).

Why?

2. The priority of care should have been given to:

   a. Patient #1
b. Patient #2

Why?

3. The Senior Doctor was right to keep other doctors in the room once the toxic powder had been released.
4. The Junior Doctors would have been right to refuse to support their senior doctor if they did not agree with his decision.

Why?
CLIP 2:

For reference:

Patient #1:

Pregnant woman experiencing breathing problems

Patient #2:

Husband of Patient #1

Senior Doctor:

Doctor in charge of the situation

ER Nurse:

The nurse helping the Senior Doctor

Treatment #1:

A clot-buster called TPA that has a 1% chance of killing the mother, but a 10% chance of killing the baby

Treatment #2:

A vena cava stint that takes longer to work but is safer for the baby
Questions:

1. A doctor can ignore the wishes of a patient to save his/her life.

![Strongly Disagree to Strongly Agree Scale]

2. The Senior Doctor should face repercussions if:

   a. The woman (mother) dies.

   ![Strongly Disagree to Strongly Agree Scale]

   b. The baby dies.

   ![Strongly Disagree to Strongly Agree Scale]
3. In this clip the responsibility for making treatment decisions lies with:

a. The Senior Doctor.

b. Patient #1

c. Patient #2

d. The ER Nurse
e. The Senior Doctor and the ER Nurse together

Why?

4. The Senior Doctor acted appropriately given the situation.

Why?
5. The Senior Doctor communicated appropriately with all members concerned.
CLIP 3:

For reference:

Patient #1:
Young girl (age 17) who is dying from cancer
She has tried every treatment option but will only live for two more years.

Patient #2:
Young husband of Patient #1

Parents of Patient #1:
Couple that said they would help raise the child when their daughter died.

Practice Administrator:
Woman that just found out about what the doctors were doing.

Team of Doctors:
Doctors performing the In-Vitro Fertilization (IVF)

Questions:

1. The Practice Administrator’s behaviour was appropriate.
2. The decision by the Team of Doctors to perform the IVF was appropriate. Why?

3. The Team of Doctors considered the short and long-term consequences of their actions appropriately. Why?
4. The Team of Doctors communicated well with all parties concerned.

5. A physician should support IVF if:
   a. The woman is infertile because of promiscuity.

   Why?
b. The woman is infertile because of a violent incident (e.g. rape).

Why?

6. The Team of Doctors’ responsibility is to:

   a. Patient #1 (the mother-to-be).
b. Patient #2 (the father)

Why?

c. The parents of Patient #1

d. The unborn baby

Why?
CLIP 4:

For reference:

Patient #1:
Woman who enters the Emergency Room complaining of breathing problems.

Patient #2:
Son of Patient #1

ER Senior Doctor:
Young man who first talks to Patient #1

ER Resident Doctor:
Young woman who is helping the ER senior doctor

Surgical Consult:
Man with glasses who is asked to give his opinion about Patient #1’s condition
Questions:

1. The Surgical Consult communicated with Patient #1 appropriately.

Why?

2. Responsibility for Patient #1 lies with:
   a. The ER senior doctor
b. The ER Resident Doctor

[Diagram]

Strongly Disagree

Strongly Agree

Why?

c. The Surgical Consult

[Diagram]

Strongly Disagree

Strongly Agree

Why?
3. The ER Senior Doctor (young man) and the ER Resident Doctor (young woman) were right to speak up when they disagreed with the Surgical Consult.

Why?

4. It is important in any doctor-patient interaction to discuss both the good and the bad scenarios and allow patients to make their own decisions with this information.

Why?
5. The Team of Doctors communicated effectively:

a. With Patient #1

\[\text{Strongly Disagree} \quad \text{Strongly Agree}\]

b. With Patient #2

\[\text{Strongly Disagree} \quad \text{Strongly Agree}\]

c. With each other

\[\text{Strongly Disagree} \quad \text{Strongly Agree}\]

Why?
6. It is the job of a physician to give the patient some hope when discussing their condition.

Why?
Appendix H: Qualitative Questionnaires (Pre Test)

IPEME QUESTIONNAIRE

Instructions:

The following questionnaire is intended to gather some information about why you wanted to participate in the program (I know you have already answered this verbally many times), your thoughts about projects like IPEME, etc.

There are no right or wrong answers.

Please answer as honestly and accurately as possible. Answers do not have to be long. If you need more space to write please continue on the back of the page.

Answers will remain confidential and anonymous (only the researcher will know the source of the answers).

This questionnaire in no way affects your completion of the elective.

When you have completed the questionnaire, please seal it in the envelope provided and return it to the researcher by Monday July 27th.

Thank you for your participation!

Questions:

1. Why did you choose to apply for this elective? (For example: Professional reasons? Personal reasons? Both?)
2. What made you think this would be a valuable experience? (For example: A previous participant? The idea of working with doctors from other parts of the world? The idea of coming to Canada?)

3. What do you feel will be the most important thing you learn from this elective? (For example: Do you think your attitudes will change? Do you think your skills will improve?)
4. Do you think what you learn from this program will affect what you do when you return to your training? Why?

5. After the first week of the program, what do you think are the biggest differences between students from Jordan, Palestine, Israel and Canada? (For example: Different skills, different ideas about medicine, different attitudes, etc).
6. What things are similar?

7. What do you think will be the most important thing you learn from your colleagues (other students)?

8. What do you think they will learn from you?
9. Do you think the IPEME program would be different if it took place:
   a. In Jordan?
   b. In Israel?
   c. In Palestine?

   Why?

10. Do you think that doctors can stay out of politics (i.e. be politically neutral in their work)? Why?
11. Do you think they should? Why?

12. In your opinion, what are the most important characteristics/skills a doctor needs to have to work in a “Global/International” setting? (Please list five).

13. Do you think collaboration sets a good example for other members of your community? Why?
14. The following is a quote from the World Health Organization:

“The role of physicians and other health workers in the preservation and promotion of peace is the most significant factor for the attainment of health for all”

*World Health Assembly, Resolution 34.38, 1981*

a. Do you feel this is true? Why?

15. Some health experts say doctors can do things in their communities other than treat patients (For example: Act as advocates, refuse to cooperate with “unjust” wars, practice “public health” in their clinics, etc).

a. What are your thoughts?

b. Do you feel doctors should take on these roles? Why?
Appendix I: Qualitative Questionnaires (Post Test)

IPEME QUESTIONNAIRE 2

Instructions:

The following questionnaire is intended to gather some information about what you learned from the program (I know you have already answered this verbally many times), as well as your thoughts about projects like IPEME.

There are no right or wrong answers.

Please answer as honestly and accurately as possible. Answers do not have to be long. If you need more space to write please continue on the back of the page.

Answers will remain confidential and anonymous. Only the researcher will know the source of the answers.

This questionnaire in no way affects your completion of the elective.

When you have completed the questionnaire, please seal it in the envelope provided and return it to the researcher by Thursday August 13th.

Thank you for your participation, there will be presents I promise!!!

Questions:

1. Do you feel you have changed as a result of this elective? (For example: Did your attitudes change? Did your skills/knowledge improve?) Why?
2. What do you feel was the **most** important thing you learned from this elective?

3. Have your attitudes toward your colleagues changed since the beginning of the elective? **Why?**
4. What was the most important thing you learned from your colleagues in the last 4 weeks (other students)?

What do you think they learned from you?
5. Do you think what you learned from this program will affect what you do when you return to your training? **Why?**

6. Do you think the projects you started in Toronto will continue when you return home? (For example: Will there be political/economic barriers to cross-border work?) **Why?**
7. How do you think your colleagues (other medical students and faculty) at home will view the collaborative projects that you have begun in Toronto? (For example: Will they be supportive, unsupportive, or indifferent?)

8. Now that you are near the end of the program, what were the greatest challenges you encountered in your time in Toronto?
9. You have listened to a number of lectures that discussed the role of physicians in the community, in crisis situations, in conflict regions, in public health, and in politics.

For example:

- *It could be argued that doctors should provide the best care possible to their patients and nothing more.*

- *Dr. Arnold Noyek gave a passionate talk about collaboration between Israeli, Jordanian and Palestinian doctors in the Middle East. His organization encourages peaceful cooperation but “does not take a political or partisan position on the affairs of its colleagues in the Middle East” (CISEPO).*

- *There are those that would say collaboration in itself is a political statement and that doctors can never be removed from politics.*

- *There are scholars who believe doctors can play a greater role in politics and can use their position of authority to resist or reject unethical practices or ‘unjust’ wars, advocate for peace, etc.*

a. In your opinion, what is the role of a physician?
b. Does this role change in a conflict region? **Why?**

b. As a physician, do you think that **you** will be able to stay out of politics (i.e. be politically neutral in your work)? **Why?**

c. What do you think your supervisors/mentors/teachers would say about the role of a physician in a conflict region?
10. Getting support for cross-border collaboration projects can be difficult. One reason may be that some people think peaceful collaboration should not come until justice has been done.

For example: If Country A is at war with Country B, some would argue that collaboration between professionals of those two countries ignores the deeply rooted cause of the conflict. They might say that peaceful collaboration should not take place before the political/economic/religious conflict has been resolved.

What are your thoughts?
11. In your opinion, what are the most important characteristics/skills a doctor needs to have to work in a “Global/International” setting? (Please list five).
Appendix J: University of Toronto Ethics Submission

ETHICS REVIEW PROTOCOL SUBMISSION FORM FOR SUPERVISED AND SPONSORED RESEARCHERS
(For use by graduate students, post-docs and visiting professors and researchers)

SECTION A – GENERAL INFORMATION

1. TITLE OF RESEARCH PROJECT

Peace through Health: Theory and Practice of the International Paediatric Emergency Medicine Elective (IPEME)

2. INVESTIGATOR INFORMATION

Investigator:
Title: Mr. Name: Zachary Kuehner
Department: Health Policy, Management, and Evaluation
Mailing address: 628 Dovercourt Road, Toronto, Ontario M6H 2W6
Phone: (416) 997-0672 Fax: N/A Email: zachary.kuehner@utoronto.ca

Level of Project
Faculty Research
Post-Doctoral Research
Student Research: Doctoral ☐ Masters ☑ Student Number: 996553359

Faculty Supervisor/Sponsor:
Title: Dr. Name: Rhonda Cockerill
Department: Health Policy, Management, and Evaluation
Mailing address:155 College Street, Suite 425, Toronto, Ontario M5T 3M6
Phone: (416) 978-7721 Fax: N/A Email: rhonda.cockerill@utoronto.ca
Co-Investigators:
Are co-investigators involved? Yes ☑ No ☐

<table>
<thead>
<tr>
<th>Title:</th>
<th>Name: Dennis Scolnik</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department: Paediatrics</td>
<td></td>
</tr>
</tbody>
</table>

Mailing address: 555 University Avenue, Toronto, Ontario M5G 1X8

| Phone: (416) 813 7500 | Fax: N/A | Email: dennis.scolnik@sickkids.ca |

Title: Name: Department: Mailing address: Phone: Fax: Email:

Please append additional pages if necessary.

3. UNIVERSITY OF TORONTO RESEARCH ETHICS BOARD

Health Sciences ☑ Education ☐ Social Science & Humanities ☐
Please consult http://www.research.utoronto.ca/ethics/eh_rebs.html to determine which Research Ethics Board your proposal should be submitted to.

4. LOCATION(S) WHERE THE RESEARCH WILL BE CONDUCTED:

If the research is to be conducted at a site requiring administrative approval/consent (e.g. in a school), please include all draft administrative consent letters. It is the responsibility of the researcher to determine what other means of approval are required, and to obtain approval prior to starting the project.

University of Toronto ☑
Hospital ☐ specify site(s)
School board or community agency ☐ specify site(s)
Community within the GTA ☐ specify site(s)
International ☐ specify site(s)
Other ☐ specify site(s)

The University of Toronto has recently reached an agreement with the University-Affiliated Teaching Hospitals, regarding ethics review of hospital-based research. Based on this agreement, certain hospital-based research is now exempt from ethics review at the University of Toronto. If your research is based at a University-Affiliated Teaching Hospital please consult the following document to determine whether or not your research requires review at the University of Toronto http://www.research.utoronto.ca/ethics/eh_where_tahsn.html.

5. OTHER RESEARCH ETHICS BOARD APPROVAL(S)

(a) Does the research involve another institution or site? Yes ☑ No ☐
(b) Has any other REB approved this project? Yes ☐ No ☑
If Yes please provide a copy of the approval letter upon submission of this application.

If No, will any other REB be asked for approval?
   Yes ☒ The Hospital for Sick Children No ☐

6. FUNDING OF THE PROJECT

(a) Please check one:

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<th>Funded ☐</th>
<th>Agency:</th>
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<tr>
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<td>Unfunded ☒</td>
<td>Agency:</td>
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If one protocol is to cover more than one grant, please include all fund numbers.

(b) If waiting for funding, do you wish to postdate ethics approval to the release of funds?
   Yes ☐ No ☒

(c) For funded research, will more than one protocol be submitted to cover all research funded by the respective grant? Yes ☐ No ☒
   If Yes, this is # of

7. CONTRACTS

Is there a funding or non-funded agreement associated with the research?
   Yes ☐ No ☒
   If Yes, please include 3 copies upon submission of this application.

8. PROJECT START AND END DATES

Estimated start date for this project: July 20th, 2009
Estimated completion date for this project: December 31st, 2009

9. SCHOLARLY REVIEW

Please check one:

☒ The research has been approved by a thesis committee, or equivalent (required for thesis research)
☐ The research has undergone scholarly review prior to this submission for ethical review
   (specify review committee)
☐ The research will undergo scholarly review prior to funding
   (specify review committee)
☐ The research will not undergo scholarly review apart from this ethics review

10. CONFLICTS OF INTEREST

(a) Will the researcher(s), members of the research team, and/or their partners or immediate family members:

   (i) Receive any personal benefits (e.g. financial benefit such as remuneration, intellectual property rights, rights of employment, consultancies, board membership, share ownership, stock options, etc.) as a result of or in connection to this study? Yes ☐ No ☑

   (ii) If Yes, please describe the benefits below. (Do not include conference and travel expense coverage, or other benefits which are standard to the conduct of research.)

(b) Describe any restrictions regarding access to or disclosure of information (during or at the end of the study) that has been placed on the investigator(s). This includes controls placed by sponsor, advisory or steering committee.

   None

(c) Where relevant, please explain any pre-existing relationship between the researcher(s) and the researched (e.g. instructor-student; manager-employee; minister-congregant).

   None

SECTION B – SUMMARY OF THE PROPOSED RESEARCH

Please include a list of appendices for all additional materials submitted.

11. RATIONALE

Describe the purpose and background rationale for the proposed project, and, if relevant, the hypotheses/research questions to be examined.

The concept of peace and health originated more than two decades ago, but its emergence as a formal discipline in the field of international relations (and public health) is far more recent (early 1990’s). The idea of using health services and the actions of health professionals to facilitate cooperation, peace-building, and reconciliation between opposing groups has developed as a practice and as a theory, with practice contributing to theory and vice versa. However, consensus about the applicability and measurability of peace and health initiatives has not been realized and many challenges exist from both theoretical and practical perspectives.

Jabbour states that peace and health theory has identified many ways in which health services and health professionals can and do play a substantial role
in facilitating cooperation and ultimately peace. However, there is a lack of documentation about the impact of such programs on-the-ground, particularly in less than favourable political climates where such initiatives have typically taken place. The writings of Jabbour articulate a need for evidence that projects are indeed making an impact (whether positive or negative) and a desire for innovative ideas that add weight to the body of literature.

The current study focuses on the International Paediatric Emergency Medicine Elective (IPEME), a Canadian-based initiative that seeks to foster understanding and cooperation between Canadian, Israeli, Jordanian, and Palestinian medical students. Because the IPEME initiative takes place in Toronto, it may be said to contribute to a new branch in the burgeoning peace and health framework. It is far from clear, however, what role such programs may play in peace and health theory (if any). The program is technically 'on-the-ground', working with practitioners and attempting to facilitate cooperation and understanding, but is removed from the conflict zone and must be analyzed accordingly.

The ability of lessons learned in this elective to endure under adverse circumstances is far from certain. Each year IPEME organizers have tried to measure the impact of the project in some regard: In 2007 shifts in students’ attitudes (about medicine, about each other, etc) were documented using Prochaska’s Stages of Change (Verma, 2007). In 2008, the study was evaluated in terms of CanMEDS Competencies for Specialist Physicians, using questionnaires with answers assessed on a 5-point Likert Scale (Rama Krishna, 2008). In both cases, the organizers of the IPEME initiative sought to use as much scientific rigour as possible when assessing the outcomes of the elective. This year, 2009, the program will examine attitudinal change in terms of the WHO 5 Star Criteria for Global Doctors (Boelen, 1996). In addition to being core competencies for good physicians, it is thought that these criteria provide an ideal model for physicians working in conflict zones and may thus speak to IPEME’s role as a peace and health initiative.

The purpose of the study is to answer the question: What does an initiative such as IPEME contribute to the larger peace through health theory? The study will pursue this end by examining students’ attitudinal change in relation to the WHO 5 Star Criteria for Global Doctors and by exploring themes derived from a number of qualitative data collection methods. Written field notes and a systematic review of the literature will then be used to assess the applicability of these outcomes to peace and health theory.

The methods of the current study are two-fold and seek to answer questions pertaining to both the practical and theoretical applicability of the IPEME project:

1. Use a program evaluation analysis to assess the IPEME process and outputs.
2. Use the results of the evaluation and a systematic review of the literature to build on the existing peace and health theory.
12. METHODS

Please describe all formal and informal procedures to be used, settings and types of information to be involved, as well as how data will be analyzed.

Attach a copy of all questionnaires, interview guides or other non-standard test instruments.

Program Evaluation Design:

The current study employs a Mixed-Methods methodology. Quantitative data and supplementary qualitative data will be used to explore the process and outcomes of IPEME and assess its contribution, if any, to peace and health theory. Triangulation of methods will serve to strengthen the results, improve their validity, and overcome biases inherent in ‘single method’ studies (Denzin, 1978).

Subjects:

The IPEME initiative includes 8 participants: two Canadian, two Israeli, two Jordanian and two Palestinian medical students. IPEME organizers and teaching staff may also be interviewed if necessary to saturate collected data.

Consent:

At the outset of the elective students will be approached by Zachary Kuehner, an MSc candidate at the University of Toronto. He will inform the students of his role in the IPEME initiative and obtain consent to:

f. Utilize the data obtained from the questionnaires students complete during teaching sessions.

g. Audiotape and transcribe one teaching session on ethics and professionalism that uses TV scenarios and one session with a hospital chaplain.

h. Take field notes throughout the duration of the elective.

i. Participate in a one-on-one, semi-structured interview with each student (Approximately 15 minutes) to supplement other data collected (time-permitting). Interviews will take place on the last day of the elective after all curriculum activities have been completed. Interviews will be audio taped and transcribed.

j. Retain the option to interview IPEME teaching staff and organizers if necessary to saturate collected data.

k. Potentially approach participants in coming years in an effort to look at IPEME sustainability.

(All data recorded from teaching sessions, from the chaplain session, and from semi-structured interviews will remain anonymous and will only be accessed by members of the research team)
Data Collection:

1. Videos and Questionnaires (Quantitative Data)

The 2009 IPEME project will examine attitudinal change in terms of the WHO 5 Star Criteria for Global Doctors (Bolden, 1996):

1. Caregiver
2. Decision-Maker
3. Communicator
4. Community Leader
5. Manager

Interventions

Using the WHO 5 Star Criteria as a guide, a series of six video clips lasting up to five minutes each have been selected from popular medical TV shows to highlight dilemmas facing medical practitioners (Click here to view clips). Up to 15 questions have been developed by the study investigators (using a consensus process) for each clip that attempt to span issues relating to the WHO 5 Star Criteria and peace and health concepts (see Appendix).

Questions were designed to be pivotal in nature and have been pilot tested and refined on a group of non-native English speakers. Both students arriving from Israel are considered to be fluent English speakers (students from previous years commented that phrasing of interview questions was sometimes difficult due to complex English).

Each answer will use a 10 cm visual analogue scale (VAS) anchored at one end by 'strongly agree' and the other by 'strongly disagree'. Changes in students' responses to these clips and questionnaires over the course of the elective will be measured. Similar clips will be used to teach subjects such as medical ethics and professionalism during the course, but only the first session on Day 2 of the course and the last session on Day 26 of the course will ask students to mark their responses on a questionnaire. In addition, selected questions will require students to explain their answer and/or consider an alternative situation (e.g. How could X have been done differently?). The time allotted for the video clips and questionnaire is currently 1.5 hours. The number of questions may be reduced prior to the start of the elective based on feedback regarding language complexity and the pivotal nature of each question (i.e. questions deemed to be too leading will be discarded). If such a change is made, an amendment will be submitted to the Research Ethics Board.

Bias

Although the same video clips will be shown both pre and post test, students will not be informed that this will be the case. In the interim they will have undergone a full month of intense programming on a number of issues
concerning the WHO 5 Star Criteria and will also have had several additional sessions using different TV clips followed by discussions regarding medical ethics and professionalism. When students fill in the questionnaires for the second time, nearly four weeks later, the order of the clips and the directionality of the questions will be changed. It is anticipated that with the large number of questions, time lag between pre and posttest, subsequent sessions, and reorganization of clips and questions, students’ recall of their exact answer will be limited.

Reliability

Video clips portraying medical doctors in very realistic ethical dilemmas were used for two purposes:

1. Visual Learning – similar to the idea of role-play, but potentially more engaging.
2. Reliability of testing – video clips appear the same to all participants for both pre and post test.

Please see Appendix for a synopsis of chosen video clips, and sample questionnaire.

2. Transcripts and Observational Research (Qualitative Data)

Audio recordings of a focus group on ethics and professionalism, a meeting with a hospital chaplain, and a discussion regarding physicians as advocates will be transcribed and examined for key themes relating to both the WHO 5 Star Criteria and peace and health concepts.

Written field notes will be taken throughout the course of the elective. The observer will record student interaction with their instructors, each other, course materials, social activities, etc. All observations will remain anonymous, but these descriptive notes will serve as a guide to the assessment of the IPEME curriculum activities in practice.

3. Student Interviews (Qualitative Data)

Semi-structured interviews lasting approximately 15 minutes will be conducted with each student at the beginning and end of the elective. Questions will be used to assess what students learned from their time in Toronto and what they think its long-term impact will ultimately be (if any). Answers to interview questions will be audio taped and transcribed. All answers will remain anonymous and be used to supplement other collected data.

4. Retrospective/secondary source analysis (Supplementary)
In addition to primary data collected from the 2009 IPEME initiative, the 2009 curriculum will be compared to those of 2007 and 2008, as will the results from these initiatives (already obtained from IPEME organizers). The video clips and questionnaires used in this evaluation will also be sent to the eight participants from the 2008 elective. These secondary sources will be used to address topics such as selection bias, generality, long-term outcomes, etc as best as possible. An information letter to be sent to past participants is attached to this application.

**Data Analysis:**

Quantitative data obtained from the Video Clip Questionnaires (via the VAS) will be analyzed using Chi Squared and t-tests as appropriate for categorical and continuous data.

Focus groups and interviews will be transcribed and analyzed using a program for qualitative software analysis (i.e. NVivo). Using the research question as a guide (i.e. How does IPEME contribute to peace and health theory?) transcripts will be examined for themes relating to the objectives of the study. The analysis will serve to identify key themes pertaining to both the WHO 5 Star Doctor Criteria and peace and health concepts (i.e. advocacy, tolerance, etc).

Written field notes and analysis from past IPEME assessments will be used in conjunction with a review of the relevant peace and health literature to serve as a method of triangulation.

13. PARTICIPANTS OR DATA SUBJECTS

Describe the participants that will be recruited, or the subjects about whom personal information will be collected. Where active recruitment is required, please describe inclusion and exclusion criteria. Where the research involves extraction or collection of personal information, please describe from whom the information will be obtained and what it will include.

The IPEME initiative includes 8 participants: two Canadian, two Israeli, two Jordanian and two Palestinian medical students. No personal information will be collected from these participants that they have not already divulged in agreeing to take part in the medical elective. The consent process will simply be obtaining permission to utilize information that students would have forfeited regardless (with the exception of interviews for which consent will be obtained). A component of the current study is a program evaluation analysis, with the IPEME initiative the program in question. Documents relevant to an analysis of the program will be obtained from IPEME organizers and written field notes (i.e.
curriculum layout, learning tools, workshop delivery, topics covered, reactions of students, extracurricular activities, etc).

The opinions of program administrators may also be used to enrich collected data. Opinions of administrators are not intended to be compared to those of students. This option was included simply to obtain a more detailed description of the intended goals of the elective, why certain learning activities were chosen, and so on. This may not be needed, but their testimony may be useful when for determining how or why the elective is in fact a contributor to the peace through health theory.

14. EXPERIENCE

For projects that involve collection of sensitive data, methods that pose greater than minimal risk to participants, or involves a vulnerable population, please provide a brief description of the researcher’s/research team’s experience with this type of research.

N/A

15. RECRUITMENT

Where there is formal recruitment, please describe how and from where the participants will be recruited.
Where participant observation is to be used, please explain the form of insertion of the researcher into the research setting (e.g. living in a community, visiting on a bi-weekly basis, attending organized functions).

Attach a copy of any posters, advertisements, flyers, letters, or telephone scripts to be used for recruitment.

Participants applied to this medical elective as part of their training as medical professionals. With the exception of the interviews, all other activities to be recorded by the researcher will be occurring regardless. The researcher is asking consent to use the data they are producing for research purposes. The researcher will be attending IPEME curriculum activities throughout the 4-week elective. The researcher will be recording written field notes 3 days per week and will be present for two focus groups and one session with a hospital chaplain (to be recorded and transcribed). Video clips and questionnaires will be administered on the first and last days of the elective. Semi-structured interviews of approximately 15 minutes in length will be conducted with each student on the third and last day of the elective.

Participants will be approached on the first day of the elective by Zachary Kuehner, a Master’s candidate at the University of Toronto. He will explain his role in the research and present consent forms. It will be explained that they have no obligation to permit their data to be used for research purposes and that it will in no way affect their participation in the elective itself.
If a participant decides to withdraw from the research at some point during the elective, interview responses will be deleted from recordings and transcripts destroyed. During teaching sessions and focus groups, the researcher will be keeping hand written notes to supplement the audio recordings. The researcher will thus be able to identify which participants when examining recorded tapes. In this way, recordings of any participant that withdraws can be eliminated the tapes.

16. COMPENSATION

(a) Will participants receive compensation for participation?

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<td>In-kind</td>
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<tr>
<td>Other</td>
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(b) If Yes, please provide details.

(c) Where there is a withdrawal clause in the research procedure, if participants choose to withdraw, how will you deal with compensation?

N/A

SECTION C –DESCRIPTION OF THE RISKS AND BENEFITS OF THE PROPOSED RESEARCH

17. POSSIBLE RISKS

1. Indicate if the participants as individuals or as part of an identifiable group or community might experience any of the following risks by being part of this research project:

(a) Physical risks (including any bodily contact or administration of any substance)? Yes ☐ No ☒

(b) Psychological/emotional risks (feeling uncomfortable, embarrassed, anxious or upset)? Yes ☐ No ☒

(c) Social risks (including possible loss of status, privacy and/or reputation)? Yes ☐ No ☒

(d) Is there any deception involved? (See Debriefing, #21) Yes ☐ No ☒

2. If you answered Yes to any of the above, please explain the risks, and describe how they will be managed and/or minimized.

N/A

18. POSSIBLE BENEFITS

Discuss any potential direct benefits to the participants from their involvement in the project. Comment on the (potential) benefits to the scientific/scholarly community or society that would justify involvement of participants in this study.
Participants will not realize any direct benefits from their participation in this research. The scientific community will benefit from insight into a novel field of research (peace and health) that is just beginning to attract international attention. Even in the burgeoning field of peace and health, IPEME is unique in that it brings students from various (often conflicting) backgrounds to a neutral ground (Toronto). Its role as a peace and health initiative is not entirely certain. Analyzing what it does contribute (if anything) will be beneficial to the peace and health theory, practitioners in the field, and conflict mediation theory.

SECTION D – THE INFORMED CONSENT PROCESS

19. THE CONSENT PROCESS

Describe the process that the investigator(s) will be using to obtain informed consent. Please include the experience of the team member with this participant population and/or training that this person will receive prior to recruitment. If there will be no written consent form, please explain (e.g. discipline, cultural appropriateness, etc.). Please note, it is the quality of the consent, not the format that is important. If the research involves extraction or collection of personal information from a data subject, please describe how consent from the individuals or authorization from the custodian will be obtained.

For information about the required elements in the information letter and consent form, please refer to [http://www.research.utoronto.ca/ethics/eh_best.html](http://www.research.utoronto.ca/ethics/eh_best.html).

Where applicable, please attach a copy of the Information Letter/Consent Form, the content of any telephone script, letters of administrative consent or authorization and/or any other material which will be used in the informed consent process.

At the outset of the elective students will be approached by Zachary Kuehner, an MSc candidate at the University of Toronto. He will inform the students of his role in the IPEME initiative and obtain consent to:

a. Utilize the data obtained from the questionnaires students complete during teaching sessions.
b. Audiotape and transcribe one teaching session on ethics and professionalism that uses TV scenarios and one session with a hospital chaplain.
c. Take written field notes throughout the duration of the elective.
d. Participate in a one-on-one, semi-structured interview with each student (Approximately 15 minutes) to supplement other data collected (time-permitting). Interviews will take place on the last day of the elective after all curriculum activities have been completed. Interviews will be audio taped and transcribed.
e. Retain the option to interview IPEME teaching staff and organizers if necessary to saturate collected data.
f. Potentially approach participants in coming years in an effort to look at IPEME sustainability.

(All data recorded from teaching sessions, from the chaplain session, and from semi-structured interviews will remain anonymous and will only be accessed by members of the research team)

20. CONSENT BY AN AUTHORIZED PARTY

If the participants are children, or are not competent to consent, describe the proposed alternate source of consent, including any permission/information letter to be provided to the person(s) providing the alternate consent as well as the assent process for participants.

N/A

21. DEBRIEFING

(a) If deception will be used in the research study, please explain what information/feedback will be provided to participants after participation in the project.

Please provide a copy of the written debriefing form, if applicable.

N/A

(b) How will participants be informed of study results?

Study results will be available to participants upon request. All raw data will remain anonymous and will only be directly accessible to members of the research team.

22. PARTICIPANT WITHDRAWAL

(a) Where applicable, please describe how the participants will be informed of their right to withdraw from the project. Outline the procedures which will be followed to allow them to exercise this right.

Students will be asked to sign a consent form at the outset of the study. This consent form will inform them that they are free to withdraw from the study at any point in the research process simply by informing the principle investigator or any member of the research team or IPEME teaching staff. Because the research is recording information that students will provide through their participation in the elective, they can simply inform any member of IPEME that they do not wish their participation in the elective to be used for research purposes.

(b) Indicate what will be done with the participant’s data and any consequences which withdrawal may have on the participant.
Once a student has requested withdrawal from the study, any data collected to that point will be destroyed in an appropriate manner (documents will be shredded, computer files deleted, etc). Students will be informed in the consent form that withdrawal will not affect their subsequent treatment throughout the elective in any way.

(c) If participants will not have the right to withdraw from the project at all, or beyond a certain point, please explain.

N/A

SECTION E – CONFIDENTIALITY AND PRIVACY

23. CONFIDENTIALITY

(a) Will the data be treated as confidential? Yes ☒ No ☐

(b) Describe the procedures to be used to ensure anonymity of participants or informants, where applicable, or the confidentiality of data during the conduct of research and dissemination of results.

Participants will be coded and at no time will their personal information be known to anyone other than members of the research team. Both qualitative and quantitative results will remain confidential during the conduct of the research and in any published works.

(c) Explain how written records, video/audio tapes and questionnaires will be secured, how long they will be retained, and provide details of their final disposal or storage.

Data will be secured for a period of 7 years (computer files on a password protected computer, and audio tapes and documents in a locked office accessible only to members of the research team) upon which time all data will be destroyed (Documents shredded and computer files deleted).

(d) If participant anonymity or confidentiality is not appropriate to this research project, please explain.

N/A

24. PRIVACY REGULATIONS
For research involving extraction or collection of personal information, provincial, national and/or international laws may apply. My signature as Principal Investigator, in Section G of this protocol form, confirms that I understand and will comply with all relevant laws governing the collection and use of personal information in research.

SECTION F – CONTINUING REVIEW OF ONGOING RESEARCH

RISK MATRIX: REVIEW TYPE BY GROUP VULNERABILITY AND RESEARCH RISK – check one:

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<tr>
<td>Medium</td>
<td>1</td>
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<tr>
<td>High</td>
<td>2</td>
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See the Instructions for Ethics Review Protocol Submission Form for detailed information about the Risk Matrix.

Briefly explain/justify the level of risk and group vulnerability reported above (max 100 words):

The current study is evaluating a preexisting program and thus much of the data to be collected during research is forfeited by participants regardless. Consent will be obtained to observe and collect this data in a number of ways, none of which are a burden to participants. Only semi-structured interviews impose an added time commitment of 15 minutes per student. Students will be informed prior to taking part in the interview that they are not obligated to answer any question and may withdraw from the interview process at any time. Students have no known preexisting vulnerabilities that could present an issue in the conduct of this research. The level of risk and group vulnerability of the study is thus very low.

Review Type

Based on the level of risk, please submit the appropriate number of copies of the Protocol Submission Form for Review Type:

Risk level = 1: Expedited Review
Risk level = 2 or 3: Full Review
Information about individual REBs, including the number of copies required for each review type, can be found here: [www.research.utoronto.ca/ethics/eh_rebs.html](http://www.research.utoronto.ca/ethics/eh_rebs.html)

Please note that the final determination of Review Type and program of Continuing Review will be made by the University of Toronto REB and the Ethics Review Office.

## SECTION G – SIGNATURES

All researchers and their respective Departmental Chair/Dean or designate must sign below:

**As the Investigator on this project, my signature confirms that I will ensure that all procedures performed under the project will be conducted in accordance with all relevant University, provincial, national and international policies and regulations that govern research involving human participants. Any deviation from the project as originally approved will be submitted to the Research Ethics Board for approval prior to its implementation.**

For student researchers, **my signature confirms that I am a registered student in good standing with the University of Toronto. My project has been reviewed and approved by my advisory committee (where applicable). If my status as a student changes, I will inform the Ethics Review Office.**

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<tr>
<th>Signature of Investigator:</th>
<th>Date:</th>
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For Graduate Students the signature of the Faculty Supervisor is required. For Post-Doctoral Fellows and Visiting Professors or Researchers, the signature of the Faculty Sponsor is required.

**As the Faculty Supervisor of this project, my signature confirms that I have reviewed and approve the scientific merit of the research project and this ethics protocol submission. I will provide the necessary supervision to the student researcher throughout the project, to ensure that all procedures performed under the research project will be conducted in accordance with relevant University, provincial, national or international policies and regulations that govern research involving human subjects. This includes ensuring that the level of risk inherent to the project is managed by the level of research experience that the student has, combined with the extent of oversight that will be provided by the Faculty Supervisor and/or On-site Supervisor.**

**As the Faculty Sponsor for this project, my signature confirms that I have reviewed and approve of the research project and will assume responsibility, as the University representative, for this research project. I will ensure that all procedures performed under the project will be conducted in accordance with all relevant University, provincial, national or international policies and regulations that govern research involving human participants.**

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<tr>
<th>Signature of Faculty Supervisor/Sponsor:</th>
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As the **Departmental Chair/Dean**, my signature confirms that I am aware of the proposed activity. My administrative unit will follow guidelines and procedures which ensure compliance with all relevant University, provincial, national or international policies and regulations that govern research involving human subjects. My signature also reflects the willingness of the department, faculty or division to administer the research funds, if there are any, in accordance with University, regulatory agency and sponsor agency policies.

**Name of Departmental Chair/Dean (or designate):**

**Signature of Departmental Chair/Dean:** __________________________

**Date:** __________________________

(or designate)