Peace through Health and Medical Education: First Steps in Inclination of Healthcare Workers Toward Conflict-Preventive Activities

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Abstract

Background: The number of deaths and disabilities due to all types of violence has increased; violence and especially war heavily affect public and individual health and all sectors, including the health sector, are responsible for making attempts to take part in mitigation of war effects. However, “peace through health” has not been so far included globally in the curriculum of basic medical schools. The study aims to prepare data on responsibilities that could be devolved to health sector, and the importance and role of education for those health workers who are willing to participate in the peace field

Methods: A systematic search in Web of Science, PubMed, Scopus and ERIC was conducted looking for relevant documents following combination of the key terms: peace, health and education.

Results: Health professionals consider war as a serious contagious disease that needs to be prevented like any other diseases. Prevention maneuvers at the primordial, primary, secondary and tertiary stages are important tasks that can be carried out by health professionals; there is an increasing demand for establishment of some courses; the roles and the manner of performing these tasks are not part of medical curriculum and for better execution of these roles, peace through health courses should be developed and then integrated to the current curriculum of health-related universities.

Conclusion: The work of developing peace through health courses has been started before and it will continue until it completely becomes an accepted global course.

Keywords: Education, Conflict (psychology), Health promotion, Medical, Violence


Introduction

War/violence has profound devastating influences on human health; it affects all aspects of human life and can destroy a society completely.1 Its complication and consequences are divided into two categories: direct consequences of war that include injury, disability, and death, often affecting civilians; and indirect ones that include chronic physical disabilities, long-term psychological trauma, destruction of the infrastructure of society, increased number of refugees in other countries etc.2 It has been projected that war and violence will be one of the top 10 causes of disability and death, globally.3 Therefore, the humankind has to promote peace throughout the world if they want a healthier life. As peace is part of public health, the health sector has the responsibility to work toward peace in alliance with other sectors including political, economic, social and ethnic divisions.4 Accordingly, the World Health Assembly announced, “The role of physicians and other health workers in war/violence preservation and promotion of peace is the most significant factor for the attainment of health for all”.6

Almost all healthcare professionals including physicians, nurses, public health workers, mental health practitioners, etc. can assist in peacebuilding and/or peace-making but not only through humanitarian relief activities.7-9 Despite the importance and the great potential of healthcare professionals in peace-promoting activities, “peace through health” has not been globally included in the curricula of medical schools.10 Introducing the basics, principles and key concepts, opportunities and dilemmas of peace through health to graduates and undergraduates of health-related disciplines could be a highly effective peace-promoting program.11 This study aims to shed more light on the importance of developing a global course for “peace through health”.

Materials and Methods

Search Sources and Strategies
We conducted a systematic review for relevant publications
on three subjects, responsibilities that could be devolved to health sector, importance and role of education for those health workers who are willing to participate in the peace field and current or previous training courses on “peace through health”. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guideline was used in the current study. Data was gathered from two different sources; one from online databases and the other consisted of various courses in the field of medical peace-building and peace-making activities derived from personal correspondence to authors, asking other experts and review of eligible articles of the former source. Online databases used for the systematic literature search were: Web of Science, PubMed, Scopus and ERIC. The search was conducted by the first author on February 15, 2019. In order not to miss any data, we developed a broad search strategy for combination of non-specialized key terms and the keywords were reduced to only “peace”, “health” and “education”. The following search strategy was used in each of the databases:

- PubMed ((peace [Title/Abstract]) AND health [Title/Abstract]) AND education
- Scopus: TITL-ABS-KEY (“peace through health” OR (peace AND health AND education))
- Web of Science: ALL FIELDS: (peace) AND ALL FIELDS: (health) AND ALL FIELDS: (education)
- ERIC: peer-reviewed AND peace AND health

**Study Selection**

Seven hundred fifty-seven articles in Web of Sciences, 558 articles in Scopus, 262 articles in PubMed and 76 articles in ERIC were found following the search and then their citations were exported into Endnote X9. First, duplicates (262 documents) were removed from the library and then the first round of screening was initiated; in this step, titles and abstracts of the articles were evaluated to remove articles which were clearly irrelevant; those studies which did not contain the data needed for our study were excluded in this initial screening; however, those articles which were unclear whether they met the study inclusion criteria or not were kept in the study for subsequent screening (Figure 1); relevancy was considered where the studies provided data in each of the following three topics: the reason why health professionals should take responsibilities in peace-making and peace-building activities, how they can assume this role and why there is a vital demand for establishing peace through health courses. In the second screening, articles were selected based on meeting the inclusion criteria which are demonstrated in Table 1.

The full-texts of the remaining articles (n = 104) were evaluated and those articles were included that contained information about at least one of the three abovementioned subjects.

**Data Extraction**

An Excel spreadsheet was created to extract information about study title, first author's name, journal, year of publication, country of study, methods, study design, postgraduate or undergraduate trainees, measures, and limitations and a paper code was given to each article. Then, in the summary table, study codes were listed and the findings from each study were qualitatively described beside its code; also, they were categorized into three groups based on the data they provided about the three main question of the study.

**Results and Discussion**

**Why Health Professionals Should be Involve in Peace-building Activities**

By the definition of World Health Organization, health is “the state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”15,15; So, any factor that damages the physical, mental and social well-being status is endangering one's health. Thus, health and health-related sectors should make all attempts to remove the hazardous factor. Violence, conflict and especially war have been proven to be the leading cause of disability and death in many parts of the world16,17 and constitute one of the most serious threats to the three components of health. War directly accounts for thousands and even millions of deaths every year and a dramatically higher number of physical and mental disability; furthermore, by destroying the infrastructures of the society and jeopardizing people’s access to healthcare centers and medical needs, it can cause even more catastrophic consequences and more disability and death.18,19 Also, disruption of infrastructures allows the spread of infectious diseases and in these situations, malnutrition emerges at a higher rate.20 Moreover, these consequences can also lead to an increase in the level of conflict and violence and thus a “vicious cycle” is born that tends to be more devastating (Figure 2). So, presence of peace is a component of health and health workers should have peace-building and peace-making activities. The “vicious cycle” should be disrupted by multi-sector

<table>
<thead>
<tr>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
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<tbody>
<tr>
<td>Population</td>
<td>Studies on non-medical students</td>
</tr>
<tr>
<td>Study language</td>
<td>Other languages</td>
</tr>
<tr>
<td>Study type</td>
<td>Letters and editorial papers</td>
</tr>
<tr>
<td>Study appraisal</td>
<td>Not peer-reviewed studies</td>
</tr>
<tr>
<td>Full texts</td>
<td>Publications whose full-text material could not be retrieved</td>
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**Table 1. Inclusion/Exclusion Criteria**
peace workings\(^2^1\); health workers, in addition to their direct effects on conflict-ceasing, can fuel the engines of political arguments, social and economic agreements and popular involvement. Generally, “Peace through Health” or “Health as a Bridge for Peace” involves the adoption of a public health point of view by health workers regarding conflict, war and other forms of violence, that aims to impede or lessen violence as a cause of death and morbidity, and promoting peace as a major determinant of health for all.\(^2^1, 2^2\)

What Health Workers Can Do in Peace-Making and Peace-Building Processes
As discussed earlier, conflict and other types of violence compromise the condition and status of health in the involved society\(^2^3\); thus, we can consider violence as a serious contagious disease that spreads rapidly and entangles all layers of the public.\(^2^4\) As a matter of fact, attempts toward addressing this “serious disease: violence” and launching of peace process are not only done after the emergence of violence; like other diseases, health workers could identify several layers of prevention and obviously, they should support initiatives that contribute more to prevention and not cure; because they need a smaller budget and have better results and better efficacy.\(^2^5\) Initiatives for prevention like prevention from any other public health diseases are arranged in four sets: primordial, primary, secondary and tertiary preventions\(^2^6\) (each set itself includes a variety of measures and interventions).

Primordial prevention, the first level of prevention, refers to impeding the development of risk factors that predispose arenas to different types of violence\(^2^7\) and this level includes initiatives that change the societal structures\(^2^8\) or environmental factors\(^2^9\) such as exclusion by policy or suppression of feelings and identities\(^3^0\); holding peace classes or shaping new attitudes are examples of this type of activities. The next level, primary prevention, aims to limit risk factors after being developed and not let them progress into conflict.\(^3^1\) This level concerns prevention of violence from eruption.\(^2^1, 2^2\) Examples of this level could be seen in global works of “International Physician for the...
Prevention of Nuclear War” (IPPNW) that tries to drew global public attention to the dangers of utilization of nuclear weapons.\(^\text{22,23}\) The third level known as secondary prevention is employed when the big problem has occurred and encompasses measures that focus on peace-making and prompts effective interventions to de-escalate a violent conflict and extenuate the perilous impacts in the conflict-laden arena. Example of the third levels can be seen in humanitarian ceasefires, for example in central Africa known as “five days for peace”\(^\text{34}\) or El Salvador peace works.\(^\text{35,36}\) The last level, tertiary prevention, direct primarily at recovery and rehabilitation in post-conflict situations and is meant to promote adjusting to limitation in health, attempts to minimize severity of suffering from the on-going trouble and stabilize the arena affected by the cascade of violence.\(^\text{37}\)

Why There Is Need for Holding Courses and Workshops in this Field

Now, an important question is posed, “how can healthcare workers play the roles discussed above without any background?” The fact is that without educating the basis, concepts and principles of “peace through health” to healthcare workers, it is really hard (maybe even near impossible) and troublesome for them to implement their aforementioned measures.\(^\text{38}\) These days, the health sector’s tasks do not just belong to the backside for taking care of the injured or the wounded and their new duties transferred them from the home front to the front line,\(^\text{39}\) where they directly encounter the barrage of weapon fire\(^\text{40}\) and engage straightforwardly in conflicts or their risk factors. Hence, any mistakes may put their lives in danger\(^\text{41}\) or worsen the situation and make conditions more complicated.

On the other hand, as discussed earlier, waging of war and violence has always been accompanied by dramatic increases in the prevalence and incidence of diseases and rapid dissemination of infections.\(^\text{42}\) Conflict may lead to large population displacement into overcrowded encampments or undeveloped cantonments with incomplete access to safe water, poor sanitation, inadequate basic necessities of life and partial access to medical services.\(^\text{43,44}\) These conditions increase the chance of exposure to disease agents. In the other word, it is reputed that war is the mother generator of epidemics and outbreaks of diseases. Thus, in the case of occurrence of a severe conflict, the health sector’s approach should be changed toward early detection and treatment of diseases; now, again our question is posed, “how can healthcare workers play the roles discussed above without any background?” A study conducted in Mexico City with the goal of analyzing the health system status in the times of peace and war, showed a complete alteration of health sector attitudes and programs after that the civil war broke out.\(^\text{45}\) Without a suitable background of knowledge of these situations and management, it may lead not only to uncontrolled amplification of outbreaks but also the conflict-laden area’s health facilities can turn into the foci and the sources of devastating agents of diseases.\(^\text{46,47}\)

These backgrounds need to be taught to the graduates and undergraduates of health-related disciplines.\(^\text{48}\) Unfortunately, no global training courses have been designed in management of health system’s approach during conflict-ridden periods and in guiding healthcare workers about what roles they should play for peace-building and peace-making. Without such education, full prevention and limitation of wars, negotiation of conflicts and promotion of health by health workers may seem just like an optimistic reverie and conflict-mitigating activities could not be accomplished with the highest possible efficacy and may be ceased. MacQueen et al stated, “there are thousands of people around the world studying or working in medicine and health care who are aware of the health impacts of war and who wish to help lessen war. Many of them have experienced war in their own societies. They took up health sciences for altruistic reasons; now they want to make a positive difference, for their societies and for the world. But their textbooks and their teachers are unable to give them the guidance they seek.”\(^\text{49}\) This statement is representative of the importance of demands for transformative medical education. The deficits in knowledge, skills, values and utilities that are essential and necessary for the purpose could be eliminated by appending “Peace Through Health” courses to medical curriculum as mandatory or optional. In order to develop these courses, it may be better to seek help from health professionals with a wealth of experiences or representatives from international organization working in this field such as “Health as a Bridge for Peace”\(^\text{50}\) and “Violence and Injury Prevention”\(^\text{51}\) or non-governmental organizations such as “Doctors Without Borders”\(^\text{52}\) and “Physicians for Human Rights”.\(^\text{53}\)

For the first time, Peace through Health university courses were launched in McMaster University, Hamilton, Canada.\(^\text{54}\) These courses mainly focus on “how health workers contribute to peace” and “how they can demolish conflict in every level of prevention and settle tranquillity”.\(^\text{55}\) The discipline is collaborative, innovative and optional for undergraduate students of health-related disciplines.\(^\text{56}\) Afterwards, another university in Canada, the Waterloo University, held courses for undergraduates in Peace through Health and similar programs and courses have been introduced sporadically throughout the universities in different countries,\(^\text{57}\) such as the University of Tromsø Peace through Health courses administrated by Faculty of Health Sciences, Eastern university of Sri Lanka and Washington university conducted by Dr. Evan and Dr. Hagopian, 4-credit classes on “health and war” for both graduates and undergraduates.\(^\text{58}\) Some well-known courses in this field were once established and may not be active these days, which are depicted in Table 2. However, the field has not been yet globally integrated.
in the medical curriculum. Furthermore, an online Peace through Health course was launched entitled “Medical Peace Work”.[60] Medical Peace Work, developed by the University of Bergen, consists of seven free online courses that help healthcare workers understand how healthcare professionals can actively participate in building peaceful and healthy societies by identifying, responding to, and helping prevent various forms of violence.[61] This course could be useful for people with some experience in healthcare who are interested in this field.

In conclusion, health professionals have worked in the past and will continue to work with wider scope in the future towards developing conditions for a peaceful society and overcoming conflict. Activities done by them are not only restricted to dressing wounds, curing diseases and taking care of the hurt as before; their scope has changed and broadened and consists of activities conducted for peace-building and peace-making and conflict management, resolution, and transformation. As discussed earlier, performing these activities by health workers requires some background and this reinforces the demand for development and integration of Peace through Health courses in medical curricula. Fortunately, this process has started promisingly and will continue until it completely becomes a well-established accepted global course.

Limitations
Although this research was carefully prepared and reached its aims, there were some unavoidable limitations; unfortunately, there were few articles discussing peace through health and medical education and there were none arguing the essential demand for development of a global medical course. Furthermore, full-text of some articles were not found.

Authors’ Contribution
HMW, NA and AS conceptualized and designed the study and critically reviewed the manuscript. ET participated in collection of data, writing the manuscript and critically reviewed the manuscript. All authors read and approved the final manuscript.

Conflict of Interest Disclosures
None.

Table 2. Some Courses in the Field of “Peace Through Health”

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<tr>
<th>Courses</th>
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<tbody>
<tr>
<td>Health and war[61]</td>
<td>Washington University</td>
</tr>
<tr>
<td>Medical Peace Work III[61]</td>
<td>University of Bergen</td>
</tr>
<tr>
<td>Peace-Building and Health Initiatives[62]</td>
<td>McMaster University</td>
</tr>
<tr>
<td>Course in Peace and conflict studies[61]</td>
<td>Institute for International Studies at Oslo</td>
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<tr>
<td></td>
<td>and Akershus University College (HIOA)</td>
</tr>
<tr>
<td>Summer Peace and Conflict Course Kosovo[63]</td>
<td>Rochester Institute of Technology Kosovo</td>
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<tr>
<td></td>
<td>(A.U.K)</td>
</tr>
<tr>
<td>Health as a bridge for peace - Training[64]</td>
<td>WHO</td>
</tr>
<tr>
<td>Peace, Health and Medical Work[64]</td>
<td>University of Tromsø</td>
</tr>
<tr>
<td>Health Systems through Conflict &amp; Recovery[65]</td>
<td>Scuola Superiore Sant’Anna</td>
</tr>
<tr>
<td>War and Health[66]</td>
<td>IPPNW, the European Medical Peace Work Network, Physicians for Social Responsibility, and the University of Gezira</td>
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Ethical Statement
No ethics committee approval was required for this paper.

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