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Holistic frontiers in peace and health research

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Drawing from broad social-cultural-ecological theoretical frameworks, an adaptive model of peace and health research is seen as increasing individual and collective self-efficacy. By locating a path to individual and collective responsibility, situated at the junction of social justice, peace and health, research has the potential to enhance adaptive capacity across scales of human organization, and to set the stage for anticipatory and pro-active strategies for social innovation within a hybrid field of inquiry and of practice. This work presents a conceptual model of the emerging field of "peace and health" research and invites exploration and dialogue.

Key words: Peace and health, self-efficacy, adaptation, youth, transformation.

INTRODUCTION

Building on the foundational work situating structural violence within peace studies by Galtung (1969) and the application of the 1946 World Health Organization's definition of the social determinants of health to issues of structural violence and development intervention as health concerns by Farmer (2005, 2009), new, hybrid areas of health theory and practice have emerged. Insightful studies of development economics also contribute significantly to advancing new understandings of health and justice (Mehmet, 1999; Ghosh, 2000). These areas include, for example, medical intervention and humanitarian assistance in regions of conflict provided by organizations and by individuals. Examples of organizations that have contributed to an expanded vision include: International Red Cross, Doctors Without Borders, Physicians for Social Responsibility, and International Physicians for Prevention of Nuclear War. Other emerging areas of intervention and research supporting a broader vision of peace and health include: eco-health (Lebel, 2003; International Development Research Centre, IDRC, 2011), environmental health and social justice (Doyle, 2004; Hossay, 2006; McCabe, 2009), and more recently, peace through health (Yusuf et

This paper does not attempt a comprehensive review of particular fields of health practice or of peace research findings per se, but rather seeks to make a contribution to our conceptual vision of a broader interdisciplinary field embracing "peace and health" as a means of beginning an open discussion among engaged parties everywhere who share an interest in advancing these entwined human values as a form of human development. It is strongly informed by our experiences, one as a physician in a war-torn region, Gaza, in the Middle East, (Abuelaish) and the other as a lawyer and biologist working for Indigenous Peoples in a contested region, the Arctic, (Doubleday). These experiences have revealed to us both the importance of expanding contemporary discourses about peace and health, as well as some prospects for a bolder and more inclusive vision. In this short communication, we share some initial thinking about a systemic consideration of peace and health based on practice and theory, and we invite discussion of these prospects as directions for future research and for the practice of systemic multidisciplinary interventions.

Situating peace and health within complex systems: Starting points

Specifically this paper proposes in conceptual terms the adoption of a broad framework, building on resilience

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al., 1998; Arya and Santa Barbara, 2008).

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thinking about social-cultural-ecological systems (Berkes and Folke, 1998), recognizing complex systems enabling "peace and health" as a context for:

- (1) Interdisciplinary research and hybrid enquiry, reflecting an enlarged interpretation of the statement of the World Health Organization in 1946 concerning the social determinants of health.
- (2) Understanding both the structure and the adaptive implications of interventions more deeply, recognizing that concerns for peace and health are embedded in complex social-cultural-ecological systems.
- (3) Expansion of peace and health as a conceptual domain to encourage new inter- and multi-disciplinary collaboration.

As our collective understanding of the interconnectedness of social-cultural-ecological worlds deepens through conventional scientific discoveries and the convergence of knowledge systems across scales, it is apparent that integrative concepts, methods and strategies, as well as new directions and new questions are needed, both for practice and for research.

The guiding principles of this framework are humanitarian and include:

- (1) A proactive focus on creating conditions for futures that diverge from past norms of violence.
- (2) A commitment to optimism and respect in seeking the best that can be for all.
- (3) Recognition that individual health and well-being are essential for societal and global health and for peace.
- (4) Health and peace are comprised of, and dependent upon, an amalgam of physical, mental, emotional and spiritual conditions.

As such, while critiques of current and past conditions are important foundations for understanding present conditions, the aim here is to transform from the past, so that alternatives for the future become possible and hope remains alive. Thus our emphasis is on adaptive change.

The grounding principles of this approach are rooted in resilience thinking (Holling, 2001, 2004):

- (1) Recognition that our understanding of complex systems is inevitably partial.
- (2) Social-cultural-ecological realities play out through time and space, are not controllable and often are not predictable.
- (3) The adaptive cycle as a metaphor for change serves to describe transformatory processes in natural and human systems, originating in biological sciences has grown into a metaphor for integration of natural and human systems (http://www.resalliance.org/index.php/adaptive_cycle) and we draw from it here. The schematic for the adaptive cycle consists of four primary phases,

labelled as:

(1) "Growth/exploitation" (r), which then segues into 2) "conservation" (K), then into 3) "release" (Ω) and finally into "reorganization/renewal" (α) which then leads to subsequent cycles of growth and exploitation, and 4) this yields a fourth principle that is both hopeful and cautious: the only constant really is change. Our hope is to influence it.

To nurture new realities requires grounded understanding of existing conditions and the processes of change, the will to invest in change and a recognition that our collective human fate is ultimately one that is shared. In part this is the basis of the emerging "responsibility to protect" at international law (Thakur, 2006). It is also an ecological and social reality.

METHODOLOGIES AND METHODOLOGICAL CONSIDERATIONS

A few words here about methodological issues may be helpful with regard to the discussions we hope to stimulate. Firstly, both quantitative and qualitative research have the capacity to play significant and important roles in developing understanding of the realities, the needs, and the mechanisms of personal and societal transformation toward desired states of peace and health. There is no room for bias within an inclusive approach, and an inclusive approach is the only way forward in a shared world. Recognizing this, we point to the value of narrative and ethnographic methods, used so successfully by Farmer (2009), Orr (2008) and Redekop and Paré (2010), as well as to quantitative work so familiar to evidence-based researchers in the health community (Townsend et al., 1988; Reddy and Yusuf, 1998; Vass, 2001). Our own work is based on a spectrum of methods, from individual cases addressing health and illness, to systematic studies, investigating social healing across political, economic and cultural divides. At the same time we draw heavily from significant, long-term, population-based studies that relate health, including psychosocial health, to contextual factors (Marmot et al., 2010; Chandola, et al., 2004).

The second key point is that inclusive methodologies are valuable, and so action research, involving participatory methodologies is also important, both from the standpoint of increasing our knowledge and also for increasing our collective self-efficacy, as discussed subsequently. There are many examples of action research and more are needed, bearing in mind our need to learn from each other. Examples of participatory research from development studies (Smith et al., 1997) and also from healthcare (Rosenstock et al., 1988; Bent et al., 2005) continue to encourage researchers and can usefully be applied.

DISCUSSION

Toward a conceptual model for a hybrid field

The relationship between peace and health proposed in Figure 1 is arguably heterogeneous, affected by both place- and culture-specific factors. It is underpinned by historical forces and operates across scales beginning with the individual, even before birth, and his or her social

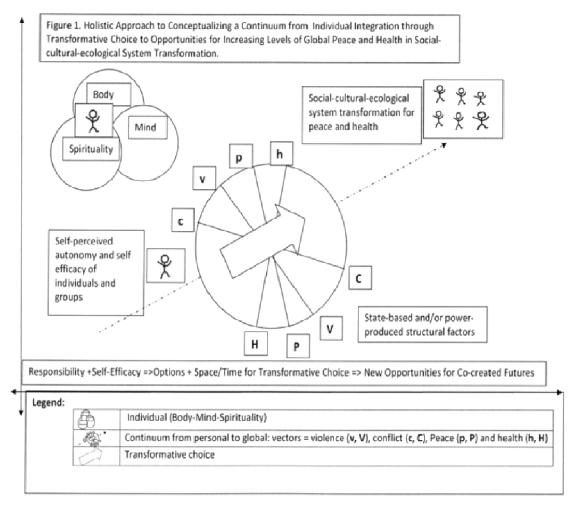


Figure 1. The holistic model for development of peace and health.

context; and traveling through time and space to condition future prospects for health and peace at individual, local, regional, national and global scales. We do not assume simple causal relationships between and "health" because a higher order of complexity is inevitable as a result of this heterogeneity. For this reason, the focus in this commentary is deliberately directed to the issue of a broad concepttualization of this emerging, hybrid field, rather than to more narrowly focused discussions such as a medical critique of war. This is in no way intended to detract from important work done to date. Rather it is to address evidence-based research that clearly points to the critical juncture of social justice and peace and health outcomes that is emerging through population-based research (Marmot, 2003). In this sense the present commentary is calling for a "bigger tent" (Doubleday, 2010), or in other words, a paradigm shift, toward a shared understanding of the holistic nature of both the co-creation of the peace and health "problem" and the "cure". The methodological challenge for research is to retain coherence and rigor in the face of enormous complexities while at the same time, developing reliable and accessible approaches to obtain policy-relevant metadata from the integration of findings from diverse and mixed research methods.

Given the need for dynamic connections between research and practice, two additional, specific, priorities are evident if we are to move from describing problems to intervening to produce change (Kivimaki et. al., 2008). First is an emphasis on the need to prioritize development of social processes for the transformation of social injustice, discussed above, and secondly, is the need to recognize youth as a significant and vulnerable demographic in a transforming world, as well as a generative and transformative force within society.

Youth are the future: Social learning, education, communication and our duties to future generations

Youth both represent and symbolize human potential. According to United Nations estimates the population of the Arab world will be 395 million by 2015 as compared to 317 million in 2007, and 150 million in 1980 (UNDP)

Arab Human Development Report, 2009). Young people are the fastest growing segment of Arab countries' populations, and some 60% of this population is under 25 years old, making this one of the most youthful regions in the world. In the Canadian context, although forming only a portion of the total population, Indigenous Peoples constitute one of the fastest growing populations, with over 50% under 15 years of age. Youth represent the future, literally, and present generations owe future generations a duty of care that includes protection of the fundamental sources of life, such as land, water, air and biodiversity (Brundtland, 1987) as well as access to them.

The holistic model for development of peace and health in Figure 1 is based on the recognition that comes from work on social-cultural-ecological systems: adaptive strategies for fostering peace and health are also part of the ethical requirement for intergenerational equity. It also reflects the realization that strategies for social learning, education and communications for resolving conflicts. building new forms of respectful engagement and selfempowerment with youth are essential. An integrated training model has been developed by Lederach (1995) for example, and new strategies are being developed, based on reciprocal relationships, to alleviate conflicts and avert escalation to violence (Redekop and Paré. 2010). More work is needed, both to develop models for training and intervention in peace and health, and to develop theory to support it. Here theoretical advances in conflict resolution (and other fields) offer rich resources (Melchin and Picard, 2008).

Bandura (1977, 1995, and 2001) recognized that people learn observationally by modelling and imitating behaviours, and that this precedes attempts to perform behaviours. He also identified "reciprocal determinism", by which a reciprocal relationship is understood to exist between people and "environment". We include this relationship in our conceptual model as "context", meaning those elements of the environment that an individual perceives, and for our purposes, the meanings that the individual assigns to those perceptions. In Figure 1, the path travelled by individuals and units of sociallyorganized individuals moves through a context that consists of the formal elements of formal structural realities, including conditions promoting health (H), peace (P), violence (V), and conflict (C); as well as the informal non-structural versions of these conditions, created by epistemic conditions (represented by lower case "h", "p", "v" and "c"). Importantly, the traveller has the capacity to choose a response. This choice is a critical element contributing to the progress along the path from individual reality in the lower left of the figure toward a transformed social-cultural-ecological system represented at the upper right of Figure 1.

Applications of Bandura (1995) social learning theory to health outcomes have been made at the level of the individual (Rosenstock et al., 1988) and by Bandura et al. (2001) in the context of individuals and groups. We are

now in need of the ability to scale up self-efficacy, much as Holling (2004) has proposed with respect to scaling up "panarchy" (the idea of systems of human and natural systems forming complex systems), in this case from individual levels to the level of "worlds".

Clearly the role of youth in a transformed future is critical. Yet without opportunities to model, imitate and observe healthy and adaptive behaviour, how can youth find inspiration to "be the change" as Gandhi said we must? There are many important areas for future research, as well as many more areas of existing research to engage. For this reason, it is hoped that others will see this work as an invitation to share their work, and that the conceptual model of Figure 1 may serve to further stimulate development of interdisciplinary research initiatives, both in basic and applied peace and health research, and also in the synthesis of interoperable metadata concerning peace and health in complex systems transformations.

Some early conclusions along the way to a holistic approach: "Being the change" in order to make change

Often it is easy to look for problems and to sink into pessimism. This paper deliberately chooses the higher ground and looks for paths toward peace and health, as well as the means of "proliferating" peace and health. Individuals experience "conflict", "peace", "violence" and "change" in human terms, as part of daily life. On a daily basis humans must find ways of coping with and transforming heart-rending, difficult, negative experiences (Abuelaish, 2010). At the other end of the continuum of social organization, at impersonal scales, human organizations of all kinds can be instruments of official "conflict", "peace", and "violence", perpetuating what Galtung (1969) has identified as "structural violence" and thwarting prospects for peace and health. These systems, too, need to be transformed (Doubleday, 2010). To stimulate conceptual innovation and to emphasize the deliberate choice of actions and the possibility of transformation across scales and along a continuum of social and political organization, the authors have proposed a simple model in Figure 1 relating the personal and individual to other scales of human and structural organization. By including the national and international dimensions, the model devises a bridge between individuals and their actions linked to the transformation of existing human-created regimes and the imposed orders responsible for "conflict" and "violence". convergence is centred around 3 key factors:

- (1) Values based on the conviction that moral and ethical choice is possible at multiple scales.
- (2) Trust and optimism can persist despite adversity and are essential to the positive risk-taking behaviour that

supports self-efficacy and change.

(3) Physical, mental, emotional and spiritual factors interact within and between individuals and must be seen holistically, if health and peace are to be fully supported.

The fine analysis of discrimination as confusion about cultural difference (Farmer, 2009) coupled with critical rethinking of health in the context of human rights (Farmer, 2005; Townsend et al., 1988) advances arguments for recognizing poverty as a key frame of reference for inequalities of health and cumulative injustice impairing opportunities for peace. Much as Galtung (1969) constructed peace as more than the mere absence of violence, similarly the linkages between peace and health require development of new ways of envisioning universal human rights as operating in time and space to validate actions to meet the basic needs of all, on the ground, in real time. The challenges in bringing human rights from ideals to action are significant, and constitute a remarkable opportunity for human development. The new duty to protect can be interpreted as a state-scale version of the "golden rule" of taking responsibility for the well-being of others. It remains for individuals and groups to develop what Bandura (1995) has called "self-efficacy", best understood in resilience thinking as "adaptive capacity"; and to see that by taking responsibility, they become powerful, despite existing structural asymmetries of power (Doubleday, 2007).

This holistic approach began by embracing a holistic model of the individual as an integrated being of body-mind-spirit (including emotions) because a synthesis of actions, beliefs, feelings and values is required for health and for change to occur. In the absence or impairment of any one or more of these dimensions an individual cannot be completely healthy or well. A society can hardly be healthy if composed of incomplete and unhealthy individuals. The continuum of life is expressed in the microcosm of the individual, as well as in the macrocosm of global realities, and health and peace assist us all to realize full human potential.

Where possible, taking responsibility demands that individuals take ownership and exercise leadership in order to become opinion leaders able to offer inspiration and examples to others, modeling new choices and new decisions upon which new futures for peace and health can thrive.

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