Refining Public Health in Wartime: From the Biomedical Model to the “Wounds Inside”

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This article traces the research trajectory of the Institute of Community and Public Health (ICPH) at Birzeit University, whose work focuses on life and health outcomes for Palestinians living in chronic warlike conditions under Israeli settler-colonial rule. Over decades of field-based work, ICPH researchers came to the realization that medicalized responses to trauma contributed to concealing the social and political meaning that Palestinians attribute to their collective experience. By adopting an approach that linked the biological/biomedical sphere to the political sphere through the concept of suffering, and exposing the sociopolitical conditions of life and the collective trauma-inducing nature of Israeli military occupation and repression, ICPH’s research has allowed for the simultaneous personalization of war and politicization of health. In addition to discussing some of the health problems identified by ongoing investigations, the article also touches on the ways in which institution building and research production are linked to the capacity of Palestinians to endure and resist violation in their struggle for justice.

The mission of the Institute of Community and Public Health (ICPH) at Birzeit University (BZU) is primarily defined by the extraordinary conditions of the West Bank, including East Jerusalem, and the Gaza Strip as territories under protracted Israeli military occupation, now spanning half a century. The institute’s work aims to contribute to the protection and improvement of the health of Palestinians: by conducting research, producing knowledge, and generating the evidence required to develop independent and informed health policies, plans, and programs; through teaching; and by strengthening the capacity of public health professionals. Given its public health focus, the institute’s primary objective is to test existing health measures or develop new ones, and to produce numerical evidence linking health to the broader context in which people live.

ICPH’s approach has been interdisciplinary almost from the beginning, with public health defined as a field of inquiry drawing on relevant conceptualizations from the medical sciences, the social sciences, and related disciplines that are subjected to empirical scrutiny. This interdisciplinary approach comes from firsthand experience with life under military occupation and colonization, and is inspired by the work of Rudolf Virchow, the nineteenth-century father of social medicine who coined the aphorism: “Medicine is a social science, and politics is nothing else but medicine on a...
large scale”—a statement that has been described as public health’s biggest idea.¹ Most of the measures assessing health outcomes referenced in this article have been developed by ICPH faculty and researchers based on a contextual understanding of the effects of war on health, often with the support of research colleagues from abroad. Such regional and international partnerships are important for generating locally relevant evidence. Over many years, discussions with Lebanese, Syrian, Iraqi, and Turkish colleagues have provided a rich medium for the documentation of war experiences of significant import to our understandings. Thanks to the initiative of Huda Zurayk, scholars and researchers from the Faculty of Health Sciences at the American University of Beirut, and from the Reproductive Health Working Group–Arab World and Turkey, have been able to come together to share, think, read, and write on issues of mutual concern, enabling us Palestinian academics to break out of the isolation from the broader region that characterized our situation until the mid-1990s.

The Early Years

Our research journey and our questioning of frameworks for understanding health began in the early 1980s. ICPH was established first informally in 1978 when I came back from the United States to take up an academic post at BZU. I was fortunate that the university was a small institution with fewer than two thousand students at the time, and faculty from various departments formed a close-knit group that was actively engaged in institution building and in linking academic work to societal needs under military occupation. As soon as I arrived, I was asked by sociologist Salim Tamari to join his research team and contribute a health section to a study examining the social impact of agricultural technology on the life of a peasant community in the Jordan Valley.² The experience was transformative: I had been focusing on the microscopic until then, examining nutritional status and parasite infestation among children, without asking key macroscopic questions about the root causes of such conditions. Working with a team of social scientists was eye-opening and made it possible to raise new, albeit difficult, questions about poverty, deprivation, environmental degradation, and, importantly, about Israeli occupation measures and their impact on health.

The second transformative experience occurred after I received a small grant from the Population Council (Cairo) in 1981, which allowed me to employ research assistants and consolidate the establishment of a community health research unit housed in a small garage near the old BZU campus. The unit’s establishment was possible thanks to the strong encouragement and support of Ramzi Rihan, a Birzeit physicist, who was charged with planning the university’s expansion, and Gabi Baramki, then acting president. Both men worked tirelessly to link academic work with the developmental and relief needs of a captive population, and to protect the university from chronic attack. I witnessed with admiration Baramki’s skillful handling of Israeli army onslaughts (incursions and repeated closures of the campus, as well as the killing, injuring, or detention of faculty and students) and his ability to conduct seemingly endless negotiations with the military governor with remarkable dignity. Baramki’s example helped the rest of us maintain our own dignity and sumud in the face of repeated exposure to violation and humiliation.
The 1981 research grant marked a turning point: our findings on life and health in three West Bank villages showed us that something was wrong with the way that Palestinian biomedical and allied health sciences specialists had been trained (and hence conducted research) on the basis of a conventional Western biomedical model that emphasized biological factors and gave little consideration to social, environmental, psychological, and, in the Palestinian case, political factors. Our study indicated clearly that economic and social relations, specifically class and gender, were key determinants of health, and that these were enmeshed with and reinforced by military occupation policies that rendered improvements in health status unlikely, at best, and impossible, at worst, absent a change in the Palestinian response to the problems of ill-health.3 We also critiqued Palestinian health planning, which we called “planning behind the desk”—as the term suggests, this was planning done in offices, based on unverified assumptions about people’s health needs, focusing on services and equipment without conducting needs assessments to identify priorities, and without any reference to the broader context in which people lived. (Nor did the process involve working with communities to prevent disease and promote and protect health, inside and outside existing health services.)4 Based on these findings, we critiqued the internal Palestinian health debate for failing to take into consideration the impact of Israel’s colonial policies on the economy, social structure, and therefore health of Palestinians under occupation.5 We understood then that we would need to develop a research agenda that could assist in changing living conditions rather than just providing palliative treatment. Thus, a mix of research and our own experience of life under occupation and colonization helped us to realize that our conceptions of health had to change.

From Academia to the Field, and Back

As researcher-activists with a foot in academia and a foot in the field, immersed and active during the heyday of the Palestinian social action movement in the 1980s, we also used our research findings to ameliorate people’s health. With another small grant, we managed to partner with a nongovernmental organization (NGO), the Birzeit Women’s Charitable Society, to set up a program that trained village health workers. We considered this a crucial component of primary health care (PHC) since women health workers would be able to enter homes and meet with families in the community. Entering homes was important because it made possible linkages between particular health conditions and specific social, economic, and political situations. For example, when we discovered many cases of diarrhea among children in one village, we worked with an international NGO to hook up piped water supplies to the village. This simple measure alone required years of work and campaigning: the Israeli military government routinely denied the necessary permits for the needed infrastructure in order to punish village communities in whose midst lived individuals who were active in the Palestinian struggle—collective punishment that continues to this day. We also developed and operated a student health services program at the Charitable Society’s center to address the needs of BZU students. This was probably the first time that student health services had ever been introduced in the country. Thus, the health center began providing students the care they needed while also catering to the needs of seven villages...
near Birzeit. It was also on the basis of this research that in 1986, my colleague Laura Wick and I helped the Union of Palestinian Medical Relief Committees (today’s Palestinian Medical Relief Society) to establish a village health worker school, now accredited by the Palestinian Ministry of Education and Higher Education as a junior college offering a diploma program.6

By this time, we had realized that the pool of health professionals in the country was composed largely of doctors and nurses, and that we had no public health specialists. Thus, we began to mentor our undergraduate students and to locate scholarships that would enable them to continue their education abroad in various public health fields, including rural sanitation, nutrition, health education, and others.7 Later on, we provided support to our young research assistants to complete PhD studies abroad. Emphasizing capacity building of specialists in research and in locally needed practices was another mode of resistance to Israel’s military occupation by means of institution building.

Our field experience helped us understand what PHC was about before knowing how the World Health Organization (WHO) had defined the term in its 1978 Alma-Ata Declaration. In retrospect, it was work done in reverse, although it could be rightfully considered praxis: we worked on research/practice in communities and discovered theory later. We began to read the international biomedical and public health literature critically and because it was not then easily accessible at BZU, we did this mainly when we traveled abroad. As we did so, we questioned the reasons for the Western conventional health model’s focus on disease rather than health and well-being, and its targeting of individual behavior to the exclusion of broader factors that influence behavior, as well as structural factors that affect health negatively despite individual behavior change. Since the conventional medical approach did not allow an understanding of why disease seemed to afflict some groups more than others, we questioned the appropriateness of health assessment frameworks and metrics that we had generally swallowed whole during our training. We came to realize that the model’s framing conceptualization was problematic, and we understood that it was framing that determined the research questions, as well as the methods and instruments used. For example, international researchers were asking, How can we get these violent Palestinian youth off the streets?, a framing that assumed Palestinian youth were violent by definition. Instead, we started to ask and research different types of questions, such as, Why are Palestinian youth exhibiting violent behavior to begin with? Framing the question differently made it possible to expose the violations that Palestinian young people were experiencing, and the effects of those violations on their behavior, health, and well-being, as well as their hopes for change and justice.

As we pursued our empirical work, we also began critiquing the Western domination of knowledge production. Gradually, we moved toward the production of what Michel Foucault described as subjugated or buried, disguised, and disqualified knowledge. Essential to the completion of a critique were “knowledges that have been disqualified as inadequate . . . naïve knowledges located low down on the hierarchy, beneath the required level of cognition or scientificity.”8 In the Palestinian context, where we had long been silenced and our narrative was disqualified (a practice that continues to prevail), knowledge production became part of the resistance to our settler-colonial predicament. We gradually moved away from accepting at face value, and using, knowledge and instruments produced in the West to a situation
where we were producing knowledge relevant to and important for our community, often going against the tide, and sometimes at great cost: being unable to publish internationally, and producing gray reports that could only be used locally to lobby at public meetings and events.

The recognition we arrived at was derived from our collective attempt to understand, give meaning to, and document what was happening to our own lives in warlike conditions. Palestinian academics and researchers were exposed to various forms of violence over time, and chronically, like everyone else. To us, it seemed that, in the main, everyone counted the dead, the injured, the disabled, and the sick—so-called objective metrics—all of which were necessary but not sufficient (figure 1). In addition, such data were metrics of disease, not health. We recognized that our task in interdisciplinary public health research was to uncover what war does to the survivors since the dead are 100 percent dead. Our quest thus became one to reframe and measure the effects of political violence on the living beyond apparent physical health, uncovering the wounds inside, the invisible traumas of war that, cumulatively and over the life course, can lead to visible and diagnosable disease.

The First Intifada: Combining Academic and Emergency Work

As we pursued our research, we combined capacity and institution building, planning, and model building with emergency work, including the provision of first aid to students who were shot or attacked by the Israeli military. During the First Intifada (1987–93), we went into full emergency mode and launched various initiatives to assist the population in surviving Israel’s onslaught. We tested the cistern water of the Ramallah/al-Bireh twin cities for bacterial contamination and chlorinated it in case the Israeli military retaliated against the population by withholding piped water supplies from the area. When the Israeli army closed down schools and universities, we taught in homes in defiance of closure orders, turning our kitchens into labs and using microscopes and other equipment available from BZU. And we launched research to
uncover the consequences of Israeli army violence on health. During this period, the traumatic effects of Israeli military occupation became pronounced, with the implementation of the “broken bones” policy that had Israeli troops breaking the limbs of rock-throwing Palestinian protesters. Israeli army repression intensified against a mostly unarmed population practicing civil disobedience, and more than 1,000 Palestinians were killed. In the first two years of the intifada alone, almost 30,000 children required medical treatment for injuries caused by beatings at the hands of Israeli soldiers and 6,500–8,500 Palestinian minors were wounded by Israeli gunfire and/or hauled off into administrative detention in Israeli prisons.¹⁰

By the end of the first year of the intifada, we had joined forces with East Jerusalem’s Makassed Hospital and with Bethlehem University to build the profile of a group of mostly young people who had had become disabled as a result of Israeli army brutality. On the basis of West Bank hospital records, and using the databases of institutions collecting information about injuries due to Israeli army violence, we ascertained that at least 2,500 cases had been admitted to hospital (this number excluded the many cases treated outside, since the injured incurred the threat of arrest by the Israeli army if they were admitted). Based on severity, we concluded that about 40 percent of the injured would end up with a disability requiring long-term institutional and community-based rehabilitation.¹¹ This particular study also helped to highlight the health status of the general disabled population, a long-neglected sector, leading us to research the needs of all the disabled (regardless of the cause of their disability) in cooperation with a consortium of local and international NGOs. The consortium established a community-based rehabilitation (CBR) program in which we participated as researchers and trainers to address some of the physical and social integration needs of the disabled. Training and program implementation were based on needs assessments completed in the north, center, and south of the West Bank as well as the Gaza Strip. Those CBR programs continue to serve the disabled to the present day.¹²

The Oslo Accords and Second Intifada Periods

Up until the mid-1980s, what health sector research there was focused on the physical consequences of war on Palestinians’ health. The emotional distress and mental ill-health caused by the violations that Palestinians endured chronically had received hardly any attention from health practitioners, humanitarian aid providers, or researchers.¹³ From the Nakba in 1948 until the mid to late 1980s, Palestinians were the recipients of aid in the form of food, shelter, and medical treatment, but they were perceived as having no psychological/mental health needs. The increasing media attention to Israeli military violence during the First Intifada marked a change in attitude, however. International and humanitarian aid agencies began to identify the need to address psychological trauma, and soon it became a priority for the organizations in question. Exporting Western approaches, they medicalized distress, which resulted in a growing tide of psychological therapies in the late 1980s and the 1990s. In one sense, the trauma discourse allowed Palestinians to expose the sociopolitical conditions of life and the collective trauma-inducing nature of Israeli military occupation and repression.¹⁴ But the medicalized responses to trauma contributed to concealing the social and
political meaning that we Palestinians attributed to our collective experience. Despite this contradiction, the trauma discourse was adopted by many Palestinian groups hoping to draw international attention to distress, suffering, and other symptoms resulting from political oppression, even though individualized treatment with counseling and medications could not address the underlying causes of ongoing collective trauma.

The signature of the Oslo Accords between the Palestine Liberation Organization and Israel in 1993 brought about a shift in ICPH’s activities. As health was one of the first spheres to be handed over, it became necessary to help train Palestinians to take charge of health services, and in 1994 ICPH completed a needs assessment covering all West Bank and Gaza Strip clinics in preparation for the establishment of postgraduate programs toward a PHC diploma and a master’s in public health (MPH). Based on the results of the assessment, we developed curricula that were endorsed by local and international public health experts and practitioners. ICPH has been offering the MPH program since 1996, combining those curricula and the international literature with our continued research and field experiences.

The Second Intifada (2000–5) marked another watershed. According to statistics released in 2007, the uprising resulted in over 5,000 fatalities (4,228 Palestinians, 1,024 Israelis, and 63 foreign nationals), with a ratio of about 7 injured for every person killed, and a preponderance of Palestinian civilians among the dead and injured. During the 2002 military invasion of West Bank towns when Israel attempted to quash the uprising, the population was placed under curfew for as long as forty-five consecutive days; infrastructure and services, as well as cultural, media, and other institutions were destroyed en masse; and house demolitions and electric and water supply shutdowns were pervasive. A severe siege incapacitated medical and health services, interrupted immunization for children, and shuttered schools and universities, as the Israeli army set up checkpoints everywhere and blocked all roads. The medical journal the Lancet described the town invasions of 2002 as “a race to the bottom in terms of respect for human rights and international humanitarian law.” The damage to civilian infrastructure and institutions was estimated at $361 million. Yet despite these violent conditions, ICPH researchers embarked on documenting the consequences of incursions and curfews for the social and health-related quality of life of civilians during this period. Simultaneously with our fieldwork, we put in place public health interventions such as operating hotlines to link the population to medication donors, distributing food whenever curfew was lifted for a couple of hours every few days, linking patients to ambulances, and even teaching our students remotely through the use of the internet, telephones, and faxes so that they could complete the semester despite the odds.

By the time of the Second Intifada, our ability to access international research had become much improved as BZU’s library connected us to various types of international literature search engines. Hinari, WHO’s search engine, became accessible around 2003, allowing our researchers (as others from countries of the Global South) to access thousands of medical and public health journals at low cost. We gained additional access to knowledge and built capacity as Palestinian PhD graduates returned to Palestine from different parts of the world; by employing them, we were able to expand our pool of specialties to include epidemiology, chronic diseases, statistics, health economics, health management, and mental health, and to further consolidate the institute’s capacity for group research.
Social Suffering in War

Our first encounter with the concept of social suffering came from reading the work of psychiatrist Derek Summerfield who distinguishes distress and suffering from psychopathology, and critiques framing the distress that is experienced in war as a psychological disturbance. Summerfield emphasizes that people traumatized by war are not “mad” and that the consequences of war are not illnesses affecting individuals, but moral and collective problems requiring justice. Other work, such as that of cross-cultural psychiatrist Duncan Pedersen, was also useful, emphasizing that in situations of armed conflict and war distress patterns can be both varied and localized, and that political violence against individuals and communities has short- as well as long-term effects on health. A selective reading of the social science literature also resonated with how we understood what was happening to our lives. As we read essays and critiques, we searched for concepts to which we could relate in order to develop new measures, and provide the numerical evidence needed to support our understanding of the effects of war on health in the Palestinian context.

Veena Das, for example, notes that suffering is an “experiential challenge” in situations where particular life patterns that are meaningful to people can disappear, there is a failure of justice in wars, and the “rational” administration of pain is a deliberate attempt to create “docile bodies”—a description that corresponded exactly to what we experienced as Palestinians under military occupation. The work of Arthur Kleinman was similarly useful with its conceptualization of suffering as the embodiment of specific experiences that produce tragedy, and its articulation of ambiguity and the indirectness of experiences as contributors to a disorder of human actions rather than a disorder of the brain. In this framework, suffering is embodied in practice as opposed to choice; not attributable to depressive disease but to “melancholy,” a type of suffering that disorders and disturbs, which exemplifies the Palestinian condition. As surviving civilians of war, Palestinians have experienced internal displacement, forced migration, and the descent of terror and violence to the level of the everyday ordinary, reaching the home front, all of it disordering our lives, producing pain, tragedy, sadness, and misery. More, Palestinians are ruled not only with brute force, but also with ambiguity, uncertainty, insecurity, loss of dignity, and deliberate humiliation, all important consequences of chronic war that need acknowledgment and not merely as a matter of physical survival worthy of assistance and support.

Hence, in addition to the physical effects of war, the destruction of people’s way of life had to be taken into consideration. And because social relations are key contributors to health, survivors’ experience of the destruction of their social, economic, and cultural worlds all of which related to how they defined their identities, values, and roles was an all-important but less visible impact of war. In other words, survivors of war experience trauma as suffering, as the invisible injuries of war, the “wounds inside.” Such wounds not only dramatically affect the capacity to respond to and recover from trauma, but they can only be addressed ultimately through sociopolitical means, the reconstruction of social worlds, and of course, the attainment of justice.

Framing the suffering of war in terms of mental disorders rather than of social and political issues thus became questionable, if not downright harmful. We questioned the utility of
post-traumatic stress disorder as a diagnostic category that framed distress and suffering due to violation as a psychiatric condition. This approach depoliticized mental ill-health due to war by framing it as a biological phenomenon, turning the pain of living in war into a technical problem, and obliterating the fundamental issue of justice. As Summerfield points out, ethnographic studies demonstrate that “the presentation, attribution, classification, prevalence and prognosis of mental disorders varies greatly between cultures.” Indeed, reports by a local psychiatrist who practiced at Bethlehem’s mental hospital for more than three decades from the early 1950s to the 1980s indicated that the presentation of mental disorders could change from period to period even in the same society, given important changes in context. We thus began to realize that the foundational concept of social suffering as it relates to the survivors of war could help us lay bare the pain of living in war by reframing health beyond the confines of the biomedical approach and other paradigms that paid little heed to justice and the cause of causes—that is, the political domain—pointing only to medications and therapies as solutions to symptoms of mental ill-health. By linking the biological/biomedical sphere to the political one through the concept of suffering we were able to uncover the impact of political decisions, wars, and conflicts on our lives and our communities. It allowed us to personalize war and to politicize health.

Our own experiences with violation as academics, professionals, and families, and how time after time we collectively worked toward recovery—especially the recovery of our children and loved ones—pointed to the need for new ways of measuring the effects of war on health. Hitherto available measures focused on the medicalization of distress and social suffering from war, with most conflating the range of health and well-being states with disorders and psychopathologies, necessarily pointing to a variety of “treatments” as remedies to the trauma of war, and medicalizing the process of recovery. In light of this, we began to articulate the domain of suffering and to develop context-specific measures to correspond to this framing as, at the time and up until recently, instruments that specifically assess suffering in war and its effects on health were rarely available in the literature.

We also appreciated the notion of exposure to political violence over the life course. When people endure the social suffering of war daily, the cumulative exposure to political violence among survivors can gradually develop from the wounds inside to disease and death. We understood that we needed to place social suffering within the Ease–Disease continuum rather than using the binary of either having or not having disease, and that this continuum illustrated different states of health—and ill-health—that included not only disease, but also mental and emotional health, with the extreme situation of a disease or disorder at one end of the continuum. This continuum of health states links health to indicators of well-being and to measures of suffering and ill-health,
including humiliation, deprivation, insecurity, and distress, among other manifestations of the ill-health accompanying the invisible traumas of war.

We also recognized that the survivors of war oscillate back and forth within this continuum, depending on degree, severity, and chronicity of violation, as well as on the resources available to them assisting in recovery, including financial security, strength, cultural stability, and social support, among others.\(^38\)

**Developing New Measures**

It was during the Second Intifada that we made initial attempts to develop a new so-called subjective measure of health derived from interviewing people and finding out how they experienced the trauma of war and the effects of suffering on health.\(^39\) We began this qualitative work by developing a new measure/scale based on local understanding, which we called the Social and Health Related Quality-of-Life Scale. Using this scale in a statistical survey, we demonstrated how civilians suffer in war and showed the impact this had on their health and social relations. We did this as soon as the curfew was lifted, not only to document our experiences but also to preserve our sanities, having lived through or witnessed death, destruction, bombing, curfew, food, electricity and water scarcity, home invasions and occupation by the Israeli army, and even pilfering by Israeli troops when families would be locked into one room during curfew and soldiers occupied the rest of their homes, leaving the premises in unbelievable squalor, with all sorts of items missing when they departed: this was total disorder, with the home front becoming the battlefront.\(^40\) We worked despite having been traumatized as families, especially as regards our children. We knew by then that collective agency and trying to get back to normal life as quickly as possible after such brutal population-wide exposure to violence could assist in recovery.

Our second attempt to develop metrics relevant to the Palestinian experience came as a result of our meeting with a group of mostly young paramedics whom we had assembled to speak to ICPH students and workers about their attempts to get the injured, the sick, and women in labor to hospital under fire or during the twenty-three-day curfew of 2002. Their talks made them and everyone else cry as they spoke about their experiences. An outstanding finding was their unanimity about the biggest trauma they had suffered during the period being an intense feeling of deep humiliation for not having been able to get their patients to hospital because the roads were blocked by the Israeli army. This led us to conduct qualitative work first: crucial to understanding people’s feelings was exploring the meanings they attributed to events and particular experiences, as well as to their social behavior.\(^41\) This in turn set the stage for the development of an instrument relevant to context and culture, a quantitative investigation among youth, and the production of several scientific papers focusing on the way that Palestinian young

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people experience and understand conditions of protracted exposure to political violence, superimposed on acute periods of intensification. We also developed a scale to measure humiliation in order to reflect the invisible trauma of war, beginning with a qualitative study to understand how young people understood dignity and experienced humiliation. We asked study participants to identify the characteristics of dignity, and the factors that made them feel dignified or humiliated. Responses were remarkable in that many defined humiliation as a feeling that one cannot get over, that was linked to Israeli military occupation actions, and related to collective rather than individual experiences. For example, one young person reported that he lost his dignity and felt humiliated every time he crossed the Qalandia checkpoint separating the West Bank from East Jerusalem, alongside hundreds and thousands of others also trying to get across—a collective humiliation at the national level. The most frequently cited dignity domain was respect for oneself and others, followed by personal and collective freedom, and independence. We concluded that dignity or its loss can be used as one of the indicators of social suffering related to war and for the assessment of well-being.

As a result of further research, we were also able to demonstrate the association between humiliation and subjective health complaints among youth. Our findings revealed a key aspect of our growing understanding of the trauma of war, namely that individual and collective exposure to violence affects mental health negatively, independently of each other. Collective exposures included experiencing shelling in the neighborhood, tear gassings, and sound bombs thrown indiscriminately at groups of people, especially around checkpoints and crossings, as well as seeing others being humiliated, arrested, injured, and killed. These findings contrasted starkly with the biomedical individualized instruments, focusing mainly on individual pathologies and physical traumas. Such results highlighted the need to include not only individual but also collective violation experiences in assessing the impact of war on health. As this research continues, we update the social suffering domain in accordance with our own experiences, working in the process toward developing the quantitative instruments required to assess the effect of such experiences on health (figure 4).
We invariably use the mixed method approach (qualitative then quantitative) to test existing international measures of health or develop new subjective ones that are recognized in the literature to predict ill-health and death (figure 5). Such measures allow people to reflect on and evaluate their own health and, thereby, contribute their voice to the assessment.\textsuperscript{46} For instance, testing the WHO’s Well-Being Index, we found that in times when crises are not severe, the index worked adequately, factoring statistically well among adolescents and adults in the West Bank and Gaza Strip and among Palestinian refugees in Lebanon.\textsuperscript{47} We also tested the WHO’s quality-of-life instrument (WHOQOL-BREF) by conducting a qualitative study to understand the meaning of quality of life in the local context first. The results indicated that political freedom, self-determination, participation in democratic processes, and involvement in political decision-making were all considered important contributors to people’s self-reported quality of life and that the WHO’s standardized instrument, restricted to physical, psychological, social, and environmental domains, was weak on the social domain and completely devoid of a political domain.\textsuperscript{48} We statistically tested the WHOQOL-BREF instrument without upsetting its psychometric properties and added what we called Palestinian questions derived from our qualitative work and knowledge of what Palestinians experience in times of war and heightened conflict.\textsuperscript{49} These questions were used to form a “scale for distress,” since distress manifested differently in different contexts, and another measure we called a “scale of fears and threats,” which Palestinians in the occupied territories endure on a daily basis.\textsuperscript{50} This last scale we later renamed the human insecurity scale, based on our discovery of Jennifer Leaning’s conceptualization of human security, which we found corresponded surprisingly closely to the items identified in our scale.\textsuperscript{51}

We continued to test combinations of locally and internationally developed subjective measures of health, completing studies in the Gaza Strip following the winter 2008–9 Israeli onslaught against the territory, among Palestinian refugees in Lebanon, and with Palestinian adolescents from both the West Bank and Gaza Strip.\textsuperscript{52} It is interesting to note that a comparison of Gazans’ QOL before and after the winter 2008–9 attack revealed that the standardized WHOQOL-BREF instrument could not

![Subjective Measures of Health](image)

Figure 5. Subjective measures of health.
detect significant changes in QOL scores. In contrast, our locally developed measures of human insecurity and distress detected important increases in these two measures of suffering and reported health before and after the war, confirming the need to supplement or replace standardized international instruments with context-specific measures. This study also confirmed the importance of introducing a political domain into QOL instruments, that is, uncovering the political determinants of health.

As our relations with international and regional researchers strengthened, a group of academics from the United States incorporated our new measures into an investigation examining the articulation of suffering that had hitherto remained uncaptured in the mental health literature. Their study revealed a key existential form of suffering, a particular local expression of distress, in which participants described themselves as *muhattam* or *mudammar* (feeling broken or destroyed in Arabic) to convey their suffering in terms of spirit, morale, or hopes and ambitions for the future. For example, a West Bank man describing conditions during the First Intifada reported that the situation had destroyed his morale, broken his spirit and character. The study revealed that this feeling was more commonly experienced than depression or trauma-related stress, which are usually used to assess the effects of war on mental health. Given that *muhattam* could be reliably measured, the investigation emphasized the importance of using grounded and contextualized measures to assess the impact of political conflict on functioning (and health). *Muhattam* was an important addition to the lexicon of idioms used by people to describe their health—where being well, *afyeh* in Arabic, is understood as a combination of physical, psychological, social, and emotional components that cannot be separated from each other. Such idioms not only form part of a health–disease continuum, but they are also used differently in different contexts so that sometimes they cannot be meaningfully (as opposed to semantically) translated into English using a single word. Examples include *maghmoum*, *kulli ghull*, *masmum badani*, *mja’lak*, *fish himmeh*, *tal’aaneh rohi*, *mahdoud heili*, *mistwi*, *kharban*, *makel hawa*, *mayel*.

As we researched, read the literature, and tried to understand our war and conflict experiences, we began to examine the root causes of ill-health, that is, the cause of causes, and not just the war’s consequences on health. WHO had emphasized the social determinants of health in 2008, but it did not go far enough given our understanding of politics or the political domain as the cause of causes. As a result, we added political determinants of health to our framework (figure 6) and broadened that category beyond war and conflict to include biopower, biopolitics, necropolitics, racism, the unequal distributions of power and money within and across countries, global market forces, particular global and country-specific policies, as well as internal conflicts and factionalism. Using data from a study we conducted jointly with the UN Economic and Social Commission for Western Asia (ESCWA) following the 2014 Israeli onslaught on Gaza, we are currently analyzing results of new questions we included on feelings of deprivation. Initial findings reveal that 56 percent of respondents in a representative sample of men and women in the Gaza Strip feel deprived. Of these, 53 percent report that their feelings of deprivation are due to Israeli occupation, 51 percent attribute deprivation to financial/material hardship, 43 percent cite the rift in the Palestinian national movement between Fatah and Hamas, 39 percent invoke societal...
conservatism, 37 percent cite lack of work, 36 percent mention movement restrictions to the West Bank, and 35 percent list restriction on international travel imposed by the Israeli military. We are currently conducting statistical analyses to examine the association between mental health status and reported deprivation.

Undeniably, it is the political determinants of health that create the conditions in which people are born, grow, live, and age, and it is those that drive the social determinants of health. While it is important not to lose sight of biological predispositions that shape people’s health and well-being over the life course, the realization that the political determinants of health can lead to death, disease, and injury directly must not obscure the fact that these also lead to social suffering, the wounds inside, which in turn can lead to ill-health, disease, and death over the life course (figure 7). Thus, we conceptualize health and its determinants in war with a focus on the root causes of ill-health and suffering, taking into consideration how suffering affects well- or ill-being, and not simply relying on biomedical indicators of disease, which is the end stage of the continuum.

Our journey in the process of investigating the effects of war on health has revealed the need for a reframing of the causes and health consequences of exposure to political violence by placing the concept of suffering at the core of the health paradigm, and by adding a political domain as the ultimate determinant of population health. This reframing is essential to really understand what war does to people. It is also essential to guide relief operations and humanitarian assistance, and to support initiatives intended to mitigate the effects of war on health. For too long, Palestinians
have been the recipients of aid in response to their plight, a plight that seems to have no end in sight. Yet, what Palestinians really need is first and foremost a recognition of the injustice that befell them when with the Balfour Declaration the British decided to give a land they did not own to people coming from elsewhere, and when the United Nations agreed to partition Palestine despite the severe injustice to Palestinians this entailed, with the consequent creation of a tragedy that continues to this day: the question of Palestine. Palestinians do not want charity, or medications and therapies to help them withstand injustice. While it is true that humanitarian assistance and relief operations are needed in times of chronic crises, those must be coupled with a serious attempt at resolving the root causes of ill-health, which, in the Palestinian case, requires a sociopolitical resolution: justice, freedom, sovereignty, and self-determination before good health and peace can be achieved.

About the Author
Rita Giacaman is a professor of public health at Birzeit University’s Institute of Community and Public Health, which she helped found in 1978. Her current work focuses on developing measures that are context-relevant and appropriate to assess psychosocial health; she also continues to explore interventions that support Palestinians’ capacities to endure ongoing warlike conditions and resist injustice in the occupied Palestinian territories, especially among youth.
ENDNOTES


23 Derek Summerfield has since visited ICPH, participated in reviewing our needs assessment for mental health programming, and continues to support us and the Palestinian call for justice.


32 Summerfield, “War and Mental Health.”

33 Summerfield, “The Invention of Post-Traumatic Stress Disorder.”


35 Interviews by author with the late Dr. Antoine Dabdoub, Bethlehem, 22 April 2005.


38 Antonovsky, “The Structure and Properties of the Sense of Coherence Scale.”

39 Giacaman et al., “Imprints on the Consciousness.”


Ziadni et al., “Sources of Human Insecurity in Post-War Situations.”


