Mental health and armed conflict: The importance of distinguishing between war exposure and other sources of adversity: A response to Neuner

Kenneth E. Miller, Andrew Rasmussen

Organizational Consultant, 18 Whitney Avenue, Cambridge, MA 02139, USA
New York University School of Medicine, NY, USA

In a recent article in Social Science & Medicine (Miller & Rasmussen, 2010), we examined findings from research on the various factors that appear to influence mental health in conflict and post-conflict settings. We focused in particular on two categories of stressors that have received considerable attention in the literature: direct exposure to the violence and destruction of war, and “daily stressors”, the stressful social and material conditions that are often caused or exacerbated by armed conflict. Our aims were twofold: (1) to elaborate an empirically-based model delineating the various pathways by which armed conflict influences the mental health of civilians, and (2) to offer a framework for intervention based on that model, which might help to bridge the often contentious divide between advocates of what we labeled “trauma-focused” and “psychosocial” approaches. As we note in the article, trauma-focused advocates generally assume that psychological distress in war-affected populations is primarily the result of direct exposure to specific war-related events, and that effective interventions should focus on the amelioration of war-related trauma (PTSD) through specialized clinical treatments. In contrast, psychosocial advocates view distress as stemming largely from the stressful conditions of everyday life in settings of organized violence—conditions such as poverty and the loss of livelihoods, displacement into overcrowded and impoverished refugee settlements, heightened family violence, the destruction of social networks and the corresponding loss of social support, and the marginalization of groups such as widows, sexual assault survivors, former child soldiers, and people with war-related disabilities. From a psychosocial perspective, altering those stressful conditions is likely to improve mental health, while at the same time enhancing people’s innate capacity to heal from potentially traumatic experiences of violence and loss (Betancourt & Williams, 2008; Boothby, Strang, & Wessells, 2006).

The model we proposed, based on our review of the available research, is one in which daily stressors partially mediate the relationship between war exposure and mental health (Miller & Rasmussen, 2010). In our model, war exposure still exerts a direct effect on mental health; however, it is a significantly smaller effect than what we find when daily stressors are not included in the model. Beyond any discussion of mediation, it is quite evident that war exposure and daily stressors both account for significant variance in mental health status in settings of armed conflict. Because daily stressors represent continuous or proximal threats to mental health (by persistently elevating stress levels and taxing available coping resources), we suggested that it might be useful to first aim at reducing daily stressors as an approach to improving mental health, before providing specialized clinical treatment to individuals whose distress might abate with the repair of their social ecology. We also noted that whereas trauma-focused advocates generally focus on ameliorating symptoms of PTSD presumed to be related to prior exposure to armed conflict, there is growing evidence that in conflict settings other sources of traumatic stress may be elevated as well, such as child abuse and domestic violence.
and thus may contribute strongly to elevated PTSD symptom levels. A narrow focus on healing war-related PTSD runs the risk of overlooking ongoing sources of trauma that may affect people on a continuous basis.

In this issue of Social Science & Medicine, Neuner (2010) offers a thoughtful commentary on our paper. Neuner, whose intervention research group generally fits within the trauma-focused approach, is primarily concerned with the lack of an evidence base for prioritizing psychosocial over trauma-focused interventions (the sequenced approach to intervention we proposed). He rightly notes the lack of controlled outcome studies demonstrating the effectiveness of psychosocial interventions in conflict and post-­conflict settings. He also criticizes the psychosocial framework as including everything from individual counseling to community-­based interventions aimed at altering widespread social problems that may or may not be linked to mental health.

Perhaps more fundamentally, Neuner challenges the basic premise of our paper by questioning the utility of distinguishing between war exposure and other types of stressors (Neuner, 2010). He questions whether what we have called daily stressors are in fact causally related to mental health, and suggests that causality may actually work in the opposite direction; that is, he suggests that poor mental health may lead people to experience high levels of daily stressors, or to perceive situations as stressful that healthier individuals might not. He further suggests some daily stressors may be hidden from view and therefore be difficult to identify, and that in any case, it would be hard to assess which daily stressors are most strongly related to mental health in any given setting and should therefore be targeted for change. In effect, Neuner has suggested that we are advocating empirically unproven intervention strategies in order to target social-­ecological variables that are difficult to identify and may not be causally related to mental health anyway. In his view, treating PTSD using specialized, expert-driven interventions that have at least some empirical support is the appropriate role of mental health organizations working with conflict-­affected populations.

Points of agreement

Although the available data strongly support the usefulness of distinguishing between war exposure and other sources of adversity (i.e., daily stressors), we do find merit in several of the points raised in Neuner’s commentary. First, we agree that a compelling argument can be made for a multi-­level approach to intervention, in which specialized clinical services are provided concurrently with, rather than subsequent to, psychosocial interventions aimed at repairing the social ecology. We have received considerable feedback on our original paper from field-­based practitioners as well as researchers. While there has been strong support for the distinction we have made between war exposure and daily stressors as determinants of mental health (and for the importance of targeting daily stressors as an approach to improving mental health), we have also heard some frustration from clinicians who, like Neuner, question the practical utility of a sequenced approach to intervention. As one colleague asked at a recent conference where we presented a version of the paper, “What am I to say to the mother who brings her traumatized child into the clinic for treatment? Shall I tell her to wait while we first alter the social environment?”

Hubbard and Pearson (2004) have thoughtfully argued the case for concurrent, multi-­level interventions, based on their work with severely traumatized and depressed refugees from Sierra Leone living in Guinean refugee camps. They noted that a minority of camp residents experienced PTSD and depression so severe that it not only impeded their ability to function but also limited their capacity to benefit from psychosocial resources available within the camps. For these individuals, a culturally adapted, trauma-­focused intervention was developed. The group-level program, which also fostered an increase in social support among participants, yielded significant benefits in terms of symptom reduction. By maintaining a long-­term presence in the camps, project staff were able to train local community members in the intervention model, provide ongoing supervision, and adapt the intervention as needed to the evolving conditions within the camp.

In advocating a sequenced approach to intervention that prioritized altering the social ecology before offering specialized clinical services, our concerns were twofold. First, it can be difficult to distinguish normal stress reactions from actual disorder in need of treatment, particularly in settings of ongoing adversity (a point we discuss in our original paper). Indeed, there are examples in the literature (including an intervention study by Neuner’s own group) of PTSD symptom levels dropping markedly when political violence abated or conditions of greater safety were established (Neuner, Karunakara, & Elbert, 2004; Thabet & Vostanis, 2000). Consequently, we are cautious about advocating specialized care for potentially transitory trauma reactions that might diminish with the provision of social support and a greater degree of safety. We share the concern of researchers such as Bonanno (2004), who argue that the mental health field has tended to underestimate people’s capacity for resilience and recovery, while at the same time overestimating the need for professional treatment in the wake of stressful life events (Bonanno, 2004). Moreover, as a field we have learned about the hazards of prematurely offering specialized trauma-­focused interventions that may actually impede the natural process of recovery from exposure to traumatic stress (Bisson & Deahl, 1994; Hobbs, Mayou, Harrison, & Worlock, 1996).

However, to the extent that appropriate steps can be taken to distinguish transitory stress reactions from actual cases of disorder in need of treatment, we would support the provision of clinical treatment concurrently with psychosocial activities aimed at reducing the salience of ongoing environmental stressors. We would certainly encourage clinicians to adopt a broad view, and not limit their focus to the post-­traumatic effects of direct war exposure. By considering the full range of stressors affecting program clients, and understanding the variety of mental health outcomes other than PTSD that may arise (including culturally specific indicators and idioms of distress), we believe clinical programs are likely to have more powerful and sustained effects. Such a broader view necessarily means fostering linkages with other programs that are positioned to target ongoing sources of traumatic stress (e.g., domestic violence projects, child protection organizations) that lie outside the scope of traditional clinical services. Consistent with the IASC guidelines (2007), we would also encourage the development of local capacity in the implementation of clinical interventions, and the incorporation of local values and practices regarding psychological healing.

In his commentary, Neuner suggests that such a broad view is the norm among trauma-­focused researchers, who he believes do not focus specifically on war-­related trauma, but consider the broad range of traumatic stressors to which war-­affected populations may be exposed (Neuner, 2010). Unfortunately, the evidence simply does not support this assertion. Several reviews of the literature on mental health in war-­affected populations document how few studies have assessed sources of distress other than direct war exposure (Barenbaum, Ruchkin, & Schwab-­Stone, 2004; de Jong, 2002; Miller & Rasco, 2004). Domestic violence, for example, has seldom been assessed as a source of distress in war-­affected communities, despite its strong association with PTSD and other types of distress in the literature (Benice, Resick, Mechanic, & Astin, 2003). It is of course possible that practitioners in the field
are focusing on a broader range of stressors than the narrow set addressed in much of the research literature.

We share two other points of agreement with Neuner. He makes an important point that not all psychosocial interventions need to include improved mental health as a primary aim. As he aptly notes, for example, psychosocial projects that aim at reintegrating former child soldiers into their communities may have mental health benefits, but successful reintegration is worthy aim independent of any improvements in mental health. Indeed, our point was not that all psychosocial programming does or should aim at improving mental health; rather, because daily stressors are so strongly linked to mental health, efforts at reducing those stressors by altering the social ecology are likely to yield significant mental health benefits and may lessen the need for costly and generally scarce mental health care. Because many psychosocial programs aim precisely at reducing daily stressors and increasing resources that foster resilience (Boothby et al., 2006), we advocate psychosocial programming as a potentially effective approach to improving mental health, even when mental health per se is not a primary focus of such programming. de Jong (2002) gives the example of livelihood programs that not only generate much needed income, but also instill a sense of hope and a greater perception of control, two factors strongly linked to mental health.

Finally, we agree with Neuner that the term daily stressors is conceptually problematic, a point we discuss at some length in our original paper. It is overly inclusive, referring to potentially traumatic events such as child and spouse abuse, as well as lower-level chronic stressors such as poverty and unemployment, overcrowded and unsafe housing, social isolation, and a lack of access to basic resources such as water and medical care. We offered the term as starting point, meant to broaden attention beyond the historical focus on the mental health effects of direct war exposure. It may be that other terms, such as ongoing adversity or ecological stressors, or a subset of categories that include traumatic events as well as less intense chronic stressors, better capture the range of stressful social and material conditions we have described. We hope our paper will contribute to an ongoing dialogue about the full range of stressors that are salient in settings of armed conflict, and the elaboration of increasingly useful constructs to describe those stressors.

**War exposure, daily stressors, and mental health: the question of causality**

Neuner argues, and we agree, that emotionally distressed individuals are more likely than non-distressed individuals to perceive events as stressful. He rightly notes the potential bias inherent in stressful event checklists such as the Afghan Daily Stressors Scale or ADSS (Miller et al., 2008), which do not separate actual exposure to stressful events from the degree to which those events are perceived as stressful. However, he overlooks the fact that research on daily stressors in Afghanistan using the ADSS (Miller et al., 2008; Panter-Brick, Eggerman, Gonzalez, & Safdar, 2009) has yielded findings that are highly consistent with the results of other studies of war-affected populations in which actual exposure to daily stressors has been assessed separately from the appraisal of events as more or less stressful (Fernando, Miller, & Berger, in press; de Jong et al., 2004). Moreover, he overlooks the findings of Panter-Brick, Eggerman, Mojadidi, and McDade (2008) who used both subjective and objective measures of psychosocial stressors affecting youth in Kabul, and found that both sets of measures were linked to adverse mental health outcomes. To reiterate what we concluded in our original paper, exposure to daily stressors has been consistently related to both western psychiatric and local measures of distress. In fact, level of exposure to daily stressors has consistently been a stronger predictor than direct war exposure on most mental health outcomes. In short, both categories of stressors contribute to psychological distress and disorder, and both represent important targets for intervention.

We also agree with Neuner’s suggestion that poor mental health may, in some instances, actually contribute to the development of stressful social and material conditions. As noted in the IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings (IASC, 2007), and as discussed in the previously cited work by Hubbard and Pearson (2004), for a minority of war-affected individuals the experience of extreme distress may impede their ability to function effectively in their daily lives. Functional impairment may in turn generate or exacerbate a host of daily stressors (for oneself and others in one’s environment), such as family conflict, impaired parenting, social isolation, and worsened poverty (because of the inability to work or access basic resources). Importantly, these stressors may in turn adversely affect mental health—a point that Neuner curiously seems to question by suggesting a lack of data proving that daily stressors are causally related to poor mental health. In so doing, he overlooks a fairly extensive body of research documenting the impact of chronic environmental stressors on psychological as well as physical well-being. Social isolation, for example, is a major risk factor for adverse mental and physical health outcomes, including depression and heart disease (Brummet et al., 2001; Chesney & Darbes, 1998; House, 2001). Loss of income and a descent into poverty are likewise strongly linked to variety of mental health problems, and more broadly to chronically heightened stress, which is in turn related to a host of mental and physical health problems ranging from depression and anxiety, to diabetes and other diseases (Groh, 2007; Murali & Oyebode, 2004; Sapolsky, 2004). Family violence, and especially child and spouse abuse, are also highly predictive of numerous adverse mental health outcomes, including PTSD (Bennice et al., 2003; McCloskey, Figueredo, & Ross, 2008; Spathar & Mullen, 2004).

We agree with Neuner’s suggestion that the relationship between daily stressors and mental health is unlikely to be simple and direct; our model does not include the numerous variables that may serve to either mediate or moderate that relationship. However, to dismiss the model as “highly oversimplified” misses the point: the model is meant to broaden the discussion beyond its historically narrow focus on war-related PTSD, and to illustrate the various pathways by which armed conflict may affect mental health. We also note with interest that Neuner does not raise the same concern about inferring causality in the research on war exposure and PTSD (including his own group’s research), which has generally assumed a causal relationship based on correlations between measures of war exposure and psychiatric symptomatology. We do acknowledge the caution one must exercise when inferring causality based on correlational data. In our paper, we proposed a risk model, documenting the increased risk of adverse mental health outcomes associated with specific types of stressors (war exposure and daily stressors), and the statistical relations among those categories of stressors. Given the extensive findings from other contexts documenting causal relations among chronic adversity (both traumatic and lower intensity) and mental health, we are comfortable inferring, albeit cautiously, causal relationships within our model. Further confidence in the causality of those relationships is likely to come through the targeted interventions with war-affected populations that alter specific variables (e.g., poverty reduction or increased social support) and assess their expected impact on mental health outcomes.

Finally, although we agree with Neuner that mental health problems may generate a variety of social and material difficulties, his position that daily stressors are primarily caused by poor mental health suggests, albeit unintentionally, some rather untenable...
conclusions. Clearly, poor mental health does not cause people to be displaced from their homes and communities, nor does it land them in unsafe and overcrowded refugee camps. Poor mental health does not lead to the loss of social networks and economic livelihoods when villages are destroyed and their residents are killed or dispersed, nor does it cause the social marginalization of groups made vulnerable by their war-related experiences of violence and loss (e.g., widows, orphans). Stressors such as these represent the indirect effects of armed conflict on the social ecology of everyday life in conflict and post-conflict settings. Far from discounting the potentially devastating effects of direct exposure to armed conflict, we are simply arguing that a comprehensive understanding of mental health in war-affected populations settings must go beyond direct exposure to consider the diverse and indirect pathways by which conflict affects psychological wellbeing.

The difficulty of identifying daily stressors and assessing their relation to mental health status

We are puzzled by Neuner’s suggestion that it is difficult to identify daily stressors, especially “hidden stressors” such as domestic violence, and that in any case, it would be hard to know which stressors are most strongly linked to mental health and should be prioritized as intervention targets in any particular setting. In fact, the process is neither mysterious nor difficult. In order to identify locally salient daily stressors, one need simply take the time to inquire in a systematic way. Numerous researchers have discussed the value of starting with qualitative methods that allow community members to identify challenges and threats to their wellbeing. By using techniques such as focus groups, key informant interviews, and freelisting, researchers can quickly and reliably identify environmental stressors that are salient in particular contexts. Assessment tools incorporating items identified through such methods can then be created and validated, allowing researchers to systematically examine the relationship between those stressors and mental health status, in order to assess the relative contribution of different stressors to mental health status, and to identify the most critical targets for intervention. Moreover, given conditions of trust between researchers and community members, together with methodologies that emphasize the identification of common stressors in the community rather than the sharing of personal experiences, we have generally found that the sort of stressors Neuner calls “hidden” can be readily identified.

The lack of an evidence base for psychosocial interventions

As noted earlier, in our original paper we proposed a sequenced approach to intervention, in which efforts are first made to modify the social ecology by enhancing social support and reducing ongoing sources of stress; subsequently, specialized mental health care can be provided to individuals and families whose distress has not abated with the passing of time and the alteration of salient environmental stressors. Neuner is critical of this approach, arguing that it prioritizes psychosocial interventions despite a lack of clear evidence supporting their effectiveness at reducing daily stressors or improving mental health. He contrasts this with what he suggests is a strong evidence base supporting the effectiveness of trauma-focused interventions such as NET and KIDNET.

Neuner is absolutely correct in noting the dearth of systematically conducted outcome evaluations of psychosocial programs in war-affected populations. Whether in fact well-designed interventions aimed at altering stressful social and material conditions in conflict and post-conflict are actually effective, and whether they have a measurable impact on mental health, are critical questions that must be addressed. Certainly we know from research in other contexts that altering elements of the social ecology can significantly improve mental health. Experimental studies have shown the mental health benefits of poverty reduction programs, including programs that move families out of high stress, high poverty neighborhoods into economically less impoverished communities (Leventhal & Brooks-Gunn, 2003). Providing social support to widows, helping laid off workers develop the support networks and needed skills to find new employment, and giving elderly residents of retirement homes greater control over their environments are all examples of empirically supported psycho-social interventions with well-documented benefits to mental health (Caplan, Vinokur, & Price, 1997; Silverman, 1988; Slivinske & Fitch, 1987). In a similar vein, we know that that natural social support networks play a critical role in fostering mental health and preventing PTSD (and other types of distress) in the wake of natural disasters (Norris, Friedman, Watson, Byrne, Diaz, & Kaniasty, 2002), which has led to the suggestion that reinforcing support networks of individuals and families should be a greater priority in the wake of disaster than the provision of professional mental health care to distressed individuals (Norris, Friedman, & Watson, 2002). Nonetheless, the effectiveness of psychosocial interventions specifically with war-affected populations remains to be empirically established, and Neuner is right to note the current lack of an adequate evidence base in support of the sequenced approach we advocate. On the other hand, the available data strongly suggest that ongoing daily stressors account for a great deal of the distress so often documented in war-affected communities. Consequently, it seems to us that a narrow focus on healing war-related PTSD runs the risk of being out of sync with the actual needs and priorities of communities affected by armed conflict. We certainly support the inclusion of trauma-focused interventions as elements of larger ecological approaches to addressing mental health needs in war-affected populations. However, to prioritize the specialized treatment of war-related trauma because such treatment has been evaluated and shown to be effective at reducing symptoms of PTSD, overlooks the reality that myriad other factors other than war exposure affect mental health, and that other mental health problems than PTSD may be of greater concern to community members (de Jong, 2002; Miller, K., Kulkarni, & Kushner, 2006). The treatment of war-related trauma certainly has its place, but it cannot address the multiple sources of continual stress that undermine mental health in communities affected by armed conflict.

Although it is not our intent to critique the status of clinical interventions in conflict and post-conflict settings, we would encourage a somewhat greater degree of caution in asserting their impact at this point. Bolton and colleagues (2007) conducted a controlled intervention study aimed at reducing depression, anxiety, and conduct problems among Ugandan adolescents affected by war and displacement, and found a significant reduction in depressive symptoms among girls, but not boys. No effect was found for anxiety or conduct problems. Neuner points to his own group’s work as evidence of effective trauma-focused treatment; however, we note that although effective in that differences between-groups were statistically significant, the effect size associated with their NET intervention among Sudanese refugees was modest (Neuner et al., 2004), and between-group differences actually disappeared by four months post-treatment. Moreover, the treatment had no significant impact on other types of symptoms (depression, anxiety, or overall mental health). Provisional data from the Center for Victims of Torture intervention described by Hubbard and Pearson (2004) with Sierra Leonean refugees is somewhat more encouraging, with reductions in PTSD, depression, and anxiety persisting through the six month follow up; however, the lack of an adequate control group suggests caution when interpreting these
findings. We strongly applaud the efforts of these and other research intervention groups (e.g., Jordans et al., in press) to bring empirical rigor to the evaluation of their interventions. The point here is not to argue against clinical interventions—we believe they are appropriate for targeting clinical problems—but rather to suggest that treatment effects to date have generally been more modest than suggested by Neuner in his commentary.

In sum, we believe Neuner has provided an important wake-up call to advocates of psychosocial interventions. Although we do think that the available data suggest that daily stressors are an appropriate target for mental health interventions in war-affected communities, as Neuner rightly notes, the lack of systematic evaluation data and the conceptual and definitional fuzziness that characterize a great deal of psychosocial programming are critical problems that must be addressed. We recognize and appreciate the methodological rigor that Neuner and his group have brought to the design and evaluation of their treatment programs, and we hope that psychosocial advocates will bring comparable rigor to their own interventions. The contentious divide between advocates of psychosocial and trauma-focused interventions has not been fruitful, and has been fueled more by opinion and ideology than empirical data. We hope that our paper, and this dialogue to which it has given rise, will foster a more-empirically-based consideration of the ways in which the mental health needs of war-affected populations can most effectively be understood and addressed.

References


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