



# World Health Organization Guidelines for Management of Acute Stress, PTSD, and Bereavement: Key Challenges on the Road Ahead

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## Why New Guidelines on Mental Health Conditions Specifically Related to Stress?

In 2009, the World Health Organization (WHO) launched the Mental Health Gap Action Programme (mhGAP), which has since been used in more than 50 countries worldwide. The mhGAP is aimed at improving access to evidence-based mental health interventions, by ensuring their integration within non-specialized (primary care) settings, the emphasis being on low- and middle-income countries (LMICs). The evidence-based guidelines formed the basis for the development of the mhGAP Intervention Guide [1].

Since then, WHO has been asked repeatedly to provide similar guidelines as a basis for an additional Intervention Guide Module, for conditions specifically associated with major stressors such as potentially traumatic events (e.g., involvement in severe accidents, armed conflicts, gender-based violence) and major losses (e.g., bereavement, displacement). Exposure to such major stressors is common in many LMICs [2].

The approach adopted by WHO was to ensure a comprehensive focus in

**Policy Forum** articles provide a platform for health policy makers from around the world to discuss the challenges and opportunities in improving health care to their constituencies.

## Summary Points

- The implementation of new WHO mental health guidelines for conditions and disorders specifically related to stress is likely to face obstacles, particularly in low- and middle-income countries.
- Formulation of evidence-based guidelines is complicated by limited knowledge regarding (a) the effectiveness of commonly implemented interventions, (b) the effectiveness of established evidence-based interventions when used in situations of ongoing adversity, and (c) the effectiveness of widely used cultural practices in LMICs. The application of the guidelines requires improved knowledge on how to reduce potentially harmful practices that are widely applied.
- The implementation of recommendations regarding psychotherapeutic interventions will require an approach that balances (a) strengthening the availability and capacity of specialists to train and supervise and (b) shifting to the delivery of psychotherapy by non-specialists.
- The strengthening of evidence for managing these conditions will require collaborative efforts by researchers and practitioners in a manner that is mindful of local sociocultural and health system realities.

**Citation:** Tol WA, Barbui C, Bisson J, Cohen J, Hijazi Z, et al. (2014) World Health Organization Guidelines for Management of Acute Stress, PTSD, and Bereavement: Key Challenges on the Road Ahead. *PLoS Med* 11(12): e1001769. doi:10.1371/journal.pmed.1001769

**Published:** December 16, 2014

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**Funding:** The World Health Organization and United Nations High Commissioner for Refugees provided funding for the development of the guidelines. The authors are responsible for the views expressed in this article and, except for the specifically noted recommendations, they do not necessarily represent the decisions, policies, or views of WHO. No funding bodies had any role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

**Competing Interests:** SS is a member of the editorial board of *PLOS ONE*. MVO is a member of the Editorial Board of *PLOS Medicine*.

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**Provenance:** Not commissioned; externally peer reviewed

developing guidelines for adults, children, and adolescents, comprising recommendations on pharmacological and psychological interventions. The guidelines include but extend beyond posttraumatic stress disorder (PTSD) to a range of conditions that are relevant to non-specialized health settings, including symptoms in the first month after exposure (acute traumatic stress symptoms, insomnia, enuresis, dissociation, and hyperventilation); PTSD; and bereavement in the absence of frank mental disorder. The development [3,4] and content [5] of the evidence-based recommendations and resulting intervention module are described in more detail elsewhere. A brief summary of the recommendations is provided in Table 1.

Although these guidelines and companion intervention guide are an important first step, their success will rest on their actual implementation in settings with high needs for mental health care. In this paper, we discuss challenges encountered in the formulation of guidelines, as well as potential obstacles that may constrain effective implementation of these guidelines in low-resource settings. We also offer suggestions for how these obstacles may be overcome. The authors represent the Guideline Development Group (JB, JC, ZH, JTVMDJ, OO, SS, DS, RS, AS, LV, IW, DZ), WHO secretariat (MvO), and four consultants to the guideline development process (WAT, CB, LJ, NM).

## What Are the Key Obstacles on the Road Ahead?

First, the Guideline Development Group (GDG) (see author contributions) discovered that there is a dearth of scientifically rigorous research supporting many of the most commonly used interventions for managing conditions specifically associated with stress. To establish the evidence, the GDG identified recent systematic reviews, or they commissioned reviews in cases for which none were available. The evidence is particularly poor for children and adolescents: for three out of 11 questions asked, no specific recommendations could be made based on existing evidence. In relation to the absence of evidence in general, a notable example in adults concerns symptoms manifesting in the first month after exposure to major stressors. At the outset, the GDG commissioned evidence searches for a broader set of psychological interventions to manage acute traumatic stress

symptoms in adults, including problem-solving counseling, relaxation, and psychoeducation. However, it was deemed that there was insufficient evidence to recommend either in favor or against the use of these interventions. In humanitarian settings in LMICs specifically, earlier systematic reviews have shown that there is a wide gap between interventions that are commonly implemented and evidence for interventions in such settings [6].

Second, a key challenge is the limited availability of mental health resources in LMICs in general, creating a major obstacle to implementation of new mental health recommendations. Lack of resources takes a number of forms, including limits in basic mental health infrastructure, budget, and personnel, particularly in humanitarian settings [7]. Mental health is often a low priority for governments and donors, and too often there is a lack of political will to prioritize this area [8]. Where basic mental health resources do exist, there is a lack of specialized staff to provide the necessary training and supervision to ensure recommended psychotherapeutic interventions such as cognitive behavioral therapy (CBT) and eye movement desensitization and reprocessing (EMDR) can be implemented [9]. There is promising evidence, however, based on randomized controlled trials, that non-specialists (for example, community health workers or personnel without a formal mental health background working for non-governmental organizations) can successfully deliver psychotherapeutic interventions based on a task-sharing approach [10–12]. Nevertheless, it is uncertain whether psychotherapeutic interventions can be feasibly scaled up and sustained in naturalistic settings that lack the financial resources (e.g., for supervision) which were available to researchers when these interventions were tested.

Third, some practitioners may be reluctant to adhere to recommendations that caution against practices that are widely applied. These include, for example, recommendations not to offer benzodiazepines for acute traumatic stress symptoms, nor to offer structured psychological interventions for bereavement reactions in the absence of frank mental disorder. Studies have revealed the over-prescription of benzodiazepines in some LMIC health care settings [13,14], supporting general impressions that in humanitarian settings the prescription of benzodiazepines for symptoms of acute stress (including insomnia) and bereavement is

commonplace. Similarly, grief counseling is a popular intervention following bereavement in spite of the lack of evidence that it is necessary or effective [15]. Overall, there may be major challenges in achieving changes in practice in low-resource settings where the evidence-based alternative suggests more time-intensive management strategies or where expectations of help-seekers favor pharmacological management, as is common in many LMICs.

Fourth, mhGAP recommendations are based on evidence gathered mainly in well-resourced health settings in industrialized countries. There is uncertainty as to what extent the findings can be generalized across diverse sociocultural settings. Furthermore, there is a paucity of evidence concerning the effectiveness of (a) interventions for specific cultural idioms or concepts of distress [16] and (b) existing supportive cultural practices to manage stress-related conditions, such as yoga for stress management, or cultural mourning practices for bereavement. This is a paradox because international consensus guidelines for mental health and psychosocial interventions in humanitarian emergencies explicitly recommend identifying and building on such practices where possible [17], the evident advantages being accessibility, acceptability, and sustainability.

Fifth, a number of peer reviewers and the GDG raised questions about the specific challenges of providing effective treatments in contexts where stressors are ongoing. Situations of ongoing adversity, such as in the context of armed conflict, chronic poverty, or intimate partner violence, raise two important questions: (1) whether to prioritize social interventions over psychotherapeutic interventions in this population [18] and (2) if treatments are equally effective and safe for those exposed to ongoing major stressors. Limited knowledge is available to guide decisions on both issues. With regard to the first question, consensus guidelines have recommended addressing social and psychological issues simultaneously in a multilayered, multisectoral approach. However, randomized trials have not yet indicated whether this is more effective than single-intervention approaches. With regard to the second question, there is some evidence that treatments can be effective in situations of ongoing adversity [19,20], whereas other studies have shown reduced treatment benefits for populations facing chronic adversity [21].

**Table 1.** Overview of recommendations.

Mental health condition (broad)	Mental health condition (specific)	Recommendation	Strength of recommendation
Symptoms of acute stress (first month after exposure) <sup>1</sup>	Acute traumatic stress symptoms (intrusion, avoidance, hyperarousal) associated with significant impairment in daily functioning	CBT with a trauma focus (CBT-T) should be considered in adults	Standard <sup>2</sup>
		Benzodiazepines should not be offered to adults	Strong
		Antidepressants should not be offered to adults	Standard
		Benzodiazepines and antidepressants should not be offered to children and adolescents	Strong
Insomnia		Relaxation techniques (e.g., progressive muscle relaxation or cultural equivalents) and advice about sleep hygiene (including advice about psychostimulants, such as coffee, nicotine, and alcohol) should be considered for adults	Standard
		Benzodiazepines should not be offered to adults	Standard
		Benzodiazepines should not be offered to children and adolescents	Strong
		Secondary nonorganic enuresis	Explanation of the negative effects of punitive responses, parenting skills training, and the use of simple behavioral interventions (i.e., star charts, toileting before sleep, and rewarding having nights without wetting the bed) should be considered
Hyperventilation		Rebreathing into a paper bag should not be offered to children	Standard
		Individual or group CBT-T, EMDR or stress management should be considered for adults	Standard
		Individual or group CBT-T or EMDR should be considered for children and adolescents	Standard
		SSRIs and TCAs should not be offered as the first line of treatment for adults	Standard
PTSD		Antidepressants should not be offered to children and adolescents	Strong
		Structured psychological interventions should not be offered universally to (all) bereaved adults who do not meet the criteria for a mental disorder	Strong
		Structured psychological interventions should not be offered universally to (all) bereaved children and adolescents who do not meet the criteria for a mental disorder	Strong
		Benzodiazepines should not be offered to bereaved adults who do not meet criteria for a mental disorder	Strong
Bereavement (without a mental disorder)		Benzodiazepines should not be offered to bereaved children and adolescents who do not meet criteria for a mental disorder	Strong

<sup>1</sup>For all symptoms of acute stress, a previous WHO GDG recommended Psychological First Aid as management strategy.

<sup>2</sup>Strength of recommendations was evaluated in accordance with previous WHO mhGAP guidelines, which is based on GRADE (Grading of Recommendations Assessment, Development, and Evaluation) methodology (Barbui et al, 2010). A strong recommendation means that the guideline development group agreed that the quality of the evidence, combined with certainty about the values, preferences, benefits, and feasibility of this recommendation meant it should be followed in all or almost all circumstances. A standard recommendation means that there was less certainty about the combined quality of evidence and values, preferences, benefits, and feasibility of this recommendation; thus, there may be circumstances in which it will not apply.

SSRIs: selective serotonin reuptake inhibitors.

TCAs: tricyclic antidepressants.

doi:10.1371/journal.pmed.1001769.t001

## How Can These Obstacles Be Overcome?

First, concerted action is needed to strengthen the evidence base for interventions. This will require testing the efficacy of treatments for conditions specifically related to stress that previously have proven efficacious, generally in high-income countries. Also, it will require determining the efficacy of interventions that are currently very popular in practice but have not been rigorously studied. Currently popular interventions include non-specific counseling, psycho-education,

structured recreational and sports activities, and provision of child-friendly spaces. In relation to the current knowledge base, there are both consistent and inconsistent findings [22]. For example, amongst children and adolescents with PTSD, CBT has been shown to be more effective than supportive counseling for a range of outcomes [23]. In humanitarian settings, some studies have shown benefits of counseling [24,25], whereas others have not [26–28]. It is challenging to make broad conclusions based on existing studies given the heterogeneity of counseling approaches applied, and further rigorous

research is required. Child-friendly spaces provide an additional example. This popular intervention aims at promoting and supporting resilience and well-being amongst children and young people who have recently experienced natural or human-made disasters by provision of community-organized, structured activities conducted in a safe, child-friendly, and stimulating environment. A recent systematic review found no randomized controlled trials evaluating this methodology, and only one study applying a comparison group with pre- and post-intervention measurement of outcomes [29].

The evidence base could benefit from action on two fronts: supporting research efforts in LMICs, as well as building the capacity of agencies to measure the outcomes of interventions in the course of program implementation. Research capacity building in LMICs could assist in initiating research projects that are relevant to low-resource settings, e.g., testing culturally congruent approaches for stress management. A recent initiative to set research priorities for mental health and psychosocial support in humanitarian settings, in which there was strong representation from personnel working in LMICs, produced a largely practice-informed research agenda; notably, there was little focus on topics that have dominated debates in the peer-reviewed literature. For example, the agenda focused on a range of disorders and conditions besides PTSD, in spite of the latter diagnosis being the subject of most attention in the literature [30]. Building research capacity within agencies implementing interventions (e.g., government and non-governmental organizations) has the potential to improve knowledge on a larger scale and in a shorter time frame. For example, including outcome indicators measuring mental health as a standard monitoring practice could assist in rapidly identifying which practice elements are associated with positive changes. Finally, future research efforts should take costs of treatments into account to better inform policy and practice.

Second, the limited availability of mental health resources in LMICs will need to be addressed for successful implementation of these guidelines. For example, building the capacity to train and supervise psychotherapeutic interventions in non-specialist settings will be crucial to ensure that such services are sustainable and of sufficient quality [31]. This is likely to require a balanced approach in building capacity of both specialist supervisors and non-specialist health workers in community and primary health care settings [32]. Future studies could explore implementing and evaluating stepped care models in which (a) those who are in greatest need receive timely interventions, (b) people are identified and receive interventions initially from community workers, and (c) those people are referred to progressively more resource-intensive interventions, depending on their response to first-line treatments [33]. In addition, a promising direction concerns transdiagnostic approaches in which mental health practitioners learn skills across a variety of therapies to address a range of common

mental disorders [34]. This approach seems most desirable given the high levels of comorbidity (for example, involving PTSD, anxiety, and depression) in the context of major stressors, and the lack of feasibility of training personnel in numerous separate interventions that address single conditions.

Third, if the aim is to ensure that negative recommendations are implemented (that is, to discontinue established practices) it is important to understand (a) the reasons behind practitioners' current use of contra-indicated interventions, (b) barriers to using evidence-based approaches, and (c) strategies that will encourage practitioners to take up evidence-based alternatives. Such research falls within the scope of dissemination and implementation science, a field of research that has not yet received sufficient attention for mental health interventions in LMICs [35]. For example, important research questions in this regard may include the following: What are the most important determinants of currently employed pharmacological and non-pharmacological interventions (e.g., demand-side preferences of clients versus delivery-side training and preferences of mental health workers)? What are the perspectives of mental health professionals in LMICs with regard to evidence-based approaches that often originate in high-income countries? What are key barriers and facilitators for implementation and scaling up of evidence-based interventions? What types of adaptations are necessary for evidence-based interventions to be compelling and practical from a contextual and cultural perspective? The limited available research on uptake of guidelines by practitioners has shown that it is critical to fit guidelines to local contexts, to make recommendations sensitive to how work is organized locally, and to ensure feedback mechanisms to monitor implementation of recommendations [36,37].

Fourth, lack of knowledge with regard to cultural concepts of distress and the effectiveness of existing cultural practices need to be addressed. This will require a willingness to take seriously local perspectives on mental health across highly diverse sociocultural settings in LMICs. Such efforts would benefit from multidisciplinary collaboration, in which experts in qualitative research (e.g., to identify the phenomenology of cultural concepts of distress, views on determinants of these concepts, and help-seeking patterns) join hands with experts in quantitative research (e.g., to identify prevalence rates and establish efficacy of interventions). A

recent meta-analysis found a particularly high level of overlap between locally defined cultural concepts of distress and a diagnosis of PTSD. However, one of the major shortcomings of this literature concerned the failure to include cultural concepts of distress in treatment outcome studies [16].

Finally, implementation efforts need to be more responsive to the reality that populations affected by humanitarian crises in LMICs commonly are living in settings of ongoing exposure to major stressors. Further research needs to confirm whether evidence-based treatments can be safely and sustainably implemented in low-resource settings with populations exposed to high levels of ongoing adversity and to identify additional promising intervention approaches. Clinical interventions are only part of the picture, given the impact of social and economic factors on mental health in these settings. There is a need to strengthen preventive approaches that address the major social determinants of mental health, including poverty, gender-based violence, and social exclusion [38]. One approach would be to combine preventive and treatment interventions—in a way, to simultaneously target the causes and consequences of adversity, thereby addressing both ends of a vicious cycle. For example, an intervention that would relieve symptoms of mental disorders in women exposed to past intimate partner violence could, at the same time, aim at empowerment of women to prevent future violence, engagement of men, and awareness-raising in the community as a whole about the deleterious effects of domestic violence. Previous research has indicated that psychotherapeutic treatments by themselves may lower chances for future victimization [39].

In conclusion, although the new WHO recommendations on conditions specifically related to stress present an important step forward, there will be many challenges in implementation. The road ahead is to address these challenges through concerted and multidisciplinary efforts by policy makers, practitioners, and researchers.

## Disclaimer

The authors are responsible for the views expressed in this article and, except for the specifically noted recommendations, they do not necessarily represent the decisions, policies, or views of WHO.

## Author Contributions

Wrote the first draft of the manuscript: WAT. Wrote the paper: WAT CB JB JC ZH LJ

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manuscript results and conclusions: WAT CB JB JC ZH LJ JTVMDJ NM OO SS DS RS AS LV IW DZ MvO. Members of the Guideline Development Group (GDG): JB JC ZH

JTVMDJ (chair) OO SS DS RS AS LV IW DZ. WHO Secretariat: MvO. Consultants to the GDG: WT CB LJ NM.

## References

1. World Health Organization (2010) mhGAP Intervention Guide for Mental, Neurological and Substance Use Disorders in Non-Specialized Health Settings: Mental Health Gap Action Programme (mhGAP). Geneva: WHO.
2. Stein DJ, Chiu WT, Hwang I, Kessler RC, Sampson N, et al. (2010) Cross-national analysis of the associations between traumatic events and suicidal behavior: findings from the WHO World Mental Health Surveys. *PLoS ONE* 5: e10574.
3. World Health Organization (2013) Guidelines for the Management of Conditions specifically related to Stress. Geneva: WHO.
4. Tol WA, Barbui C, van Ommeren M (2013) Management of acute stress, PTSD, and bereavement: WHO recommendations. *JAMA* 310: 477–478.
5. World Health Organization, United Nations High Commissioner for Refugees (2013) Assessment and Management of Conditions Specifically Related to Stress: mhGAP Intervention Guide Module. Geneva: WHO.
6. Tol WA, Barbui C, Galappatti A, Silove D, Betancourt TS, et al. (2011) Mental health and psychosocial support in humanitarian settings: linking practice and research. *Lancet* 378: 1581–1591.
7. Saraceno B, van Ommeren M, Batniji R, Cohen A, Gureje O, et al. (2007) Barriers to improvement of mental health services in low-income and middle-income countries. *Lancet* 370: 1164–1174.
8. Abdulmalik J, Kola L, Fadahunsi W, Adebayo K, Yasamy MT, et al. (2013) Country contextualization of the mental health gap action programme intervention guide: a case study from Nigeria. *PLoS Med* 10: e1001501.
9. World Health Organization (2005) Mental Health Atlas - Revised Edition. Geneva: WHO.
10. Bass JK, Neugebauer R, Clougherty KF, Verdelli H, Wickramaratne P, et al. (2006) Group interpersonal psychotherapy for depression in rural Uganda: 6-month outcomes: randomised controlled trial. *Br J Psychiatry* 188: 567–573.
11. Rahman A, Malik A, Sikander S, Roberts C, Creed F (2008) Cognitive behaviour therapy-based intervention by community health workers for mothers with depression and their infants in rural Pakistan: a cluster-randomised controlled trial. *Lancet* 372: 902–909.
12. Neuner F, Onyut LP, Ertl V, Odenwald M, Schauer E, et al. (2008) Treatment of Posttraumatic Stress Disorder by trained lay counselors in an African refugee settlement: a randomized controlled trial. *J Consult Clin Psychol* 76: 686–694.
13. Patel MJ, Ahmer S, Khan F, Qureshi AW, Shehzad MF, et al. (2013) Benzodiazepine use in medical out-patient clinics: a study from a developing country. *J Pak Med Assoc* 63: 717–720.
14. Kapczinski F, Amaral OB, Madruga M, Quevedo J, Busnelo JV, et al. (2001) Use and misuse of benzodiazepines in Brazil: a review. *Subst Use Misuse* 36: 1053–1069.
15. Wittouck C, Van Auteve S, De Jaegere E, Portzky G, van Heeringen K (2011) The prevention and treatment of complicated grief: a meta-analysis. *Clin Psychol Rev* 31: 69–78.
16. Kohrt BA, Rasmussen A, Kaiser BN, Haroz EE, Maharjan SM, et al. (2013) Cultural concepts of distress and psychiatric disorders: literature review and research recommendations for global mental health epidemiology. *Int J Epidemiol* 43: 365–406.
17. Inter-Agency Standing Committee [IASC] (2007) IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings. Geneva: IASC.
18. Miller KE, Rasmussen A (2010) War exposure, daily stressors, and mental health in conflict and post-conflict settings: bridging the divide between trauma-focused and psychosocial frameworks. *Soc Sci Med* 70: 7–16.
19. Bass JK, Annan J, McIvor Murray S, Kaysen D, Griffiths S, et al. (2013) Controlled trial of psychotherapy for Congolese survivors of sexual violence. *N Engl J Med* 368: 2182–2191.
20. Cohen JA, Mannarino AP, Iyengar S (2011) Community treatment of posttraumatic stress disorder for children exposed to intimate partner violence: a randomized controlled trial. *Arch Pediatr Adolesc Med* 165: 16–21.
21. Tol WA, Komproe IH, Jordans MJ, Ndayisaba A, Ntamutumba P, et al. (2014) School-based mental health intervention for children in war-affected Burundi: a cluster randomized trial. *BMC Med* 12: 56.
22. Richards J, Foster C, Townsend N, Bauman A (2014) Physical fitness and mental health impact of a sport-for-development intervention in a post-conflict setting: randomised controlled trial nested within an observational study of adolescents in Gulu, Uganda. *BMC Public Health* 14: 619.
23. Gillies D, Taylor F, Gray C, O'Brien L, D'Abrew N (2012) Psychological therapies for the treatment of post-traumatic stress disorder in children and adolescents. *Cochrane Database Syst Rev* 12: CD006726.
24. Ayoughi S, Missmahl I, Weierstall R, Elbert T (2012) Provision of mental health services in resource-poor settings: a randomised trial comparing counselling with routine medical treatment in North Afghanistan (Mazar-e-Sharif). *BMC Psychiatry* 12: 14.
25. Nakimuli-Mpungu E, Okello J, Kinyanda E, Alderman S, Nakku J, et al. (2013) The impact of group counseling on depression, post-traumatic stress and function outcomes: A prospective comparison study in the Peter C. Alderman trauma clinics in northern Uganda. *J Affect Disord* 151: 78–84.
26. Neuner F, Schauer M, Klaschik C, Karunakara U, Elbert T (2004) A comparison of narrative exposure therapy, supportive counseling, and psychoeducation for treating posttraumatic stress disorder in an African refugee settlement. *J Consult Clin Psychol* 72: 579–587.
27. Bass JK, Poudyal B, Tol WA, Murray L, Nadison M, et al. (2012) A controlled trial of problem-solving counseling for war-affected adults in Aceh, Indonesia. *Soc Psychiatry Psychiatr Epidemiol* 47: 279–291.
28. Tol WA, Komproe IH, Jordans MJD, Thapa SB, Sharma B, et al. (2009) Brief multi-disciplinary treatment for torture survivors in Nepal: a naturalistic comparative study. *Int J Soc Psychiatry* 55: 39–56.
29. Ager A, Metzler J, Vojta M, Savage K (2013) Child friendly spaces: a systematic review of the current evidence base on outcomes and impact. *Intervention (Amstelveen)* 11: 133–147.
30. Tol WA, Patel V, Tomlinson M, Baingana F, Galappatti A, et al. (2011) Research priorities for mental health and psychosocial support in humanitarian settings. *PLoS Med* 8: e1001096.
31. Murray LK, Dorsey S, Bolton P, Jordans MJ, Rahman A, et al. (2011) Building capacity in mental health interventions in low resource countries: an apprenticeship model for training local providers. *Int J Ment Health Syst* 5: 30.
32. Thornicroft G, Tansella M (2013) The balanced care model for global mental health. *Psychol Med* 43: 849–863.
33. Zatzick D, Jurkovich G, Rivara FP, Russo J, Wagner A, et al. (2013) A randomized stepped care intervention trial targeting posttraumatic stress disorder for surgically hospitalized injury survivors. *Ann Surg* 257: 390–399.
34. Weisz JR, Chorpita BF, Palinkas LA, Schoenwald SK, Miranda J, et al. (2012) Testing standard and modular designs for psychotherapy treating depression, anxiety, and conduct problems in youth: a randomized effectiveness trial. *Arch Gen Psychiatry* 69: 274–282.
35. Proctor EK, Landsverk J, Aarons G, Chambers D, Glisson C, et al. (2009) Implementation research in mental health services: an emerging science with conceptual, methodological, and training challenges. *Adm Policy Ment Health* 36: 24–34.
36. Knaup C, Koesters M, Schofer D, Becker T, Puschner B (2009) Effect of feedback of treatment outcome in specialist mental healthcare: meta-analysis. *Br J Psychiatry* 195: 15–22.
37. Grimshaw JM, Thomas RE, MacLennan G, Fraser C, Ramsay CR, et al. (2004) Effectiveness and efficiency of guideline dissemination and implementation strategies. *Health Technol Assess (Rockv)* 8: iii-iv, 1–72.
38. Marmot M, Allen J, Balfour R, Bell R (2013) Social Determinants of Mental Health. Lissabon: UCL Institute of Health Equity.
39. Iverson KM, Gradus JL, Resick PA, Suvak MK, Smith KF, et al. (2011) Cognitive-behavioral therapy for PTSD and depression symptoms reduces risk for future intimate partner violence among interpersonal trauma survivors. *J Consult Clin Psychol* 79: 193–202.