A Scoping Study on Mental Health and Psychosocial Support (MHPSS) in Sierra Leone

Abdulai Jawo Bah, Ayesha Idriss, Haja Wurie, Maria Bertone, Kelly Elimian, Rebecca Horn and Mohamed Samai

July 2018
Table of Contents

Executive Summary ................................................................................................................................. 5

1 Introduction........................................................................................................................................ 9
   1.1 The work of the NIHR Research Unit on Health in Fragility ................................................. 9
   1.2 Aim and specific objectives of the scoping study ................................................................. 9
   1.3 Context .................................................................................................................................. 10

2 Methods........................................................................................................................................ 12
   2.1 Data collection ....................................................................................................................... 12
      2.1.1 Data sources and search strategy .................................................................................... 12
      2.1.2 Study selection ................................................................................................................ 12
      2.1.3 Other document sources ............................................................................................... 14
      2.1.4 Data extraction ................................................................................................................ 14
   2.2 Analysis & reporting .............................................................................................................. 16

3 Results........................................................................................................................................ 17
   3.1 Descriptive or bibliometric analysis of documents reviewed .................................................. 17
   3.2 Mental health and psychosocial wellbeing in Sierra Leone .................................................. 18
      3.2.1 Epidemiological studies of mental disorders and risk/protective factors .............. 18
      3.2.2 Views and expressions (idioms) for distress and mental illness .............................. 24
      3.2.3 Help-seeking for mental health problems .................................................................... 25
   3.3 National mental health policies and strategies in Sierra Leone ............................................ 26
      3.3.1 Evolution of MHPSS policies in Sierra Leone: history and milestones .......... 26
      3.3.2 Current regulatory frameworks: policies and strategies ............................................. 28
         3.3.2.1 Lunacy Act ............................................................................................................... 28
         3.3.2.2 Mental Health Policy and Strategic Plan 2010-2015 ............................................. 29
   3.4 In reality: type, accessibility and quality of services ............................................................ 31
      3.4.1 Public service delivery organisation ............................................................................. 31
      3.4.2 Service delivery organisation in the non-public sector ............................................ 35
      3.4.3 Role of communities .................................................................................................... 37
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4.4</td>
<td>MHPSS coordination bodies in Sierra Leone</td>
<td>38</td>
</tr>
<tr>
<td>3.4.5</td>
<td>Challenges in the implementation of policies and MHPSS service provision</td>
<td>39</td>
</tr>
<tr>
<td>3.4.6</td>
<td>Assessment of MHPSS interventions</td>
<td>40</td>
</tr>
<tr>
<td>3.5</td>
<td>Key actors</td>
<td>45</td>
</tr>
<tr>
<td>3.5.1</td>
<td>Main implementation partners</td>
<td>45</td>
</tr>
<tr>
<td>4</td>
<td>Discussion and Conclusions</td>
<td>47</td>
</tr>
<tr>
<td>4.1</td>
<td>Summary and interpretation of key findings</td>
<td>47</td>
</tr>
<tr>
<td>4.2</td>
<td>Strength and limitations of study</td>
<td>50</td>
</tr>
<tr>
<td>4.3</td>
<td>Generalisability of findings</td>
<td>50</td>
</tr>
<tr>
<td>5</td>
<td>Conclusions and recommendations</td>
<td>51</td>
</tr>
<tr>
<td>5.1</td>
<td>Conclusions</td>
<td>51</td>
</tr>
<tr>
<td>5.2</td>
<td>Recommendations</td>
<td>52</td>
</tr>
<tr>
<td>References</td>
<td></td>
<td>55</td>
</tr>
<tr>
<td>Appendix 1: Estimated burden of mental health in Sierra Leone</td>
<td>63</td>
<td></td>
</tr>
</tbody>
</table>
List of Figures

**Figure 1:** PRISMA flow diagram (Moher, Liberati, Tetzlaff and Altman, 2009) ...................... 13
**Figure 2:** Documents analysed by year .................................................................................. 17
**Figure 3:** Documents analysed by event .................................................................................. 18
**Figure 4:** Documents analysed by type of study (situation analysis or intervention) .......... 18
**Figure 5:** IASC MHPSS Intervention pyramid ......................................................................... 32
**Figure 6:** Intervention pyramid - number of activities: number of agencies ...................... 36

List of Tables

**Table 1:** Number of documents retrieved by database.............................................................. 12
**Table 2:** Elements and themes included in the data extraction form ....................................... 15
**Table 3:** WHO projection of mental health disorders in adult populations affected by emergencies (WHO & UNHCR, 2012) .................................................................................. 20
**Table 4:** History and milestones for mental health services in Sierra Leone ....................... 26
**Table 5** Mental health interventions in Sierra Leone ............................................................... 42
**Table 6:** Preliminary mapping of key MHPSS stakeholders in Sierra Leone ....................... 45
Executive Summary

Background

Mental illness constitutes an extremely high burden of disease globally. Many studies have highlighted the large treatment gap in low-income and middle-income countries, and particularly so in fragile and conflict-affected settings (FCAS). This increases risk of disability, reduced quality of life, stigma and discrimination, poverty, worsened physical health and premature mortality. This reflects the situation in Sierra Leone, a post-conflict and post-crisis (the recent Ebola disease outbreak and mudslide) setting, where mental health service delivery and access remain challenging. Despite a number of discrete intervention initiatives, there has to date been relatively limited research from the community and health system perspectives in Sierra Leone that would guide thinking on effective strategies of mental health provision. To address this gap, the National Institute for Health Research (NIHR) Research Unit on Health in Fragility (RUHF) at Queen Margaret University (QMU), Edinburgh has launched a research programme that seeks to identify sources of resilience within formal health systems and local community processes to facilitate effective provision for health services in situations of fragility. One of the particular foci of this work is mental health and psychosocial support (MHPSS) in Sierra Leone.

Objectives

The three main objectives of this scoping review were (1) to review information available on the burden of mental health in Sierra Leone; (2) to identify existing official policies and strategies, and interventions designed and implemented, with respect to MHPSS with particular focus on (a) their evaluation, assessment, and current challenges in delivery and (b) their integration into the health system and the broader context (including features of fragility) at community, district and national levels; and (3) to identify and map the key actors involved in service delivery for MHPSS in Sierra Leone.

Methods

This scoping review was conducted regarding both published and grey literature using PubMed, Medline, CINAHL, Scopus and Google Scholar to identify studies reporting on mental health among Sierra Leoneans. Additionally, relevant stakeholders (WHO country office, MoHS, provider organisations etc.) were asked to share grey literature, policies and strategic plans on mental health in Sierra Leone.
Findings

A total of 45 documents were identified for inclusion in this scoping review. The majority of documents refer to MHPSS in relation to specific events, and in reference to the conflict period (1991 -2002) and the recent Ebola Virus Disease outbreak (2014-2016). Twenty-six of the documents reviewed refer to the conflict focusing on MHPSS, for example, for war-affected population, youth or child soldiers, while 12 looked at MHPSS in groups such as EVD survivors and workers/communities during the outbreak. Most of the studies are either descriptive or analytical cross-sectional, resulting in the assessment of disease burden in terms of point and/or period prevalence (but not incidence).

The burden of mental health disorders in Sierra Leone is yet to be truly ascertained given the dependence of most available studies on specific events (EVD and civil war) and limited generalisability. The most commonly diagnosed mental health conditions in Sierra Leone are psychosis, epilepsy, medically unexplained somatic symptoms and ‘other psychological complaints’ including anxiety disorders among others.

The limited evidence-base suggests that 13% of the total burden of disease and 31% of all health-related disabilities are attributable to mental illness. Few studies have investigated the prevalence of mental health in the general population in Sierra Leone in a non-emergency phase. For example, studies conducted in the post-conflict phase on the mental health impacts of the conflict focused mainly on post-traumatic stress disorder (PTSD); the majority of studies focusing on depression, anxiety and psychosis did so in either the post-conflict or the post-Ebola phase. Overall, the prevalence of PTSD, depression and anxiety was very high across these studies; this is not surprising as the prevalence of common mental disorders tend to escalate during or immediately after events such as a civil war or an Ebola crisis. Further, the effects of these extreme events on mental health in Sierra Leone is likely to be exacerbated by the presence of other predisposing factors to mental health conditions e.g. loss of social support networks, disruption of basic services, low level of education, among others. The impact of an extreme event (the conflict), on a particular sub-set of the population (e.g. former child soldiers and displaced children) has been particularly extensively reported in the literature. However, these studies are not representative of the post-emergency pattern of MH in Sierra Leone. One of the key findings of the review, and one of the challenges in addressing mental health in Sierra Leone, is therefore the dearth of reliable data on the prevalence of mental health conditions.

The review also revealed a dearth of evidence on co-morbidities of mental health conditions in Sierra Leone. A significant correlation between mental health and other public health
concerns issues, including maternal and child health and HIV/AIDS, is widely noted in other contexts and warrants exploration in Sierra Leone.

The review identified reports of a number of interventions designed to target a specific target group in response to the conflict or crisis experienced in Sierra Leone. These describe a very large number of small-scale pilot interventions, often implemented by external actors. Many are crisis/conflict specific programmes, tailored to war-affected populations and communities (e.g. the Youth Readiness Intervention) or to populations affected by the recent Ebola epidemic. These include Psychological First Aid (to help health workers recognize and respond to signs of distress among patients, as well as in themselves and their colleagues) and community health workers and medical doctors nationwide being trained on the World Health Organisation (WHO) mental health gap action programme (mhGAP) to provide more specialised mental health services. While some interventions are reported to be effective (e.g. to contribute positively to reintegration of war-affected youths into society) there is limited evidence of the effectiveness of the majority of these pilot projects and interventions. These investments have yet to secure any notable advance in provision, apart from a few examples of ‘positive deviance’ where services have secured improvement in coverage and quality. In addition, these interventions were often poorly integrated into the overall health system, resulting in limited sustainability. There are very few MHPSS interventions that are nationally-led, which impacts on integration and sustainability. There is a need for better collaboration and knowledge-sharing between policy makers, and mental health service providers and researchers in the design of interventions, informed by evidence and lessons learnt from systematic outcome evaluations of past interventions.

There is also a major gap in the understanding of local idioms for common psychological distresses and mental health disorders in Sierra Leone. This poses a major challenge as effective systems and supports are dependent on addressing these issues from the perspective of the affected population and their decision-making in health-seeking.

**Conclusion**

The review points to multiple system and community barriers to the effective delivery of MHPSS services in Sierra Leone - ranging from contextual socio-cultural factors and the associated stigma and discrimination, lack of political will to implement policy and strategic plans, inadequate human resources and financial constraints, to ineffective delivery of mental health services. National policies and strategies to address mental health issues have remained largely on paper and poorly implemented, due to lack of financial resources and human capacity to support effective implementation. There is an urgent need to revise
the mental health legal framework, the Lunacy Act, which is far outdated and fails to address the current needs of mental health patients. This legal framework will support the integration of mental health services at all levels of care, the much-needed training and capacity building of health care workers, and translation of research into action. These efforts should be complimented by a tried-and-tested referral pathway (as is already in place for Ebola survivors) and an algorithm designed to help the decision-making process for health care workers to capture all cases of mental disorder and distress.

Collectively, findings highlight the need for a nationally-led, concerted collaborative effort to address the burden of mental ill-health, outside of the usual conflict-affected and Ebola/disaster-affected paradigm, in a non-fragmented, socio-culturally sensitive manner. This needs financial commitment beyond the time-bound injection of resources around emergencies, to support the elucidation of what effective, context-specific service models would look like in Sierra Leone. This should be informed by lessons learnt from past initiatives, noting the barriers that served to limit their scale-up, sustainability and community acceptability, to improve service delivery in the future.
1 Introduction

1.1 The work of the NIHR Research Unit on Health in Fragility

The NIHR Research Unit on Health in Fragility (RUHF) at Queen Margaret University, Edinburgh seeks to identify sources of resilience within formal health systems and local community processes to facilitate effective provision for health services in situations of fragility - particularly mental health and non-communicable disease (NCDs). Current framings of fragility have principally focused on ‘fragile states’ or ‘vulnerable communities’ in isolation and neglected to examine the interdependencies (or the ‘situations of fragility’) arising at the interface between community and health systems. At this level, social networks, community integration, trust in healthcare providers, the right to health and coordinated, well-resourced service delivery efforts are likely to be strong predictors of healthcare access, utilisation and population health (Diaconu et al., 2018). RUHF research seeks to understand how and why the interaction of those elements is compromised or absent and to identify ways to strengthen such connections. Understanding what healthcare delivery models work best in such situations and identifying promising approaches for engaging patient and wider communities is critical to both improving population health and enabling legitimate appropriate and high-quality service delivery. This research programme is carried out in collaboration between researchers at QMU, Edinburgh and at the American University Beirut (AUB), Lebanon and the College of Medicine and Allied Health Sciences (COMAHS), University of Sierra Leone, Freetown, Sierra Leone. This project is divided into phases, with Phase 1 providing the foundation to inform activities in the subsequent phases. The first phase includes the present scoping study, which will provide the evidential basis for our focus on specific mental health and psychosocial support (MHPSS), contexts, interventions and challenges associated with service delivery in situations of fragility.

1.2 Aim and specific objectives of the scoping study

The overarching aim of the scoping study is to provide a review of the existing literature and an evidence base to support the future phases of the research with the identification of the relevant actors working on MHPSS, broader context, potential challenges, and interventions for the delivery of MHPSS services in Sierra Leone. This study will provide an initial understanding of the MPHSS landscape and bring together the existing evidence on the current issues regarding MPHSS in Sierra Leone, in order to inform the subsequent phases of the research project. To achieve this overarching aim, the following specific objectives formed the basis of this scoping review:

1. To review information available on the burden of mental health in Sierra Leone
2. To identify existing official policies and strategies, and interventions designed and implemented, with respect to MHPSS with particular focus on (a) their evaluation, assessment, and current challenges in delivery and (b) their integration into the health system and the broader context (including features of fragility) at community, district and national level.

3. To identify and map the key actors involved in service delivery for MHPSS in Sierra Leone.

1.3 Context

Mental illness constitutes an extremely high burden of disease globally. A study has estimated that mental illness, together with substance-use disorders, accounts for 23% of disability-associated burden (Charlson et al., 2014). Additionally, it has been highlighted that the treatment gap for mental disorders is particularly high, especially in low-income and middle-income countries, and particularly in sub-Saharan Africa (WHO, 2008; Charlson et al., 2014). Left untreated, mental illness can result in disability, reduced quality of life, stigma and discrimination, poverty, worsened physical health and premature mortality (WHO, 2008).

Despite the high burden and gaps in treatment, mental health remains a neglected area, as evidenced by the lack of investment in service delivery in most African countries (WHO, 2009). The recent history of Sierra Leone, the setting of the present study, involves events likely to contribute to psychosocial and mental health problems within the population.

A brutal civil war took place in Sierra Leone between 1991 and 2002, during which an estimated 70,000 people were killed and more than 2 million (more than one-third of the population) were displaced, either to another part of Sierra Leone, into a neighbouring country or further afield. The war was characterised by mutilations and forced recruitment of children, as well as killings, sexual assault, looting and destruction of property. Atrocities against civilians - such as executions, amputation of limbs, decapitation and gang rape - were often witnessed by other civilians (Kaldor and Vincent, 2006). It is estimated that 27,000 people were disabled as a result of the conflict (IRIN News, 2011). Children were abducted and drugged to fight, with an estimated 48,000 child soldiers enlisted in war-related activities including the national army, defence forces, and the rebel force throughout the conflict period (McKay and Mazurana, 2004). The initiation of these child soldiers into the fighting forces was often violent and they commonly experienced physical and sexual abuse themselves, as well as being force to inflict it on others (T. Betancourt, Brennan, et al., 2010).
Following the war, efforts were made to rebuild systems and infrastructure within Sierra Leone, including the health system (Wurie, Witter and Raven, 2016), but in 2014 a severe outbreak of the Ebola Virus Disease (EVD) began. This continued for almost two years, and had a devastating effect on an already fragile population. Ebola is a highly contagious virus, with an extremely high mortality rate. By the time the outbreak was declared over in March 2016, Sierra Leone had reported 14,124 cases of suspected, probable and confirmed EVD and 3956 deaths (CDC, 2016). During the outbreak, more than 30,000 individuals were quarantined due to possible Ebola exposure (CDC, 2017).

One year after the end of the EVD outbreak, in August 2017, Sierra Leone was hit by a deadly mudslide and catastrophic flooding. Over 500 people were confirmed dead and hundreds more were reported missing. As with all disasters of this type, there was also widespread disruption of families and the loss of entire communities (Harris et al., 2018). The UN Disaster Assessment and Coordination report estimated that 5951 people were affected in some way, many through displacement and associated limited access to basic amenities such as food, water, shelter, or safety (UN Disaster Assessment and Coordination, 2017).

Given that the population of Sierra Leone has experienced such a series of extreme events, they have demonstrated remarkable resilience. However, the coping capacities of individuals, communities and the health systems within the country have been severely challenged and this project aims to identify areas of resilience which can be further strengthened in order to provide effective support for those experiencing mental health problems.
2 Methods

2.1 Data collection

2.1.1 Data sources and search strategy

To identify relevant documents on mental health and psychosocial support for Sierra Leone at sub-national, national and regional level, we performed a scoping review of both published and grey literature using PubMed, Medline, CINAHL, Scopus and Google Scholar. The search was carried out between December 2017 and February 2018. The search terms used included “mental health” OR “psychosocial support” AND “Sierra Leone” for each of the data sources. Additionally, relevant stakeholders (WHO country office, MoHS, etc.) were asked to share grey literature, policies and strategic plans on mental health in Sierra Leone.

Titles and (where relevant) abstracts were screened for all documents retrieved. Documents were selected for full appraisal based on the following inclusion and exclusion criteria.

2.1.1.1 Inclusion criteria:

- Published literature, policy documents and any links or websites that detail interventions related to mental health and psychosocial support in Sierra Leone or sub-region
- English language documents
- Documents published on or after 2007 (e.g., covering the last decade).

2.1.1.2 Exclusion criteria:

- Documents in languages other than English
- Duplicates identified during title and abstract screening
- Documents or links not specific to Sierra Leone or on the sub-region
- Newspaper articles, blogs, meeting/event announcements
- Documents published before 2007
- Newspaper articles, blogs, meeting/event announcements

2.1.2 Study selection

Following the data search, 183 documents were identified from the various databases (Table 1).

Table 1: Number of documents retrieved by database

<table>
<thead>
<tr>
<th>Database</th>
<th>Initial search results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medline</td>
<td>41</td>
</tr>
<tr>
<td>PubMed</td>
<td>(40)</td>
</tr>
<tr>
<td>Database</td>
<td>Count</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CINAHL</td>
<td>29</td>
</tr>
<tr>
<td>Scopus</td>
<td>64</td>
</tr>
<tr>
<td>Google Scholar (first 5 pages)</td>
<td>49</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>183*</td>
</tr>
</tbody>
</table>

* excluding PubMed search which produced a subset of Medline search

Titles of all the retrieved documents were screened against the predefined eligibility criteria and subsequently the abstract and full text of the eligible documents was also appraised. Two authors (AJB and MB) independently read the abstracts/summaries of the remaining documents to ensure that they met the study eligibility criteria. In the end, duplicates and those documents that did not meet eligibility criteria were excluded. Figure 1 shows the selection processes for included documents according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Moher, Liberati, Tetzlaff, Altman, et al., 2009). Of the 183 documents identified in total, 74 duplicates were identified and removed. Following the screening of the remaining 109 documents, 45 documents met the study inclusion criteria and were retained for full review and data extraction.

Figure 1: PRISMA flow diagram (Moher, Liberati, Tetzlaff and Altman, 2009)
2.1.3 Other document sources

A further 33 documents were retrieved directly in country, by asking informants and key contacts to provide any relevant documentation in the topic. These documents (which were collected iteratively at different stages of the analysis) are not included in the PRISMA diagram above and in the bibliometric analysis below.

2.1.4 Data extraction

A data extraction form (in MS Excel) was developed by the team listing all the variables (see Table 2 below) that needed to be extracted. The table builds on the original terms of reference for this study, but also on the insight and feedback gathered during the presentation of preliminary findings at the launch of RUHF in November in Edinburgh. Using the predefined data extraction form, AJB undertook data extraction of relevant data from the retrieved documents.
Table 2: Elements and themes included in the data extraction form

<table>
<thead>
<tr>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
</tr>
<tr>
<td>Title</td>
</tr>
<tr>
<td>Type of document (e.g. policy, strategy, M&amp;E framework, intervention guideline, report, peer-reviewed publication, etc.)</td>
</tr>
<tr>
<td>Source / link</td>
</tr>
<tr>
<td>Geographical focus</td>
</tr>
<tr>
<td>Population considered</td>
</tr>
<tr>
<td>Period / events considered</td>
</tr>
<tr>
<td>Categories / types of mental health disorders considered</td>
</tr>
<tr>
<td>Information on epidemiological &amp; burden of disease data</td>
</tr>
<tr>
<td>Information on barriers identified for access to mental health services and current challenges to service provision: both in access to and quality of services</td>
</tr>
<tr>
<td>Does the document present (i) a policy/strategy, (ii) an intervention, or (iii) a situation analysis?</td>
</tr>
<tr>
<td>Key design issues of policy or intervention (aims, objectives, theory of change, activities included/nature of intervention, level of care, costing, person/organization’s roles and responsibilities)</td>
</tr>
<tr>
<td>Health care delivery organization (how are services provided according to the policy/intervention? At what level? Who is responsible? etc.)</td>
</tr>
<tr>
<td>Coverage of the policy/intervention (population, geographic and healthcare level focus)</td>
</tr>
<tr>
<td>Key actors involved (e.g., service delivery organizations and actors, funding bodies, responsibility for implementation/evaluation, etc.)</td>
</tr>
<tr>
<td>Role of the community and community engagement</td>
</tr>
<tr>
<td>Information on implementation (where, when, by whom, funded by whom, etc.?)</td>
</tr>
<tr>
<td>Evaluation and assessment (incl. strength/successes, challenges and bottlenecks in the organization of service delivery)</td>
</tr>
<tr>
<td>Quality of services provided</td>
</tr>
<tr>
<td>Information on integration of services in the health system and in the broader context at community, district and national level.</td>
</tr>
</tbody>
</table>
### 2.2 Analysis & reporting

Analysis was carried out by theme, based on the extracted data and predefined codes. For reporting, a preliminary outline was prepared which summarized and reorganised the main themes of the data extraction form. The analysis and writing up was developed by HW and AJB and preliminary findings discussed with all co-authors.
3 Results

3.1 Descriptive or bibliometric analysis of documents reviewed

In total, 45 documents met the eligibility criteria and were fully analysed in this study. The bibliometric analysis shows that within the period (2007-2017) included in the review, 24 (53.3%) of the total 45 documents were published in the last three years, while the remaining 21 (46.7%) documents were published between 2007 and 2014 (Figure 2 below).

![Figure 2: Documents analysed by year](image)

It is also interesting to note that the majority of documents refer to MHPSS in relation to specific events, and in particular the prolonged civil conflict which affected Sierra Leone from 1991 to 2002 and the 2014-2015 Ebola epidemics. 26 (57.8%) of the documents reviewed refer to the conflict focusing on MHPSS, for example, for war-affected population/youth or child soldiers, while 12 (26.7%) looked at MHPSS for groups such as EVD survivors and workers/communities during the outbreak and 7 (15.6%) were not event specific.
Finally, 33.3% (n=15) of the documents reviewed assess interventions being implemented in the domain of MHPSS, while the remaining 66.7% (n=30) presents an analysis of the existing situation with reference to the mental health status of the population, or population subgroups.

3.2. Mental health and psychosocial wellbeing in Sierra Leone

3.2.1 Epidemiological studies of mental disorders and risk/protective factors

As noted above, the majority of published research relates to the impact of emergency situations on mental health, particularly the prolonged civil conflict and the EVD outbreak. Many of the studies relate to specific subgroups (e.g. children forcibly recruited into armed groups), rather than the population as a whole. Whilst these studies provide useful contextual information, they are less useful in terms of understanding the current prevalence
of mental health problems, and the risk and protective factors related to mental health and psychosocial wellbeing in a non-emergency context.

**Mental health impact of the civil war in Sierra Leone**

A number of researchers have reported increases in mental health conditions amongst the population in Sierra Leone who were affected by the civil war, including anxiety, drug abuse, schizophrenia, depression and post-traumatic stress disorder (PTSD) (de Jong *et al.*, 2000; Fox and Tang, 2000).

For example, an assessment of traumatic stress in the capital city, Freetown, following a period of intense violence in early 1999, reported that nearly all respondents indicated a high level of psycho-social impact that would meet the clinical threshold for post-traumatic stress disorder (PTSD) using European criteria (de Jong *et al.*, 2000). An assessment conducted by the Ministry of Health and Sanitation (MoHS) and the World Health Organisation (WHO) in the immediate post-conflict period (2002) identified prevalence rates of 2% (50,000 people) for psychosis; 4% (100,000) for severe depression; 4% (100,000) for severe substance abuse; 1% (25,000) for mental disability, and 1% (25,000) for epilepsy (Asare and Jones, 2005). This study is in line with WHO estimates of mental disorder prevalence in adult populations affected by complex emergencies (see Table 3 below) (WHO & UNHCR, 2012). One can expect an increase in mental disorders (e.g. depression, anxiety-related disorders) in the aftermath of an emergency, but figures are still relatively low for the most severe disorders.
Table 3: WHO projections of mental disorders in adult populations affected by emergencies (WHO & UNHCR, 2012)

<table>
<thead>
<tr>
<th>Category</th>
<th>Before the emergency 12-month prevalence</th>
<th>After the emergency 12-month prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe disorder</td>
<td>2% to 3%</td>
<td>3% to 4%</td>
</tr>
<tr>
<td>(e.g. psychosis, severe depression, severely disabling form of anxiety disorder)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mild or moderate mental disorder</td>
<td>10%</td>
<td>15% to 20%</td>
</tr>
<tr>
<td>(e.g. mild and moderate forms of depression and anxiety disorders, including mild and moderate posttraumatic stress disorder)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal distress / other psychological reactions (no disorder)</td>
<td>No estimate</td>
<td>Large percentage</td>
</tr>
</tbody>
</table>

A number of studies of the mental health impact of the war in Sierra Leone have focused on children forcibly recruited into armed groups. Several of these, conducted at different times, have found high rates of depression, anxiety, and post-traumatic stress disorders (T. Betancourt, Agnew-Blais, et al., 2010)(T. Betancourt, Brennan, et al., 2010)(Maharjan et al., 2013); (Santacruz and Arana, 2002). Moreover, a range of factors such as stigma, discrimination, poverty, unemployment, and limited social support to unstable family structures posed barriers to community reintegration of children who were involved with armed groups, with further impacts on their mental health (T. Betancourt, Agnew-Blais, et al., 2010). Betancourt et al. (2013) used a pre-post study approach to assess the risk and protective factors associated with PTSD symptom change among 243 former child soldiers in Sierra Leone. The authors found a prevalence of 32% and 16% in 2004 and 2008 respectively, suggesting that PTSD burden among former child soldiers declined with time. A study of children who were not involved in armed groups, but were displaced during the war,
recorded symptoms suggesting post-traumatic stress disorder (PTSD) among 70-95% of the children (Gupta and Zimmer, 2008a).

As is clear from the studies reported here, research related to the mental health impacts of the civil war in Sierra Leone has been highly focused on identifying PTSD. This was partly a consequence of the time at which much of this research was conducted (when there was considerable attention on PTSD in terms of funding and interest), but is also a general tendency in research on war-affected populations. It is challenging to interpret these results because assessment measures were often not normed and validated for the Sierra Leone population. Notably, wide variations in prevalence of mental disorders have been recorded across psychiatric epidemiological studies conducted with war-affected communities (Charlson et al., 2016). These variations may be a result of contextual influences, methodological issues, the use of different instruments, and time following conflict (Steel et al., 2009; Silove, Ventevogel and Rees, 2017). There is a particularly high risk of transcultural measurement errors in relation to the use of standard self-report questionnaires.

**Mental health impact of EVD outbreak**

An epidemic such as the EVD outbreak in West Africa increases the risk of mild, moderate and severe mental health disorders, as described in Table 3 above. In addition to the impact of the disease itself, people were also affected by perceptions of threat, loss of loved ones, loss of property and livelihood, rumours and uncertainty, loss of social support networks, inability to move freely, stigma and discrimination (Shultz, Baingana and Neria, 2015; Jalloh et al., 2018).

In a national sample of Sierra Leoneans after more than a year of the Ebola outbreak nearly 50% of all the respondents reported at least one symptom of anxiety or depression, 75% reported experiencing at least one PTSD symptom, 27% met levels of clinical concern for PTSD and 16% met levels of probable PTSD diagnosis. Individuals with any level of Ebola experience were more likely to report symptoms of anxiety, depression or PTSD than those who did not (Jalloh et al., 2018). High levels of distress were documented among Ebola survivors, with obsession-compulsion, anxiety, hostility, phobic anxiety, and paranoid ideation reported as extremely high in survivors of the Ebola virus (Ji et al., 2017; Jalloh et al., 2018). It should be noted, however, that the findings of Ji et al (2017) are based on Chinese norms for the SCL-90-R, since norms for this tool had not been established for a Sierra Leonean population, so the conclusions may be unreliable. Hugo et al., (2015) undertook a study of the psychological health of EVD survivors discharged from an Ebola
treatment centre in Kailahun. Of the 74 survivors discharged in the study period, 24 were followed up at home, and five reported clinically important post traumatic reactions 3-4 weeks after discharge predicting a risk of developing post-traumatic stress disorder.

When interpreting these findings, it is important to bear in mind that many responses which may be pathological in a normal context may actually have been adaptive during the EVD outbreak. For example, hand-washing and protective behaviours which may be labelled ‘obsessive-compulsive’ in normal circumstances were a way of staying safe; fear about whether other people posed a danger to one’s wellbeing may be termed ‘paranoia’ in normal circumstances, but was an adaptive response to the reality of the EVD situation. ‘Phobic anxiety’ may, again, be a normal response in this extreme situation. We must be particularly cautious about drawing conclusions, especially regarding PTSD, from studies that were conducted in the midst of the EVD outbreak (Jalloh et al., 2018). PTSD cannot be reliably diagnosed while a crisis is ongoing; the diagnosis was developed to capture the presence of distress which continues even after the danger has passed. In 2014 and 2015, when these studies were conducted, the crisis was still very much present so PTSD ‘symptoms’ such as hypervigilance and avoidance should not be seen as pathological reactions.

**Mental health impact of floods and mudslide**

In emergencies, not everyone has or develops significant psychological problems (see Table 3); there are numerous interacting social, psychological and biological factors that influence whether people develop psychological problems or show resilience after a disaster such as the mudslide that occurred in Sierra Leone (Inter-Agency Standing Committee (IASC), 2007). Certain groups (e.g. those with pre-existing mental health disorders) may be more likely to be at risk of developing mental health problems, depending on the type of emergency (Harris et al., 2018).

Although no specific research was identified on the mental health effects of the flooding and mudslide in Sierra Leone, a systematic review notes that experiences of flooding can exacerbate or provoke mental health problems amongst some individuals (Stanke, Murray and Amlôt, 2012). The study highlights the importance of secondary stressors (e.g. lack of access to basic services; loss of social supports) in prolonging the psychosocial impacts of flooding.

**Mental health issues in non-emergency contexts within Sierra Leone**

Relatively few studies were identified which investigated the prevalence of mental health disorders in the general population outside of an ongoing emergency situation.
A cross-sectional survey in the Western urban and Western rural districts of Sierra Leone aimed at examining the associations between war exposures, mental health disorders and EVD-related health behaviours was undertaken by Betancourt et al., 2016. Amongst those in this sample who had experienced a distressing event (N=563), an estimated weighted prevalence for meeting the criteria of likely PTSD was 11.3% (95% CI 7.7%, 16.3%).

Epilepsy and neuropsychiatric disorders were also reported by two health facility-based studies (Jones et al., 2009; Kamara et al., 2017). The study by Jones et al., 2009 was undertaken at primary healthcare facilities in five humanitarian settings, including Sierra Leone. Of the 204 people who sought help at the mental health clinic in Sierra Leone, 122 (60%) met the criteria of epilepsy according to the International Classification of Diseases, 10th revision (ICD-10) codes. In describing their experience of establishing a nurse-led mental health and psychosocial support unit at Connaught hospital in Freetown, Kamara et al., 2017 recorded 10 cases of epilepsy or seizures among 143 patients following assessments with the mhGAP tool by the trained nurses. These findings on the prevalence of epilepsy may not, however, be representative of the community burden given the study setting was a health facility. For example, over half (67%) of the patients in this study (Kamara et al., 2017) were referred for mental health assessment within Connaught hospital departments as compared to 12% that were referred by family or relatives.

Mental health services in contexts where understanding of mental health is low attract people with epilepsy because local populations incorrectly categorise epileptic people as having a mental disorder and stigmatise them in similar ways. Many also have mental health sequelae of epilepsy, such as hypoxic brain damage and behavioural disturbance (Jones et al., 2009). Perhaps unsurprisingly, a study of adults with epilepsy in Freetown (Connaught Hospital) and Kenema (Kenema Government Hospital) found that 28% showed signs of depression and/ or anxiety (M’bayo, Tomek, Kamara and D. R. Lisk, 2017). This illustrates the important point that those who experience one type of mental, neurological or substance use (MHS) disorder are likely to also experience others, and so require multiple forms of support and treatment.

There have been a small number of studies of depression, anxiety and psychosis in Sierra Leone, but these occurred either immediately after the war (e.g. Jones et al., 2009) or in the EVD context (Kamara et al., 2017), and in some cases involved small numbers, so it is difficult to draw strong conclusions from these. Severe disorders such as psychosis and epilepsy tend to be more common in those presenting at clinics in emergencies (Jones et al., 2009). For example, of 143 patients attending the psychosocial and counselling clinic at Connaught hospital in a 12-month period during the EVD outbreak, 30 were seeking help
due to psychosis compared to 17 experiencing moderate to severe emotional disorder or depression (Kamara et al., 2017). However, these individuals or their caregivers had actively sought help within the formal health system, so the findings do not give an indication of the extent of the problems within the general population (or outside of an emergency context). ICD-10 diagnoses of cases at community-based emergency mental health clinics in Sierra Leone over a 5-month period from 2004-2005 diagnosed five of the 204 people who presented at the clinic with substance-induced psychosis; ten with schizophrenia, schizotypal and delusional disorders; 35 with other non-organic psychotic disorders; 122 with epilepsy; and five with depression.

A descriptive summary of the studies drawn on for the above analysis is provided in Appendix 1. Overall, as a result of design weaknesses, sampling approach and the time periods in which they were conducted they are of limited assistance in understanding the prevalence of mental health disorder in Sierra Leone.

3.2.2 Views and expressions (idioms) for distress and mental illness

Cultural idioms of distress refer to common modes of expressing distress within a culture or community that may be used for a wide variety of problems, conditions or concerns. Explanatory models refer to the ways that people explain and make sense of their symptoms or illness, in particular how they view causes, course and potential outcomes of their problem, including how their condition affects them and their social environment, and what they believe is appropriate treatment (Kirmayer and Bhugra, 2009). Understanding local illness models and idioms of distress facilitates both the design of support services that meet the needs of the population (which may include both formal and informal medical systems, religious or community resources and strategies), and effective measurement of psychosocial wellbeing and mental health.

In their report describing the establishment of community mental health services in Kailahun in 2004, Asare and Jones (Asare and Jones, 2005) note that stigmatisation was the main problem they observed in the area of mental health. They found that it affected every aspect of work done to prevent and respond to mental health problems, including attendance at clinics, compliance with medication, and particularly the availability of social support for people who are mentally ill. They report that the brief surveys they conducted showed that most of the community believed mentally ill people to be evil, violent, lazy, stupid, unable to marry or have children, and unfit to vote. The International Medical Corps (which initiated this project) held regular public education workshops with community leaders and police and
found that they were able to shift attitudes towards a more positive approach regarding the need for social support and a less pessimistic approach to treatment.

According to Yoder et al., 2016, mental health problems in Sierra Leone are commonly attributable to spiritual or supernatural causes and associated with help-seeking from traditional healers or religious institutions.

However, to our knowledge, no systematic studies have been conducted on Sierra Leonean views and expressions for distress and mental illness. In other contexts, this has been a fundamental first step in designing, implementing and/or evaluating mental health support services (e.g. (Hassan et al., 2015; Cavallera et al., 2016)), so the gap in the literature focusing on cultural understandings of distress and wellbeing in Sierra Leone is significant. Understanding the key sociocultural aspects of mental health and wellbeing is key to assisting government and non-government organisations to provide effective services.

### 3.2.3 Help-seeking for mental health problems

The small number of studies on help-seeking behaviour in relation to mental health issues in Sierra Leone indicate that individuals with mental health problems are managed in the homes of relatives whenever possible, with the most commonly accessed care being that provided by traditional healers or faith-based institutions (Duncan, 2012).

Reliance on informal health care is due partly to the fact that public health services are difficult to access because they are far from where those in need actually live, and the lack of health care staff trained to respond effectively to mental health needs (McBain et al., 2015; Reardon, 2015). However, equally important are beliefs about mental health (causes, effects, prognosis, and effective responses) and associated stigma, discrimination and shame amongst both those affected and their families. Traditional healing practices often allow for issues to be addressed privately or even secretively between the healer and patient, thus minimising the risk of ostracism and stigma in the community.

As noted above, it is essential to better understand current help-seeking behaviours, and the beliefs on which these are based, in order to assess and strengthen the effectiveness of mental health provision in Sierra Leone. There has been minimal research in this area, although (J. Song, van den Brink and de Jong, 2013a) reported that efforts to address stigma associated with mental health and to include traditional healers in the communication around mental health have been inadequate. The lack of communication and coordination between the formal system and the traditional system results in a lack of regulation and quality control, and potentially harmful practices occurring at community level.
3.3 National mental health policies and strategies in Sierra Leone

3.3.1 Evolution of MHPSS policies in Sierra Leone: history and milestones

On paper, the Ministry of Health and Sanitation (MoHS) has developed a number of policies, strategies and services to address mental health issues. One of the studies reviewed (Alemu et al., 2012) presents a summary of the main steps and milestones in the evolution of mental health policies, strategies and services from the immediate post-conflict phase up until 2012. Table 4 summarises the main findings in chronological order, and adds in some additional MHPSS policies and initiatives in Sierra Leone which occurred after 2012.

Table 4: History and milestones for mental health services in Sierra Leone

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>The report Mental Health and Substance abuse in Post Conflict Sierra Leone describes the current state of mental health in Sierra Leone. The first Systematic Needs Assessment on Mental Health and Substance Abuse Survey was undertaken in October by the Ministry of Health and Sanitation with the support of WHO.</td>
</tr>
</tbody>
</table>
| 2009  | Two WHO missions to Sierra Leone occurred. The first, in March, assesses the mental health situation in Sierra Leone, and the second, in October, reviews the mental health situation in the country and assists in the development of a policy and plan.  
|       | A full-time Mental Health Officer is appointed to the WHO Country office in Sierra Leone.  
<p>|       | The Mental Health Policy is drafted between October and December. In December, a validation meeting was held for the Mental Health Policy, with participants from MoHS, Ministry of social Welfare (MoSW), WHO, and several other relevant organisations. |
| 2010  | The National Mental Health Strategic Plan (2010-2015) is drafted and finalised, and the Mental Health Policy is finalised and printed. In September 2010, the first mental health users and families' association was established. |</p>
<table>
<thead>
<tr>
<th>Year</th>
<th>Events</th>
</tr>
</thead>
</table>
| 2011 | • Sierra Leone is identified as a priority country in Africa for roll-out of mhGAP.  
• Strategic partnership between key players in mental health in Sierra Leone and Ministry of Health and Sanitation cemented under Enabling Access to Mental Health Programme.  
• Establishment of National Mental Health Coalition, who organised first national mental health conference.  
• New psychiatric nurse training course (at College of Medicine and Allied Health Sciences, COMAHS) enrolled its first students. |
| 2012 | • Mental Health Steering Committee launched under Ministry of Health and Sanitation.  
• National Mental Health Policy and Plan launched.  
• Mental Health Leadership and Advocacy Programme launched, with 7 mental health leaders receiving training in public mental health and service development.  
• First cohort of Psychiatric Nurses graduate from College of Medicine and Allied Health Sciences, Freetown. |
| 2013 |  |
| 2014 | [Beginning of EVD outbreak]  
• Psychological First Aid (PFA) for Ebola survivors, led by Mental Health Coalition in partnership with WHO and King’s Sierra Leone partnership |
| 2015 | • In response to EVD outbreak, 30 non-governmental organisation (NGO) partners and national staff were trained on National Mental Health and Psychosocial Support Services and PFA, and 400 Child Welfare Committee Members and community volunteers were trained on child rights, child protection, MPHSS and PFA (UNICEF, 2015)  
• A directory of MHPSS and child services nationwide was developed by the Ministry of Social Welfare, Gender and Children’s affairs in Sierra Leone and the international Medical Corps (IMC), although many service-providers included were only active during the EVD outbreak period (MSWGCA and IMC, 2015)  
• Continuation of PFA for Ebola survivors (Mental Health Coalition in partnership with WHO and King’s Sierra Leone partnership) |
| 2016 | [EVD outbreak declared over in March]  
• Establishment of a task force for disaster related mental health issues  
• Roll-out of mhGAP to 150 Community Health Officers |
| 2017 | • Continuation of roll-out of mhGAP |
3.3.2 Current regulatory frameworks: policies and strategies

3.3.2.1 Lunacy Act

There is an urgent need to revise the Lunacy Act, an outdated colonial law that is yet to be amended in the Laws of Sierra Leone, since it was enacted in 1902. This was a period wherein mental health was treated as a communicable disease and management and treatment of these patients involved isolation from society and being chained. The provisions in the Act as it stands still subscribes to this notion and regards lunacy as a form of institutionalised mental disorder. Therefore, the Act should be repealed and replaced rather than revised in its current form (Mental Health Coalition Sierra Leone, 2012). However, the Mental Health Policy document (2010-2015) (Ministry of Health and Sanitation Sierra Leone, 2015), calls for a revision of the 'Lunacy Act', to “make it more humane to meet the demands of present day society (Lunacy is to be replaced by 'mental health')", with legal minds and other stakeholders represented in the review committee. This will be informed by other relevant laws, e.g., The Pharmacy and Drugs Act 2001, to address overlapping issues, such as clarity of the cadre of health professionals authorised to prescribe and provide psychotropic medications to patients. This will be complemented by community efforts, i.e., promotion and prevention activities. It will allow for patients suffering with mental health and their families to be fully informed about their treatment and rehabilitation options, and given autonomy in seeking consent to their care or management. In support of this, clinical guidelines, including management of relationships with families and the patient’s environment, confidentiality issues and informed consent, among other important issues will be developed. Admission will be on a voluntary basis, with involuntary admission being regulated by the law and only permitted in exceptional circumstances. This will be cascaded into the education sector, and included into the teaching curriculum and of mental health professionals and other allied health professionals such as social workers and Community health workers, to support its application/implementation (Ministry of Health and Sanitation Sierra Leone, 2015).
3.3.2.2 Mental Health Policy and Strategic Plan 2010-2015

The main current policy of the MoHS is the *Mental Health Policy (2010-2015)* (Ministry of Health and Sanitation Sierra Leone, 2015). Its aim is to make available to all the people in Sierra Leone sustainable, integrated, affordable, accessible and high-quality mental health services, in collaboration with a range of partners.

The general objectives include:

1. To improve the mental health of all people in Sierra Leone, particularly the most vulnerable, by increasing access to affordable and acceptable quality mental health services.

2. To promote the quality of life (e.g. good general health status, social inclusion) of all people with mental disability and their families in Sierra Leone.

3. To develop an enabling social environment for mental health through strong collaboration with all stakeholders, within and beyond the health sector.

The specific objectives include:

i. To provide quality affordable, acceptable and accessible mental health services (including rehabilitation) at all levels as an integrated part of the comprehensive health services package available in Sierra Leone, with a view to achieving a continuum of care.

ii. To promote mental health and prevent mental disorders (including early interventions and reduction of risk factors) in order to reduce the overall prevalence of mental disorders.

iii. To promote and protect the rights of people with mental disorders, including by advocating at different levels (e.g. decision-makers, health professionals, communities) to reduce the stigma and discrimination associated with mental illness and by promoting social inclusion of people with mental disorders.

iv. To foster effective collaborative partnerships and networks for mental health with stakeholders within and beyond the health sector.

v. To ensure community involvement and participation in assessing, planning, designing, implementing and evaluating mental health activities at all levels.

vi. To promote action-oriented research, data collection, monitoring and evaluation in order to inform and support evidence-based mental health practice and services.
To address the specific needs of special population groups listed in this document when designing mental health interventions and services.

The policy envisaged that these objectives would be achieved through coordination between the MoHS and the Ministry of Education, Youth and Sports; Ministry of Social welfare, Gender and Children’s Affairs; Ministry of Local Government and Rural Development; and Ministry of Justice. The MoHS is envisaged to play a lead role in the coordination of mental health services through the Directorates of Post-graduate training, Non-Communicable Diseases and Research (PNR), Primary Health Care (PHC), and Hospital and Laboratories (H&L). H&L coordinates health care at tertiary level while PHC coordinates at secondary and primary levels.

The policy envisages joint annual planning and quarterly reviews with the District Health Management Teams (DHMTs). The directorate of PNR is in charge of supervising the development of an updated database of the different mental health providers and stakeholders at country level, while at district level, District Health Management Teams are responsible for developing and updating such a database. Mental health activities are implemented at district level by the responsible DHMT. The Districts report to the central level. However, with the PNR no longer operating as a unit, but as separate entities currently, i.e., Directorate of Non-Communicable Diseases, Directorate of Post-Graduate training and Research, it is impossible to assess whether this system was operational and if it was, how effective was it. In the absence of a monitoring and evaluation report of policy implementation, it is safe to assume that the policy was largely non-operational and remained on paper.

A Mental Health Coordinator within MoHS/DPNR has been appointed and sits within the NCD Directorate at the MoHS. This person is responsible for overseeing the technical and administrative activities of the mental health unit, advocating for mental health services, and coordinating the implementation of policies and plans with other relevant Ministries, UN, NGOs and civil societies.

The Mental Health Policy 2010-2015 - as well as the Strategic Plan- are in the process of being updated, with initial plans for it to be launched in April 2018. However, as of the time this report was being finalised, this activity was still outstanding.
3.4 In reality: type, accessibility and quality of services

The mental health system in Sierra Leone comprises all organisations and institutions that devote their activities to promote, restore and maintain the mental health of the population. These activities include formal health care such as the professional delivery of personal medical attention, action by traditional practitioners, home care and self-care, public health activities such as health promotion and mental illness prevention and other health enhancing interventions.

3.4.1 Public service delivery organisation

Within the public healthcare systems, the MoHS aims to provide different levels of care for mental health across community, primary, secondary and tertiary levels. This is modelled on the Inter-Agency Standing Committee (IASC) Guidelines on MHPSS in Emergency Settings (2007). One of the core principles underpinning these guidelines is that of providing multi-layered supports to ensure that everyone within a population has access to the services they need to achieve good mental health and psychosocial wellbeing. This recognises the fact that people will respond differently to adversity, with the majority of the population being able to recover from difficult experiences over time, provided that they have access to basic services which are provided in a safe, dignified and participatory way. Some people will need, in addition to this, assistance to strengthen the social networks and supports that have been shown to play a crucial role in preventing and responding to mental health problems. The majority of the population will be able to achieve good mental health and psychosocial wellbeing with these services alone (Levels 1 and 2 of the pyramid shown in Figure 5).

A smaller proportion (see Table 3) will require the type of emotional or psychological support that can be provided by trained and supervised non-specialists (e.g. primary health care staff; community health workers; teachers; religious leaders), and a very small proportion will require access to specialist mental health services. In any settings (whether emergency or not), this model of MHPSS interventions can help to ensure that services are coordinated, duplication of services is minimised and any gaps are addressed.
The MHPSS government mental health services in Sierra Leone can be considered in relation to this pyramid.

### 3.4.1.1 Level 1: Social considerations in basic services and security

There is considerable evidence that daily stressors play at least as great a role in mental health as do previous distressing experiences (e.g. effects of war) – e.g. (Miller and Rasmussen, 2010). The population of Sierra Leone continue to experience challenges at this level: the World Bank notes that Sierra Leone was seeking to attain middle-income status by 2035, but this plan was derailed by the EVD outbreak. Currently, there is still high youth unemployment, corruption and weak governance, and problems of poor infrastructure and widespread rural and urban impoverishment still persist. Whilst any activity which strengthens access to basic services and security in Sierra Leone will have a positive impact on mental health, this is outside the scope of the current project.

### 3.4.1.1 Level 2: Community and family support (Community care)

Formal healthcare services at community level are provided by “volunteers” known as Community Health Workers (CHWs). There are currently over 15,000 CHWs in the country,
which means about two at every village. Based on national guidelines, their scope of work does not currently support mental health services, which suggests that mental health care at community level is currently scarce or not available. However, some CHWs trained in case findings and sensitisation, were trained in psychological first aid (PFA) during the EVD outbreak, which proved to be important in their disease surveillance role (Walker et al., 2016).

A comprehensive Clinical care Package for Ebola Survivors (CPES) exists, wherein clinical and training officers and survivor advocates are the main target groups for capacity-building, so they can link survivors to mental health services and ensure survivors access care, including mental health care.

### 3.4.1.2 Level 3: Focused, non-specialised supports (Primary care)

The primary level of healthcare is provided by 559 Maternal and Child Health Posts (MCHPs), 386 Community Health Posts (CHPs) and 229 Community Health Clinics (CHCs). In the post conflict and pre-Ebola phase, there were no designated mental health workers at this level. However, in the current post-Ebola phase, 150 CHOs were trained in the mhGAP Intervention Guide and other PHU staff have been trained in PFA. These programmes were rolled out by MoHS and WHO in 2016-2017, using a nationwide approach.

There is some evidence that PFA is an effective approach which can be used by health-care workers (and others) to respond in a helpful way to a distressed individual. Whilst the quality of PFA training which took place during the EVD outbreak was variable, the programme rolled out to health care workers in 2017 was more systematic and rigorous.

Evidence from field visits also indicates that mhGAP has proved useful in screening and managing mental disorders (Hughes, 2015), but up to now the mhGAP programme has not been evaluated in Sierra Leone.

### 3.4.1.3 Level 4: Specialised services (Secondary care)

The secondary level of healthcare is provided by the 21 District Hospitals, each of which should have a Mental Health Unit staffed by a Mental Health Nurse trained either as a state enrolled community health nurse or a state registered nurse.

Between April 2011 and March 2012, Mercy Ships, WHO and MoHS trained 187 health care workers, including nurses and Community Health Officers (CHOs) from across the country, to provide mental health support in their districts (Alemu et al., 2012). However, this did not
occur since the trained staff did not receive the necessary support once they returned to their districts.

In 2013, 21 Mental Health Nurses were trained by the College of Medicine and Allied Health Sciences (COMAHS), University of Sierra Leone, under its new psychiatric nurse training course, and were deployed by the MoHS to staff the Mental Health Units at district level. Currently, 19 of these trained staff are working as Mental Health Nurses across the districts of Sierra Leone. They provide community sensitisation through activities, radio broadcasts and workshops with traditional healers and leaders, as well as clinical management through home visits, outpatient clinics and liaison services with the mental health units in the general hospitals. The management of the Mental Health Units is based on the mhGAP Intervention Guide (World Health Organization, 2010). Mental Health Nurses receive continuous professional development training and supervision through a partnership between Building Back Better, Kings Sierra Leone Partnership, and more recently two Sierra Leonean psychiatrists who were trained in Kenya.

Mental health nurses are also trained in PFA and many are experienced PFA trainers. This capacity enabled them to be immediately deployed to offer PFA support to individuals affected by the mudslide in August 2017, including mortuary staff, ambulance workers, and burial teams (Harris et al., 2018).

In addition to the mhGAP training for CHOs at primary care level, a number of secondary health care workers (16 Doctors, two Pharmacists, one Clinical psychologist, one Child and Adolescent Mental Health officer (CAMH), three Nurses), were trained in mhGAP under the Mental Health Leadership and Advocacy Programme (mhLAP), a five-year capacity building project for mental health leaders, using a training of trainer (TOT) approach. Furthermore, ‘Building Back Better’ trained 60 Doctors in mhGAP and 20 health professionals on leadership and advocacy.

Patients with severe mental disorders at this level are usually referred to Kissy National Referral and Teaching Hospital just outside Freetown.

### 3.4.1.4 Level 4: Specialised services (Tertiary care)

This is the most specialised form of management and is undertaken at the Kissy National Teaching and Psychiatric Hospital. This is the only psychiatric hospital in the country, and is currently staffed by one retired psychiatrist and two full-time psychiatrists (one recruited by a World Bank project and the other deployed by the MoHS). In addition, the 34 Military Hospital, headed by the second Sierra Leonean psychiatrist, provides psychiatric services to
the public as well as being engaged in MHPSS research. There is one mental health social worker, based in Connaught Hospital, in the capital city, Freetown.

There are no public psychotherapy services at present, although private practitioners, non-governmental and informal organisations offer psychotherapy and counselling services in some communities. In 2017, a nurse trained in CAMH in Nigeria set up a CAMH unit in Freetown.

3.4.2 Service delivery organisation in the non-public sector

As already noted, the majority of care for people with mental health problems is provided by their families. Also playing a key role are the informal supports offered by traditional healers, religious leaders and other key individuals in the communities where the affected individual lives, plus non-governmental organisations (NGOs), faith-based organisations (FBOs) and community-based organisations (CBOs).

During the EVD outbreak there was a considerable influx of organisations (international and national NGOs) providing MHPSS. These were mapped by International Medical Corps (IMC, 2015), but it was very difficult during the outbreak for the Ministries to keep track of which organisations were providing which services in which locations. A directory of MHPSS and child protection services available at the height of the EVD outbreak reported that 209 agencies at district level were involved in 8,835 activities in all the districts in Sierra Leone (MSWGCA and IMC, 2015). Since many organisations stopped providing services when the EVD outbreak ended and funding for these activities was no longer available, these interventions will not be discussed in detail here. However, Figure 6 illustrates the type of MHPSS supports which were available during the EVD outbreak.
Examples of organisations (see Table 6 for a fuller listing) who are currently providing MHPSS services in Sierra Leone include:

- **City of Rest (CoR):** A local and faith-based voluntary organisation situated in Freetown. It caters mainly for the mentally ill and victims of substance abuse, and offers mainly counselling and prayers, with currently no professionally trained personnel on site. It is the only private residential service provider in the entire country. In its present structure, it can take up to 40 patients.

- **Community Association for Psycho-social Counselling (CAPS):** CAPS conduct community healing through traditional purification and counselling, and provides psychosocial support at a local level in the Western and Eastern provinces of Sierra Leone. It emerged from the Sierra Leoneans who were trained and employed by the Center for Victims of Torture (CVT) when they were displaced to Guinea during the war, and builds strongly on the CVT model.

- **University of Makeni (UNIMAK):** This University is based in the northern region of the country and aims to meet both the academic and social needs of Sierra Leoneans.
is in this light that training is provided for mental health especially in relation to providing counselling activities as well as training nurses in mental health in the region.

- **Non-Governmental Organisations (NGOs):** The King’s Sierra Leone Partnership (KSLP) Mental Health team have a longstanding relationship with the MoHS, and work collaboratively with local partners (e.g. the Building Back Better team) to strengthen the training and supervision of health workers for integrated mental health at the district level. They are also providing technical advice to the MoHS to support the revision of the mental health legislation and to strengthen mental health information systems.

- **Handicap International** implement a MHPSS programme which aims to develop and implement community based-prevention and response strategies, leading to an improvement in the quality of life and wellbeing/ positive mental health of people suffering from psychosocial distress and/or living with a mental health disorder.

- **Faith-Based Organisations (FBOs):** These include organisations such as Mending Hearts and the Council of Churches in Sierra Leone.

### 3.4.3 Role of communities

There is a general consensus that the majority of care for individuals experiencing psychological distress and mental health problems takes place at community level, as already noted in this report. Caregivers and service providers include family members, traditional healers, religious leaders and other key figures. However, the role played by these structures is rarely studied and even more rarely documented in published form. This can give the impression that most support takes place through structured psychosocial interventions, and it is important to remember that such interventions in fact reach a small proportion of affected individuals compared to the informal support offered at community level.

One of the few published reports on traditional healing ceremonies describes them as an integral aspect of psychosocial healing in post-war Sierra Leone (Stark, 2006). An example of the approach used by one traditional healer to prevent and respond to distress amongst girls who had returned from armed groups is described below:

> The way I saw the girls, I knew I should cleanse them before their minds were set. I went to the ancestors and asked them how to help the girls. The ancestors instructed
me in how to cleanse them. I went to the bush to fetch the herbs for the cleansing. I knew which herbs to pick because the ancestors had told me. I put the herbs in a pot and boiled them. I poured a libation on the ground and also drank some of it. After boiling the herbs, I steamed the girls under blankets and over the boiling pot for their bodies to become clean and their minds to become steady. After the steaming, we all slept in the house. The next morning we all went to the bush. In the bush, I gave them herbs to drink. We spent the day cooking, singing, eating, and telling stories. On the third day, I brought the girls to the waterside. I told them that they would not go back to town wearing the clothes that they had worn to the riverside. I washed the girls one by one with black soap and herbs. After the washing, they put on new clothing and we all came to town dancing and singing.’ (Stark, 2006: 207).

Elements of this approach have much in common with more formal psychosocial interventions, such as strengthening social networks, ‘telling stories’, and addressing the stigma attached to the girls before they returned to their communities.

Whilst it is important to recognise and engage with mental health care that occurs at community level, it is equally important to recognise that this type of care is not necessarily unproblematic. Families often bear an overwhelming personal and financial responsibility for their loved ones, with little support, and may engage in abusive practices due to their own lack of understanding, lack of coping strategies and/or high levels of distress. They may rely on poorly regulated private marketplaces for medication and treatment. Traditional healing can be helpful, as described above, but can also involve overblown claims of what the healer is capable of achieving, and abusive practices.

3.4.4 MHPSS coordination bodies in Sierra Leone

There are two key coordination bodies for MHPSS in Sierra Leone: the Mental Health Coalition, and the Mental Health Steering Committee. Both are based in Freetown.

The Mental Health Coalition aims to advocate for the human rights and dignity of all those affected by and working to improve mental ill-health. The coalition includes service users, their families, and service providers, and traditional medicine practitioners (TMP). Local leaders are also being engaged to address the myths and stigma surrounding mental health, and to promote community-based rather than institution-based care. Through channels of already established community engagement programmes, regional chapters and national mental health conferences are being organised by the coalition for diverse participants and audiences. In addition, mental health nurses often do community outreach and support
community service users groups and caregivers. Advocacy and awareness raising training have been organised by the coalition for journalists, police and prison officers. The Mental Health Steering Committee is chaired by the MoHS and members include all those bodies providing or supporting MHPSS services in Sierra Leone.

3.4.5 Challenges in the implementation of policies and to MHPSS service provision

In low and middle-income countries (LMIC) in general, barriers to mental health care include contextual issues (little understanding of mental health, weak investment), system issues (inadequate infrastructure and skilled workers, centralised care), and outcomes issues (inequitable access, stigma, lack of evidence for policy and practice) (J. Song, van den Brink and de Jong, 2013b).

Many of these elements, amongst others, have been reported in the research and other literature in relation to Sierra Leone. They include:

- Lack of government support for mental health, and the associated resource constraints (J. Song, van den Brink and de Jong, 2013b)

The Mental Health Policies are not supported by a budget line for MHPSS in the MoHS budget at either national and district level. Therefore there is inadequate financing for infrastructure, technology, supplies (medicines), service delivery, development and remuneration of a trained mental health workforce. The Directorate of NCDs, under which mental health programmes are coordinated, needs to ensure that central and district plans include a budget for all mental health activities and needs, including training and recruitment. So far, the MoHS, through the Directorate of NCDs, has committed to accessing other sources of funding to meet the challenges of implementing mental health activities outlined in the policy and plan. Likely sources include donors through technical cooperation, bilateral and multilateral partnerships, but they remain inadequate and non-sustainable.

- Lack of communication and coordination between the Government of Sierra Leone and the various non-governmental providers of mental health care (including NGOs and religious organisations). Community providers and those from the psychosocial and religious sectors are serving those with serious mental illness but report a lack of communication with each other and the government (J. Song, van den Brink and de Jong, 2013b)

- Lack of adequate trained mental health care workers (J. Song, van den Brink and de Jong, 2013b). This is a long standing problem, coupled with poor skill-mix,
demotivated workforce (Wurie, Samai and Witter, 2016), and a high attrition rate that was exacerbated by the exodus of health workers during the conflict and further depletion of the numbers during the recent Ebola disease outbreak (Witter and Wurie, 2014).

- Quality of mental health care provided is not adequate, according to the mental health policy document (Ministry of Health and Sanitation Sierra Leone, 2015). At mental health institution and social care homes, human right violations and substandard quality services are common. People living in mental health facilities such as the Kissy psychiatric hospital are often exposed to degrading treatment including filthy living conditions, lack of clothes, food, proper bedding or hygiene facilities and clean water. Rights to confidentiality, accessing information, privacy, movement, communications are also frequently violated. Anecdotal reports have shown that in Sierra Leone, mental health treatment and physical health care services and community support services are not available in most facilities resulting in people staying in these facilities longer than expected.

- Geographical and financial barriers, since public health services may be far from the reach of service users.

- Cultural barriers (e.g. beliefs about the causes of mental disorder) as well as lack of culturally relevant, sustainable and responsive mental health services (J. Song, van den Brink and de Jong, 2013b; Betancourt et al., 2014; Newnham et al., 2015).

- Poverty, stigma and discrimination. Asare and Jones (2005) note that stigmatisation was the main problem they observed in the area of mental health when setting up a community-based service in Kailahun.

### 3.4.6 Assessment of MHPSS interventions

Although there have been many MHPSS interventions implemented by non-state actors in Sierra Leone particularly during and in the immediate aftermath of crises such as the civil conflict and the Ebola epidemic (IMC, 2015), our literature review found that very few have been evaluated, so there is a lack of evidence on their effectiveness. The few evaluated intervention studies of culturally adapted Western-based psychosocial interventions (Stepakoff, 2007; Gupta and Zimmer, 2008a) have not been adopted by local practitioners (J. Song, van den Brink and de Jong, 2013b). Integration into the wider health system has been a challenge in general for the interventions implemented by outside organisations. The
majority of the interventions captured in the review were tailored for war affected youths, followed by Ebola-affected target groups, with a few interventions designed for the general population. We provide in table 5 below, a summary of these interventions.
<table>
<thead>
<tr>
<th>Study</th>
<th>Target group</th>
<th>Type of intervention</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harris, 2007</td>
<td>Former child soldiers (orphans) aged 15 to 18 years</td>
<td>Dance/movement therapy</td>
<td>The intervention created a platform for participants to give a public performance highlighting their dual roles as both victims and perpetrators in the war. This, in turn, advanced their reconciliation within the local community.</td>
</tr>
<tr>
<td>Stepakoff, 2007</td>
<td>Liberian and Sierra Leonean refugees in the refugee camps of Guinea</td>
<td>Trauma counselling program developed by the Center for Victims of Torture</td>
<td>Verbal and nonverbal communication, or via a combination of the two, allowed for psychological and social repair</td>
</tr>
<tr>
<td>Gupta and Zimmer,</td>
<td>Children in a displacement camp</td>
<td>Psychosocial intervention (Rapid-Ed Intervention)</td>
<td>The findings suggested the potential for combining basic education with trauma healing activities for children in post-conflict settings</td>
</tr>
<tr>
<td>Betancourt et al.,</td>
<td>War affected youths</td>
<td>Youth Readiness Intervention</td>
<td>The study concluded that the intervention resulted in significant improvements in mental health and functioning as well as longer-term effects on school engagement and behaviour, suggesting potential to prepare war-affected youth for educational and other opportunities.</td>
</tr>
<tr>
<td>Newnham et al., 2015</td>
<td>War affected youths aged 15 to 24 years</td>
<td>Youth Readiness Intervention (YRI)</td>
<td>YRI significantly reduced internalising and externalising symptoms and improved functioning among trauma-exposed youth and concluded that interventions that ready youth for educational and vocational activities have great potential for increasing well-being and economic recovery.</td>
</tr>
<tr>
<td>McBain et al., 2015</td>
<td>Adolescents and young adults living in a war-affected area</td>
<td>Psychotherapeutic intervention - cognitive–behavioural intervention</td>
<td>Concluded that the intervention is not cost-effective. However, the results indicate that the intervention translated into a range of benefits, such as improved school enrolment, not captured by cost-effectiveness analysis.</td>
</tr>
<tr>
<td>Study</td>
<td>Setting</td>
<td>Intervention</td>
<td>Findings</td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>Kahn <em>et al.</em>, 2016</td>
<td>Ebola hotline operators</td>
<td>Evaluated a support group created to strengthen the resilience of the operators and provide them with coping skills</td>
<td>Findings indicate that using support groups for hotline workers during a crisis is a promising approach to promoting mental health, self-care and work performance. This indicates the need to ensure psychosocial support is provided to the helpers as well as the victims of an international disaster.</td>
</tr>
<tr>
<td>Stewart <em>et al.</em>, 2016</td>
<td>57 health and non-health workers, including NGO workers</td>
<td>Acceptance and Commitment Therapy (ACT)</td>
<td>The study findings indicated that participants rated the workshops positively, and acquired transferable skills and techniques that were applicable to their clinical work. Participants demonstrated improvements in psychological flexibility and life satisfaction following training.</td>
</tr>
<tr>
<td>Kamara <em>et al.</em>, 2017</td>
<td>In-patients</td>
<td>Ebola-related intervention</td>
<td>This study concluded that a nurse-led approach within a non-specialist setting was a successful model for delivering mental health and psychosocial support services during the Ebola outbreak in Sierra Leone. However, challenges with the availability of enablers, e.g., were lack of affordable psychotropic medications, limited human resources and weak social welfare structures, needs to be addressed.</td>
</tr>
<tr>
<td>Vesel <em>et al.</em>, 2015</td>
<td>271 health workers from 74 PHUs in Kono district</td>
<td>Helping Health Workers Cope (HHWC)</td>
<td>The findings showed that the HHWC intervention had a positive effect on coping skills, stress levels and provider-provider and provider-service user relationships, with a positive impact associations between changes in coping skills and changes in relationships as well as changes in stress management skills and changes in relationships. This presents a low-cost and relatively rapid method that could potentially increase services and ultimately improve on health outcomes.</td>
</tr>
</tbody>
</table>
Overall, it must be noted that the Youth Readiness Intervention and others reported above remain relatively top-down and external. They focus on a very specific population and are often not well integrated into the health system at national, district and primary levels. This means that even those which have been well-evaluated have had a limited impact on the overall mental health and psychosocial wellbeing of the population of Sierra Leone.
3.5 Key actors

3.5.1 Main implementation partners

Based on the document review and contacts with key actors at national level, a mapping of relevant organisations, groups and actors involved in MHPSS was drawn. In particular, the Mental Health Steering Committee was a good source for relevant stakeholders.

Table 6: Preliminary mapping of key MHPSS stakeholders in Sierra Leone

<table>
<thead>
<tr>
<th>Category</th>
<th>Organisation / Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination and advisory</td>
<td>Directorate of NCD and MH, MOHS</td>
</tr>
<tr>
<td>groups</td>
<td>Sierra Leone Psychiatric Hospital</td>
</tr>
<tr>
<td></td>
<td>WHO</td>
</tr>
<tr>
<td></td>
<td>Kings Partnership</td>
</tr>
<tr>
<td></td>
<td>34 Military Hospital</td>
</tr>
<tr>
<td></td>
<td>Central Medical Stores</td>
</tr>
<tr>
<td></td>
<td>University of Makeni</td>
</tr>
<tr>
<td></td>
<td>City of Rest</td>
</tr>
<tr>
<td></td>
<td>Build Back Better</td>
</tr>
<tr>
<td></td>
<td>Pharmacy Board of Sierra Leone</td>
</tr>
<tr>
<td>National bodies</td>
<td>MoHS</td>
</tr>
<tr>
<td></td>
<td>Minister of Social Welfare, Gender and Children’s Affairs (MoSWGCA)</td>
</tr>
<tr>
<td>International organisations</td>
<td>WHO</td>
</tr>
<tr>
<td>NGOs</td>
<td>Faith-Based Organisations (e.g. CBM, Mending Hearts)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Handicap International</strong></td>
<td></td>
</tr>
<tr>
<td><strong>King’s SL partnership</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Harvard School of Public Health/ Boston College through Caritas</strong></td>
<td></td>
</tr>
<tr>
<td><strong>MoHS / service providers</strong></td>
<td>Caregivers at Tertiary, Secondary and Primary Health Care level</td>
</tr>
<tr>
<td><strong>Religious organisations</strong></td>
<td>City of Rest</td>
</tr>
<tr>
<td><strong>Community-level providers</strong></td>
<td>Traditional medicine practitioners</td>
</tr>
<tr>
<td><strong>Service users / Patient groups and associations</strong></td>
<td>EVD survivors</td>
</tr>
<tr>
<td></td>
<td>People with mental health problems</td>
</tr>
<tr>
<td></td>
<td>Carers and relatives of people with mental health problems</td>
</tr>
</tbody>
</table>
4 Discussion and Conclusions

4.1 Summary and interpretation of key findings

This scoping review presents the findings of a number of studies on the burden of mental health disorders in Sierra Leone, as well as formal and informal responses to mental health problems in this context, including a chronicle of mental health policies and strategies development and prevailing challenges.

Relatively few studies were identified which investigated the prevalence of mental health disorders in the general population of Sierra Leone outside of an ongoing emergency situation. Studies conducted on the mental health effects of the civil war focused primarily on PTSD, and there are limitations around the methodologies used. There have been a small number of studies of depression, anxiety and psychosis in Sierra Leone, but these occurred either immediately after the war (Jones et al., 2009) or in the EVD context (Kamara et al., 2017). Mental health problems identified during and immediately after periods of crisis may be adaptive/normative or become maladaptive/pathological over time, so do not give a good indication of the post-emergency pattern of mental health problems in the country. In addition, the epidemiological design adopted by many of these studies limits our understanding of mental health issues in Sierra Leone, since cross-sectional studies are not able to establish temporal association (i.e. reverse causality). The impact of the Sierra Leonean civil war on former child soldiers and displaced children has been extensively explored by Betancourt and colleagues (T. S. Betancourt et al., 2010; Betancourt et al., 2015), but again this information relates to a particular sub-group of the population affected by a particular extreme event.

The high prevalence of mental health disorders and psychological distress recorded in the included studies is not surprising as exposure to extremely distressing events, such as war and EVD outbreak, is known to increase the occurrence of these cases (Shultz, Baingana and Neria, 2015). This is particularly likely in a context like Sierra Leone where other known predisposing factors to mental health conditions –e.g., loss of social support networks, lack of basic services, low level of education, among others– are endemic (Shultz, Baingana and Neria, 2015). At the same time, it should be noted that wide variations in prevalence of mental disorders have been recorded across psychiatric epidemiological studies conducted with war-affected communities (Charlson et al., 2016) due to contextual influences, methodological issues, the use of different instruments, and time following conflict (Steel et al., 2009; Silove, Ventevogel and Rees, 2017). There is a particularly high risk of
transcultural measurement errors in relation to the use of standard self-report questionnaires.

Whilst the studies reported in this scoping review use a variety of measures of mental health and psychological wellbeing (e.g. Hopkins Symptom Checklist-25 (HSCL); General Health Questionnaire (GHQ)), these have not all been validated and norms established for the Sierra Leone context, and – equally importantly - may not address the issues of concern to the community (Summerfield, 2007, 2008; Jordans et al., 2009). At least one study used norms from another population (China) to determine the extent to which symptom levels were of clinical concern. In some circumstances, etic measures of psychopathology may be useful with non-Western populations, but a reliance on the language and constructs of Western psychiatry risks inappropriately prioritising psychiatric syndromes that are familiar to Western practitioners (e.g. PTSD) but which may be of secondary concern, or simply lack meaning to non-Western populations for whom local idioms of psychological distress are more salient (Miller et al., 2006; Miller, Kulkarni and Kushner, 2006); see (Pike and Williams, 2006), for an example of the challenges encountered when using an etic measure of psychosocial wellbeing inappropriately). A problem arises, as (Fernando, 2008) points out, when a construct that is defined and measured in an individualistic culture is then imposed on a very different culture as if it is culture-general or universal.

The relevance of concepts such as PTSD for the Sierra Leone population has yet to be explored. This is a significant challenge to strengthening MHPSS in Sierra Leone - effective systems and supports depend on addressing the issues as understood and experienced by the affected population (as well as the use of effective and appropriate measures of psychosocial wellbeing and mental health). As noted earlier in this report, distress is often expressed in local idioms or somatic symptoms (Kirmayer, 2001) which may not completely fit with the classification categories of commonly used assessment tools; thus, potentially misestimating the mental health burden (Ali, Ryan and De Silva, 2016). (Bass, Bolton and Murray, 2007) write that ‘investigation of local syndromes thus becomes a necessary initial step in the evaluation of the validity and utility of concepts and instruments developed in different contexts’ (p918). Where there is evidence that psychological distress is expressed in a form similar to that in cultures for which there are standardised instruments, the use of such instruments makes sense (see, for example, (Bolton et al., 2007). Where the evidence suggests poor agreement, new instruments need to be developed. Where there is little or no data about agreement, additional information must be collected.

There is now a consensus that effective assessment of mental health and psychosocial wellbeing must be based on initial identification of patterns of distress among the relevant
population (Miller and Rasco, 2004; Sweetland, Belkin and Verdeli, 2014). WHO have begun to increase their emphasis on understanding the ways in which cultural contexts affect perceptions, access and experiences of health and wellbeing\(^1\), and there are many examples of culturally grounded indicators and measures based on local concepts of wellbeing, as well as methods of developing such tools, available in the literature (Bass, Bolton and Murray, 2007; Hart \textit{et al.}, 2007; Stark \textit{et al.}, 2009; Rasmussen \textit{et al.}, 2010). Measures created in this way are useful because they are able to (a) assess the most pressing mental health concerns of war-affected communities, and (b) identify the particular ways in which community members understand and talk about their distress (Miller \textit{et al.}, 2006; Miller, Kulkarni and Kushner, 2006).

Given that this is a clear gap in our understanding in relation to mental health in Sierra Leone, undertaking a study aimed at systematically identifying and validating local idioms for common psychological distresses and mental health disorders in Sierra Leone would have great value. It would not only improve our understanding of mental health in this context but could also enable a more accurate picture to be developed of the mental health burden in Sierra Leone.

Apart from one study (M’bayo, Tomek, Kamara and D. Lisk, 2017) that investigated the prevalence of depression and anxiety among people with epilepsy, there seems to be dearth of evidence on comorbidities of mental health conditions in Sierra Leone. As well as non-communicable diseases(Baxter \textit{et al.}, 2011), a significant association between mental health disorders and other public health issues including maternal and child health and HIV/AIDS in LMIC has been established (Patel, 2007). Interestingly, a cross-sectional study in the Western Urban and Western Rural districts of Sierra Leone found that EVD risk behaviours were significantly associated with depression and PTSD symptoms(Betancourt \textit{et al.}, 2016b), underlining the critical role of mental health in preventing infectious disease transmission especially in a fragile setting as Sierra Leone. Thus, a nationally representative study on comorbidities of mental health conditions be useful in informing mental health care services and allocation of scarce resources.

The scoping review also identified multiple system and community barriers, ranging from contextual socio-cultural factors, lack of political will to implement policy and strategic plans, inadequate human resources to financial constraints, to ineffective delivery of mental health

services in Sierra Leone. Similar findings have been reported in other fragile settings such as Nigeria (Jack-Ide and Uys, 2013) and Nepal (Luitel et al., 2017).

4.2 Strength and limitations of study
To the best of our knowledge, this appears to be the first attempt to review available evidence of mental health burden and policies in Sierra Leone. Despite adopting a scoping approach to the review, the findings contribute to initial knowledge of mental health and psychosocial support as well as provide answers to fundamental public health questions including who bears the mental health burden and where are the key areas that need strengthening for better mental health services and policy implementation in Sierra Leone.

For an exhaustive data search, review of mental health peer-reviewed journals may have identified some additional studies not accessible through the licensed databases used. Resource and timing constraints also restricted proactive search for grey literature that may be held by relevant agencies. In particular, many interventions may have been implemented but not formally evaluated or even documented. Consulting with stakeholders to validate the study findings is thus an important step in developing the presented analysis.

4.3 Generalisability of findings
Studies on mental health burden relied primarily on non-systematic sampling approaches (e.g. convenience or purposive sampling) for the recruitment of study participants, which potentially limit the generalisability of findings to the Sierra Leonean population. Furthermore, studies in this review that were undertaken within health facilities (Jones et al., 2009; Hugo et al., 2015; Ji et al., 2017; Kamara et al., 2017; M’bayo, Tomek, Kamara and D. Lisk, 2017) may have limited generalisability. Firstly, the stigma associated with mental health conditions may prevent some cases from being presented to formal health facilities for assessments. This bypassing of health facilities may underestimate mental health burden given the preference for help-seeking at traditional or religious institutions (Hélène N C Yoder et al., 2016). This health seeking pathways is corroborated by findings from our previous scoping visit and group model building workshops among key stakeholders in Sierra Leone. Secondly, most studies on mental health burden focused on individuals affected by the civil war and EVD outbreak in Sierra Leone, suggesting that findings may not reflect the burden within the population. Given these limitations, a representative survey aimed at quantifying the mental health burden within the population is warranted to serve as both baseline data for public health services and evaluation of public health interventions. It would be essential that such a survey used a measurement tool which was culturally grounded and based on local concepts of wellbeing.
5 Conclusions and recommendations

5.1 Conclusions

The burden of mental health disorders in Sierra Leone is yet to be truly ascertained given the dependence of most available studies on specific events (EVD and civil war) and limited generalisability. Key risk and protective factors in relation to mental health have also yet to be identified.

Preventing, detecting, and responding to mental health conditions should be an important component of global health security efforts. Mental health is severely underfunded and under-resourced in Sierra Leone – injection of resources around the post-war period and in the context of Ebola represented significant investment in strengthening MHPSS service accessibility and quality. However, these investments have yet to secure any notable advance in provision. There have been a few examples of ‘positive deviance’ where services have secured improvement in coverage and quality. It is evident that it is a learning process to elucidate further what service models adjusted for this fragile context and how they should be designed. This should also take into account lessons learnt from the past interventions/initiatives and noting the barriers that served to limit their scale-up, sustainability and community acceptability, to improve service delivery overall in the future.

The MoHS-WHO work prioritises establishing a policy and legal framework that is supportive of the integration of mental health services at all levels of care, training and capacity building of health care workers, and research. In order to support the integration of mental health services and to train health care workers, a tried and tested referral pathway for mental health care has been developed for Ebola survivors, complimented by an algorithm that will help health care workers to recognise mental disorders/mental distress in this target group. The algorithm, will be distributed to all health care workers, to guide in the decision-making process for referrals. A similar system should be put in place that captures all cases of mental health.

There is a need for better collaboration between practitioners and mental health service providers and researchers to capitalise on the specific expertise and strengths both can bring to interventions. In addition, international organisations who fund MHPSS interventions should ensure that systematic outcome evaluations of these interventions are conducted to create a learning from experience platform.

This scoping study is the first phase of the work of RUHF on the issue of MHPSS in Sierra Leone, aiming to explore available evidence and possibly identify research gaps. These
findings highlight the need for a concerted collaborative effort to address the growing burden of disease, outside of the war affected and Ebola/disaster affected space. Currently, challenges ranging from socio-cultural to financial and human resources for health exist, impeding all efforts to support mental health service delivery in a non-fragmented approach.

5.2 Recommendations

The following recommendations are based on the scoping review findings, plus general guidance on providing mental health and psychosocial support in an effective and non-harmful manner. Following the release of the IASC Guidelines for Mental Health and Psychosocial Support in Emergency Settings (IASC, 2007), a consensus has emerged that MHPSS services need to be conceptualised and organised as a multi-layered system of services and supports (see Figure 5). It is important to combine community-based psychosocial approaches with clinical approaches grounded in an experiential/theoretical framework that addresses the core aspects of the experience of the population and the health system. In a stepped care model, subpopulations with different symptom profiles and severity are allocated to different levels of services and support. It is important to distinguish between people whose symptoms may be transient or may be amenable to minimal intervention versus those who need more intensive or specialised clinical support.

The recommendations from this scoping review are:

- Study local idioms of distress and understandings of mental health and wellbeing in Sierra Leone (including beliefs about causes of mental health problems, and appropriate responses).

- If existing standardised tools are found to not fully reflect mental health problems in a way appropriate for the Sierra Leone population, then develop and validate a culturally grounded set of indicators and measures of mental health and mental disorder based on local concepts of wellbeing.

- A community survey aimed at estimating the burden (prevalence and incidence) of and determining factors (risk and protective) for mental health disorders in both children and adults in Sierra Leone. This should make use of a measurement tool which has been confirmed as valid for this population.

- Traditional medicine practitioners are already the primary source of care for many affected by mental illness. These people are trusted and accessible, and it is likely to be some time before a strong cadre of mental health personnel are available in the formal systems in Sierra Leone. Therefore, it is essential to involve this group, and
others who are already sought out for assistance, in strengthening care systems for those with mental health problems, whilst maintaining a focus on the ‘do no harm’ approach (IASC, 2007).

- Families are the primary caregivers for people affected by mental health problems, and they themselves are often under considerable emotional and financial pressure. This can result in inadequate care or even abusive practices and creates a socio-economic burden. It is important that any approach to strengthening mental health care in Sierra Leone involves the caregivers – beginning with understanding their current situation (e.g. capacities, coping strategies, challenges, knowledge).

- Those affected by mental health problems themselves must be involved in any research, implementation or evaluation initiatives. Mental health is about more than symptom reduction; it is about people deciding what outcomes are important for them to live a more meaningful and satisfying life. The Mental Health Coalition in Sierra Leone includes representatives of those affected, so a close working relationship with these groups is essential.

- Explore possibilities to integrate mental health support into existing services (including non-health care services) where possible. This is in line with general guidance on effective mental health service provision (IASC, 2007) since this approach can minimise stigma and increase access.

- Seek opportunities to assess and address community attitudes and beliefs around mental health. This scoping review found that stigma is one of the main challenges in enabling access to mental health services in Sierra Leone, so evaluation of any organisation’s activities which aim to address this (e.g. awareness campaigns, working with community structures) would make a valuable contribution to understanding how to increase access to mental health services.

- Ensure that a focus on the interaction between gender and mental health issues is maintained. There is a limited focus on gender in the literature reviewed in this report (except in relation to war-affected youth), but there is considerable evidence that women and men are affected differently by mental health issues.

- There is a focus on task-sharing in the literature on strengthening mental health services in LMIC, and there have been some initiatives in this direction in Sierra Leone (e.g. training CHOs in mhGAP). The effects of these on practice and services received would be a valuable focus of study.
• Some barriers limiting access to formal mental health services have been identified in this review, but a more systematic study of these would help to inform the development of effective and sustainable interventions.

• Continued capacity building for mental health research at the institutional level, and mental health systems strengthening at the policy making, planning and monitoring and evaluating level, to support national ownership and leadership and political commitment.
References


Betancourt, T. S. et al. (2016a) ‘Associations between Mental Health and Ebola-Related


IRIN News (2011) *Amputees still waiting for reparations almost 10 years on.*


current status and recommended response.’, JAMA, 313, pp. 567–8.


Walker, P. et al. (2016) *CHWs and Mental Health: Equipping community health workers with essential skills for addressing mental health and violence in the home.*


## Appendix 1: Estimated burden of mental health in Sierra Leone

<table>
<thead>
<tr>
<th>Author, Year</th>
<th>Study aim</th>
<th>Study period</th>
<th>Study setting &amp; population</th>
<th>Age/age group (years)</th>
<th>Study design &amp; assessment of mental illness</th>
<th>Findings (prevalence)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Gupta and Zimmer, 2008a)</td>
<td>To assess the psychosocial status of displaced children enrolled in the Rapid-Ed intervention in Sierra Leone</td>
<td>The pre-test assessment was between October and November 1999 while post-test survey was administered between December 1999 and January 2000</td>
<td>Study setting was not explicitly stated. 315 and 306 children for the pre- and post-test respectively.</td>
<td>8–18 years</td>
<td>Pre- and post-test study; semi-structured questionnaire written in Creole including a 15-item revised version of the Impact of Events Scale.</td>
<td>Between 70 and 95% of the children reported symptoms of PTSD. E.g., a total of 95% reported that they thought about the event sometimes or often when they did not want to, 71% experienced recurrent pictures in their minds about the worst event, 72% reported experiencing bad dreams or nightmares associated with the violence they witnessed, and 76% were worried that they might not live to be an adult.</td>
</tr>
</tbody>
</table>
| (Jones et al., 2009)                  | The study describes field experiences in establishing primary-health-care-based mental health clinics; n=204                                | November, 2004–March, 2005                                                                         | Primary-health-care-based mental health clinics; n=204 | Clinical audit of mental health consultations done in Substance-induced psychosis: 5 (3%) Schizophrenia, schizotypal, and delusional disorders: 10 }
mental health services in five humanitarian settings, including Sierra Leone.

243 former child soldiers who had data available in 2004 and 2008. Mean age at baseline 16.58 years. Pre- and post-test study; data for all participants were collected through face-to-face interviews using the nine-item short form of the UCLA Post-Traumatic Stress Disorder Reaction Index (PTSD-RI).

PTSD: 32% (76/243) in 2004 and 16% (38/243) in 2008.

The study aimed to assess the risk and protective factors associated with PTSD symptom change among former child soldiers in Sierra Leone.


Betancourt et al. 2013

International Classification of Diseases, 10th revision (ICD-10 code) was used for assessment.

Depression‡: 5 (3%)
Epilepsy: 122 (60%)
Severe neuropsychiatric disorders: 186 (91%)

Betancourt et al. 2013

The study aimed to assess the risk and protective factors associated with PTSD symptom change among former child soldiers in Sierra Leone.


243 former child soldiers who had data available in 2004 and 2008. Mean age at baseline 16.58 years. Pre- and post-test study; data for all participants were collected through face-to-face interviews using the nine-item short form of the UCLA Post-Traumatic Stress Disorder Reaction Index (PTSD-RI).

PTSD: 32% (76/243) in 2004 and 16% (38/243) in 2008.

The study aimed to assess the risk and protective factors associated with PTSD symptom change among former child soldiers in Sierra Leone.


243 former child soldiers who had data available in 2004 and 2008. Mean age at baseline 16.58 years. Pre- and post-test study; data for all participants were collected through face-to-face interviews using the nine-item short form of the UCLA Post-Traumatic Stress Disorder Reaction Index (PTSD-RI).

PTSD: 32% (76/243) in 2004 and 16% (38/243) in 2008.

The study aimed to assess the risk and protective factors associated with PTSD symptom change among former child soldiers in Sierra Leone.


243 former child soldiers who had data available in 2004 and 2008. Mean age at baseline 16.58 years. Pre- and post-test study; data for all participants were collected through face-to-face interviews using the nine-item short form of the UCLA Post-Traumatic Stress Disorder Reaction Index (PTSD-RI).

PTSD: 32% (76/243) in 2004 and 16% (38/243) in 2008.

(Hugo et al., 2015) The study June 2014 – Survivors who Median A retrospective 21% of the 24 EVD survivors
<table>
<thead>
<tr>
<th>Study</th>
<th>Title</th>
<th>Methodology</th>
<th>Participants</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>M’bayo, Tomek, Kamara and D. R. Lisk, 2017</td>
<td>To investigate the prevalence and determinants of depression and anxiety among people with epilepsy in Sierra Leone</td>
<td>March–April 2014</td>
<td>142 patients in Freetown (Connaught Hospital) and Kenema (Kenema Government Hospital); 18–82 years</td>
<td>A cross-sectional descriptive study; a 10-item screening questionnaire designed for the detection of anxiety and depression (previously validated in Zambia) was used for data collection. 28% (39/142) prevalence rate of anxiety and/or depression among adults with epilepsy.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24 participants</td>
<td>Study of program data on psychological care provided to EVD survivors. A trauma screening questionnaire (TSQ) and medical notes were used as data sources. Reported clinically important post traumatic reactions between three and four weeks post Discharge, predicting a risk of developing post-traumatic stress disorder.</td>
</tr>
</tbody>
</table>

Exped the psychological reactions in Ebola Virus Disease survivors following their discharge from an Ebola treatment centre in Sierra Leone. September 2014 were admitted to the Medecins Sans Frontieres (MSF) case management centre (CMC) and confirmed positive for Ebola virus by polymerase chain reaction (PCR), recovered from the disease, and were discharged with a negative PCR result in Kailahun, Sierra Leone; 24 participants. Age of the 24 survivors followed up was 25 years while three of the survivors were children (<18 years).
for a minimum of preceding six months, with the diagnosis made by a qualified clinician collection.

(Betancourt et al., 2016a) The study examines associations between war exposures, post-traumatic stress disorder (PTSD) symptoms, depression, anxiety, and personal EVD exposure (e.g. having family members or friends diagnosed with EVD) and EVD-related health behaviours. January–April 2015 Survey data from a representative sample in the Western urban and Western rural districts of Sierra Leone; 1,008 adults (98% response rate) from 63 census enumeration areas; however, only 563 adults were assessed for PTSD and reported here. Median age was 30 years, ranging from 18 to 84 years. A cross-sectional study; PTSD was assessed using the PTSD Symptom Scale–Interview adapted for use in Liberia. An estimated weighted 11.3% (95% CI 7.7%, 16.3%) of 563 individuals who endorsed a traumatic war-related event or who chose to discuss a troubling event without describing it met the criteria of likely PTSD.

(Kamara et al., 2017) The study describes authors' March 2015 to February 2016 Study was undertaken at a nurse-led MHPSS All age group MHPSS were assessed Epilepsy or seizures 7%; Intellectual disability 5%;
experience of establishing one of the new units – a nurse-led mental health and psychosocial support service at Connaught hospital in Freetown; Nurses were trained in psychological first-aid to provide support to patients (n=143) presenting to Connaught hospital.

**Psychotic disorder (including mania)** 21%;
**Moderate to severe emotional disorder or depression** 12%.

| (Ji et al., 2017) | The study aimed to assess the prevalence of psychological symptoms among Ebola survivors and healthcare workers during the 2014–2015 Ebola outbreak in Sierra Leone | October, 2014–March, 2015 | Jui Government Hospital in Freetown, Sierra Leone; 161 participants including Ebola survivors and healthcare workers classified as follow: SL medical staff (n=59), SL logistic staff (n=21), SL medical students (n=22), and Chinese medical staff | Median age was 32.0 years (range, 12–80) | A cross-sectional study; Symptoms Checklist 90-item revised (SCL-90-R), a most widely used questionnaire was used to measure psychological symptoms of survivors, and healthcare workers before and after | The total psychological dimensions were the highest in EVD survivors and lowest in Chinese medical staff. For EVD survivors, the proportions of positive symptom on anxiety and phobic anxiety were 83.3% and 94.4%, respectively. |
| (Jalloh et al., 2018) | The study aimed to estimate prevalence of mental health symptoms and factors associated with having symptoms in the general population. | A national survey of communities across the 4 regions and 14 districts of Sierra Leone; population of 3,564 consenting participants. | A cross-sectional survey after over a year of outbreak response; Symptoms of anxiety and depression were measured by Patient Health Questionnaire-4 while PTSD symptoms were measured by six items from the Impact of Events Scale revised. | Prevalence of any anxiety-depression symptom was 48% (95% CI 46.8% to 50.0%); Prevalence of any PTSD symptom 76% (95% CI 75.0% to 77.8%); In addition, 6% (95% CI 5.4% to 7.0%) met the clinical cut-off for anxiety-depression; 27% (95% CI 25.8% to 28.8%) met levels of clinical concern for PTSD; and 16% (95% CI 14.7% to 17.1%) met levels of probable PTSD diagnosis. |
Find out more about the RUHF here: www.qmu.ac.uk/ruhf

NIHR Research Unit on Health in Situations of Fragility (RUHF)
Institute for Global Health and Development
Queen Margaret University, Edinburgh, UK
T: +44 (0) 131 474 0000
E: ruhf@qmu.ac.uk
http://www.qmu.ac.uk/ruhf
t: @IGHD_QMU #RUHF