Secure Livelihoods Research Consortium

Researching livelihoods and services affected by conflict

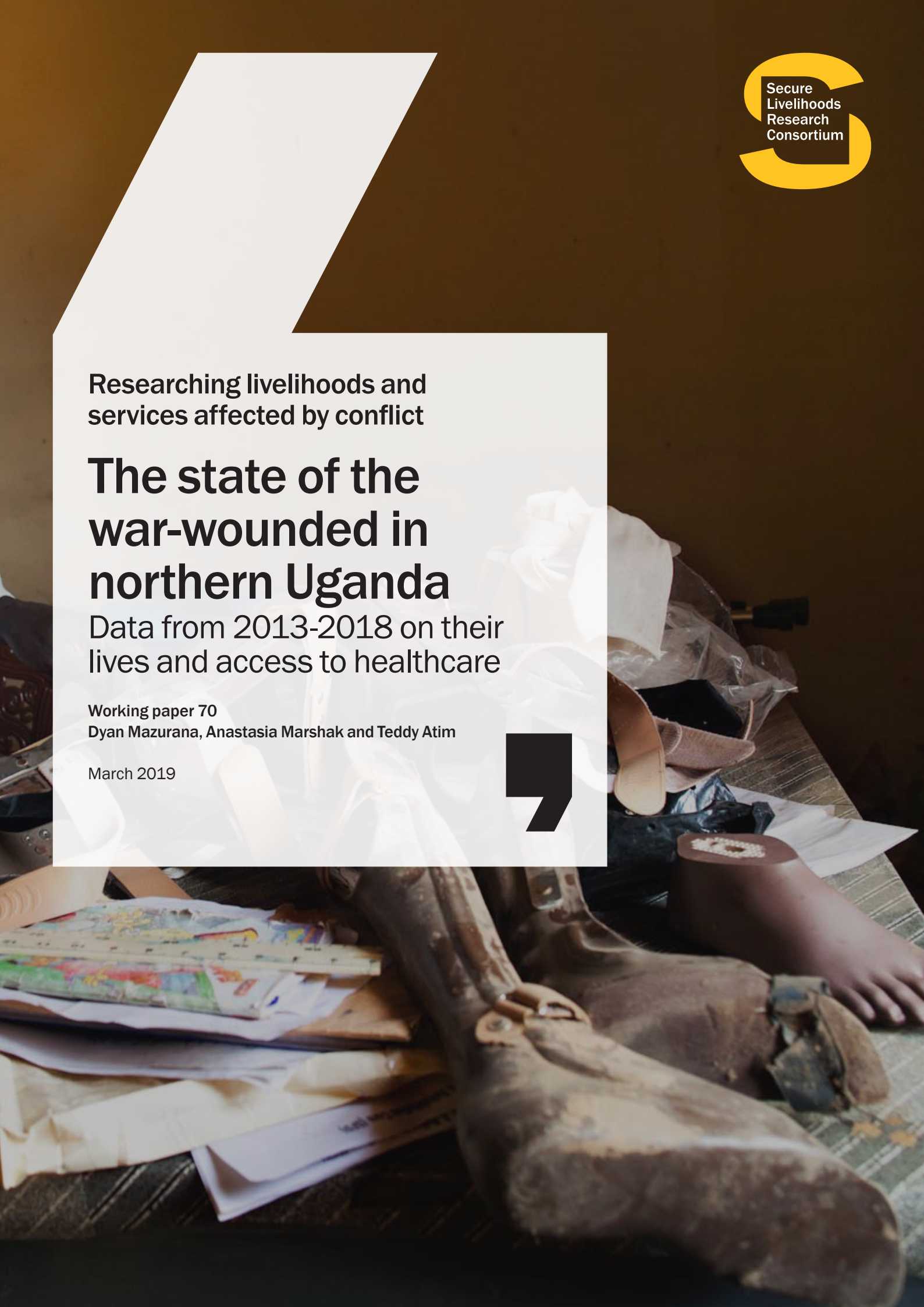
The state of the war-wounded in northern Uganda

Data from 2013-2018 on their lives and access to healthcare

Working paper 70

Dyan Mazurana, Anastasia Marshak and Teddy Atim

March 2019



Written by Dyan Mazurana,
Anastasia Marshak and Teddy Atim

SLRC publications present information, analysis and key policy recommendations on issues relating to livelihoods, basic services and social protection in conflict affected situations. This and other SLRC publications are available from **www.securelivelihoods.org**. Funded by UK aid from the UK Government, Irish Aid and the EC.

Disclaimer: The views presented in this publication are those of the author(s) and do not necessarily reflect the UK Government's official policies or represent the views of Irish Aid, the EC, SLRC or our partners. ©SLRC 2019.

Readers are encouraged to quote or reproduce material from SLRC for their own publications. As copyright holder SLRC requests due acknowledgement.

Secure Livelihoods Research Consortium
Overseas Development Institute (ODI)
203 Blackfriars Road
London SE1 8NJ
United Kingdom

T +44 (0)20 3817 0031
F +44 (0)20 7922 0399
E slrc@odi.org.uk
www.securelivelihoods.org
@SLRCtweet

Cover photo: International Day of Persons with Disabilities. Prosethesises. Albert González Farran, UNAMID, 2013 (CC BY-NC-ND 2.0).

Preface

The Secure Livelihoods Research Consortium (SLRC) aims to generate a stronger evidence base on state-building, service delivery and livelihood recovery in fragile and conflict-affected situations. It began in 2011 with funding from the UK's Department for International Development (DFID), Irish Aid and the European Commission (EC).

Phase I: 2011 - 2017

SLRC's research can be separated into two phases. Our first phase was based on three research questions on state legitimacy, state capacity and livelihoods, developed over the course of an intensive one-year inception phase. Findings from the first phase of research were summarised in five synthesis reports produced in 2017 that draw out broad lessons for policy-makers, practitioners and researchers.

Phase II: 2017 - 2019

Guided by our original research questions on state legitimacy, state capacity, and livelihoods, the second phase of SLRC answers the questions that still remain, under three themes:

- Theme 1: What are the underlying reasons for continued livelihood instability in post-conflict recovery situations?
- Theme 2: How does the experience of conflict link to how people experience trust, fairness and expectations of the future as part of their recovery?
- Theme 3: How does service delivery influence the negotiation of state legitimacy?

Theme 1: Livelihoods instability

This paper is one of eight pieces of research from Theme 1 conducted in Afghanistan, Nepal, Pakistan, Sri Lanka and Uganda. The research was conducted by the Afghanistan Research and Evaluation Unit (AREU), Centre for Poverty Analysis (CEPA - Sri Lanka), Feinstein International Center (FIC, Tufts University - Uganda), Nepal Institute for Social and Environmental Research (NISER), Overseas Development Institute (ODI) and the Sustainable Development Policy Institute (SDPI - Pakistan). The research lead was Vagisha Gunasekara.

The studies under this theme question currently held assumptions about the nature of exchange and economic behaviour in rural economies. These studies demonstrate that livelihoods in conflict and post-conflict settings are in socially embedded economies - driven by patron-client relationship and non-contractual obligations.

In Afghanistan, we delve into the role of informal borrowing as a buffer in sustaining livelihoods. In Sri Lanka, we examine the suitability of 'entrepreneurship' promotion as a development intervention for people in war-affected areas. The study in Nepal looks at work and livelihood patterns of women in migrant households. The Pakistan study investigates how households access credit, the impact of indebtedness on families, and develops a framework that explains household indebtedness and its impacts. Lastly, the research in Uganda focuses on the internal migration of young people and their experiences with employment, the livelihoods realities of the war-wounded, and how livelihood trajectories of the war-affected influence decisions related to education of young people.

The evidence generated by the studies offers a number of insights into why people in conflict settings can no longer sustain their own lives through direct access to a living wage, why policies and aid interventions aimed at socio-economic recovery fail and the mechanisms people use in order to stay afloat within these economies.

For more information on who we are and what we do, visit: www.securelivelihoods.org/about-slrc

Acknowledgements

Research for this paper was made possible by the Secure Livelihoods Research Consortium (SLRC), based at the Overseas Development Institute (ODI), and through funding provided by the United Kingdom's Department for International Development (DFID). This working paper is part of the SLRC's Uganda research programme. The programme explores livelihoods, post-conflict recovery and access to basic services – including education, healthcare and water – in two of the most conflict-affected sub-regions of northern Uganda, Lango and Acholi. The authors wish to thank all the Ugandans who shared their time, stories and perspectives with us. Thanks also to Simon Levine and Paul Harvey for their helpful review of the paper.

Acronyms

AYINET	African Youth Initiative Network
CRPD	Convention on the Rights of Persons with Disabilities
CVT	Center for Victims of Torture
DINU	Development Initiative for northern Uganda
GoU	Government of Uganda
GWEDG	Gulu Women's Economic Development and Globalisation
LRA	Lord's Resistance Army
MHU	Ministry of Health of Uganda
PTSD	Post-traumatic stress disorder
rCSI	Reduced Coping Strategies Index
RLP	Refugee Law Project
TPO	Transcultural Psychosocial Organization
SLRC	Secure Livelihoods Research Consortium
WHO	World Health Organization

Contents

Tables

Executive summary

Few large-scale, structured surveys have been conducted on the prevalence of alleged war crimes or crimes against humanity committed by warring parties against civilians. Fewer still investigate how experiences of alleged war crimes or crimes against humanity relate to victims' disability and how these experiences affect food security, wealth and access to basic services, including their access to basic and therapeutic healthcare over time. Using data from a panel survey carried out in 2013, 2015 and 2018 that is representative of all of Acholi and Lango sub-regions in northern Uganda, in this working paper we report the prevalence of alleged war crimes or crimes against humanity for individuals and households, their association with disability; and the resulting effects over time on people's lives in terms of food security, wealth, access to basic services and healthcare.

We find that around 13% of all individuals and 42% of all households reported having experienced at least one alleged war crime or crime against humanity at the hands of parties to the conflict (recall period 1986-2012). Roughly 15% of respondents who experienced an alleged war crime or crime against humanity reported a related physical or psychological injury. Furthermore, the greater the number of alleged crimes experienced, the greater the likelihood that the respondent was left disabled. Controlling for location, we found households that had experienced an alleged war crime or crime against humanity were significantly less likely to have access to healthcare over time, despite their greater burden of disability.

Based on the research conducted in northern Uganda, this study contributes to:

- An understanding of people who have experienced alleged war crimes or crimes against humanity that affect them physically and psychologically.
- The relationship between experience of these alleged crimes and their experience of disability.
- The effects of these crimes on their wealth, food security and access to livelihood and social protection services.
- The effects of these crimes on their access to basic and therapeutic healthcare.
- A better understanding of the key obstacles faced by victims of these alleged crimes when they are unable to receive basic and therapeutic healthcare.

1 Situating our study within the literature

We begin by situating our study within the broader literature on victims of war violence, with a particular focus on their health and access to healthcare. The majority of studies on health and victims of war violence examine the consequences, not for civilians, but for combatants, including their experiences, and perpetration, of violence. Studies highlighted that after deployment combatants show an increased likelihood of post-traumatic stress disorder (PTSD), dissociation, and functional impairment as well as violent and criminal behaviours, particularly for combatants who have killed, experienced sexual violence or suffered adverse childhood experiences (Elbogen et al., 2013; Johnson et al., 2008; Maguen et al., 2009; Nandi et al., 2015). Studies also found that most combatants in developing countries have poor access to therapeutic health care (Annan et al., 2008; Holt, 2013; ISIS-WICCE, 2001; Johnson et al., 2008). Even in developed countries like the United States, the needs of veterans from the wars in Iraq and Afghanistan are overwhelming the veterans' healthcare system (Bilmes, 2007; Hoge et al., 2006).

Only a few population-based studies have compared the prevalence and impact of alleged war crimes or crimes against humanity among war-affected male and female non-combatants and combatants (Kohrt et al., 2008) and only two studies on this topic have been conducted in northern Uganda (Annan et al., 2006; Annan et al., 2008 ; Blattman et al., 2011). In these studies, researchers found that compared to their non-combatant war-affected peers, male and female combatants have worse health outcomes as well as diminished economic and educational opportunities (the latter primarily for males). In northern Uganda, Annan et al. (2008) found that combatants had comparatively better access to immediate physical and psychosocial care than their non-combatant peers as a result of programming by non-governmental organisations (NGOs) targeting youth combatants. The authors' also noted that 2 – 4% of all youth in Acholi sub-region need, but largely are not receiving , treatment for physical injuries sustained due to the war (Annan et al., 2008).

Most large-scale sample surveys that seek to determine the impact of war violence on civilian populations take an epidemiological approach and focus on rates of morbidity and mortality. Unsurprisingly, these studies often record the destruction of infrastructure and health facilities and report high rates of mortality near areas of fighting, primarily due to malnutrition and infectious disease (Burnham et al. 2006; Depoortere et al. 2004; Plümper and Neumayer 2004; Van Herp et al. 2003). In 2005, the World Health Organization (WHO) and the Ministry of

Health of Uganda (MHU) carried out a health and mortality survey among internally displaced persons in some of the districts in northern Uganda most heavily affected by war. They found that the crude mortality rate and the mortality rate of children under five were well above emergency threshold levels and four times higher than in non-war affected areas. Malaria, fever and HIV/AIDS were the top self-reported causes of death, followed by violence. Nearly 4,000 people in the study population were killed by violence in a six month period (WHO and MHU, 2005).

Outside the larger epidemiological studies, the majority of health studies on civilians in war focus on a particular type of violation or abuse. This includes research on sexual violence against women (Physicians for Human Rights, 2002; Swiss et al., 1998; Usta et al., 2008) and, less commonly, men (Sivakumaran et al., 2007; Swiss et al., 1998). There is also a growing body of literature on the health impacts of torture, primarily focused on the torture of men (Jaranson et al., 2004; Linos, 2009; Steel et al., 2009; Willard et al., 2014). The health effects of forced displacement on civilians have also been studied (Holt, 2013; Husain et al., 2011; Opaas and Varvin, 2015; WHO and MHU, 2005).

A robust literature is developing on the psychosocial health of male and female youth that were part of fighting forces and groups (e.g. Annan et al., 2008; Betancourt, 2010; Hoge et al., 2006; Stevens, 2014). Indeed, the majority of studies on particular types of violations or abuse have focused on mental health outcomes for victims (Farhood et al., 2006; Karam et al., 2006; Miller et al., 2002; Tolin and Fao, 2006). There are fewer studies that paid attention to the physical outcomes and impacts on livelihoods (Johnson et al., 2010; Kinyanda et al., 2010; Vinck and Pham, 2010; WHO and MHU, 2005). Overall, studies found that victims of violations or abuses often have diminished mental and physical health, lower quality of life, reduced economic and educational opportunities, and experience stigma from their families or communities. These outcomes varied by age and sex. For example, they also found that women who are victims of violations or abuse are particularly likely to experience an increase in domestic and sexual violence post-conflict (Annan et al., 2008; Mazurana et al., 2014; Levy and Sidel, 2013). With rare exceptions, studies on civilians, war violence and health did not focus on access to basic or therapeutic healthcare by victims' of war violence (Annan et al., 2008; Hoge et al., 2006; Mazurana et al., 2014; Mazurana et al., 2016).

Rather than concentrating on access to healthcare, most health-focused studies on war violence against civilians framed, diagnosed and described the mental and psychosocial health of their study populations. These studies reported heightened levels of PTSD, depression, anxiety, hostility and anti-social behaviour among war-affected populations (Betancourt et al., 2010 ; Farhood et al., 2006; Husain et al., 2011; Jaranson et al., 2004; Karam et al., 2006). In northern Uganda, Betancourt et al. (2009) and Porter (2016) investigated how mental health problems are perceived and dealt with locally. Their studies provide important insights into how culture mediates what constitutes ill health, its sources and manifestations, and the solutions people seek to restore their health. Research in northern Uganda has also explored war-affected civilians' knowledge of their right to health, which is reportedly high (Orach et al., 2009), but does not address whether or not those civilians can access the healthcare they not only have a right to but a need for.

The association between physical and mental injuries and war-related violence remains largely unexplored in the disability studies literature. However, some positive changes are occurring with transnational solidarity efforts focusing on disability and the politicisation of impairment. These efforts seek to locate disability politics at the local and national level historically in order to highlight and link the perpetration of violence to its long-lasting consequences (Mazurana et al., 2016).

At the same time, the literature is relatively strong on disability in Uganda. However, surprisingly, almost none of it explores the connection between people's disabilities and Uganda's long history of armed conflict and political violence. In the broader health literature, very few studies show, at any representative level, the prevalence and impacts of war-related disabilities among civilian populations.

This section has shown that there is an emerging body of literature on the health impacts of war violence on civilian populations, with a focus on epidemiological studies looking into elevated mortality rates. There is also research on specific violations and abuses and their effects on mental health and psychosocial well-being. Our research seeks to add to this body of knowledge by carrying out a large-scale, representative, cluster panel survey supported by in-depth qualitative interviews to record the prevalence of a range of alleged war crimes or crimes against humanity against civilians; the relationship between these alleged crimes and individuals' experience of disability; the impact these alleged crimes have on their lives; and access to healthcare by individuals affected by these crimes over time.

2 Uganda's laws and the rights of people with disabilities

To frame our study, it is necessary to review Ugandan laws related to people with disabilities and how they cover the war-wounded in our study as a sub-group of the disabled population of Uganda. Ugandan law pledges to uphold the fundamental rights of people with disabilities. Article 32 of the Ugandan Constitution (Government of Uganda (GoU), 1995) declares that the government:

> ***shall take affirmative action in favour of groups marginalized on the basis of gender, age, disability or any other reason created by history, tradition or custom, for the purpose of redressing imbalances which exist against them.***

Article 35 states that persons with disabilities 'have a right to respect and human dignity, and the State and society shall take appropriate measures to ensure that they realise their full mental and physical potential'. Article 21 guarantees non-discrimination and equality before the law. Uganda has signed into law the Persons with Disabilities Act 2006 (GoU, 2006), the National Council for Disability Act 2003 (GoU, 2003) and other statutes that are relevant to the rights of people with disabilities.[1] Notably, Uganda was among the first countries to sign into law, without reservations, the Convention on the Rights of Persons with Disabilities (CRPD) (UNGA, 2007) and its Optional Protocol.

Disability, as defined in the Persons with Disabilities Act, is a 'substantial functional limitation of daily life activities caused by physical, mental or sensory impairment and environment barriers resulting in limited participation' (GoU, 2006).[2] While the definition in the Act draws on an early draft of the CRPD, the Ugandan law emphasises the impairment of the person. This deviates from the social model disability enshrined in the CRPD, where 'disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others'.[3] While the Persons with Disabilities Act references environmental barriers, it fails to recognise and address stigmatising attitudes that curtail the full and successful participation of people with disabilities. The Act's failure to explicitly address the barriers presented by the social environment alongside

1 For a comprehensive overview of Uganda's legal framework as it relates to people with disabilities, see Human Rights Watch (2010).

2 From Part I, article 2. 'Participation' here refers to the range of activities and interactions constituting an 'average' healthy person's daily life.

3 UNGA (2007), Preamble (e).

people's discriminatory attitudes and behaviour means the Act has critical gaps. These gaps are particularly apparent in northern Uganda, where 20 years of armed conflict directly targeted and injured civilians and where community support networks that previously supported disabled people have eroded due to the stress of displacement and the highest levels of poverty in the country.[4] The result is that disability is inconsistently defined within Uganda's regulatory framework, meaning that discrimination and the exclusion of people due to disability are not adequately addressed (Riche and Anyimuzala, 2014). This means that while the legal framework for the rights and protections for people with disabilities appears quite robust, in practice Uganda does not have effective disability policies and services (Riche and Anyimuzala, 2014; Human Rights Watch, 2010).

4 For a discussion of the ways in which the conflict has eroded traditional community support networks for people with disabilities, see Human Rights Watch (2010: 27).

3 Methodology

The present analysis draws on fieldwork completed under the umbrella of the SLRC in northern Uganda and uses both quantitative and qualitative methods. The SLRC Uganda panel data set is a unique opportunity to go beyond just a snapshot in time as with this dataset we are able to gather evidence of changes in the population over time and the specific trajectories that individuals and their households follow.

3.1 Quantitative survey

SLRC Uganda fieldwork for the longitudinal panel survey in northern Uganda was conducted from late January to February in the years 2013, 2015, and 2018 throughout all of the Acholi and Lango sub-regions of Uganda. These are the two most war-affected sub-regions in Uganda, representing a population of approximately 1.5 million people in Acholi and 2.13 million in Lango – a total of 3.63 million people.

In northern Uganda, a stratified clustered (sub-counties) sampling strategy was used to collect information across 80 sub-counties (Table 1) in Acholi and Lango sub-regions. The sub-counties were randomly selected and from each sub-county one village was randomly chosen. In each village, approximately 20 households were randomly selected so that the results would be representative and statistically significant at the sub-regional level. The same households were surveyed in each of the three years. The analysis accounts for the research design effect. All data was gender disaggregated in our analyses and so we highlight significant differences based on gender when they appear.

3.2 In-depth qualitative interviews

From the larger sample of surveyed households we then purposively selected 39 households with war-

Table 1: Sample size by year (with information on the household head)

Wave	Year	Sample Size
1	2013	1,756
2	2015	1,553
3	2018	1,506

wounded members reportedly injured due to alleged war crimes or crimes against humanity to carry out in-depth qualitative interviews and some additional quantitative data collection.

Within this group we selected a range of households reporting that their disabled members: (i) did not need treatment, (ii) had received effective treatment, (iii) were currently receiving treatment or (iv) could not access treatment. We directly interviewed females and males who had been injured, ranging in age from 18 to 85. In the case of children (under 18 years of age) with disabilities, we interviewed their parent(s). We interviewed disabled female and male heads of households; other disabled household members; people in and out of school; people with a range of occupations; people across wealth levels as calculated by the Morris Score Index (Morris et al. 1999); and people of varying education levels. We also interviewed other household members with the consent of the disabled party. Additionally, we carried out 12 interviews with healthcare practitioners directly treating the war-wounded and representatives within NGOs running programmes assisting the war wounded, including leaders and medical officers.

Interviews with the war-wounded were carried out in the interviewees' native language, in private, at the disabled parties' households, with the exception of two interviews held at an NGO office in Lira town at the request of the interviewees. The interview team was composed of three Ugandan researchers and two international researchers. The interviews with medical personnel and NGO officers were carried out by one Ugandan researcher and one international researcher. These interviews were carried out in English at NGO offices and clinics as well as over the telephone and via Skype.

Finally, we reviewed Ugandan government and development partner programmes, initiatives and funding for health in northern Uganda to understand whether or not they addressed disability and the war-wounded, and if so, how.

4 Findings

4.1 War-wounding and its effects on individuals and their households

In the SLRC Uganda study, we used the definitional parameters found in Uganda's Persons with Disabilities Act 2006 which, as explained above, has a narrower definition of disability than the CRPD. We used Uganda's definition of disability in our study to capture the substantial, functional limitation of daily life activities caused by physical, mental, or emotional impairment and environmental barriers that result in limiting a person's participation. The primary difference between the CRPD and Uganda's Disabilities Act is that the CRPD definition includes stigmatising attitudes and social conditions that can limit people's daily life activities while Uganda's Disabilities Act does not. In designing the survey, we decided we could accurately measure physical, mental and emotional impairments that limited their participation or functionality (as in Uganda's Disabilities Act) but we could not reliably measure the role of stigma and social conditions in impairing a person's participation in daily activities (as in the CRPD).

Based on data collected from our 2013 baseline survey, we find that approximately 12% of people in Acholi and Lango sub-region have a physical and/or emotional disability. 29% of all reported injuries and disabilities in the two sub-regions are reportedly a direct result of alleged war crimes or crimes against humanity against civilians. In other words, the experience of these alleged crimes is responsible for nearly a third of all injuries and disabilities suffered by civilians in the two sub-regions. (Tables 2 and 3).

Not all persons are completely disabled due to their injury and many of them are able to function on a day-to-day basis. Our 2013 baseline survey finds that 2% of households in the two sub-regions, or approximately 12,000 households, have a household member who is 'seriously disabled' due to the war and another 3% of households, or approximately 18,000 households, have a household member 'completely incapacitated'.

Table 2: Experience of war crime or crime against humanity, mental and physical Disability (individual)

	% of respondents reporting
Alleged war crime or crime against humanity	13% (11-15%)
Physical disability due to war	3% (2-3%)
Mental disability due to war	2% (1-2%)
Physical disability not due to war	10% (9-11%)
Mental disability not due to war	4% (4-5%)

Table 3: Experience of war crime or crime against humanity, mental and physical disability (household)

	% of respondents reporting (95 confidence interval)
Alleged war crime or crime against humanity	42% (37-47%)
Physical disability due to war	11% (9-13%)
Mental disability due to war	7% (6-9%)
Physical disability not due to war	36% (33-39%)
Mental disability not due to war	18% (15-20%)

Drawing from both international law and reports from the war between the GoU and the Lord's Resistance Army (LRA), our survey recorded the following as experiences of alleged war crimes or crimes against humanity when they were perpetrated by parties to the conflict[5] against protected persons (i.e. civilians): illegal killing, attempted killing, forced recruitment, forced disappearance, severe beating, torture, deliberate immolation, sexual violence and forced marriage.

We find that overall around 13% of all individuals and 42% of all households reported experiencing at least one alleged war crime or crime against humanity at the hands of parties to the conflict (recall period 1986 – 2012). Roughly 15% of respondents who experienced an alleged war crime or crime against humanity reported a related physical or psychological injury. The greater the number of alleged crimes experienced, the greater the likelihood that the respondent was left disabled.

We find that household heads were significantly (at 1%), and three times as likely as non-household heads, to have disabilities due to the war that partly or entirely inhibit their ability to work or engage in livelihood activities. In addition, female household heads were significantly (at 1%) more likely to be war-wounded as compared to male household heads. We hypothesise that there could be a number of reasons for this finding such as disabled women being abandoned by their spouses or partners, or the spouses or partners being killed or disappearing in the attack that wounded the woman, as approximately 80% of those violently killed in the conflict were male (Mazurana et al., 2014).

Households with a war-wounded member also had significantly lower wealth (at p-value<1%). Disabilities that impair the ability to carry out livelihood activities can have significant consequences for the household, limiting income while at the same time increasing expenditure, in part due to efforts to treat or assist the disabled person. During qualitative interviews some households reported that they sold assets and used funds that would have gone to school fees and food to try and treat the disability and pain of their injured household member. Thus, disability can have the effect of pushing households further into poverty.

Individuals that are war-wounded are significantly (at 1%) more likely to work in paid domestic work, casual agricultural labour or the exploitation of bush products, all of which are precarious and among the poorest paying forms of labour. For household heads, the impact of a war-related disability on their work was greater: they were significantly (at 1%) more likely to report no economic activity that brings in income. The inability of the head of the household to contribute economically has negative spill-over effects on the well-being of the entire household.

Similar to wealth, household food insecurity correlates closely with war-related disability. Food insecurity was measured using the reduced Coping Strategies Index (rCSI) (Maxwell and Caldwell, 2008). Having at least one household member with a disability significantly (at 1%) correlated with greater food insecurity across all three years of data collection (Table 4). If that household member was the household head then the impact was even larger. Not surprisingly, the larger the number of household members with a war-related disability, the greater the level of food insecurity.

Notably, despite the sub-regions being at Integrated Food Security Phase Classification[6] level 1 (meaning no to minimal food insecurity) in 2013, 2015, and 2018, reported food insecurity varied significantly across all three years (Table 4). The distinction between the three years reflects movements around the average, rather than extremely poor or good years. The difference between years does partially correspond to variations in price data of staple crops.[7]

5 These actors included government forces, militias, LRA rebels, and Karamojong raiders.

6 See www.ipcinfo.org

7 Maize retail price in Lira using the FAO Price Tool (www.fao.org/giews/food-prices/tool/public/#/dataset/domestic)

Table 4: Access to services and food security for households with war-wounded over time

Variable	2013		2015		2018	
	Non-war wounded household	War-wounded household	Non-war wounded household	War-wounded household	Non-war wounded household	War-wounded household
Social protection services	3%**	7%	8%	7%	12%	11%
Livelihood assistance services	14%	17%	20%	21%	20%	18%
Food insecurity (rCSI)	9.7***	11.6	6.7**	7.5	8.4***	9.8

Note: *** significant at p-value<0.01; ** significant at p-value<0.05; * significant at p-value<0.1

Experience of alleged war crimes or crimes against humanity by parties to the war between GoU and LRA clearly has an impact on food insecurity. If a household reported that at least one member of their household experienced a war crime or crime against humanity, their food insecurity, on average, was 5% higher. Each additional war crime or crime against humanity experienced increased food insecurity, on average, by about 1%. Based on our qualitative interviews, we believe the causal pathway is partially due to the high level of disability associated with households that experienced these crimes and the likely impact of disabilities on livelihood activities (Mazurana et al., 2014).

There was no significant increase in access to livelihood support services over time for households with a member suffering from a mental or physical disability due to the war. However, in terms of social protection services,[1] in 2013 only, households with a disabled member or members were significantly (at 1%) more likely to receive a greater degree of social protection services, primarily in terms of free food aid or free household items. That said, while in 2013 war-wounded households were more likely to receive social protection services, over the course of the three waves of data collection only 7 – 11% of these households reported receiving any type of social protection support, and most of any support received was a one-time offering. As such, the change over time in receiving social protection services was not significant. Furthermore, in 2015 and 2018, disabled households were no longer more likely to receive social protection services – the significant difference disappeared (Table 4). This illustrates that, while war-wounded households might have had greater access to social protection programmes in 2013, the significant difference did not last and access to such services overall is still extremely low, and often a one-off.

4.2 Access to healthcare and the war wounded

In the survey, we measured the time it took people to travel to health centres, if they can access health services for both routine and serious health problems, and if the medications and treatments they need for rehabilitation are available. We find that access to adequate healthcare and treatment in general is extremely poor throughout northern Uganda. At most, 8% of the population reported that they can access health services for both routine and serious health issues and that the services and medications they need are available (Table 5).

While some improvements were seen in 2015, this advancement was not sustained. Despite some individual health indicator improvements, the proportion of households having access to quality health services for both routine and serious health problems *and* saying those facilities have the medications they need remained at around 7% of the population.

Table 5: Health access indicators

Variable	2013	2015	2018
Average time in minutes to travel to health centre	125	96	101
Can access health services for routine health problems	12%	14%	12%
Can access health services for serious health problems	11%	9%	10%
Health centre has the medications and services needed	14%	20%	20%
Can access health services for routine and serious health problems and the services and medications the household needs are available	7%	8%	7%

1 Social protection in our survey included: free food or household items; school feeding programmes; old-age pension; feeding patients in hospitals; retirement pension; and any other money payment from the government or other organisations.

In 2013, households that experienced an alleged war crime or crime against humanity during the conflict reported significantly worse access to health services for routine health problems. They were significantly (at one percent) more likely to say their health centre did not have the medications and services they needed. They also reported travelling significantly (at 1%) longer to reach a health centre (by an average of almost 30 minutes more). From our qualitative research we found that the disabled are less likely to have the resources to pay for transport and more likely to take longer on their own to reach services. Furthermore, for all health indicators, the more crimes a household experienced during the war the worse, significantly, their health access and quality.

In 2015, households that experienced an alleged war crime or crime against humanity showed an improvement, 'catching-up' across all health variables to households that did not report experiencing these crimes. However, by 2018, a year that showed deterioration across most of the SLRC, Uganda outcome indicators (though not quite deteriorating to 2013 levels), the households who had reported experiences of alleged war crimes or crimes against humanity appear to show greater deterioration compared to the general population. Looking at the data from all three panel surveys, the full regression analysis (Annex 1) confirms that households experiencing at least one alleged war crime or crime against humanity had significantly worse access to health services.

27% of individuals with war-related disabilities and 31% of households with a war-wounded household member said they had not received effective treatment for the affected individual. We had no preconceived notion or standard of what would constitute 'effective treatment', nor did the survey ask for details of any treatment pursued. Instead, we left it up to the respondent to self-report if treatment they sought was available and effective. Importantly, during our qualitative interviews we learned that many people considered 'effective treatment' to mean only that they were being medicated for pain, not that they had received therapeutic treatment and were seeing improvements in their disability.

Based on our qualitative research and interviews with medical providers, therapeutic treatments include a variety of surgical procedures from routine operations to remove foreign objects (such as bullets or shrapnel) to more complex procedures such as orthopaedic surgery, fistula repair, and reconstructive surgery of amputated ears and lips. We found that many patients have serious burn wounds or keloids that have developed from extensive beatings, which significantly inhibit their ability to move and cause pain. The treatment of burn wounds may require skin grafting, functional reconstruction and physiotherapy. Those who have their limbs amputated require prosthetics, which necessitates fittings, care, upkeep, and physiotherapy. For children with amputations, new prosthetics are required yearly as they grow. Given these examples of what therapeutic treatment entails and the nature of self-reporting, we conclude that the number of individuals and households unable to access therapeutic treatment is much greater than the 27% and 31% our survey captured.

Considering that access to health services, medications and therapeutic treatments is already extremely low for the general population, the significantly worse access experienced by households that experienced alleged war crimes or crimes against humanity, including those who are disabled due to these crimes, is a matter of serious concern.

5 How is Uganda assisting the war wounded

There are three main types of health institutions in the north of Uganda: government-run facilities, private facilities and pharmacies, and health centres supported by NGOs and religious organisations. According to data from the SLRC survey in northern Uganda, government-run health services are the most widely utilised. 85% of respondents to the survey use government-run health centres. The other 15% of the population use private health centres and religiously sponsored health facilities.

Respondents who went to health centres run by private or religious groups were significantly (at 1%) more likely to say that they could access the health centre and that the treatment they needed was available compared to those who went to government-run facilities. The respondents who went to private or religious health facilities were also significantly (at 1%) less likely to say that the quality of services was poor compared to those accessing the government-run health centres. Overall, households that reported that their health services were run by the private sector (as opposed to the government) were significantly (at 1%) more satisfied with their health services.

The different types of health centres vary greatly in cost. Almost 100% of households that went to a private or NGO or religious sponsored health centre reported paying formal fees, compared to only 10% of households that went to a government centre. Moreover, 12% and 16% of households, respectively , reported having to pay informal fees at private, NGO or religious centres, compared to only 8% of those attending a government-run health centre. This shows that not only are households including a person suffering from disabilities due to alleged war crimes or crimes against humanity already at an economic disadvantage compared to other households, but that they also face further economic challenges when accessing healthcare.

Health centres run by private institutions reportedly offer better, but more expensive, health services. The relationship between cost and access is evident when looking at who has access. The more educated the household head and the smaller the distance from the household to a health centre in terms of travel time, the more likely the household was to report having access to a health centre. This relationship remains significant even when controlling for wealth.

Household wealth affects the type of health centre that a household uses. Households going to government-run health centres tend to be significantly (at 1%) poorer, while those visiting privately run health centres are significantly

wealthier. Given the better quality of the latter, it is not surprising that the wealthier a household is, the more likely its members are to seek services at a privately run health centre. Indeed, only 6% of the bottom wealth quartile of respondents (i.e. the poorest of the poor) reported going to a private health centre.

Access to a health centre and access to actual effective care are two different things. Almost half of all households in Acholi and Lango reported that they can access a health centre but the treatments they need are usually not available. Reports of a lack of available treatments were also common throughout our qualitative interviews with the 39 war-wounded households.

The GoU increased the budget for the health sector from UGX 1.8 trillion (USD 470.6 million) in 2017 – 2018 to UGX 2.3 trillion (USD 595.6 million) in 2018 – 2019. Donors provide approximately 50 percent of Uganda's annual health budget. The priorities of the MHU are universal health coverage, recruitment of community health workers, and covering expenditures at three national hospitals, all located in the capital city Kampala (The East African, 2018). Addressing the war wounded in northern Uganda is not listed as a priority.

Three national and three international NGOs with offices based in Uganda have taken the lead in securing donor funds to provide medical and psychosocial services to the war wounded. The national NGOs are African Youth Initiative Network (AYINET) Uganda, Gulu Women's Economic Development and Globalisation (GWEDG) and the Refugee Law Project (RLP), while the international NGOs are AVSI Foundation, Center for Victims of Torture (CVT) Uganda and Transcultural Psychosocial Organization (TPO) Uganda. They are all primarily reliant on international funds and interest to maintain their programmes. All six organisations face the challenge that some injuries require specialised procedures that are very expensive and require longer hospitalisation and therapeutic treatment for recovery, making them more expensive and challenging to treat.

Two of the national NGOs, AYINET Uganda and RLP, work to identify and reach out to people in need of medical and psychosocial assistance due to physical, emotional and mental war-related injuries. They undertake an initial assessment of the person's need and then consult with counsellors, doctors, clinics and hospitals to identify the best location to provide services. Through the support of their donors, AYINET Uganda and RLP fund food, accommodation, medical bills, transportation and post-operation follow up for their patients. In addition, AYINET Uganda offers counselling services throughout the entire process alongside working in the community to increase support for the victims. They provide psychosocial support to the patient and their family members both during the patients' stay at the healthcare facility and after their discharge. They also help the patients with rehabilitation and readjustment when they return to their families. Together these two organisations have provided psychotherapeutic and medical treatment to approximately 4000 patients (AYINET, 2011; RLP, 2017). The third national NGO, GWEDG, works to identify and link war-wounded people with organisations, clinics and hospitals providing treatment. They work at the community level to help lessen stigma and discrimination against victims and to bolster their acceptance in their communities.

The three international NGOs – AVSI Foundation, CVT Uganda and TPO Uganda – provide direct medical and psychosocial services to the war wounded. AVSI Foundation, with the support of the Italian government and the Trust Fund for Victims, funded, built and helps to operate a medical treatment and rehabilitation centre in northern Uganda that focuses on assisting people in need of artificial limbs. The centre, the Gulu Regional Orthopaedic Workshop (GROW), provides war-wounded victims with artificial limbs, helps them learn to care for their new limb and provides psychosocial support and other forms of rehabilitation. AVSI Foundation built GROW at the regional referral hospital in Gulu, northern Uganda, in 1997. Today, GROW is a regional rehabilitation centre serving over 300 clients annually by enabling access to prosthetic limbs, orthopaedic appliances, physiotherapy, counselling and psychotherapy. Since opening, 1,316 people have received treatment at the centre and GROW has produced over 1,500 prosthesis and orthotics (AVSI, nd).

CVT Uganda provides psychosocial, rehabilitative services to people who survived torture and other war related atrocities, and often partners with the other organisations working with the war wounded to complement and strengthen their services. They have provided services to several thousand people. In 2010, they established a rigorous trauma training course for counsellors, with over 100 trained in this specific skillset. They also partner with Makerere University's Department of Psychology in Kampala to provide on-the-job training and mentorship to masters-level psychology students.

TPO Uganda provides a combination of physical, psychological and material support for the war wounded. Taking a holistic approach to healing and rehabilitation, TPO Uganda describes its mission as building a network of support for victims to heal. They work to increase community acceptance while helping clients to heal their bodies and minds, engage in their livelihoods and live peacefully with their family and neighbours. It is unclear how many war-wounded people TPO has provided direct services too.

All six organisations continue to engage with the GoU to strengthen the state's recognition of, and direct support for, the war-wounded. They all work, in part, through government-run hospitals and clinics to provide services for their clients. They coordinate with local government in outreach, awareness raising and screening of patients. Where they operate large specialised medical facilities, such as for fistula repair, they coordinate their activities through the MHU. They also continue to raise awareness among international donors of the substantial needs of the war-wounded and how to meet these needs. While the efforts of these six organisations are important and much needed, as our research shows, the sheer number of war-wounded, the effects on their households and their lack of access to therapeutic healthcare requires GoU's direct engagement.

Beginning in the fiscal year 2018-9, GoU announced a USD 1.2 million fund specifically for treating the war-wounded in northern Uganda. This project is to be implemented in 2019 under the Development Initiative for Northern Uganda (DINU). This one of the first clear commitments in both policy and monetary terms by the GoU to specifically address the war wounded in northern Uganda. If this project goes ahead, Uganda's post-conflict recovery and development policies for northern Uganda would include health and livelihood interventions designed or targeted to address the impact of war-related disabilities on individuals and their households. To date, Uganda has not met its national and international obligations to uphold the rights of the war-wounded and disabled in northern Uganda. This project, if carried out as envisioned, will be an important start in meeting these obligations.

In addition to the funding under DINU, GoU's draft National Transitional Justice Policy is purportedly designed to address the impact of the conflict. However, it does not recognise the issues facing the war-wounded or call for health and other relevant programming for affected individuals and households. Our findings demonstrate that it is important to prioritise the war-wounded within any transitional justice initiative as they show the dramatic and multiplicative negative effects of war-related disabilities on individuals and their entire households. These findings should send a clear signal to both GoU and donor governments of the need to act.

6 Conclusion

War-wounded households are among the poorest, most food insecure, and overall worst-off households in the two sub-regions of our study. In this context, the lack of access to quality healthcare, livelihoods and social protection services makes their situation even worse. Our study finds that having an untreated war-wounded disabled person in the household has a causal relationship with that household's level of poverty, food insecurity, access to healthcare and health outcomes. We find that most war-wounded persons have not received rehabilitative therapeutic treatment that enables their healing and we find that those who can access treatment are primarily receiving treatment for pain alone rather than therapeutic treatment.

It is incumbent upon GoU and MHU, other GoU institutions concerned with justice and development, and the donors supporting them, to work in close dialogue with the war wounded, their households and the NGOs that work with them to create policy and programmes that prioritise and realise their rights. These institutions and actors should work together to design, implement, monitor and assess policy and programming to address the legacy of war on the bodies, minds and spirits of people living with war-related disabilities in northern Uganda. While these services could be linked with services for non-war related disability and mental healthcare, the particular needs of the war wounded, as outlined in this report, should be considered in designing services.

Finally, it would befit the community focused on research and action for disability rights in Uganda – and globally – to carry out research and advocacy on the intersection of war and disability among civilians. They should also focus critical analysis on the failure to address war-related disability among civilians and engage with the relevant national and international actors to help realise the rights of the war-wounded.

References

AYINET – African Youth Initiative Network (2011) '2009/2010 surgical and medical rehabilitation report'. Kampala: AYINET.

Annan, J, Blattman, C., and Horton R. (2006) *The state of youth and youth protection in northern Uganda: Findings from the survey for war affected youth*. A report for UNICEF Uganda. Kampala: AVSI and UNICEF.

Annan, J.,Blattman, C., Carlson, K., and Mazurana, D. (2008) *The state of female youth in northern Uganda: findings from the survey of war-affected youth*. SWAY Uganda.

AVSI (n.d.) 'Putting people at the centre'. Kampala: AVSI Foundation.

Betancourt, T.S., Bass, J., Borisova, I., Neugebauer, R., Speelman, L., Onyango, G. and Bolton, P. (2009) 'Assessing local instrument reliability and validity: a field-based example from northern Uganda'. *Social Psychiatry and Psychiatric Epidemiology.* 44(8) 685-692.

Betancourt, T.S., Brennan, R., Rubin-Smith, J., Fitzmaurice, G. and Gilman, S. (2010) 'Sierra Leone's former child soldiers: A longitudinal study of risk, protective factors, and mental health'. *Journal of the American Academy of Child and Adolescent Psychiatry*, 49(6), 606-615

Blattman, C, Annan, J., Mazurana, D. and Carlson, K. (2011) 'Civil war, reintegration and gender in Uganda'. *Journal of Conflict Resolution*, 55(6), 877-908.

Bilmes, L. (2007) 'Soldiers returning from Iraq and Afghanistan: The long-term costs of providing veterans medical and disability benefits'. Kennedy School of Government Working Paper No. RWP07-001. Cambridge, MA: Kennedy School of Government.

Burnham, G., Lafta, R., Doocy, S. and Roberts, L. (2006) 'Mortality after the 2003 invasion of Iraq: a cross-sectional cluster sample survey', *The Lancet*, 368(9545), 1421-1428.

Depoortere, E., Checci, F., Broillet, F., Gerstl, S., Minetti, A., Gayraud, O., Briet, V., Pahl, J., Defourny, I., Tatay, M. and Brown, V. (2004) 'Violence and mortality in West Darfur, Sudan (2003–2004): Epidemological evidence from four surveys'. *The Lancet*, 364(9442), 1315-20.

The East African (2018) 'Uganda embarks on journey to universal health cover'. Available at: http://www.theeastafrican.co.ke/scienceandhealth/Uganda-embarks-on-journey-to-universal-health-cover/3073694-4630868-141r9brz/index.html.

Elbogen, E.B., Johnson, S.C, Newton, V.M., Fuller, S., Wagner, H.R., and Beckham, J.C. (2013) 'Self-report and longitudinal predictors of violence in Iraq and Afghanistan war era veterans'. *Journal of Nervous and Mental Disease*, 201(10), 872-876.

Farhood, L, Dimassi, H. and Lehtinan, T. (2006) 'Exposure to war-related traumatic events, prevalence of PTSD, and general psychiatric morbidity in a civilian population from Southern Lebanon'. *Journal of Transcultural Nursing*, 17(4), 333-340.

GoU – Government of Uganda (1995) *Constitution of the Republic of Uganda*.

GoU (2003) *National Council for Disability Act*.

GoU (2006) *Persons with Disabilities Act.*

Hoge, C.W., Auchterlonie, J.L., and Milliken, C.S. (2006) 'Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan'. *JAMA*, 295(9), 1023-1032.

Holt, M. (2013) 'Violence against women in the context of war: experiences of Shi'i women and Palestinian refugee women in Lebanon'. *Violence Against Women*, 19(3), 316-337.

Human Rights Watch (2010) *'As if we weren't human': discrimination and violence against women with disabilities in northern Uganda*. New York, NY: Human Rights Watch.

Husain, F, Anderson, M., Lopes Cardozo, B., Becknell, K., Blanton, C., Araki, D. and Vithana, E.K. (2011) *'Prevalence of war-related mental health conditions and associations with displacement status in postwar Jaffna district, Sri Lanka'. JAMA,* 306(5), 522-531.

ISIS-WICCE (2001) *Medical intervention study of war affected Gulu, Uganda*. Kampala: ISIS-WICCE.

Jaranson, J.M., Butcher, J., Halcon, L., Johnson, D.R., Robertson, C., Savik, K., Spring, M. and Westermeyer, J. (2004) 'Somali and Oromo refugees: Correlates of torture and trauma history'. *American Journal of Public Health*, 94(4), 591-598.

Johnson, K, Asher, J., Rosborough, S., Raja, A., Panjabi, R., Beadling, C. and Lawry L. (2008) 'Association of combatant status and sexual violence with health and mental health outcomes in postconflict Liberia'. *JAMA*, 300(6), 676-690.

Johnson, K, Scott, J. and Rughita, B. (2010) 'Association of sexual violence and human rights violations with physical and mental health in territories of the eastern Democratic Republic of Congo'. *JAMA*, 304(5), 553-562.

Karam, E.G., Mneimneh, Z.N., Karam, A.N., Fayyad, J.A., Nasser, S.C., Chatterji, S. and Kessler, R.C. (2006) 'Prevalence and treatment of mental disorders in Lebanon: A national epidemiological survey'. *The Lancet*, 367(9515), 1000-1006.

Kinyanda, E, Musisi, S., Biryabarema, C., Ezati, I., Oboke, H., Ojiambo-Ochieng, R., Were-Oguttu, J., Levin, J., Grosskurth, H. and Walugembe, J. (2010) 'War related sexual violence and it's medical and psychological consequences as seen in Kitgum, Northern Uganda: a cross-sectional study'. *BMC International Health and Human Rights*, 10 (28).

Kohrt, B.A., Jordans, M.J.D., Tol, W.A., Speckman, R.A., Maharjan, S.M., Worthman, C.M., and Komproe, I.H. (2008) 'Comparison of mental health between former child soldiers and children never conscripted by armed groups in Nepal'. *JAMA*, 300(6), 691-702.

Levy, B. and Sidel, V. (2013) 'Adverse health consequences of the Iraq War'. *The Lancet*, 381(9870), 949-95.

Linos, N. (2009) 'Rethinking gender-based violence during war: is violence against civilian men a problem worth addressing?'. *Social Science and Medicine*, 68(8), 1548-1551.

Maguen, S., Metzler, T.J., Litz, B.T., Seal, K.H., Knight, S.J., and Marmar, C.R. (2009) 'The impact of killing in war on mental health symptoms and related functioning'. *Journal of Traumatic Stress*, 22(5), 435-443.

Maxwell, D. and Caldwell, R. (2008). *The Coping Strategies Index: A tool for rapid measurement of hosuehold food security and the impact of food aid programs in humanitarian emergencies*. Atlanta, GA: Cooperative for Assistance and Relief Everywhere, Inc.

Mazurana, D., Marshak, A., Hilton Opio, J., Gordon, R., and Atim, T. (2014) 'The Impact of Serious Crimes During the War on Households Today in Northern Uganda.' SLRC Briefing Paper 5. London: Secure Livelihoods Research Consortium.

Mazurana, D., Marshak, A., Gordon, R., Hilton Opio, J., Atim, T. and McEvoy, B. (2016) 'Disability and recovery from war in northern Uganda'. *Third World Thematics: A TWQ Journal, 1(3), 353-369.*

Miller, K.E., Weine, S.M., Ramic, A., Brkic, N., Bjedic, Z.D., Smajkic, A., Boskailo, E. and Worthington, G. (2002) 'The relative contribution of war experiences and exile related stressors to levels of psychological distress among Bosnian refugees'. *Journal of Traumatic Stress*, 15(5), 377–387.

Morris, S., Carletto, C., Hoddinott, J., and Christiaensen, L. (1999) 'Validity of rapid estimates of household wealth and income for health surveys in rural Africa'. FCND Discussion Paper 72. Washington, DC: International Food Policy Research Institute.

Nandi, C, Crombach, A., Bambonye, M., Elbert, T. and Weierstall, R. (2015) 'Predictors of posttraumatic stress and appetitive aggression in active soldiers and former combatants'. *European Journal of Psychotraumatology*, 6, 26553.

Opaas, M. and Varvin, S. (2015) *'Relationships of childhood adverse experiences with mental health and quality of life at treatment start for adult refugees traumatized by pre-flight experiences of war and human rights violations'. Journal of Nervous and Mental Disease,* 203(9), 684-695.

Orach C.G., Musoba, N., Byamukama, N., Mutambi, R., Aporomon, J.F., Luyombo A., and Rostedt, A. (2009) 'Perceptions about human rights, sexual and reproductive health services by internally displaced persons in northern Uganda'. *African Health Sciences,* 9(S2), S72-S80.

Physicians for Human Rights (2002) *War-related sexual violence in Sierra Leone: A population-based Assessment*. Boston: Physicians for Human Rights.

Plümper ,T. and Neumayer, E. (2004) 'The unequal burden of war: the effect of armed conflict on the gender gap in life expectancy'. *International Organization*, 60(3), 723-754.

Porter, H. (2016). *After rape: violence, justice and social harmony in northern Uganda*. Cambridge, UK: Cambridge University Press.

Riche, N., and Anyimuzala, J., (2014) 'Research study on children with disabilities living in Uganda: situational analysis on the rights of children with disabilities in

Uganda'. Submitted to UNICEF Uganda. Available at: https://www.unicef.org/uganda/UnicefUganda_CwDsStudy_Annexes_Final_(2).pdf

RLP – Refugee Law Project Uganda (2017) 'The tears of living with untreated war traumas in post-conflict northern Uganda'. Available at: https://www.refugeelawproject.org/resources/blog-articles/52-conflict-transitional-justice-governance/489-the-tears-of-living-with-untreated-war-traumas-in-post-conflict-northern-uganda

Sivakumaran, S. (2007) 'Sexual violence against men in armed conflict'. *European Journal of International Law*, 18(2), 253-276.

Steel, Z, Chey, T., Silove, D., Marnane, C., Bryant, R.A. and van Ommeren, M. (2009) 'Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: a systematic review and meta-analysis'. *JAMA*, 302(5), 537-549.

Stevens, A.J. (2014) 'The invisible soldiers: understanding how the life experiences of girl child soldiers impacts upon their health and rehabilitation needs'. *Archives of Disease in Childhood*, 99(5), 458-462.

Swiss, S, Jennings, P.J., Aryee, G.V., Brown, G.H., Jappah-Samukai, R.M., Kamara, M.S., Schaack, R.D., Turay-Kanneh, R.S. (1998) 'Violence against women during the Liberian Civil Conflict'. *JAMA*, 279(8), 625-629.

Tolin, D.F. and Foa, E.B. (2006) 'Sex differences in trauma and posttraumatic stress disorder: a quantitative review of 25 years of research'. *Psychological Bulletin*, 132(6), 959-992.

UNGA – United Nations General Assembly (2007) *Convention on the Rights of Persons with Disabilities : resolution/adopted by the General Assembly,* 24 January 2007, A/RES/61/106.

Usta J, Farver, J.A., and Zein, L. (2008) 'Women, war, and violence: surviving the experience'. *Journal of Women's Health*, 17(5), 793-804.

Van Herp, M., Parque, E., V., Rackley, E., and Ford, N. (2003) 'Mortality, violence and lack of access to healthcare in the Democratic Republic of Congo'. *Disasters,* 27(2), 141-153.

Vinck, P. and Pham, P.N. (2010) 'Association of exposure to violence and potential traumatic events with self-reported physical and mental health status in the Central African Republic'. *JAMA*, 304(5), 544-552.

Willard C.L., Rabin, M., and Lawless, M. (2014) 'The prevalence of torture and associated symptoms in United States Iraqi refugees'. *Journal of Immigrant and Minority Health*. 16(6), 1069–1076.

WHO and MHU – World Health Organization and Ministry of Health of Uganda (2005) 'Health and mortality survey among internally displaced persons in Gulu, Kitgum and Pader Districts, northern Uganda'. Geneva: World Health Organization. Available at: http://www.who.int/hac/crises/uga/sitreps/Ugandamortsurvey.pdf

Annexes

Random effects model on minutes to health centre						
Minutes to health	**Std. Err.**	**z**	**P>z**	**[95% Conf.**	**Interval]**	
Food insecurity	0.87	0.36	2.42	0.02	0.17	1.57
Female respondent	6.39	5.14	1.24	0.21	-3.70	16.47
Age	-0.19	0.15	-1.2	0.22	-0.48	0.11
Dependency ratio	12.65	8.87	1.43	0.15	-4.73	30.04
MSI	-0.21	0.10	-1.9	0.05	-0.41	0.00
Receive social protection	5.39	7.70	0.70	0.48	-9.71	20.49
Receive livelihood assistance	-8.89	5.28	-1.6	0.09	-19.23	1.45
Disease of crops or livestock	0.65	5.34	0.12	0.90	-9.82	11.11
Bad weather	6.80	5.78	1.18	0.24	-4.53	18.12
Fire in house	4.11	6.06	0.68	0.50	-7.76	15.99
Sudden health problem	1.55	4.59	0.34	0.74	-7.44	10.54
Long-term health problem	8.99	4.77	1.89	0.06	-0.35	18.33
Death in family	2.65	5.58	0.47	0.64	-8.28	13.58
Inflation or price hikes	5.85	4.27	1.37	0.17	-2.52	14.21
Job loss	12.05	12.70	0.95	0.34	-12.84	36.94
Land dispute	3.27	4.98	0.66	0.51	-6.49	13.03
Main livelihood activity (with respect to own cultivation)						
Own livestock activity	-1.98	10.56	-0.1	0.85	-22.67	18.72
Own fishing activity	37.80	52.38	0.72	0.47	-64.87	140.46
Casual labour (agriculture)	32.11	12.30	2.61	0.01	8.02	56.21
Casual labour (non-agriculture)	-7.27	18.86	-0.3	0.70	-44.24	29.69
Exploitation of bush products	-23.44	21.39	-1.1	0.27	-65.37	18.48
Business from home, street or market	6.17	11.45	0.54	0.59	-16.28	28.61
Own business from shop/building	-12.43	18.27	-0.6	0.50	-48.24	23.39
Work for the government	3.25	14.54	0.22	0.82	-25.25	31.76
Private sector job or NGO	-5.58	18.58	-0.3	0.76	-42.00	30.84
Paid housework and childcare	-30.19	47.96	-0.6	0.53	-124.18	63.80
Other economic activities	1.84	17.33	0.11	0.92	-32.12	35.81
Remittances	-83.82	48.45	-1.7	0.08	-178.78	11.13
Other assistance	-9.11	31.36	-0.2	0.77	-70.57	52.35
# of livelihood activities	-2.16	1.33	-1.6	0.10	-4.77	0.45
Migrant in the household	-13.46	9.41	-1.4	0.15	-31.90	4.99
Experienced crime	3.22	4.36	0.74	0.46	-5.33	11.76
# of serious crimes experienced in household	**1.93**	**0.63**	**3.07**	**0.00**	**0.70**	**3.16**
Urban	-61.25	30.11	-2.0	0.04	-120.27	-2.22
Controlling for sub-county						

Minutes to health	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
Food insecurity	0.89	0.36	2.48	0.01	0.19	1.59
Female respondent	5.87	5.15	1.14	0.25	-4.22	15.96
Age	-0.19	0.15	-1.27	0.21	-0.48	0.10
Dependency ratio	12.11	8.88	1.36	0.17	-5.30	29.53
MSI	-0.20	0.10	-1.94	0.05	-0.41	0.00
Receive social protection	5.07	7.70	0.66	0.51	-10.03	20.17
Receive livelihood assistance	-8.45	5.27	-1.60	0.11	-18.78	1.89
Disease of crops or livestock	0.63	5.34	0.12	0.91	-9.84	11.10
Bad weather	6.72	5.78	1.16	0.25	-4.61	18.05
Fire in house	4.39	6.06	0.72	0.47	-7.49	16.27
Sudden health problem	1.79	4.59	0.39	0.70	-7.20	10.78
Long-term health problem	8.81	4.77	1.85	0.07	-0.54	18.16
Death in family	2.94	5.58	0.53	0.60	-7.98	13.87
Inflation or price hikes	5.21	4.26	1.22	0.22	-3.15	13.57
Job loss	11.66	12.70	0.92	0.36	-13.24	36.55
Land dispute	3.22	4.98	0.65	0.52	-6.54	12.99
Main livelihood activity (with respect to own cultivation)						
Own livestock activity	-1.71	10.56	-0.16	0.87	-22.41	18.99
Own fishing activity	39.58	52.40	0.76	0.45	-63.13	142.29
Casual labour (agriculture)	31.35	12.31	2.55	0.01	7.23	55.47
Casual labour (non-agriculture)	-6.56	18.86	-0.35	0.73	-43.53	30.41
Exploitation of bush products	-23.0	21.40	-1.08	0.28	-64.98	18.89
Business from home, street or market	6.14	11.46	0.54	0.59	-16.32	28.60
Own business from shop/building	-12.6	18.28	-0.69	0.49	-48.45	23.20
Work for the government	3.24	14.55	0.22	0.82	-25.27	31.76
Private sector job or NGO	-5.05	18.59	-0.27	0.79	-41.49	31.39
Paid housework and childcare	-32.4	47.98	-0.68	0.50	-126.48	61.59
Other economic activities	1.15	17.33	0.07	0.95	-32.82	35.12
Remittances	-83.2	48.46	-1.72	0.09	-178.28	11.69
Other assistance	-9.76	31.37	-0.31	0.76	-71.24	51.72
# of livelihood activities	-2.13	1.33	-1.60	0.11	-4.74	0.48
Migrant in the household	-13.7	9.41	-1.46	0.15	-32.15	4.75
Experienced crime	3.28	4.36	0.75	0.45	-5.26	11.83
Someone in household experienced a serious crime	13.57	5.32	2.55	0.01	3.15	23.99
Urban	-64.9	30.26	-2.15	0.03	-124.24	-5.64
Controlling for sub-county						

Secure Livelihoods Research Consortium

SLRC publications present information, analysis and key policy recommendations on issues relating to livelihoods, basic services and social protection in conflict affected situations. This and other SLRC publications are available from **www.securelivelihoods.org**. Funded by UK aid from the UK Government, Irish Aid and the EC.

Disclaimer: The views presented in this publication are those of the author(s) and do not necessarily reflect the UK Government's official policies or represent the views of Irish Aid, the EC, SLRC or our partners. ©SLRC 2019.

Readers are encouraged to quote or reproduce material from SLRC for their own publications. As copyright holder SLRC requests due acknowledgement.

Secure Livelihoods Research Consortium
Overseas Development Institute (ODI)
203 Blackfriars Road
London SE1 8NJ
United Kingdom

T +44 (0)20 3817 0031
F +44 (0)20 7922 0399
E slrc@odi.org.uk
www.securelivelihoods.org
@SLRCtweet

Cover photo: International Day of Persons with Disabilities. Prosethesises. Albert González Farran, UNAMID, 2013 (CC BY-NC-ND 2.0).

Tufts University | FRIEDMAN SCHOOL OF NUTRITION SCIENCE AND POLICY
Feinstein International Center