The impact of support programmes for survivors of sexual violence: micro-level evidence from eastern Democratic Republic of the Congo

Christine Amisi, Rosalie Biaba Apassa, Aline Cikara, Gudrun Østby, Ragnhild Nordås, Siri Aas Rustad & John Quattrochi

To cite this article: Christine Amisi, Rosalie Biaba Apassa, Aline Cikara, Gudrun Østby, Ragnhild Nordås, Siri Aas Rustad & John Quattrochi (2018) The impact of support programmes for survivors of sexual violence: micro-level evidence from eastern Democratic Republic of the Congo, Medicine, Conflict and Survival, 34:3, 201-223, DOI: 10.1080/13623699.2018.1541625

To link to this article: https://doi.org/10.1080/13623699.2018.1541625

© 2018 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

Published online: 07 Nov 2018.

Article views: 294

View Crossmark data
The impact of support programmes for survivors of sexual violence: micro-level evidence from eastern Democratic Republic of the Congo

Christine Amisi\textsuperscript{a}, Rosalie Biaba Apassa\textsuperscript{a}, Aline Cikara\textsuperscript{a}, Gudrun Østby\textsuperscript{b}, Ragnhild Nordås\textsuperscript{b,c}, Siri Aas Rustad\textsuperscript{b} and John Quattrochi\textsuperscript{a,d}

\textsuperscript{a}International Centre for Advanced Research and Training (ICART), Mushununu Panzi, Bukavu, South Kivu, DRC; \textsuperscript{b}Peace Research Institute Oslo (PRIO), Oslo, NORWAY; \textsuperscript{c}University of Michigan, Ann Arbor, MI, USA; \textsuperscript{d}Simmons University, Boston, MA, USA

ABSTRACT

In the eastern Democratic Republic of the Congo there are several support programmes for sexual violence survivors, but their impacts are rarely systematically assessed. We investigated the effects for women from two support programmes that include both survivors of sexual and gender-based violence (SGBV) and others. Specifically, we estimated (1) the effect of SGBV on social exclusion and economic well-being, and (2) the effects of support programmes on social exclusion and economic well-being, as well as differential effects for SGBV survivors and others. Based on an original survey of 1,203 women, we found that survivors felt less included across various social settings, but their economic well-being was no different than that of other women. We also found that support programmes significantly improve both perceived social inclusion and economic well-being for survivors and non-survivors. The effects on economic well-being were larger for survivors. In conclusion, these support programmes brought important benefits to survivors and non-survivors alike, although there is potential for improvement, particularly on social inclusion for SGBV survivors.

ARTICLE HISTORY
Accepted 18 October 2018

KEYWORDS
Sexual violence; SGBV; social exclusion/inclusion; support programmes; DRC; South Kivu

Introduction

Sexual and gender-based violence (SGBV) has been identified as a security problem by various UN Security Council Resolutions (e.g. in UN Security Council Resolutions 1325 (2000), 1820 (2008), 1888 (2009) and 1960 (2010)). These resolutions have called for more systematic data collection on and analysis of the consequences of war for women, along with ways to alleviate these problems, particularly that of sexual violence. In recent years, conflict-related SGBV has received significantly increased attention from researchers

CONTACT
Ragnhild Nordås \texttt{ragnhild@prio.no}

© 2018 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.
looking at particular contexts and countries (e.g. Baaz and Stern 2009; Blay-Tofey and Lee 2015; Leiby 2009; Meger 2010; Peterman and Johnson 2009; Rustad, Østby, and Nordås 2016) as well as global patterns (e.g. Cohen 2013; Cohen and Nordås 2014).

In the Democratic Republic of the Congo (DRC), SGBV, gender inequality and infringements on women’s rights constitute massive challenges (Peterman, Palermo, and Bredenkamp 2011). The country is in a situation of considerable insecurity and instability, and SGBV has been and still is widespread in the eastern provinces. This has also been recognized by the United Nations Security Council, for example in resolution UNSCR 2389 (2017). Most armed groups operating in eastern DRC have been accused of committing sexual violence, including rebel groups, militia groups and, frequently, the national military, the FARDC (e.g. Baaz and Stern 2009; Cohen and Nordås 2014). Armed actors have terrorized the population using SGBV in a way that prevents a normal life and causes extreme trauma, stigma and fragmentation of families (Bartels et al. 2010a; Mukwege and Nangini 2009). Survivors of SGBV include not only women, but also children (Nelson et al. 2011) and men (Christian et al. 2011), with devastating effects on local communities.

Several recent studies have tried to systematize what the situation is for women in the DRC in general and focus on the problem of sexual violence specifically (e.g. Baaz and Stern 2009, 2010; Babalola 2014; Babalola et al. 2015; Bartels et al. 2010a, 2010b; Dossa et al. 2014; Kasangye et al. 2014; Kelly et al. 2009, 2011; Kohli et al. 2014; Peterman, Palermo, and Bredenkamp 2011; Rustad, Østby, and Nordås 2016). These studies show, amongst other things, that sexual violence is prevalent in the eastern DRC; that survivors experience their lives as oppressive and difficult (Dossa et al. 2014); that they are held in low regard (Babalola 2014; Dossa et al. 2014; Finnbakk and Nordås 2018); and that more than a third are rejected by their families or communities (Kelly et al. 2011). In a qualitative study of community perceptions of sexual violence survivors in DRC, Finnbakk and Nordås (2018) find that community members generally do not mind integrating survivors into the community in terms of the economic spheres – such as in the marketplace – but they have strong reservations against more personal contact and association with survivors. Focus group discussions reveal that a reason for this is that, in the minds of most community members, survivors have ‘lost their value’ (ibid.). Similarly, Babalola (2014) finds that egalitarian and non-traditional gender attitudes were associated with lower prevalence of negative attitudes towards survivors, and therefore concludes that changing gender norms could increase the acceptance towards survivors. Researchers have also documented how mining is central to the livelihoods of many women and girls in the DRC (e.g. Kelly, King-Close, and Perks 2014; Bashwira et al. 2014). In the popular narrative, SGBV in eastern DRC has been associated with a scramble for lucrative minerals and other natural resources. And although this is a
simplified explanation for sexual violence, women living near artisanal mining sites with armed group presence are more vulnerable to sexual violence by non-partners than women living less proximate to these sites (Rustad, Østby, and Nordås 2016).

In the midst of this situation, significant local initiatives are addressing SGBV problems and helping survivors of sexual violence to be included in the community and to improve their livelihoods, as well as empowering women and girls to improve their lives. One of the most established and well-known institutions in this regard is Panzi Hospital in Bukavu, South Kivu. Panzi Hospital is a general referral hospital, but specializes in the medical treatment of survivors of SGBV. Several programmes for social, economic, juridical and psychological assistance have been initiated around the hospital under the auspices of the Panzi Foundation DRC. These initiatives have recognized that it is important to not only treat the medical problems of the patients admitted to the hospital for treatment of sexual-violence related problems, but to also provide socio-economic and psychosocial support. Once these patients leave the hospital, they must not only cope with the continuing effects of trauma, they may also be stigmatized and rejected by family and community. The women survivors of SGBV included in the current study have participated in one of two support programmes of the Panzi Foundation DRC: Dorcas Rurale (DR) and USHINDI.

Despite the importance of effective programmes for sexual violence survivors, relatively little research has been done on how support programmes work, and what their long-term effects are for women (in terms of inter alia health, social status, employment and reintegration) and for society at large (Bosmans 2007; Steiner et al. 2009). On the one hand, support programmes are designed to help survivors. However, on the other hand, support programmes could potentially also have the unintended effect of leading to increased levels of stigma among survivors, or a stronger visibility of who has been raped and who would therefore potentially be excluded or perceived negatively by the community (e.g. Finnbakk and Nordås 2018). The few studies that focus on assistance to survivors that exist (e.g. Bolton 2009; Bosmans 2007; Douma and Hilhorst 2012; Roka et al. 2014; Steiner et al. 2009) call into question the effectiveness of some of these programmes and highlight the need for further research and critical evaluation. However, there is an acute lack of data that can be used to critically and systematically assess the focus and impact of the programmes designed to assist survivors of sexual violence. As systematic research on programme effectiveness is scarce, this represents a significant knowledge gap.

In this article, we address the knowledge gap on the impact of support programmes. We do this by presenting new survey data on women in South Kivu province, eastern DRC, including women who have recently been in support programmes and many that are survivors of sexual violence, and
analyse their experiences of social exclusion and economic well-being, and the effect of programming on these outcomes. Specifically, we address the following research questions:

(1) *What are the effects of support programmes on the participants’ perceptions of their economic well-being and social inclusion?*

(2) *Are the effects of support programmes different for survivors than for non-survivors?*

Before presenting our research design, data and analyses, we give an overview of existing knowledge on consequences of conflict-related sexual violence for survivors and the effects of support programmes.

**Sexual violence and the effect of support programmes: what do we know?**

Sexual violence is generally believed to be associated with considerable shame and stigma for the victims. In addition to the challenges of coping with physical complications and psychological trauma, many survivors face marginalization and social exclusion among family members and in their local communities. One consequence for survivors can be outright rejection by their husbands.

However, extreme events such as war can also sometimes have the effect of leading to more prosocial behaviour amongst those affected by violence (e.g. Gilligan, Pasquale, and Samii 2014). One study from Sierra Leone finds a high level of resilience among families affected by sexual violence (Koos 2018). Koos argues that conflict-related sexual violence affected households will invest more effort and resources into the community in order to avert social exclusion, compared to unaffected households. He finds evidence that exposure to sexual violence indeed ‘increases prosocial behavior – cooperation, helping, and altruism’ which he argues supports the resilience hypothesis (ibid. 194). However, the role of support programmes to assist in producing this type of behaviour (cooperation, altruism, helping), is not a direct focus of Koos’ study.

One study based on 255 women treated at Panzi hospital in eastern DRC found that of the women in this sample who had been raped, 29% were rejected by their families and 6% by their communities (Kelly et al. 2011). This rejection was often based on a sense that these women were contaminated by disease. The authors therefore concluded that sexual violence does not only have physiological and psychological health effects, it can also destroy family and community structures. Another study based on patients treated at Panzi hospital has also found that several extreme forms of sexual violence were reported – with one such extreme form being the intentional
transmission of sexually transmitted diseases, such as chlamydia and HIV – and that there were challenges associated with socio-economic reintegration (Mukwege and Nangini 2009).

Overall, evaluations of programmes and their impact are often lacking, and proper experimental designs are difficult to carry out for a variety of pragmatic and ethical reasons. Findings to date are therefore few and unclear. In one study, Bolton (2009) evaluates psychosocial activities implemented by the International Rescue Committee (IRC) in South Kivu and explores local concepts of psychosocial problems related to gender-based violence and functioning. At baseline, women reported particularly high levels of impairment in functioning (e.g. farming, trading, cooking, looking after children), as well as symptoms of anxiety and fear. At follow-up assessments, they reported substantial improvements in both functioning and symptomatology. However, the study had significant weaknesses in research design. In addition to the lack of a control group, the type of interventions and the implementing partners involved changed between the start and closure of the study, making it hard to infer which intervention was responsible for changes over time. In a more recent study, Bass et al. (2013) carried out a randomized control trial of psychotherapy for Congolese survivors of sexual violence. They report that mean scores for combined depression and anxiety [range 0–3] improved in the individual-support group (2.2 at baseline, 1.7 at the end of treatment, and 1.5 at 6 months after treatment), but improvements were significantly greater in the therapy group (2.0 at baseline, 0.8 at the end of treatment, and 0.7 at 6 months after treatment) (P < 0.001 for all comparisons). In a similar analysis to assess the efficacy of trauma-focused cognitive behavioural therapy (TF-CBT) O’Callaghan et al. (2013) carried out a controlled trial of sexually exploited teenage girls in the DRC, and found significant improvement in prosocial behaviour and mental health indicators for depression and anxiety.

One broader systematic review of the academic and grey literature by Tol et al. (2013) focusing on ‘the effectiveness of mental health and psychosocial support interventions for populations exposed to sexual and other forms of gender-based violence in the context of armed conflicts’ found that there were very few and limited studies on this topic. The meta-analysis suggested beneficial effects of mental health and psychosocial interventions, and that evaluation of such interventions in real-life settings would be feasible through partnerships with humanitarian organizations. However, based on the existing evidence, it was not possible to make robust conclusions on the effectiveness of particular approaches in various support interventions for populations affected by sexual violence in conflict zones. The authors therefore concluded that more rigorous research was urgently needed.

This study provides one such rigorous assessment of how support to female survivors of sexual violence affects their sense of exclusion specifically, as well as their sense of improvement in economic well-being. This sets this study apart
from the few existing systematic studies in that the focus is broader than on mental health indicators; it also looks at the wider implications of support programmes for livelihoods and feelings of social inclusion. The focus is on women in eastern DRC, and particular attention is paid to the situation for female survivors of sexual violence versus women in general.

Pilot study

Before conducting the survey for the current study, we conducted a pilot study in 2014 in South Kivu using focus group discussions with beneficiaries of the DR programme. These discussions served to give us an initial understanding of the situation for the women in our target demographic. The participants were active members of the DR programme who were willing to talk about their experiences; as a means of obtaining informed consent all participants were verbally informed about the nature and focus of the discussion questions. The discussions were held in Swahili and were led by Congolese researchers. The questions were designed so as to draw out the relevant subjects that the larger survey should cover, and how the questions should be worded. They covered the range of experiences of the women, and how they perceived the challenges for survivors of sexual violence, not only those that stem directly from the sexual violence itself, but also the broader challenges that women can face in their communities. The discussion also explored how women talk about the support programmes, their feelings of exclusion or inclusion in their communities, and their lives in general.

The stories from the women in these focus group discussions, as well as stories relayed by organizers of support programmes, suggested many positive benefits of the support programme activities. However, the women in the support programme also talked about feelings of shame and the possible unintended consequences of some programmes. An example of such unintended consequences came up in one focus group discussion we carried out in 2014, where it was pointed out that because one support programme provided shoes that were very recognizable, this became a sign of being a survivor: ‘When they returned, they all had similar pairs of shoes and all the women who had such pairs of shoes were said to have been raped.’ (Focus group participant in Kalehe territory, DRC, June 2014.) Regarding feelings of shame and rejection, one example was found during a discussion conducted with women in a village in Kalehe territory, when one woman said that, ‘When they raped me, I stayed in my house for seven months, I was ashamed and couldn’t approach other people’. Another woman interviewed in Kavumu territory said that, ‘When he [the husband] came back, he said I simply cannot take back a wife who has been raped…’. Another woman explained how women were rejected by their families: ‘for us who were both raped and whose husbands were killed, we were rejected by both our native families and by the families-in-law. We had to cope
with our problems – poverty, misery, illnesses – by ourselves. We were considered as useless people’ (Focus group participants in Kavumu territory, DRC, June 2014).

Study hypotheses

Our first, basic hypothesis based on existing qualitative data and some systematic studies discussed above is that survivors of sexual violence are likely to feel more socially excluded than non-survivors:

**H1:** *Sexual violence survivors are less likely to feel socially included than women who have not experienced conflict-related sexual violence.*

The intention of many existing support programmes is to both improve survivors’ economic situation and to reduce the stigma they face in their local community. However, many programmes target not only survivors but also other ‘vulnerable’ women, as defined by poverty, health needs, etc., in part to avoid associating the programmes only with survivors of sexual violence, which could lead to increased stigma. We expect that, based on the stated intentions of the support programmes to improve the inclusion and livelihoods of their beneficiaries, the programmes have an overall positive effect (both for survivors and non-survivors) with regard to perceptions of both social inclusion and economic well-being. Hence, we will test the following hypotheses:

**H2a:** *Programme beneficiaries are more likely to feel socially included than women who have not benefited from such programmes.*

**H2b:** *Programme beneficiaries are more likely to rate their economic living conditions as improved during the last year than women who have not benefited from such programmes.*

However, although the programmes reach out to vulnerable women in general, they were established to support survivors of sexual violence in particular. Given the assumed higher level of social exclusion among survivors of sexual violence and the adverse economic consequences that often arise as a result of sexual violence (for example, if women are abandoned by their husbands and extended families and need to take care of their children on their own), we expect support programmes to have a larger positive effect for survivors, both with regard to perceived social inclusion and perceived improvements in economic well-being. We hence propose the following hypotheses:
**H3a:** Support programmes have a larger positive effect on perceived social inclusion for survivors compared to non-survivors

**H3b:** Support programmes have a larger positive effect on perceived improved economic well-being for survivors compared to non-survivors

**Research design – support programmes**

To test our hypotheses, we conducted a targeted survey of women in South Kivu province in eastern DRC. We focused on two main programmes that support survivors of sexual violence in this study: DR and USHINDI. Below, we describe the selection process and activities of the programmes.

Under the auspices of the Panzi Foundation, the DR programme was set up to support sexual violence survivors who have been treated at Panzi Hospital for gynaecological problems or who are identified as vulnerable (based on indicators such as number of meals per day, number of children in school, marital status and living conditions). The programme offers a social support network to women after they leave the hospital, but concentrates its activities mainly on helping the women become financially independent and capable of taking care of themselves and their children. To do this, DR provided participants with various types of support: (1) a loan, (2) seeds, (3) livestock (pigs), (4) school fees for up to two children, (5) training in income generating activities (soap- or basket-making) and (6) literacy training. The initial loan was $30–50. Once repaid, another loan of $20–50 was given, and once that is repaid a final loan of $20–50 was provided. DR also provided access to an agricultural training field within 15 km of participants’ homes. Supervisors and teachers in the field coordinated the teaching efforts and offered practical guidance. For example, in one site, the participants raised pigs under the guidance of ‘animators’ (teachers/mentors). The agricultural training fields also served as a gathering place for participants to discuss their daily challenges and strategies in addition to learning farming techniques. Finally, participants were also organized into savings groups and trained on budgeting separately for individual loans, public goods and an emergency fund. Women could participate in DR for up to 3 years after being released from the hospital.

The USHINDI programme offered support geared towards income generation and financial management, and included both survivors of SGBV and others, and both men and women. Participants in the programme were not given information about who amongst them are survivors of sexual violence. The female survivors of SGBV recruited by the programme had been declared psychologically healthy (i.e. lack of trauma) but identified as financially vulnerable. These participants received regular follow-up. The advisor working with the beneficiary would conduct confidential visits with the woman to see how she was doing in her local community and that she
was actively participating in socio-economic activities. USHINDI organized people into voluntary savings and loan associations (VSLA) and provided training in literacy, management, entrepreneurship, and leadership. Training lasted 6 months on average, and the savings and loans groups were then managed and administered by the participants themselves, with programme support staff visiting each VSLA for another 12 months. The programme was managed by local staff and trainers. Although there were also men involved in the USHINDI programme, only women (survivors and non-survivors) were included in the survey sample as the specific research focus was on women’s empowerment. The status of whether or not a person is a survivor remains confidential in the programme (unless the survivors chooses to disclose this), which also contributed to our decision to select survey respondents among all the women in the programme.

The two programmes both had the overall goal of ensuring a better livelihood for beneficiaries. For both programmes, achieving this goal was going to be based primarily (but not exclusively) on organizing and supporting savings and loans, as well as relevant training. At the time of our study, the programmes organized activities in different geographical locations in South Kivu; there was no direct overlap in the villages they existed in, but both programmes operated in rural and semi-rural areas. The programmes differed in that the DR included only (vulnerable) women, and the participants know amongst themselves who are survivors of sexual violence, whereas USHINDI had a broader mandate in terms of participation and also included men, and the survivor status of individual participants was kept confidential from the other members. Furthermore, DR, although involved in a wide variety of activities, had a stronger focus on agricultural skills training than USHINDI, which focused more on establishing small businesses and on the savings and loans to support this. The participants in the DR programme could expect support for a longer time than USHINDI participants. The DR also had more permanent local meeting places (training sites and fields) and functioned like a support group focused on (amongst other things) overcoming the problems of being a sexual violence survivor. This reflects the difference in openness about survivor status between the two programmes.

**Survey design**

In order to address the research questions and hypotheses presented above, we surveyed 1203 women aged 15–87 in South Kivu between 2 July and 1 August 2015. Since our point of departure was trying to assess the effectiveness of support programmes directed at survivors of sexual violence and other vulnerable women, we surveyed two groups of women (1) Women who had been affiliated with DR or USHINDI (including both survivors and non-survivors), and (2) Women from the same geographic areas who had not
participated in either programme (control group). From the lists of women who participated in the support programmes, we randomly selected 889 to survey (452 from DR in Kalehe, Kabare and Walungu territories and 437 from USHINDI in Mwenga territory). Some areas in which USHINDI operated were deemed inaccessible due to insecurity, and these were excluded prior to the random selection of participants. Security in local areas does change over time, sometimes quite rapidly, depending on the movement of local militias and other armed groups as well as weather conditions and other factors. We did not receive any indication at the time of the survey that areas that had to be excluded on security grounds were markedly different from those surveyed, so while a resulting data bias cannot be completely ruled out, we consider that any bias is likely to be insignificant.

Conducting research on this topic in an ethically sound manner can be a challenge, most notably because of social taboos and trauma from being a survivor of sexual violence, but also due to the concerns for the security and well-being of the researchers and interviewers involved. This research was therefore based on a partnership with researchers in the local area and on a careful assessment of the possible risks associated with different research strategies and implementation procedures. Ethics approval was obtained prior to the study from both Norway and DRC, specifically from the Norwegian Centre for Research Data and La Commission Institutionelle d'Ethique, Université Catholique de Bukavu. Participation in the survey was voluntary and based on informed consent obtained verbally from each woman. The respondents were compensated 2.5 USD for transportation costs to reach the interview site. The respondents were free to stop the interview at any time or refuse to answer any question, with no consequences, and were informed about this prior to and during the interviews.

For our control group, we selected a convenience sample of women in the same areas who had not participated in DR or USHINDI (although 63 of these reported that they had participated in some other support programme). The 314 survey respondents in the control group were women who were as similar as possible to the women in the support programmes in terms of age and socio-economic background. Lists of village residents are extremely difficult and expensive to obtain in rural Congo (the last census was in 1984); therefore, the team of interviewers overseen by supervisors from the project team recruited adult women who we encountered in public spaces in those areas, most typically in or around the local market. Based on local knowledge, this was deemed a practical and useful approach to obtaining a representative a sample as possible that would also be close to the characteristics of the primary respondents (from the support programmes).

The map below (Figure 1) zooms in on South Kivu and shows the four territories from which respondents were sampled (highlighted in red).
We recruited 12 women in Bukavu with university degrees to serve as interviewers, and they were subsequently trained in survey techniques, research ethics, and the particulars of this study. The interviewers used tablets with the programme Open Data Kit (ODK) (https://opendatakit.org/) to administer the questionnaire. Questions were read out by the interviewers, and all interviews were conducted in a private setting, with only the female interviewer and the respondent present. The surveys were conducted in Swahili, with French or Mashi (a local language) used as needed. The questionnaire included seven different sections: (1) demographic background factors; (2) family planning; (3) pregnancy and childbirth; (4) gender relations; (5) exposure to violence/conflict; (6) support programmes and (7) stigma/empowerment. Because the survey was a directed survey (i.e. certain questions were automatically added or deleted based on responses to other questions), the number of responses varies from question to question. On average, each interview took between 45 and 60 min to complete. The variables used in this particular analysis are outlined below.

Figure 1. Sampled territories in South Kivu.
Dependent variables: perceived social inclusion and improved economic well-being

Social exclusion or inclusion has been conceptualized and studied in many different ways. The concept of social exclusions has been used to refer to ‘a disparate group of people living on the margins of society and, in particular, without access to the system of social insurance’ (Percy-Smith 2000). This has often been studied through aggregate measures of group-based discrimination and legal obstacles to achieving the same level of political influence or economic well-being as other groups of people in society. However, no clear-cut and agreed-upon definition exists across literatures interested in social exclusion processes.

In this study, we argue that a person’s own sense of social exclusion or inclusion due to specific traits or social markers is an important focus of study, and that exclusion or inclusion can emerge in various subtle ways that involve everyday interactions in families and communities. Particularly in the context of the DRC, due to weak governance (seen in, inter alia, high corruption, low quality of public services, insufficient rule of law and political instability) and thereby lack of social welfare, social insurance is informal and based on personal interactions. For example, in 2017 the DRC ranked 48 out of 54 countries in Africa on the Ibrahim Index of African Governance. Based on the pilot study focus group discussions we conducted in various locations in South Kivu in 2014 and 2015, we see that social inclusion or exclusion does occur in many different settings. For example, women mentioned the social stigma associated with being survivors of sexual violence leading to problems in their relationships, not only with community members, such as neighbours and members of local churches, but also with their own families and in-laws. In tight-knit communities and villages in eastern DRC, family ties and different social arenas are of critical importance for survival and well-being. The survey questions were therefore designed to include various indicators of feelings of social inclusion or exclusion, capturing these different arenas at the micro-level.

Specifically, our composite measure of social inclusion focuses on whether or not women feel welcome in six social contexts: the family; with in-laws; with neighbours; at the market; at church and in the community writ large. These social settings were identified as the key social arenas of the communities in question by members of the local research team, and through focus group discussions with beneficiaries of support programmes as part of our pilot study, as well as in conversations with relevant support programme staff. Although feelings of inclusion or exclusion could arguably be about more than ‘feeling welcome’ or not, in the local context, this feeling of being welcome or not was deemed the most appropriate, unambiguous, and condensed way of appropriately capturing inclusion/exclusion from the perspective of individual women, without adding unnecessarily large and probably unusable (from a statistical standpoint) batteries of
questions on the multiple possible ways inclusion or exclusion could manifest. The scale developed as an additive index of these social arenas is based on the questions listed in Table 1, below. The response categories were 0 = never, 1 = sometimes, 2 = often, 3 = always. We added the scores on the six variables to produce a social inclusion index ranging from 0 (minimum perceived social inclusion) to 18 (maximum perceived social inclusion).

The shares of responses on the different questions are presented in Figure 2, below. A large share (36.5% of our sample) reported that they often or always feel socially included in all the six social settings, whereas 5.9% never or only sometimes feel included in all the settings. The scale has a Cronbach’s alpha score of 0.79, indicating good internal consistency.

In order to capture perceived improved economic well-being we use a variable from the survey asking about how the respondent perceives change in her living conditions: In general, how are your living conditions now compared to one year ago? (1 = much better; 2 = better; 3 = same; 4 = worse; 5 = much worse). The cut-off of 1 year was deemed the most appropriate time frame to increase the reliability of the data (the women can most likely remember the situation just 1 year ago) while also providing meaningful information about change. Shorter time frames would possibly confound more systematic change – which we are interested in – with seasonal variation and for this research less

<table>
<thead>
<tr>
<th>Question</th>
<th>Response categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you feel welcome with your family?</td>
<td>Never, Sometimes, Often, Always</td>
</tr>
<tr>
<td>How often do you feel welcome with your in-laws?</td>
<td>Never, Sometimes, Often, Always</td>
</tr>
<tr>
<td>How often do you feel welcome with your neighbours?</td>
<td>Never, Sometimes, Often, Always</td>
</tr>
<tr>
<td>How often do you feel welcome at the market?</td>
<td>Never, Sometimes, Often, Always</td>
</tr>
<tr>
<td>How often do you feel welcome at church?</td>
<td>Never, Sometimes, Often, Always</td>
</tr>
<tr>
<td>How often do you feel welcome in the community?</td>
<td>Never, Sometimes, Often, Always</td>
</tr>
</tbody>
</table>

Figure 2. Share of respondents who feel welcome in different social settings (%).
interesting short-term fluctuations. We reverse the categories so that higher values indicate higher satisfaction with the development of own living conditions. The recoded variable ranges from 0 (much worse) to 4 (much better). The distribution is shown in Figure 3.

**Main independent variables: sexual violence and support programmes**

Our subsequent analyses focus on two main independent variables. First, we created a dummy for whether the respondent has experienced conflict-related sexual violence. This variable does not include sexual violence committed by partners (e.g. domestic violence). Respondents were asked a set of questions concerning household (and individual) exposure to various forms of violence committed by armed groups – including members of the household being killed; experiences of looting, burning, extortion, and also rape and other forced sexual acts. To construct our measure of whether or not the woman is a survivor of sexual violence, we use two main survey questions: *Have you or anyone else in your household ever been raped (that is, physically forced to have sexual intercourse)?* And *Have you or anyone else in your household ever been forced to perform other sexual acts?* We coupled this with information from a subsequent question for each one, where the woman is asked whether the victim was herself and/or someone else, and information about the perpetrator. Each woman who reported having experienced either type of sexual violence herself was assigned the value ‘1’ on our survivor dummy. Otherwise they were coded...
as ‘0’. According to this operationalization, 420 women, or 34.9% of our sample, were sexual violence survivors.

Second, we created a variable for support programme involvement taking the value ‘1’ if the respondent was/had been involved in a support programme (approximately 80% of the sample) and ‘0’ if otherwise (approx. 20% of the sample).

Not all survivors had been through support programmes and not all programme beneficiaries were survivors. As the aim was to explore to what extent support programmes are successful at increasing the perception of social inclusion among survivors, we also created an interaction term by multiplying the dummy for survivor with the dummy for programme involvement. Table 2, below, shows the distribution of programme beneficiaries by survivor status.

Table 2. Sexual violence survivor status and support programme exposure in sample.

<table>
<thead>
<tr>
<th>Support programme participant</th>
<th>Survivor of SGBV</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
<td>Total</td>
</tr>
<tr>
<td>No</td>
<td>201 (26%)</td>
<td>50 (12%)</td>
<td>251 (21%)</td>
</tr>
<tr>
<td>Yes</td>
<td>582 (74%)</td>
<td>370 (88%)</td>
<td>952 (79%)</td>
</tr>
<tr>
<td>Total</td>
<td>783 (65%)</td>
<td>420 (35%)</td>
<td>1203 (100%)</td>
</tr>
</tbody>
</table>

Identification strategy

As the main dependent variable, *perception of social inclusion*, is continuous, we used OLS (ordinary least squares) regression. In order to estimate the impact of having experienced conflict-related sexual violence and/or being involved in support programmes on the perceptions of social inclusion, it is important to control for confounding variables that might influence both the independent and dependent variables. Since we could not carry out an experiment but are interested in isolating the effect of support programmes on the perception of social inclusion and economic well-being for survivors, we rely on coarsened exact matching (CEM).

CEM can be thought of as ‘an easy first line of defense in protecting users from the threats to validity in making causal inferences.’ (Iacus et al. 2012, p. 3), and is useful in situations such as ours when the researcher does not control the treatment assignment mechanism, as we would in an experimental design. It is a monotonic imbalance-reducing matching method, which means that the imbalance in covariates between the treated (survivor or programme beneficiaries, depending on the analysis) and control group (non-survivors or non-beneficiaries) is reduced. Through the use of CEM, we temporarily coarsen the data, exact match on these coarsened data, and then run the analysis on the uncoarsened, matched data. This means we are better able to approximate the causal effect of the ‘treatments’, i.e. survivor status and support programme attendance.
To estimate the effect of survivor status on social exclusion and economic well-being, we matched respondents on characteristics that are (1) unlikely to have changed due to survivor status, (2) unlikely to be reported differently due to survivor status, and (3) likely to influence social inclusion and perceived economic well-being. These variables were age-category, education level, ethnic affiliation, religion and territory of residence. To estimate the effect of programme exposure we matched on survivor status as well as on the above-mentioned variables.

Once the observations were matched, we fitted a linear regression with strata fixed effects, assuming that the effect of the programme is constant across all levels of the social inclusion index and the improved economic well-being variable.

Table 3, below, presents the descriptive statistics for all variables used in the analysis. Table 4, below, shows the distribution of key variables for programme participants and the control group, and indicates that the control group is not systematically different in terms of background, such as education levels and number of children, compared to the women who have been participants in support programmes. The women in the control group (non-participants) have a somewhat lower average age. We used Stata for all analyses.

<table>
<thead>
<tr>
<th>Table 3. Descriptive statistics.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>Social inclusion (index)</td>
</tr>
<tr>
<td>Perceived improved living cond.</td>
</tr>
<tr>
<td>SV survivor</td>
</tr>
<tr>
<td>Support programme</td>
</tr>
<tr>
<td>Age group</td>
</tr>
<tr>
<td>15–30 years</td>
</tr>
<tr>
<td>31–45 years</td>
</tr>
<tr>
<td>41–60 years</td>
</tr>
<tr>
<td>&gt; 60 years</td>
</tr>
<tr>
<td>Education level</td>
</tr>
<tr>
<td>No education</td>
</tr>
<tr>
<td>Primary education (some or completed)</td>
</tr>
<tr>
<td>Secondary education (some or completed)</td>
</tr>
<tr>
<td>Ethnicity</td>
</tr>
<tr>
<td>Shi</td>
</tr>
<tr>
<td>Rega</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Religion</td>
</tr>
<tr>
<td>Catholic</td>
</tr>
<tr>
<td>Protestant</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Territory of residence</td>
</tr>
<tr>
<td>Kalehe</td>
</tr>
<tr>
<td>Walungu</td>
</tr>
<tr>
<td>Kabare</td>
</tr>
<tr>
<td>Mwenga</td>
</tr>
<tr>
<td>Uvira</td>
</tr>
</tbody>
</table>
Results

Table 5 shows the results on how survivor status and programme exposure affect perceptions of social exclusion (Models 4a–4c) and improvements in economic living conditions (Models 4d–4f). Strata are matched on age group, education level, ethnic affiliation, religion, territory of residence and survivor status (except in Models 4a and 4d where survivor status is the treatment). Unmatched women are dropped from the models, to reflect the actual N (number in the sample) upon which the results were based.

Model 4a indicates that survivors of sexual violence feel less socially included overall (not taking into account support programmes). This apparently stronger feeling of social exclusion is in line with our first hypothesis. Survivors also report less satisfaction with regard to economic improvement during the last 12 months (Model 4d), although this result is not statistically significant at $p < 0.1$.

We see from Models 4b and 4e that support programmes seem to have a general positive significant effect, both with regard to perceived social inclusion and perceived improved economic well-being, which is in line with Hypotheses H2a and H2b.
As mentioned above, the support programmes tended to include a large share of non-survivors as well. Because we are particularly interested in the effectiveness of the programmes when it comes to improving the situation for survivors (cf. H3a and H3b), we also included interaction terms between survivor status and programme exposure in order to assess this. First, in model 4c we see that the positive effect of programmes appears to be weaker, if anything, for survivors than for non-survivors given the negative sign of the interaction term. However, the interaction term is not statistically significant, and hence we cannot conclude that support programmes have differential effects for survivors compared to non-survivors. In other words, H3a is not supported. We can only speculate as to why survivors are not benefiting more than others. One possible reason for this could be that it is more difficult for survivors to make full use of the help provided by the support programmes due to traumas and health problems. It is also possible that the programmes might (in some cases) make the survivor status more visible in the communities. Alternatively, it could be that the stigma that they face due to ingrained negative perceptions towards survivors in the communities (e.g. Babalola 2014; Finnbakk and Nordås 2018) counterweights the positive benefits of the programmes. So, although survivors are benefitting from the programme overall, and possibly need the assistance the most, they might be facing challenges of social exclusion that the programmes are just not able to effectively help them overcome. However, as shown in Model 4f, we see that the positive effect of programme exposure with regard to perceived improvements in economic well-being

Table 5. The effect of survivor status and support programme exposure on perceived social inclusion and economic wellbeing.

<table>
<thead>
<tr>
<th>Model</th>
<th>Social Inclusion</th>
<th>Social Inclusion</th>
<th>Social Inclusion</th>
<th>Economic Wellbeing</th>
<th>Economic Wellbeing</th>
<th>Economic Wellbeing</th>
</tr>
</thead>
<tbody>
<tr>
<td>4a</td>
<td>−0.741***</td>
<td>(0.279)</td>
<td></td>
<td>−0.090</td>
<td>(0.081)</td>
<td></td>
</tr>
<tr>
<td>4b</td>
<td>0.992*** (0.291)</td>
<td>1.064*** (0.328)</td>
<td>0.699*** (0.083)</td>
<td>0.608*** (0.094)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4c</td>
<td></td>
<td></td>
<td>−0.337</td>
<td>0.410** (0.712)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4d</td>
<td>11.370*** (0.147)</td>
<td>10.206*** (0.253)</td>
<td>10.224*** (0.280)</td>
<td>2.387*** (0.043)</td>
<td>1.772*** (0.071)</td>
<td>1.753*** (0.200)</td>
</tr>
<tr>
<td>4e</td>
<td>1.839</td>
<td>1.666</td>
<td>1.630</td>
<td>0.543</td>
<td>0.438</td>
<td>0.466</td>
</tr>
<tr>
<td>4f</td>
<td>3.260</td>
<td>3.202</td>
<td>3.204</td>
<td>0.981</td>
<td>0.963</td>
<td>0.961</td>
</tr>
<tr>
<td>4g</td>
<td>0.042</td>
<td>0.213</td>
<td>0.206</td>
<td>0.234</td>
<td>0.172</td>
<td>0.190</td>
</tr>
<tr>
<td>4h</td>
<td>897</td>
<td>761</td>
<td>761</td>
<td>955</td>
<td>814</td>
<td>814</td>
</tr>
<tr>
<td>4i</td>
<td>76</td>
<td>79</td>
<td>79</td>
<td>77</td>
<td>80</td>
<td>80</td>
</tr>
</tbody>
</table>

Coarsened exact matching (CEM) with fixed effects regression. Standard errors in parentheses. ** Significant at 5%; *** significant at 1%.
is stronger for survivors, and significantly so. In fact, the effect is more than 1.5 times stronger for survivors than for non-survivors.

The main take-home lesson from these results (H3a-b) is that support programmes seem to significantly improve women’s perceived economic well-being (both for survivors and others), and the programmes are particularly beneficial for survivors in this respect. However, when it comes to social inclusion, the picture is slightly different. Overall, programmes seem to have the intended effect of increasing the attendants’ perceived level of social inclusion. However, there is no difference in the effect for survivors and others. Hence, there seems to be particular potential for improvement as regards how the programmes work actively to socially integrate survivors of sexual violence in the community and family.

**Discussion and conclusion**

Sexual violence is believed to have detrimental long term negative effects on the lives of survivors and, when militarized, on entire communities. In eastern DRC, the problem of sexual violence is well known and has occurred on a large scale. Many programmes have therefore been established that assist survivors in overcoming the problems associated with sexual violence. However, there are relatively few population-based studies available that systematically compare the situation for survivors and non-survivors in general, and there is a significant knowledge gap in terms of evidence on how programmes ameliorate social exclusion and economic well-being of women in general and in eastern DRC in particular.

This study represents a first systematic survey-based analysis of the situation for women in eastern DRC focusing on whether the feeling of inclusion/exclusion and economic well-being is different for survivors and non-survivors, and, in particular, what impacts programming for survivors can have. Based on a survey of 1203 women in South Kivu carried out in 2015, we found that survivors feel significantly less socially included than other women. The support programmes improved social inclusion and economic well-being for both survivors and others, and the improvements in economic well-being were significantly higher for survivors than the other women.

Sexual violence is a notoriously difficult topic to research due to the ethical and data access challenges related to *inter alia* the trauma and stigma most often associated with being a survivor of such violence. However, the challenge can be over-reporting as well as underreporting, a possibility if there is significant support given to individuals who self-report as victims of these types of abuses. In our specific case, the latter is less of a concern given the selection of participants into programmes is not conditional on being a sexual violence survivor. However, there are other potential limitations of this study. As is often the case, we could not establish a true baseline for the participants’ economic
well-being or social inclusion (prior to entering the programme or prior to becoming a sexual violence victim), for practical reasons. We were also not able to conduct a study with an experimental design, which would require that the research team randomly assign support to potential benefactors. This, we believe, will often be a limitation in research on programming for sexual violence survivors. Yet, given this inherent limitation, the matching technique we use in the current study is the most rigorous method for observational data.

Female empowerment is of critical importance in a country like DRC, and it is likely that the need is particularly great among survivors of sexual violence, who are often rejected by their families and husbands. Support programmes can be extremely valuable in providing benefits to such vulnerable populations. Our results also document these benefits, and the wider benefits to women who are vulnerable but not survivors of SGBV. Whether the socio-economic improvement in a survivor’s situation helps her in a significant way to gain acceptance and inclusion in the more intimate and personal spheres such as in the family is less certain. A main implication of the findings from our survey of women in eastern DRC seems to be that efforts to assist survivors of sexual violence also need to include a stronger focus on the attitudes among the survivors’ families and communities. Overall, there is an acute need for continuous support and improvements of the programmes to identify and implement new efficient ways to overcome social exclusion of survivors across various social settings.

Notes

1. As a robustness check, we repeated our analysis excluding these 63 women. The results are nearly identical, and available upon request.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Christine Amisi is a medical doctor at the Panzi Hospital and a principle researcher at the International Centre for Advanced Research and Training (ICART).

Rosalie Biaba Apassa is a Research Assistant at ICART.

Aline Cikara is a Research Assistant at ICART.

Gudrun Østby is a Senior Researcher at PRIO.
Ragnhild Nordås is a Senior Researcher at PRIO and Assistant Professor in Political Science at the University of Michigan.

Siri Rustad is a Senior Researcher at PRIO.

John Quattrochi is a researcher at ICART and Assistant Professor of Public Health at Simmons University.

References


