NEEM Foundation Counselling on Wheels Programme

Evaluation Report

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Dr Chris Merritt, Professor 'Funmi Olonisakin, Professor Melanie Abas, Natasha Chilambo, Sarah Derveeuw, & Dr Kimberley Goldsmith

African Leadership Centre & Centre for Global Mental Health, King's College London, UK

In collaboration with Dr Fatima Akilu & Dr Abiye Iruayenama, NEEM Foundation, Nigeria

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The Boko Haram conflict in north-east Nigeria has created a situation of acute and enduring humanitarian need over past decade. Since 2017, the **NEEM Foundation** has sought to address the psychosocial aspects of this crisis through its innovative **Counselling on Wheels** (CoW) programme.

CoW has two main components: **therapy** services and **peacebuilding** activities. Together, these aim to improve **mental health** and wellbeing, foster **tolerance**, and build **resilience** to violent extremism among affected communities.

Therapeutic treatments comprise individual **assessment**, followed by a three-week group **intervention** to strengthen coping skills, relationships, and behavioural responses to adversity. Peacebuilding activities include **leadership** training, facilitating **dialogue** between stakeholders, and partnerships for **advocacy** on issues such as gender-based violence.

In just three years, CoW has engaged more than **20,000 people** in therapy services, while reaching nearly **2,000 people** through its range of community-based peacebuilding initiatives. This evaluation was conducted to assess the implementation outcomes and effectiveness of these activities, primarily CoW's therapy services.

For the **evaluation** of therapy services, a sample of 3,091 participants (age 16+) who had received assessment and group treatment in 2019 was selected. A single-arm **pre-post design** was used to compare participant scores on **three psychological scales** (Vulnerability to Violent Extremism; Depression, Anxiety and Stress; and Post-Traumatic Stress Disorder) before and after treatment. A mixed-effects linear regression model was used to adjust for clustering (community), age and sex in data analysis.

The **results** of this analysis showed **significant reductions** in scores on all three variables following treatment. This suggests that the therapy sessions improve mental **wellbeing** and reduce **vulnerability** to violent extremism, though some caution is needed in interpreting these findings, given the lack of a control group. In addition to these benefits, CoW was found to be broadly **acceptable** and **feasible** for delivery in this setting at **low cost**, with CoW's total cost equating to an average of US$56 per beneficiary starting in group therapy treatment.

Together, this indicates that, with appropriate adaptations, CoW has the potential for **sustainable delivery** and **scale-up** at low cost to meet psychosocial needs of communities, both in Nigeria and in other post-conflict settings. The evaluation team then convened a **workshop** of diverse research experts and NEEM staff to discuss the findings of this report and suggest ways forward for CoW, which are also presented here.

INTRODUCTION

BACKGROUND

More than one quarter of the world's nation states are currently experiencing war and conflict, with a notable recent increase in African crises.[1] As the majority of humans affected by conflict live in low- and middle-income countries (LMICs), this violence compounds the significant challenges already faced by these communities, including poverty, food insecurity and health problems.[2]

Experience of conflict, economic stress and social or political marginalisation are all thought to contribute to a person's likelihood of supporting or engaging with armed insurgency and violent extremism, thereby maintaining a cycle of violence in conflict-affected societies.[3-4]

In recent decades, healthcare has been proposed as a mechanism for conflict resolution and peacebuilding.[5] These initiatives cite health practitioners' neutrality and abilities to engage closed communities and treat trauma as potential mechanisms for achieving 'peace through health'.[6] Despite being adopted by the World Health Organisation in 1998, however, the concept of 'Health as a Bridge for Peace' has received less attention in recent years due to difficulties in demonstrating its effectiveness, as well as debate over the possible politicisation of healthcare in conflict-affected populations.[7]

Nevertheless, the strong empirical relationship between conflict and poor health, especially mental health, cannot be ignored.[5] It is widely recognised that exposure to conflict is associated with the development of mental health problems, particularly Post-Traumatic Stress Disorder (PTSD), depression and anxiety, which lead to impaired functioning and distress.[8] Given the high burden of mental ill health in conflict-affected populations, mitigating these negative psychological impacts is considered a global public health challenge.[9] Consequently, there is a need for effective interventions to alleviate distress and improve functioning at individual and community levels.[10]

Increasingly, mental health and psychosocial interventions are becoming part of humanitarian responses to conflict, and peacebuilding efforts.[11] International guidelines for their inclusion describe both pharmacological and psychological treatments.[12] A recent Cochrane review of research found that psychological therapies in LMICs affected by humanitarian crises were effective in reducing symptoms of PTSD, depression and anxiety.[13]

In Africa, psychosocial programmes have been established to assist communities in a number of crisis and conflict-affected countries. These have included interventions to help former combatants in Democratic Republic of Congo (DRC)[14] and Uganda,[15] survivors of civil violence and instability in Burundi,[16] DRC,[17] Mozambique,[18] Rwanda,[19] Sierra Leone,[20] and Zimbabwe,[21] and refugee populations from Rwanda, Somalia[22] and Sudan.[23]

Most of these programmes recruited and trained local lay counsellors to deliver interventions which adapted evidence-based therapies, such as Cognitive-Behavioural Therapy (CBT), Trauma-Focused CBT, or Narrative Exposure Therapy. Broadly positive results were found in most studies, with symptoms of PTSD and depression reducing. Some treatment packages also featured psychoeducational material to counter stigma

and promote tolerance, and found increases in prosocial behaviour following the intervention.[17,19]

However, while many programmes have been successful at improving the mental health of populations affected by conflict, few have incorporated a specific peacebuilding component aimed at enhancing resilience and reducing vulnerability to violent extremism. If such vulnerability can be reduced and resilience built in these communities, alongside improved mental health, it will help to lay the foundations for lasting peace and community reintegration.[24]

Accordingly, there is high demand in resource-limited, conflict-affected settings for scalable, low-cost psychosocial interventions which alleviate distress and improve functioning, but also include specific peacebuilding components.

This report aims to evaluate the implementation outcomes and scale-up potential of one such intervention: NEEM Foundation's Counselling on Wheels programme, delivered in north-east Nigeria during the Boko Haram conflict.

NIGERIA'S BOKO HARAM CONFLICT

Jama'atu Ahl as-Sunnah lid-Da'wati wa'l-Jihad, also known as Boko Haram, is a radical Salafist Islamist movement that was established in north-east Nigeria in 2002.[25]

Since 2009, under new leadership, its actions have become violent, with the launch of an armed insurgency in Borno state. This conflict continues today, and now affects the countries bordering north-east Nigeria, including Chad, Cameroon and Niger.[26]

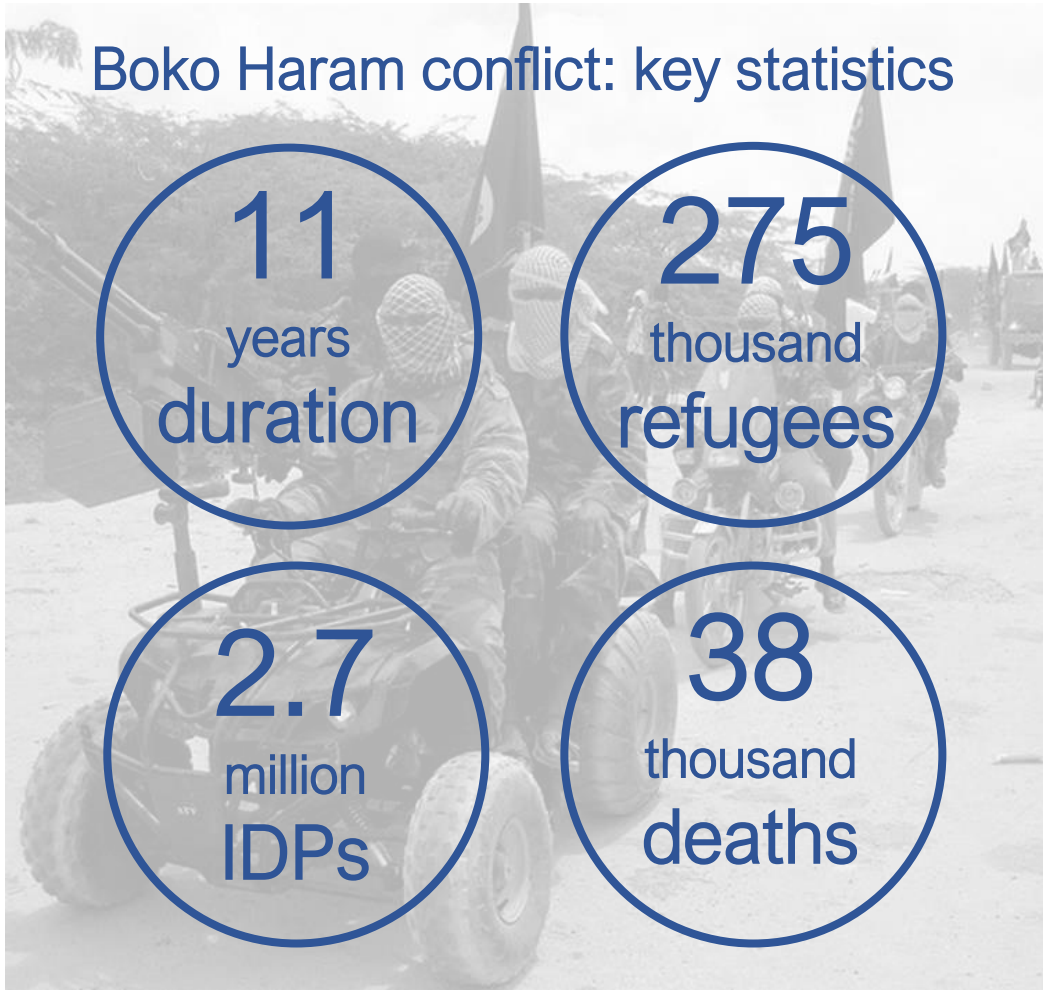
Boko Haram has attacked both government forces and civilians, including with suicide attacks, and mass civilian kidnappings. In 2014, the group gained control of large areas of land in Borno state, before pledging allegiance to Islamic State, though this led to an ideological split.[27] Nigerian security forces and sanctioned militia groups have responded with increasing organisation and military power in recent years.[25]

All violent deaths from this conflict are estimated at around 38 thousand,[28] and in 2015 Boko Haram was listed as the world's deadliest terrorist organisation.[29]

The United Nations estimates that there are currently more than three million people displaced by this conflict. 90% of those affected are Internally Displaced People (IDPs), and the remainder are refugees in neighbouring countries.[30-31] These individuals have significant humanitarian needs, including food, shelter and medical care. Many also require psychological help as a result of traumas experienced during the conflict.[32]

Additionally, community re-integration of those who have been directly involved in the conflict poses a challenge. Both perpetrators and victims of violence – particularly young female kidnap victims – are highly stigmatised and struggle for acceptance after returning home following their experiences.[33]

Collectively, the psychosocial needs of communities affected by the Boko Haram conflict in north-east Nigeria represent an acute, enduring and large-scale challenge.



PROGRAMME DELIVERY

NEEM FOUNDATION

The NEEM Foundation is a not-for-profit, non-governmental organisation set up in Nigeria in 2017 in response to the problems associated with the Boko Haram conflict. NEEM offers a range of psychosocial services to communities in north-east Nigeria, focussing on mental health interventions and peacebuilding initiatives, alongside interdisciplinary research work.[34]

NEEM engages communities, facilitates dialogue between stakeholders, and promotes rehabilitation and reintegration of those affected by the insurgency. The longer-term aim of these activities is to prevent violent extremism by fostering community resilience and countering opportunities for radicalisation.[32]

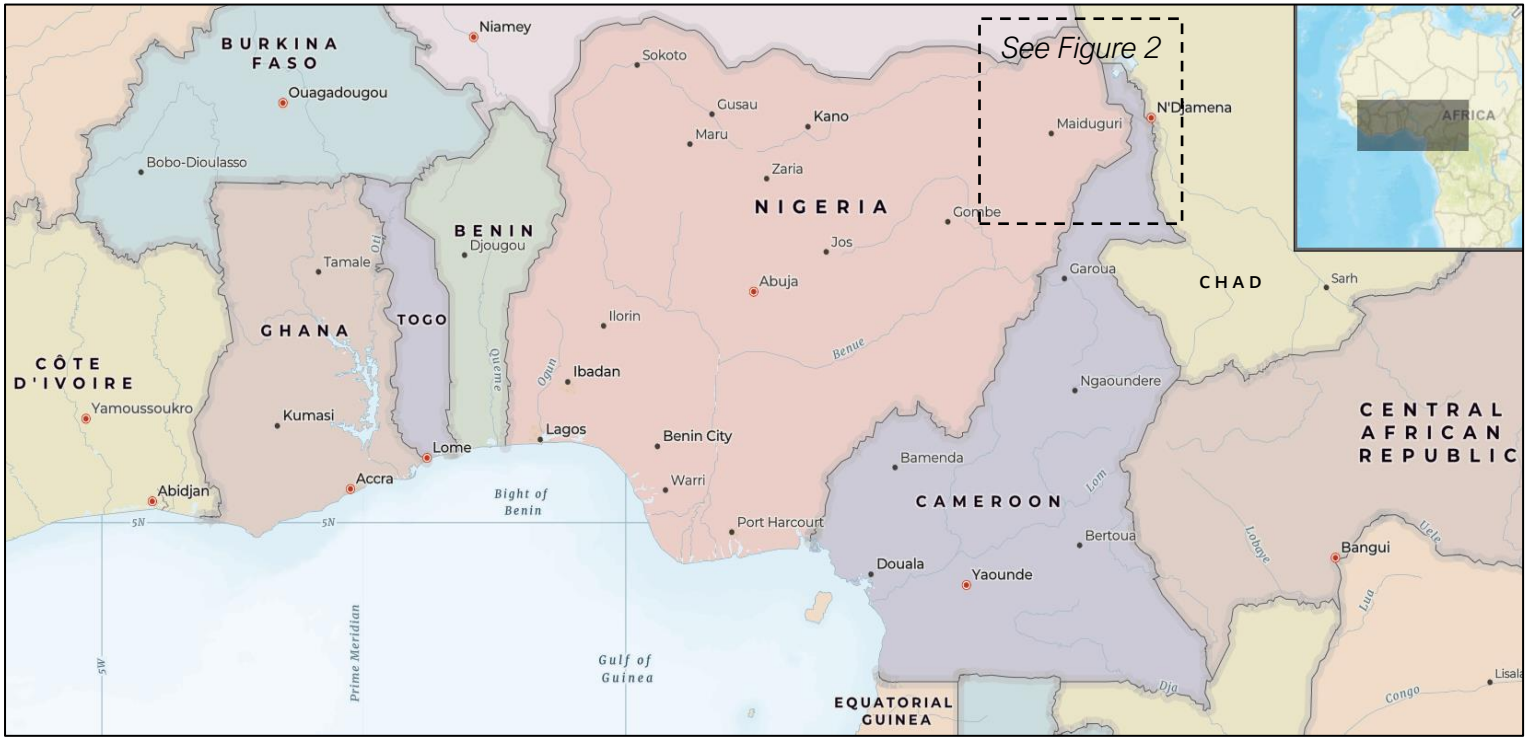


Figure 1: Map of West Africa with north-east Nigeria project location region highlighted

SETTING: BORNO STATE

Borno is one of Nigeria's thirty-six federal states, and is located in the north-east of the country, bordering Niger, Chad and Cameroon (see Figure 1). Borno state's population was projected for 2016 at 5.9 million inhabitants,[35] comprising more than 40 ethnic groups, of which the largest is Kanuri.

Borno's capital and main municipal area is Maiduguri (see Figure 2). 2020 UN estimates put Maiduguri's population at 786,000.[36] However, the true figure is likely to be much higher due to the large number of IDPs now living in the city, with some estimates exceeding 2 million.[37]

Borno experiences high levels of illiteracy, unemployment, poverty and food insecurity, which are considered both cause and consequence of its instability.[38]

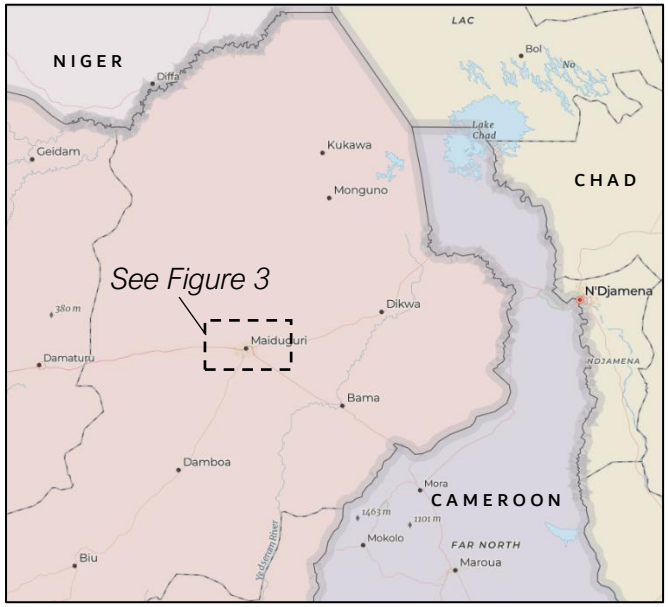


Figure 2: Map of Borno state showing project location in Maiduguri with neighbouring international borders

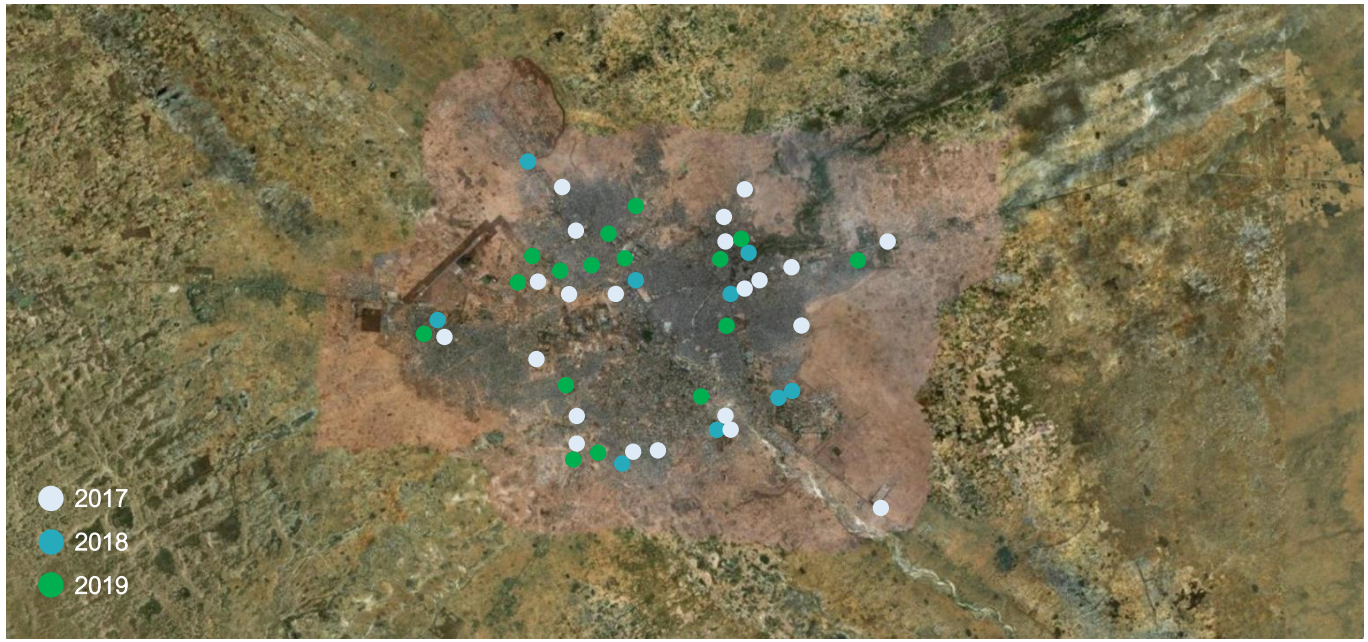


Figure 3: Satellite image of Maiduguri municipality with communities engaged during CoW project 2017-2019

PROGRAMME: COUNSELLING ON WHEELS

In this situation of enduring humanitarian crisis, NEEM established the Counselling on Wheels (CoW) programme to meet the needs of people in the region, focussing on the urban population of Maiduguri and its greater municipal area (see Figure 3).

CoW comprises two main interventions: 1) Peacebuilding activities; and 2) Therapeutic services. NEEM's team of counsellors comprises 21 Nigerian men and women, mostly with psychology and related degrees, who are given a two-week intensive training course in delivering mental health therapy, safety and assessment. Following this, counsellors receive ongoing training and mentoring one day per week from NEEM's senior psychologists.

PEACEBUILDING ACTIVITIES

Peacebuilding activities are carried out at community level, and include capacity building workshops for local leaders, engagement with schools to promote narratives countering violence (including Gender-Based Violence; GBV), multi-stakeholder workshops to increase social cohesion in communities, and consultation forums. All these events aim to raise awareness of challenges, foster dialogue, and build community resilience to violent extremism.

THERAPY SERVICES

Therapy services constitute the majority of NEEM's work, and comprise advocacy, individual assessment and group treatment using a flexible model (see Figure 4). First, NEEM identifies communities within the greater Maiduguri area and approaches community leaders (these may be district officials, religious leaders, elders or representatives of specific demographic groups, such as young people or

women. The intervention is presented and discussed, and concerns or questions are addressed. Leaders then disseminate this information to community members.

Next, NEEM visits the community again for enrolment and pre-treatment assessments. One-to-one sessions are held with those who would like treatment. Following consent, demographic details and a brief personal history are taken, and psychometric questionnaires are completed to assess baseline mental health and vulnerability to violent extremism.

When the assessments are complete, groups are established within the community to conduct the treatment. This follows a three-session protocol, informed by CBT and narrative approaches, with each session lasting one hour and taking place weekly. Creative activities, such as music, dance, drama, art and crafting, are built into the sessions, in consultation with participants, to help them express their experiences. Relaxation techniques and vocational counselling are also incorporated. In addition to mental health issues, participants are encouraged to raise, discuss and challenge psychological aspects of vulnerability to violent extremism, such as ideology and beliefs.

Individuals who present with significant problems, risk issues, or very high levels of distress are also offered one-to-one sessions in between their group work. After all therapy sessions have been delivered, NEEM conducts a post-treatment assessment and repeats the psychometric questionnaires that were given pre-treatment.

Finally, NEEM works with community members who have received treatment to establish peer support groups, which continue to provide a safe space to meet once NEEM has left the community. A two-month post-intervention check-in is offered for these groups, to follow their progress and offer support and advice.

THERAPY INTERVENTION: THEORY OF CHANGE

NEEM emphasises individual psychological wellbeing as the foundation of collective resilience to conflict and peacebuilding, describing its approach to the therapy work as follows:

"Survivors of the violent insurgency in north-eastern Nigeria often have multiple layers of trauma, and are often psychologically scarred by past acts of violence, systemic injustice and internal conflict. The negative effect of this subjective internal traumatic reality has many undesired consequences on an outward and social approach toward peacebuilding. Community members often have to deal with the loss of trust and accountability. In this context, adverse social patterns are at risk of emerging, such as aggression, drug and substance abuse, domestic violence, rape, gang culture, and organised criminality. Morality and ethical considerations become flexible and transactional in such settings, which impedes the peacebuilding process. Therefore, NEEM Foundation's approach to extrinsic peacebuilding and social cohesion starts first by addressing hidden and intrinsic emotional and cognitive challenges brought on by the conflict."

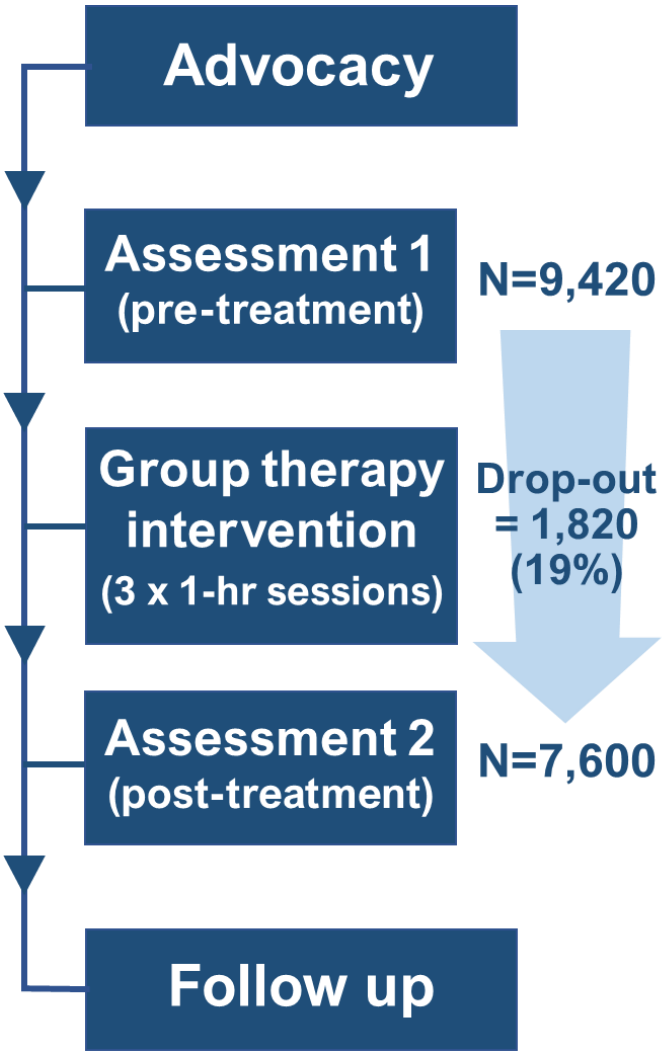


Figure 4: Flowchart for therapy intervention with total number of beneficiaries engaged in 2019 (note: drop-out data not available for 2017-18 as post-treatment assessments were not routinely conducted until 2019)

EVALUATION

THERAPEUTIC SERVICES: METHODS

An independent evaluation of the CoW psychotherapy intervention was conducted by researchers at King's College London, UK, between July-September 2020. The evaluation of therapy outcomes was conducted according to the following procedure:

PARTICIPANT RECRUITMENT
Participants were recruited to the CoW therapy intervention as described above under the section 'Programme: Counselling on Wheels' (pp.7-8). A sample was selected from this dataset of participants for analysis, as detailed below under 'Sample' (p.10).

DATA ANALYSIS
Accounting for clustering, as well as confounding effects from age and sex, a mixed-effect linear regression was carried out to compare differences in three psychometric scores (see 'Measures' in this section) between pre-intervention and post-intervention time points, four weeks apart. Data were cleaned in MS Excel and analysed in STATA.

A virtual workshop was convened to discuss the findings of the evaluation and suggest ways to take forward the work of CoW (see 'Evaluation Workshop' on p.16).

MEASURES

Participant data was collected at one week pre-intervention and one week post-intervention. Along with demographic data on age, sex, education, employment status and ethnic background, further measures of treatment outcomes were collected using the following three psychometric questionnaires:

- **Vulnerability to Violent Extremism Scale (VVES)**
  The VVES was developed by NEEM and assesses 16 variables that are believed to contribute to a person's vulnerability to violent extremism (e.g. ideology, relationships, grievance, identity, poverty). It contains 80 items rated on a Likert scale from 1 ('strongly disagree') to 5 ('strongly agree') and therefore yields a score for each respondent between 80-400. A score of 320 and above indicates 'high risk', while a cut-off score of 160 and below indicates 'low-risk'.

- **Depression, Anxiety and Stress Scale – 21-item (DASS-21)**[39]
  The DASS-21 is a self-report questionnaire consisting of 21 items, with seven items in each of three subscales: depression, anxiety and stress. Individuals are asked to score every item on a scale from 0 ('did not apply to me at all') to 3 ('applied to me very much'). Sum scores are computed by adding scores on the items across each subscale and multiplying them by 2. Total scores are obtained by summing all three subscales, yielding a figure between 0-126. Severe levels of depression, anxiety and stress are indicated by subscale scores of 21, 15 and 27 respectively.

- **Post-traumatic Stress Disorder Scale – 8-item (PTSD-8)**[40]
  The PTSD-8 is an 8-item scale based on DSM-IV criteria for PTSD and evaluates three symptom clusters: intrusion, avoidance, and hypervigilance behaviours. Items are answered on a four-point Likert scale ('not at all' (1), 'a little' (2), 'quite a bit' (3), and 'all the time' (4)). Total scores range from 8 points to 32, with a cut-off score of 17+ indicating probable PTSD.

THERAPEUTIC SERVICES: RESULTS

SAMPLE

From 2017-2019, 20,673 participants were initially recruited into the programme at pre-treatment assessment phase. A sample of this population was taken to conduct the evaluation, using the following inclusion criteria:

- Participants who received the therapy intervention in 2019 only (n=9,420), as all participants in this cohort received all three psychometric measures (VVES, DASS-21, and PTSD-8) both pre- and post-treatment.
- Participants aged 16 and over only. This excluded five of the 18 community clusters engaged in 2019, as these consisted largely of unaccompanied minors, leaving 13 communities' data for analysis.

From the remaining total of 5,750 participants with pre- and post-treatment measures, 2,659 were lost to follow-up as their baseline data could not be matched to a post-treatment ID. This resulted in a final sample of 3,091 participants used for the evaluation. This group was mostly female (78.2% vs. 21.8% male), unemployed (78.3% vs. 21.7% currently in employment) and without any formal education (64.9%). Figure 5 shows the descriptive statistics for this sample's demographic profile.

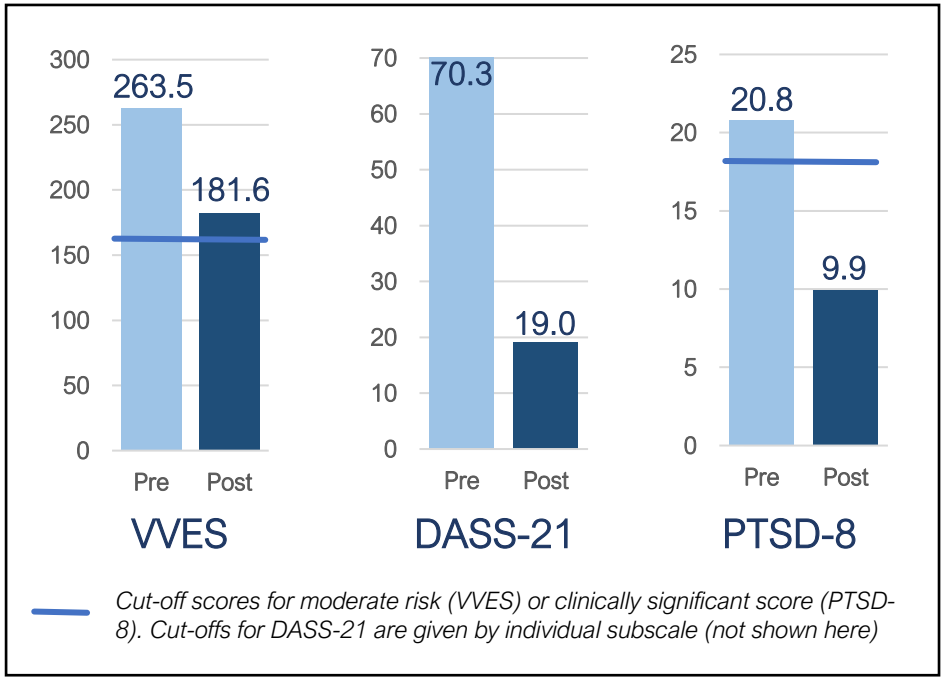


Figure 6: Pre- and post-intervention means for psychological variables

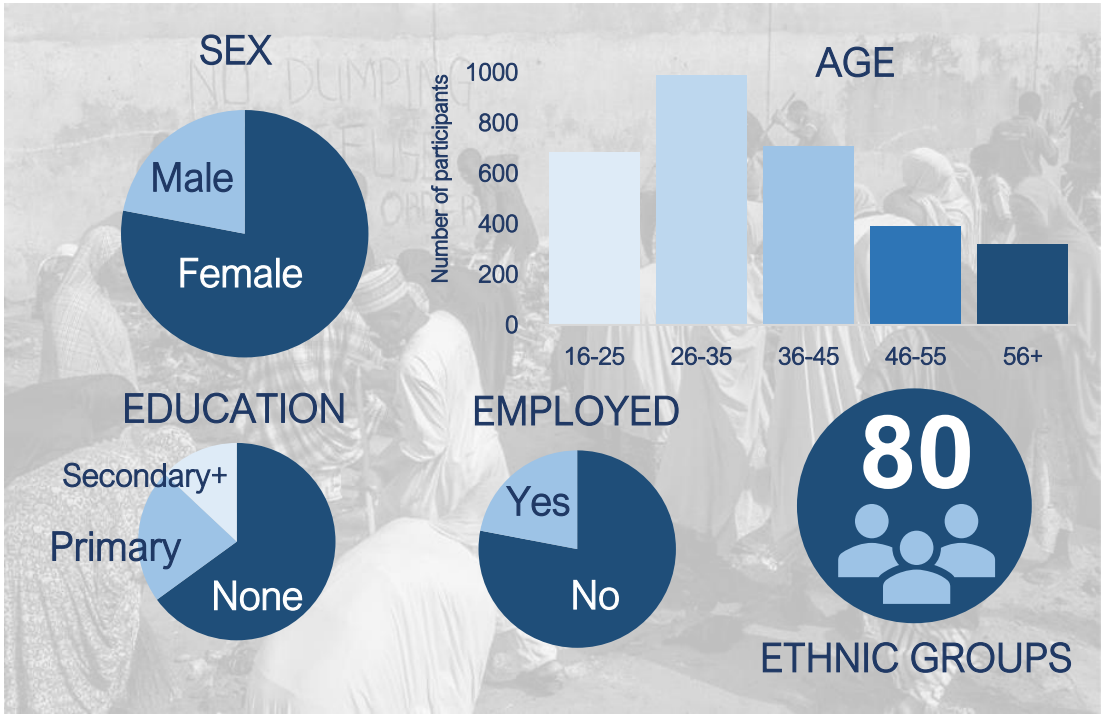


Figure 5: Sample demographic data (frequency figures).

ANALYSIS: MIXED-EFFECTS LINEAR REGRESSION

Results from a mixed effects linear regression model indicated:

- Mean VVES score was 81.85 points lower at post-intervention (181.6) as compared to pre-treatment (263.5) [95% CI 78.2-85.4], representing an average drop from 'high risk' to 'moderate risk' of vulnerability to violent extremism.
- Mean DASS-21 score was 51.3 points lower at post-intervention (19.0) as compared to pre-treatment (70.3) [95% CI 50.6-52.1], representing an average reduction from scores likely to indicate 'severe' to a total indicating 'normal' (sub-clinical) or 'mild' difficulties with depression, anxiety and stress.
- Mean PTSD-8 score was 10.8 points lower at post-intervention (9.9) compared to pre-treatment (20.8) [95% CI 10.7-11.0], indicating a clinically significant drop from an average score likely to indicate the presence of PTSD, to a score below the clinical threshold (see figure 6 for graphs illustrating these changes).
- Overall, a multilevel mixed-effects linear regression showed a significant reduction in VVES, DASS-21 and PTSD-8 scores between pre-treatment and post-treatment, adjusting for community effect, age and sex ($\beta 0$ = -35.24 [-30.17, -40.31], p<0.001).

PEACEBUILDING ACTIVITIES: OUTCOMES

In addition to evaluating CoW's therapy intervention, the programme's peacebuilding arm also recorded a number of important outcomes. A total of nearly two thousand people took part in these activities, across the range of events (see figure 7).

One key achievement was the convening and facilitation of 22 community meetings, attended by 875 stakeholders in total, to promote social cohesion. At these meetings, representatives of all key groups in the community were invited to discuss issues of concern. These topics varied considerably between locations, but included discrimination on the basis of religion, gender, age, ethnicity or IDP status, reintegration of former Boko Haram fighters, public health challenges, and how parents can engage their children to help reduce youth crime and improve formal school attendance.

Two capacity building workshops were run to train a total of 60 traditional leaders in peacebuilding techniques to tackle vulnerability to violent extremism in their communities. These encompassed ways to foster tolerance and forgiveness, while reducing prejudice, stereotyping and stigma.

NEEM also established 5 school partnerships, reaching 295 pupils (212 female, 83 male), for advocacy and sensitisation to GBV issues. A key component of this was the delivery of talks in schools to raise awareness of

Figure 7: Outcomes of peacebuilding activities with participation numbers (on right)

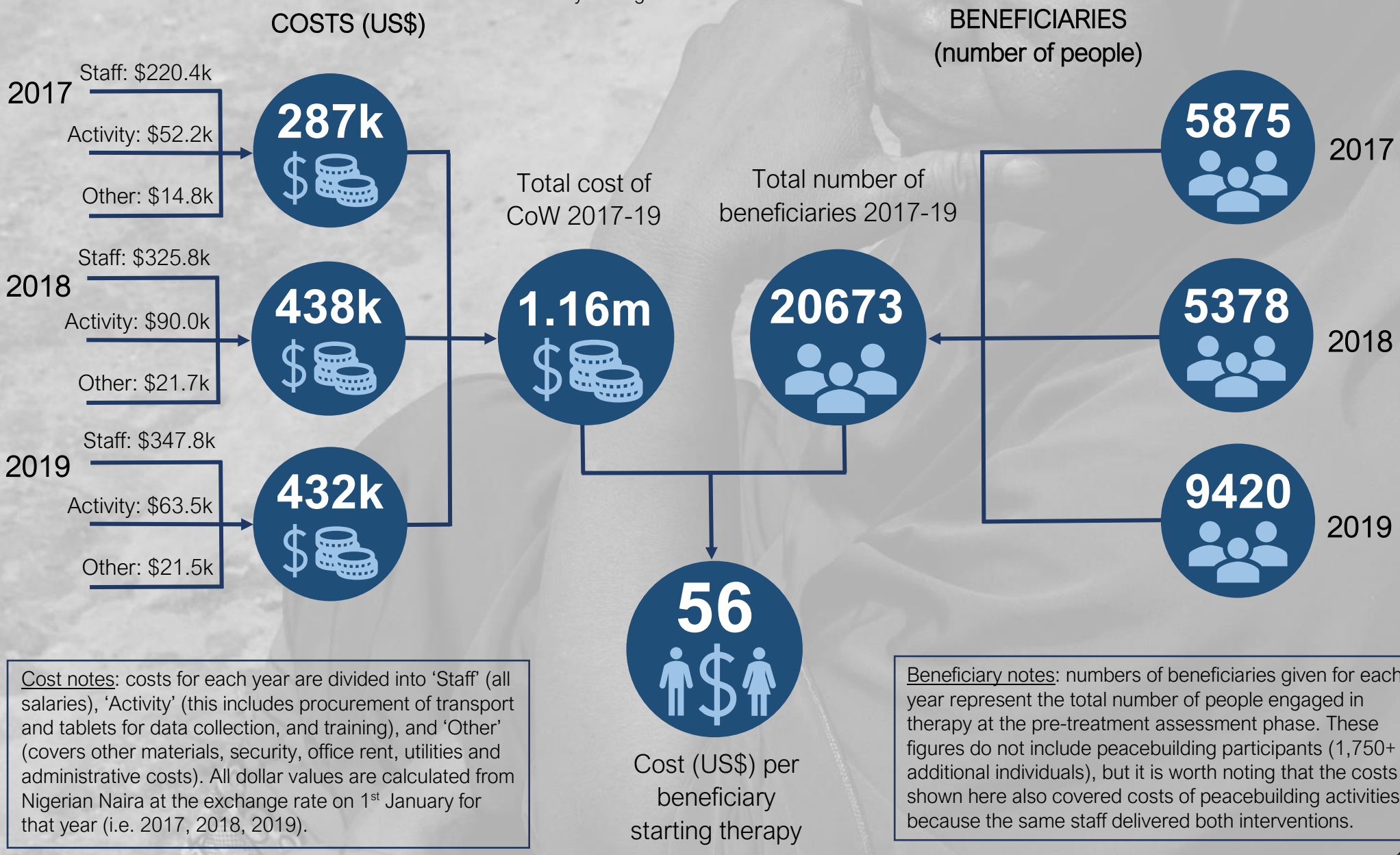
GBV and how instability created by conflict can act as an enabling environment for it.

In addition to this, NEEM convened a one-off consultation forum with representatives from official security organisations, including the military, police and Civilian Joint Task Force (CJTF). 20 representatives attended this forum, and discussed softer 'hearts and minds' approaches to achieving security in Borno state.

Finally, NEEM created two peace murals: walls which community members were encouraged to use to express messages of peace and tolerance. More than 500 individuals contributed to the walls, conveying their support for shared values such as peace, forgiveness, tolerance and unity. Importantly, these messages were written in their own languages, using stencils to represent each voice equally in size.

COST DATA AND ANALYSIS

This section details the costs of CoW and number of beneficiaries engaged in the programme between 2017-19, showing a calculation of the cost per beneficiary for therapy treatment (US$56 per person for those starting treatment; figures for those completing treatment not available for 2017-18). This indicates that the programme has feasibility through low cost.



Cost notes: costs for each year are divided into 'Staff' (all salaries), 'Activity' (this includes procurement of transport and tablets for data collection, and training), and 'Other' (covers other materials, security, office rent, utilities and administrative costs). All dollar values are calculated from Nigerian Naira at the exchange rate on 1st January for that year (i.e. 2017, 2018, 2019).

Beneficiary notes: numbers of beneficiaries given for each year represent the total number of people engaged in therapy at the pre-treatment assessment phase. These figures do not include peacebuilding participants (1,750+ additional individuals), but it is worth noting that the costs shown here also covered costs of peacebuilding activities, because the same staff delivered both interventions.

BENEFICIARY FEEDBACK

To date, feedback from those who participated in the CoW programme has not been collected formally or routinely. However, anecdotal feedback has been received on experiences both of peacebuilding activities and therapy services. While this feedback should be treated cautiously because of its inconsistent collection, it nevertheless indicates a good level of acceptability for the interventions among those who took part.

The feedback that was received illustrates some of the benefits experienced by those who engaged in CoW activities. For therapeutic interventions, several participants spoke about the support they had received from NEEM counsellors and their peers, and how this had contributed to improved mood, reduced distress, and better daily functioning for them. Those who took part in peacebuilding activities noted changes in their attitudes towards other religions, as well as towards former Boko Haram fighters, characterised by greater tolerance and understanding of differences within their communities. Some example quotes from individuals who received CoW services are shown below.

"I was in a state of devastation and worry until NEEM visited the camp. …The support group we created… has taught me love and harmony… it has made me see life in a better perspective. I have also become a motivator to others… I am gradually healing day by day."

Female therapy participant

"I grew up in a village where there are no other religions except Islam. All my life I was told to hate anybody that is not a Muslim. The meeting with other religions and your explanations has opened a new page in my life."

Community meeting participant

"I understand that, if we refuse to accept the repentant Boko Harams back into our community, the ones [Boko Haram fighters] in the bush still need them, and they will come back to the community to hurt us again."

Community meeting participant

"We need to understand that, to achieve communal peace, there has to be tolerance and togetherness… Peaceful existence within communities is inclusive of youths, women, religious and community leaders… We must have dialogue with all aggrieved stakeholders, including [Boko Haram]."

Leadership capacity building training participant

COUNSELLORS' EXPERIENCES

NEEM's counsellors were all surveyed using a bespoke feedback questionnaire about their experiences of receiving training and delivering therapy in the communities engaged in CoW. While no formal assessment of competence was conducted following training, counsellors described increases in knowledge of mental health issues and intervention techniques.

Counsellors noted that the training increased their understanding of the relationship between environmental situations (conflict, abuse and other traumatic experiences), mental health symptoms, and applications of various therapeutic approaches to reduce beneficiaries' distress. Crucially, they described their work not only in terms of directly improving beneficiaries' current situations, but also to the prevention of broader community-level issues, such as discrimination, in the future.

Some illustrative quotes from counsellors describing their experiences of training and therapy are shown in the two boxes here.

Being trained as a counsellor…

"…furthered my understanding of primary, secondary and complex PTSD."

"…improved my awareness on parental role and ways of preventing child sexual exploitation and abuse."

"…on trauma has broadened my knowledge… of the healing process."

"…helped me to understand the impact of violent extremism and the need to promote PVE (Preventing Violent Extremism) core values among individuals in communities."

"…helped me to understand the use of painting, dancing and music as a therapy form to help clients externalize their traumatic experience, as well as helping to promote peaceful coexistence among various ethnic and religious groups."

Delivering therapy in the communities…

"…has helped me to understand the community dynamics and the appropriate methods to use in each community."

"…helped me to understand cause and effect, form impressions about the clients' challenges and ability to draw a suitable treatment plan to help clients overcome distress."

"…[by] applying counseling skills and appropriate techniques has helped me to further understand client challenges from their point of view."

DISCUSSION OF FINDINGS

The results of CoW's peacebuilding activities and psychotherapy interventions are very promising and suggest that such a programme of interventions could be feasible, acceptable, and beneficial to conflict-affected populations in need. A significant drop in vulnerability to violent extremism, and clinically significant reductions in PTSD, depression, anxiety and stress were observed in participants, one week after completing the three-session group therapy programme.

Nevertheless, there were several limitations to the programme, which correspond to challenges in its implementation. These should be kept in mind when assessing CoW's outcomes, but can also be used to indicate future modifications to delivery and monitoring, which could capture more robust evidence for the programme's effectiveness.

Caution is needed in interpreting the highly significant and large effects observed in psychometric data for therapy groups, particularly given that the intervention was of relatively short duration (3 x 1-hour sessions). There are a number of possible explanations for these findings:

- There was no control arm in the programme, meaning that another, unmeasured factor could be responsible for the improvements recorded.
- There is potentially a large placebo effect for an external intervention, alongside demand characteristics of scales administered by counsellors, where positive responses at end of treatment would be socially desirable. NEEM staff noted the initial expectation that participants would receive something material for taking part, even though it was clearly explained to them that this would not happen. Despite their disadvantages over self-report measures, clinician-administered scales were unavoidable for CoW due to low literacy levels among the majority of their participants.
- Post-intervention measures were recorded immediately at end of treatment, and no follow-up measurements were conducted, so it is not known if the effects observed at end of treatment persisted. Other research literature suggests that these effects tend to diminish with time elapsed since the intervention.[10]

- The DASS-21 and PTSD-8 scales were not validated for use in this population, nor were they culturally adapted. Their translation from English to other languages for non-English speakers was verbally *ad hoc* by counsellors and not standardised.
- Drop-out rate was 19%, and paired data were only available for 52% of participants engaged in 2019.[b] It is possible that those who attended the post-treatment assessment were the best responders, thereby skewing the results towards larger positive effects.

Furthermore, number of sessions attended, and which participants received additional one-to-one therapy, were not recorded digitally, meaning that assessment of dose-response effect was not possible. This data would have permitted more detailed evaluation of change and active treatment components.

Evaluation of acceptability was limited by the lack of systematic feedback collection from participants on their experiences. NEEM could consider running

a series of qualitative interviews or focus groups among those communities already engaged, potentially held alongside 6- or 12-month follow-up evaluation to assess whether the benefits from the intervention have persisted.

However, it should be noted that some of these limitations were due to the extremely difficult circumstances in which the CoW programme was delivered. NEEM Counsellors travelled out to communities and worked in challenging field environments. In doing so, they enabled many more people to be reached than if they had required beneficiaries to travel to a clinic.

Often, the communities engaged were experiencing active conflict or its immediate aftermath, with associated difficulties of food security, sanitation and health problems. NEEM counsellors were also placed in some degree of potential danger while delivering CoW sessions and should be recognised for the level of data they did manage to collect under these conditions, in a population with very limited literacy and experience of responding to surveys, particularly psychological assessment.

EVALUATION WORKSHOP

A virtual workshop was organised by the CoW evaluation team at King's College London to discuss the initial draft of this report and consider ways forward. The 25 attendees included NEEM staff as well as a diverse panel of KCL researchers from across relevant university faculties.

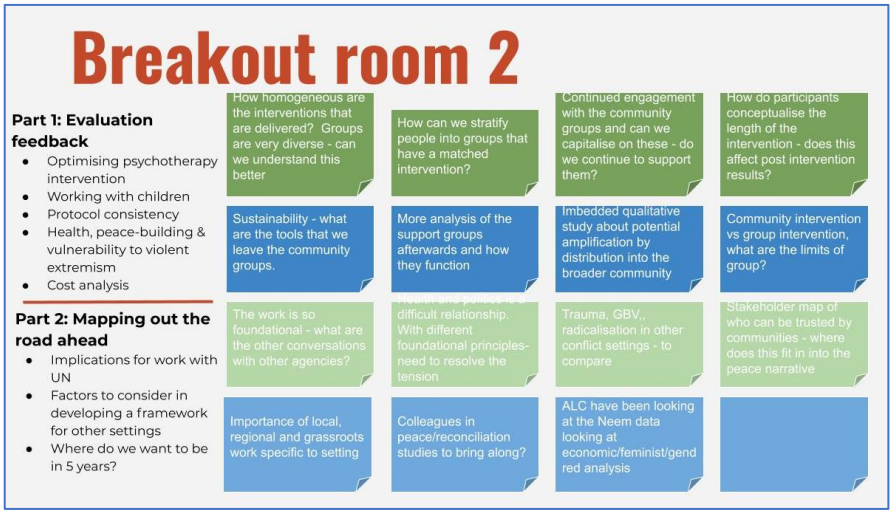


Figure 8: Still from virtual evaluation workshop 'break-out' discussion

After introductions and a project overview, three subject-matter experts were invited to share their prepared feedback on the report. This was followed by a substantive 'break-out' session where attendees divided into two groups to discuss key themes of CoW, with a particular emphasis on scale-up and sustainability of the programme for the future (Figure 8).

Views of the expert discussants and other attendees have been incorporated into this version of the report to provide greater depth of analysis and clarity of vision for next steps with the CoW model.

CONCLUSIONS

In response to the Boko Haram crisis, the NEEM Foundation has been delivering its Counselling on Wheels (CoW) programme in the greater Maiduguri area of north-east Nigeria since 2017. CoW comprises peace-building activities, which have engaged nearly 2,000 people from a range of stakeholder groups, and psychotherapy interventions, which have engaged over 20,000 people from more than 40 local communities.

This evaluation indicates that CoW was broadly feasible and acceptable to its participants. It was delivered in challenging logistical and security conditions, at comparatively low cost, with a high engagement rate and relatively low drop-out from the therapy intervention component. Anecdotal feedback indicates acceptability of the programme for both peacebuilding and therapy participants, as well as CoW counsellors. This is supported by the continuation of post-treatment peer support groups in many communities.

Outcome data from 2019 suggests that CoW's therapy intervention might produce a range of psychosocial benefits, including improved mental health (reduction in depression, anxiety, stress and post-traumatic stress symptoms) and reduced vulnerability to violent extremism, for the majority of participants. Though methodological issues mean that these findings should be treated with caution, the results are nonetheless very positive. They indicate that CoW is an appropriate, scalable intervention with the potential to address community psychosocial needs in a post-conflict setting and support peacebuilding through fostering tolerance and resilience to violent extremism.

FUTURE SUSTAINABILITY AND SCALE-UP

The encouraging findings of this evaluation prompt two questions: 1) How can NEEM sustain and strengthen the existing achievements of its CoW programme? and 2) How might NEEM expand the delivery of CoW to reach other populations in need? The evaluation workshop at King's College London (described above) attempted to address these questions, and initial thoughts on ways forward are presented here.

1. Sustaining and strengthening the existing achievements of the CoW programme could be approached through the following activities:

- **Follow up** data collection, at least for a sample of beneficiaries, to check if the positive effects are sustained beyond the end of treatment.
- Collecting systematic **feedback** from beneficiaries and conducting exploratory **qualitative research** to understand mechanisms of change and specific population needs in more detail (e.g. youth, women, IDPs).
- Running a small-scale **controlled study** to investigate outcomes by comparing two arms, only one of which receives CoW, for one month.
- Validate, translate and/or culturally adapt measurement scales to give greater confidence in their **psychometric properties** for this population.
- Considering how best to work with **children**, given issues of consent and comprehension, which may involve adapting the therapy protocol.

2. Expanding the delivery of CoW to reach other populations in need:

- **Locally**: NEEM could broaden its geographical reach within north-east Nigeria, as security and health circumstances allow, to reach other communities and IDP groups affected by this conflict.
- **Regionally**: Delivery of CoW could be scaled up for delivery in the region around north-east Nigeria similarly affected by the Boko Haram conflict, including neighbouring countries of Cameroon, Chad and Niger, where approximately 275,000 Nigerian refugees are living.
- **Internationally**: The CoW model could be adapted for other conflict-affected populations within Africa, and potentially at a global scale, including in LMIC regions such as Asia and the Middle East. Such activity would be likely to require the involvement of high-level international partners to fund, adapt, pilot and deliver the programme.

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CONTACT DETAILS

KCL: Prof Melanie Abas (melanie.abas@kcl.ac.uk), Centre for Global Mental Health, David Goldberg Centre, IoPPN, 18 de Crespigny Park, London SE5 8AF, UK.

NEEM Foundation: Dr Fatima Akilu (fatimaakilu@gmail.com), 2 Kwa Falls Street, off Agulu Lake Street, off IBB Way, Maitama, Abuja, Nigeria.