**Feasibility of a guided self-help intervention to reduce psychological distress in South Sudanese refugee women in Uganda**

Implementing evidence-based psychological interventions in low-resource refugee settings is challenging, because of the need for an extensive workforce of trainers, supervisors and facilitators1,2. Self-Help Plus (SH+) was developed by the World Health Organization (WHO) as a toolpotentially applicable in those settings3.

SH+ is a guided self-help intervention consisting of five audio-recorded sessions and an illustrated self-help manual3. It can be provided to large groups (20 to 30 participants) and facilitated by lay helpers with minimal training. It aims to reduce psychological distress in people with a range of common mental disorders and subthreshold symptoms. It is based on acceptance and commitment therapy, a third wave cognitive behavioral therapy focused on enhancing psychological flexibility4.

We adapted SH+ for South Sudanese refugees and conducted a feasibility cluster randomized controlled trial of the intervention in Rhino Camp, a refugee settlement area in northern Uganda5. We randomly allocated one village to SH+ and one to enhanced usual care. Within each village, we randomly selected households and screened one Juba Arabic-speaking consenting woman (age ≥18 years) until 25 eligible women were identified per village.

We screened for moderate psychological distress using the Kessler 6 (K6) (primary outcome, cut-off ≥5)6. We assessed exclusion criteria (imminent risk of suicide; observable signs of severe mental disorder; severe cognitive impairment) using structured questionnaires. With eligible and consenting women, we assessed secondary outcomes: disability (WHO Disability Assessment Schedule 2.0); self-defined psychosocial concerns (Psychological Outcome Profiles instrument); depression symptoms (Primary Health Questionnaire); post-traumatic stress disorder (PTSD) symptoms (PTSD Checklist Civilian); hazardous alcohol use (two survey questions); feelings of anger (shortened explosive anger index); inter-ethnic relations (three survey questions); subjective wellbeing (WHO Wellbeing Index, WHO-5); psychological flexibility (Acceptance and Action Questionnaire). We also assessed attendance, health service use, cost indicators, and exposure to potentially traumatic events.

The SH+ workshops were facilitated by four Juba Arabic-speaking Ugandan women from the settlement area without prior mental health training. Facilitators were trained by international experts (KC, FB) over a four-day period and supervised weekly by a Ugandan social worker. Enhanced usual care consisted of one psychoeducation session focused on psychological distress delivered by a trained community health worker, which included information on where to access existing mental health services delivered by the implementing organization, the Peter C. Alderman Foundation.

Assessors were blinded to allocation of villages to study condition, and conducted interviews one week pre- and post-intervention. All participants provided written or verbal informed consent. Ethical procedures were approved by the WHO Ethics Review Committee, the MildMay Uganda Research Ethics Commission, and the Uganda National Council for Science and Technology.

We screened 50 women, all of whom were eligible and consented. Their mean age was 29.5±8.5 years and 68% of them were married. Half of participants were managing households; 60% had no schooling or completed primary school.

Fidelity checks (clinical supervisor attending 10% of sessions) showed that all sections of the audio were delivered correctly at each session. Weekly supervision was provided and covered reporting of any adverse events, requests for additional help from participants or problems in running the course. Few problems were reported and supervision was brief. Attendance was good (90% of women attended each session).

We found that our research protocol was feasible. Randomization resulted in balanced groups at baseline despite the small sample. We did not find differences between groups at baseline on socio-demographic characteristics. There were larger mean post-intervention differences for the SH+ condition on all outcome measures. These were statistically significant for the K6 (p<0.05) and the WHO-5 (p<0.001). Blinding was maintained: assessors guessed correctly which participants were part of which study condition at chance level (50% of cases). Similarly, contamination did not appear to be a major concern: none of the participants in the control condition had seen the SH+ self-help book, attended workshops, nor heard about SH+. Only two women receiving enhanced usual care were lost to follow-up – an attrition of 4%.

In conclusion, we found that the SH+ intervention and research protocols were feasible in Uganda among South Sudanese refugees, with promising results related to randomization, fidelity, adherence, contamination, blinding, and sensitivity to change. If inclusion rates remain high and efficacy is confirmed in a forthcoming larger fully-powered trial, SH+ could be implemented as a targeted intervention for populations exposed to extreme stressors (e.g., as part of a stepped care model). Targeted application for specific populations would further increase the potential for scalability, because costs associated with screening would be avoided.

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