Non-specialist delivered psychosocial care after war and interpersonal violence: a systematic review and meta-analysis

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Summary

Background The effectiveness of non-specialist provider-delivered care for mood and anxiety disorders has been established, but effects in violence-exposed populations remain unclear. We examine the net effectiveness of psychosocial treatments delivered by non-specialists to adults experiencing distress following interpersonal and war-related violence.

Methods In this systematic review and meta-analysis, we searched MEDLINE/PubMed, Embase, PsycINFO, Global Health, Cochrane Library, Latin American and Caribbean Health Sciences Literature, and SciELO from Jan 1, 2000, to June 1, 2025. Studies were included if they were psychosocial treatment randomised controlled trials for adults exposed to violence; additionally, the treatment had to be delivered by a non-specialist provider. Pairs of authors double-screened and double-extracted data by applying a codebook developed for this study. We extracted information on data, population characteristics, and four primary outcomes (depression, post-traumatic stress disorder, anxiety, and impairment symptom severity), and used standardised checklists to assess risk of bias. We pooled study-level data in pairwise meta-analyses using a random-effects model to examine subgroup differences by national setting, treatment setting, provider type, violence type, and treatment focus. Our study did not involve people with lived experience of mental health conditions. This protocol was registered a priori with PROSPERO (CRD42022306099).

Findings We screened 54 748 abstracts and identified 45 eligible studies conducted with adults exposed to violence and reporting psychosocial distress. The sample included 9431 participants (mean age 37·9 years; 95% CI 37·7 to 38·1); reporting on sex or gender and ethnicity differences was inconsistent across the included studies. Sample sizes differed by outcome (N=9431 for PTSD; N=9060 for depression; N=8983 for impairment; and N=6545 for anxiety), altogether totalling 34 019 unique data-points. Overall, non-specialist-delivered treatments outperformed control conditions in reducing anxiety (standard mean difference –0·44, 95% CI –0·57 to –0·32; p<0·0001), depression (–0·41, –0·51 to –0·31; p<0·0001), post-traumatic stress disorder (–0·34, –0·44 to –0·24; p<0·0001) , and impairment symptoms (–0·34, –0·47 to –0·22; p<0·0001). A similar pattern of effects was seen in the sensitivity analyses (–0·30 [–0·49 to –0·10] to –0·55 [–0·79 to –0·30]; p<0·0001). The strongest treatment effects emerged among refugees. Treatment effects were replicated in most subgroups with a few exceptions: all outcomes for veterans were non-significant, depression and anxiety severity among interpersonal violence survivors did not significantly improve, and transdiagnostic treatments showed a clear benefit across all outcomes. Most studies had some bias (k=44 [98%]) and variability between studies for the main outcomes ranged from I^2=77–84%.

Interpretation Small to moderate clinical benefits for non-specialist-delivered care were observed across a broad set of treatments for diverse populations exposed to violence worldwide. These comprehensive analyses can inform psychosocial programming related to setting, providers, types of violence, and treatment foci, to combine treatment and implementation approaches for specific settings and populations.

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Introduction

More than 71% of the global population experiences lifetime exposure to traumatic events.[1] Traumatic events exert a host of psychosocial consequences, most prominent among which are post-traumatic stress disorder (PTSD), depression, anxiety, and functional impairment.[1] Disorder prevalence varies across settings, but rates are higher in conflict-affected settings. Epidemiological studies have found that of all traumatic events, those involving violence are associated with the highest probability of PTSD onset.[1,2] Nevertheless, treatment access disparities remain vast.[3]

The gap between people needing treatment and those who have contact with any health-care provider (defined

Research in context

Evidence before this study

We searched PubMed/MEDLINE, Embase, PsycINFO, Latin American and Caribbean Health Sciences Literature, and Cochrane Library for studies published between Jan 1, 2000, and June 1, 2025. We applied filters for peer-reviewed studies for systematic reviews and meta-analyses publishing original evidence (ie, excluded protocols) and we applied English language filters. Search terms used included "PTSD", "task sharing" or "task shifting", "LMIC", "lay health worker", "lay counselor", and "non specialist provider". These searches yielded one study that sampled non-specialist provider-delivered care for post-traumatic stress disorder in low-income and middle-income countries. This meta-analysis sampled four studies. In the period between commencing this project and submitting it for publication (February, 2022, to June, 2025), a few reviews have been published on related topics (eg, treatment effects for refugees and migrants and treatments set in low-income and middle-income countries). However, no study has examined the question of non-specialist-delivered care for a broad range of violence survivors, across multiple co-occurring clinical outcomes, or across global geographies. Further, no study has examined multiple co-primary outcomes jointly, although these occur in violence-exposed populations as the rule rather than the exception.

Added value of this study

Our study adds to the burgeoning evidence on task-sharing interventions by focusing on the effects of these in traumatic environments. Specifically, we examined the efficacy of the task-sharing interventions for violence-exposed populations, who have complex and multifaceted clinical and social needs after war and interpersonal violence. We combined factors that are exposure specific (ie, traumatic exposure), treatment specific (ie, treatment type and provider type), and implementation related (ie, treatment setting and national setting), for a comprehensive analysis on how non-specialist providers are delivering trauma-informed care. We also examined post-traumatic stress disorder in concert with depression, anxiety, and impairment as these four outcomes are essential to consider in these populations. Finally, our study is quite comprehensive, spanning work conducted over 25 years.

Implications of all the available evidence

Our study will improve the ability of researchers and practitioners to select the right treatment approaches for their implementation contexts. This work will also enhance policy makers' knowledge of the net effect of intervening with trauma survivors on various clinical outcomes; this can result in trauma-informed policies that help promote and prevent wellbeing before clinical outcomes worsen for violence survivors.

as contact coverage) remains large.[3] In 2023, findings from the World Mental Health Surveys indicated approximately 20% of trauma-exposed individuals in low-income and middle-income countries (LMICs) who needed treatment received it.[3] Comparatively, 51% of survey respondents from high-income countries (HICs) received past-year contact coverage.[3] Substantial barriers contribute to this treatment gap, including demand-side barriers (eg, perceived need for treatment and internalised stigma) and supply-side barriers (eg, insurance coverage, availability of culturally and linguistically appropriate providers, and logistical barriers).[4]

The global scarcity of specialist mental health professionals is a major driver of this treatment gap.[5] Task-sharing has been used successfully to address this barrier, wherein non-specialists (ie, people without specialist mental health qualifications) are trained to deliver interventions with training and close supervision from specialists.[6,7] Non-specialist provider-delivered interventions for depression and anxiety are effective in both LMICs[8] and HICs.[9] Treatments that incorporate cognitive-behavioural and narrative approaches have shown effectiveness in HICs.[10,11] Although some studies show similar effectiveness of cognitive-behavioural and narrative approaches for PTSD in LMICs, there is less robust evidence of their effectiveness when delivered by non-specialist providers; only four studies were identified in a review of non-specialist provider-led care.[6] Other reviews highlight the effectiveness of non-specialist providers in settings with high rates of violence exposure, such as humanitarian contexts.[12,13] Yet, to our knowledge, no study has examined multiple outcomes co-occurring with PTSD across national settings, treatment settings, violence types, treatment types, and provider types. Given the treatment gap for individuals experiencing distress after violence, the availability of evidence-based interventions, and policy recommendations to use task sharing to improve treatment access,[4,14] our systematic review and meta-analyses aim to critically examine non-specialist provider-delivered care in contexts of violence.

Exposure to violence confers increased risk for multiple mental health outcomes.[15–17] Therefore, examining several outcomes in concert can reveal the most modifiable targets for non-specialist provider-delivered care, thereby guiding strategic capacity-building efforts. This Article builds on existing PTSD treatment research[8,10,18] by exploring differences in subgroups that span the care delivery ecosystem (appendix p 10).

See Online for appendix

In this Article, we investigated the central questions of who gives and receives care, where care is delivered, and what care packages are deployed across low-resource and high-resource contexts.. As such, violence types and treatment types are positioned as central explanatory variables in our conceptual framework (appendix p 10). Next, who delivers care can modify treatment outcomes

as the training and supervision systems differ widely across settings; thus, examining outcomes by distinct non-specialist provider cadres can clarify directions for future programme development. Finally, where care is delivered also influences outcomes, so we examined the micro-setting of treatment delivery (ie, medical-based *vs* community-based care) and the macro-setting of the broader national context (ie, LMIC or HIC). Collectively, these subgroups can elucidate if and how these factors intersect with our outcomes of interest to inform more bespoke tailoring of interventions for individuals experiencing distress following exposure to violence.

We examined if, and to what extent, non-specialist provider-delivered psychosocial interventions can improve symptoms of PTSD, depression, anxiety, and functional impairment at end-of-treatment compared with control conditions for survivors of violence (ie, war and interpersonal violence); and whether—and to what extent—macro-setting, micro-setting, provider characteristics, violence types, and treatment types influenced treatment outcomes.

Methods

Search strategy and selection criteria

This study is a systematic review with pairwise random-effects meta-analyses. The protocol was registered a priori on PROSPERO (CRD42022306099). We followed the standards set by the PRISMA guidelines.[19] We systematically searched MEDLINE/PubMed, Embase, PsycINFO, SciELO, Latin American and Caribbean Health Sciences Literature, and Cochrane Library from Jan 1, 2000, to June 1, 2025. We searched the literature and could not identify any relevant studies before 2000. Search concepts encompassed population (eg, "violence from war" and "interpersonal violence"), intervention (eg, "CBT"), comparator (eg, "inactive control"), outcomes (eg, "PTSD symptoms"), and setting (eg, "community"), all terms that correspond to the PICOTS framework (appendix pp 11–25). English language filters were applied. All abstracts and full-texts were double-screened by pairs of extractors (LF, AB-S, ST, EM, KED, AA, GR, and AZ) and disagreements were resolved by ARP. We included studies using a randomised controlled trial design to test an active psychosocial treatment against a relatively inactive control (eg, waitlist or usual care). We only included studies in which a non-specialist provider delivered a psychosocial treatment to adults exposed to potentially traumatic events and who screened positive for distress. Authors were contacted if full-text could not be found for screening. Similarly, authors were contacted if the data were not easily available. Trauma exposure was verified in the sampling frame of each study because this criterion was necessary for inclusion in our systematic review. However, the individual studies in our analyses varied widely in reporting whether they linked each participant's PTSD symptom assessments to an index traumatic event (ie, a baseline-perceived worst traumatic event). In sum, it is unclear if violence was the index trauma at the individual level, so we focused our analyses on study-level aggregation using a pairwise random effects meta-analysis method.

Key study definitions

We defined a psychosocial treatment as any intervention focused on changing the target population's distress through cognitive, behavioural, affective, or somatic techniques. Although psychosocial treatments are broadly construed as talk therapy, we included interventions with an intentional focus on alleviating distress, rather than according to the specific techniques they used. We defined a non-specialist provider as any person delivering the psychosocial treatment without formal educational training in clinical psychology or psychiatry or without clinical case-based training with trauma survivors before becoming a provider for a given study. As an example, both community health workers and primary care providers would be considered non-specialist providers (although they differ substantially in education levels) because both cadres do not receive specialised clinical training or face-to-face patient contact for a trauma-related mental health condition.

Data analysis

ARP developed a data extraction tool, which was refined after the initial data entry of three studies to include a data dictionary for more standardised extraction. Descriptive information, clinical and implementation characteristics, and post-treatment symptom severity were extracted uniformly across studies. All data were double extracted by author pairs (LF, AB-S, ST, EM, KED, AA, GR, and AZ) and disagreements were resolved by ARP. For continuous outcomes, the mean scores and standard deviations at end-of-treatment were included. Missing information was treated as missing and denoted as not reported.

We extracted and examined four outcomes of symptom severity (ie, depression, PTSD, anxiety, and functional impairment) reported at each study's primary post-treatment endpoint. Our analyses thereby exclude subsequent assessments administered at follow-up points. Other outcomes were reported inconsistently and, therefore, excluded from this systematic review and meta-analysis (eg, social support and substance use). Outcomes were converted to standardised mean difference (SMD) to meta-analyse as studies used different screeners and assessment tools.

Analyses were conducted in ReviewManager (version 5.3); we then exported the data frame, including individual study weights generated by the ReviewManager calculator, into R software to visualise the data as forest plots. We conducted pairwise meta-analyses, using random-effects models to account for study heterogeneity for each of the four outcomes. We

examined symptom severity at primary endpoint for all outcomes, rather than crude diagnostic status. We used the assessment results corresponding to the closest end-of-treatment timeframe in each study. We visualised the results with individual forest plots. We also examined five subgroups across four outcomes for nuanced analyses (appendix pp 39–67). First, national setting (macro-setting): study countries were coded as HIC or LMIC, based on the study setting's classification by the World Bank at the time of the study publication. Second, treatment setting (micro-setting): places where treatment was delivered to trauma survivors were coded as either medical or health-care setting (eg, primary care clinic) or community setting (eg, place of worship, home, or camp setting). Third, provider type: non-specialist providers delivering care were coded as medically trained cadres (eg, nurses), community providers (eg, volunteers), or peers (ie, people with lived experience of the traumatic event or psychosocial condition that affects the target population, or both). Fourth, violence type: index violence-type for all participants in a study was coded corresponding to two categories (ie, war and interpersonal violence) based on shared characteristics of the overall study population. Within the category of war exposure, we delineated subgroups based on experiencing war as a combatant or civilian, as these are qualitatively distinct experiences. We coded these groups as veterans (ie, combatants) and refugees (ie, civilians); however, the classification for refugees remains broad as studies in this set also included people displaced internally during civil conflicts. Finally, treatment focus: the design of a treatment and its focal change orientation were coded as adiagnostic treatments (ie, low intensity with a diffuse approach to prevention and promotion and untethered to a diagnosis), monodiagnostic treatments (ie, focusing on one core disorder), or transdiagnostic treatments (ie, intentionally targeting multiple co-occurring disorders).

Study quality was assessed independently by pairs of screeners using the Joanna Briggs Institute Critical Appraisal Tools checklist,[20] which assesses possible sources of bias. ARP resolved raters' disagreements. Using risk of bias stratification, we grouped studies with a high risk of bias, excluded them, and re-analysed to determine pooled outcomes from stronger research designs. We then conducted sensitivity analyses for all four outcomes.

We used the χ^2 test in conjunction with the I^2 statistic to discern variability across treatment effects. We interpreted an I^2 of less than 25% as low heterogeneity, 25–50% as medium heterogeneity, and more than 75% as high heterogeneity.[21,22] To investigate publication bias for the primary outcomes, we visually inspected the funnel plots and performed Egger's test.[21]

Role of the funding source

There was no funding source for this study.

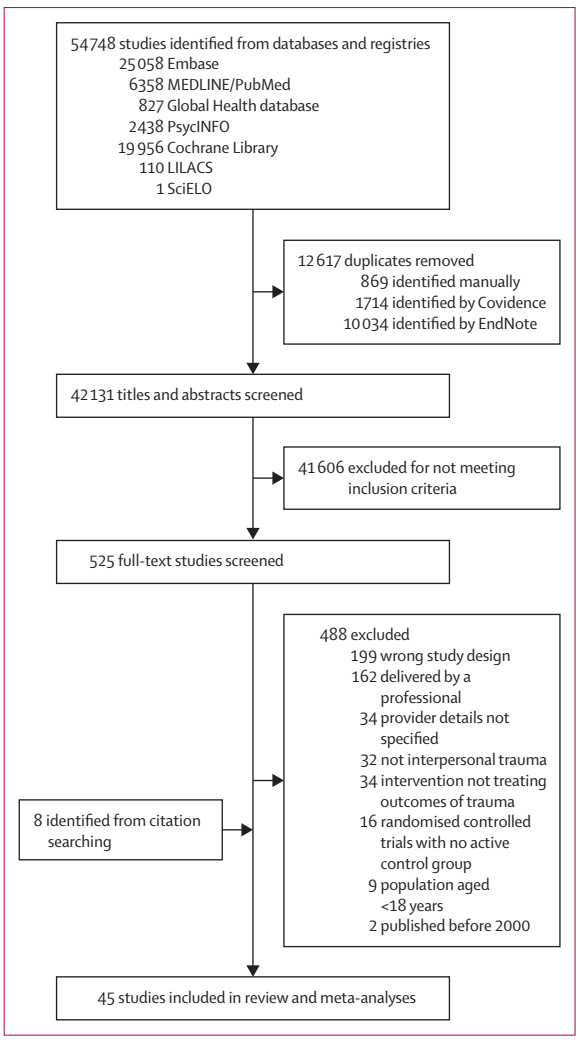


Figure 1: **Study selection**
LILACS=Latin American and Caribbean Health Sciences Literature.

Results

Our search yielded 54748 potentially relevant reports. After removing duplicates and irrelevant articles, 525 full texts were assessed for eligibility. 488 were excluded, leaving 37 eligible studies. Eight additional reports were identified through a manual search of bibliographies and citation chaining that met our criteria. A total of 45 studies and 52 treatment conditions were included in the final review for these analyses, containing 34 019 unique data-points (figure 1). Most studies (k=26 [58%]) focused on exposure to war-related violence among refugees,[22–46,55,59] 11 studies (24%) on interpersonal violence,[32,48–58] and seven (16%) on war-related violence among veterans.[58–65] One (2%) study focused on violence among incarcerated women.[66]

Three studies reported multiple treatment groups within the same study; Bolton and colleagues 2014[27] (behavioural activation treatment for depression and cognitive processing therapy), Bogdanov and colleagues

	Studies (*k*)	Participants (N)	Standardised mean difference (95% CI)
Main effects including all studies			
Depression symptoms	45	9060	−0·41 (−0·51 to −0·31)*
Anxiety symptoms	35	6545	−0·44 (−0·57 to −0·32)*
PTSD symptoms	49	9431	−0·34 (−0·44 to −0·24)*
Impairment symptoms	42	8983	−0·34 (−0·47 to −0·22)*
Sensitivity analyses excluding studies with high risk of bias			
Depression symptoms	17	4438	−0·43 (−0·69 to −0·18)*
Anxiety symptoms	15	2894	−0·55 (−0·79 to −0·30)*
PTSD symptoms	20	4779	−0·30 (−0·49 to −0·10)*
Impairment symptoms	19	4900	−0·34 (−0·56 to −0·12)*

PTSD=post-traumatic stress disorder. *p<0·0001.

Table: **Overall pooled effects and sensitivity analyses for all outcomes**

2021[26] (standard common elements treatment approach and and brief common elements treatment approach), and Weiss and colleagues 2015[43] (common elements treatment approach and cognitive processing therapy).

Characteristics of the 45 included studies are reported in a descriptive table (appendix pp 27–30). The mean age of participants was 37·9 years (95% CI 37·7–38·1). Reporting on sex or gender and ethnicity differences was inconsistent across the included studies. Included studies were published between 2009 and 2025, with 23 (51%) of 45 studies published during or after 2020.[22–26,29,31–37,40,41,44–46,51,56,59,65,66] Treatment duration was 12·6 weeks on average (see appendix pp 27–30 for range); 30 (58%) of 52 treatments[22–26,31–42,44–46,49,54,–57,59,60,64] included briefer treatment formats, between one and eight sessions long. Control groups across the 52 treatments included usual care or enhanced usual care (*k*=28 [54%]),[22–26,31–42,44–46,49,54–57,59,60,63–65] waitlist control (*k*=19 [37%]),[26–30,37,40,43,44,58–60,66] supportive control condition (*k*=2 [4%]),[52,65] education (*k*=1 [2%]),[50] and assessment-only (*k*=2 [4%]).[61,62]

Studies were included if they measured any of the four outcomes of interest. Although some studies reported all outcomes, most studies reported between one and four outcomes across the 45 studies. In total, we found 49 comparisons between treatment versus inactive controls for PTSD,[22–47,49–54,57–66] 45 for depression,[22,24–48,50,51,53,55,56,58–61,63–66] 42 for impairment,[22–49,52,54–56,58–60,65] and 35 for anxiety.[24–31,33–43,45–47,55–57,61,65,66]

28 (54%) of 52 non-specialist provider-delivered treatments were given in LMICs[22–33,36–39,42,46,49,51,52,54,56] and 24 (46%) in HICs.[34,35,40,41,43–45,47,48,50,53,55,57–66] Of the 45 studies, the highest proportion in LMICs were conducted in Pakistan (*k*=3 [7%]),[38,39,42] Türkiye (*k*=3 [7%]),[22–24] and Colombia (*k*=3 [7%])[29,30,37] and HIC-based studies were largely conducted in the USA (*k*=11 [24%]).[44,50,53,57,59,61–66] Across the 52 treatments, care was most often delivered in community settings (*k*=36 [69%]),[22–27,29–41, 44,46–48,50,52–54,58,59,63,64,66] followed by medical settings (*k*=16 [31%]).[27,28,42,43,45,49,51,55–57,60–62,65] Community settings included refugee camps, local non-profit offices, churches, and shared outdoor spaces. Medical settings included health centres, outpatient clinics, and hospitals. Community providers were the most frequent cadre of providers (*k*=31 [60%]),[25–30,33,37–39,41,42,44–52,54,58,60–62] followed by peers (*k*=12 [23%]),[22–24,32,34–36,40,59,64–66] and non-specialist medical providers (*k*=9 [17%]).[31,43,53,55–57,63]

Data on training length were available for 29 (64%) [of 45 studies;[23–25,27–29,30,31,33–35,37–40,42–49,52–55,57,59] the modal number of training days was 8. Most commonly, the mode of non-specialist provider training was in-person (*k*=15 [33%]),[23,27,31,34,35,39,43,45,47,49,52–54,57,58] and three (7%) studies reported online or virtual training.[41,59,64] 34 (76%) studies[27–49,51–54,58,65] mentioned supervision, but few provided details; when available, we coded for supervision location, modality, setup, and frequency. Supervision across the 45 studies most commonly took place in hybrid format (ie, in person and virtual; *k*=8 [18%]),[28,29,31,37,40,43,47,51] followed by virtual only (*k*=5 [11%])[32,38,39,41,42] or in-person only (*k*=7 [16%]).[30,34,35,53,54,63] Supervision formats varied; most studies reported group supervision (*k*=13 [29%]),[22–24,34,35,37–39,42–44,54,65] followed by individual (*k*=7 [16%])[26,31,47,48,53,59,66] and mixed individual and group (*k*=6 [13%]).[27,28,33,45,46,51] Most studies reported that non-specialist providers received weekly supervision (*k*=24 [53%]);[23,24,26–29,31,33–35,37–39,42–46,49,51,54,63,65,66] one (2%) study provided supervision every 2 weeks,[40] and four (9%) studies provided monthly supervision.[47,53,58,59]

In terms of treatment type, adiagnostic treatments were the most used across the 52 treatments (*k*=28 [54%]),[22–25,29,31,32,34,35,37–42,45,47–49,53–56,60,65,66] followed by trans-diagnostic (*k*=13 [25%]),[26,28,30,36,43,44,52,57,59,64] and monodiagnostic (*k*=11 [21%]).[27,33,43,46,50,51,58,61–63]

The most common outcomes reported were PTSD symptoms, followed by depression symptoms, functional impairment symptoms, and anxiety symptoms (table). Most outcomes relied on self-report measures, with four (9%) of 45 studies using clinician-administered interviews.[22,50,41,60] All studies from LMICs translated and culturally adapted tools and/or used previously adapted tools; 26 (84%) of 31 studies in LMICs that reported PTSD as an outcome measure reported at least some psychometric properties for their study PTSD measures.

Our meta-analysis for depression symptoms found that psychosocial interventions delivered by non-specialist providers were more effective than control conditions (SMD −0·41, 95% CI −0·51 to −0·31; table). Similarly, we found that non-specialist provider-delivered interventions significantly improved anxiety symptoms (−0·44, −0·57 to −0·32), PTSD symptoms (−0·34, −0·44 to −0·24), and impairment symptoms (−0·34, −0·47 to −0·22). Overall, these findings show a moderate effect size for depression and anxiety symptoms, but smaller effects for PTSD and impairment symptoms (table; figures 2–5).

After excluding studies with a high risk of bias, we observed a similar pattern in all outcomes, and all outcomes remained statistically significant. The SMD for depression symptoms remained stable, whereas the SMD for anxiety symptoms was higher than in the

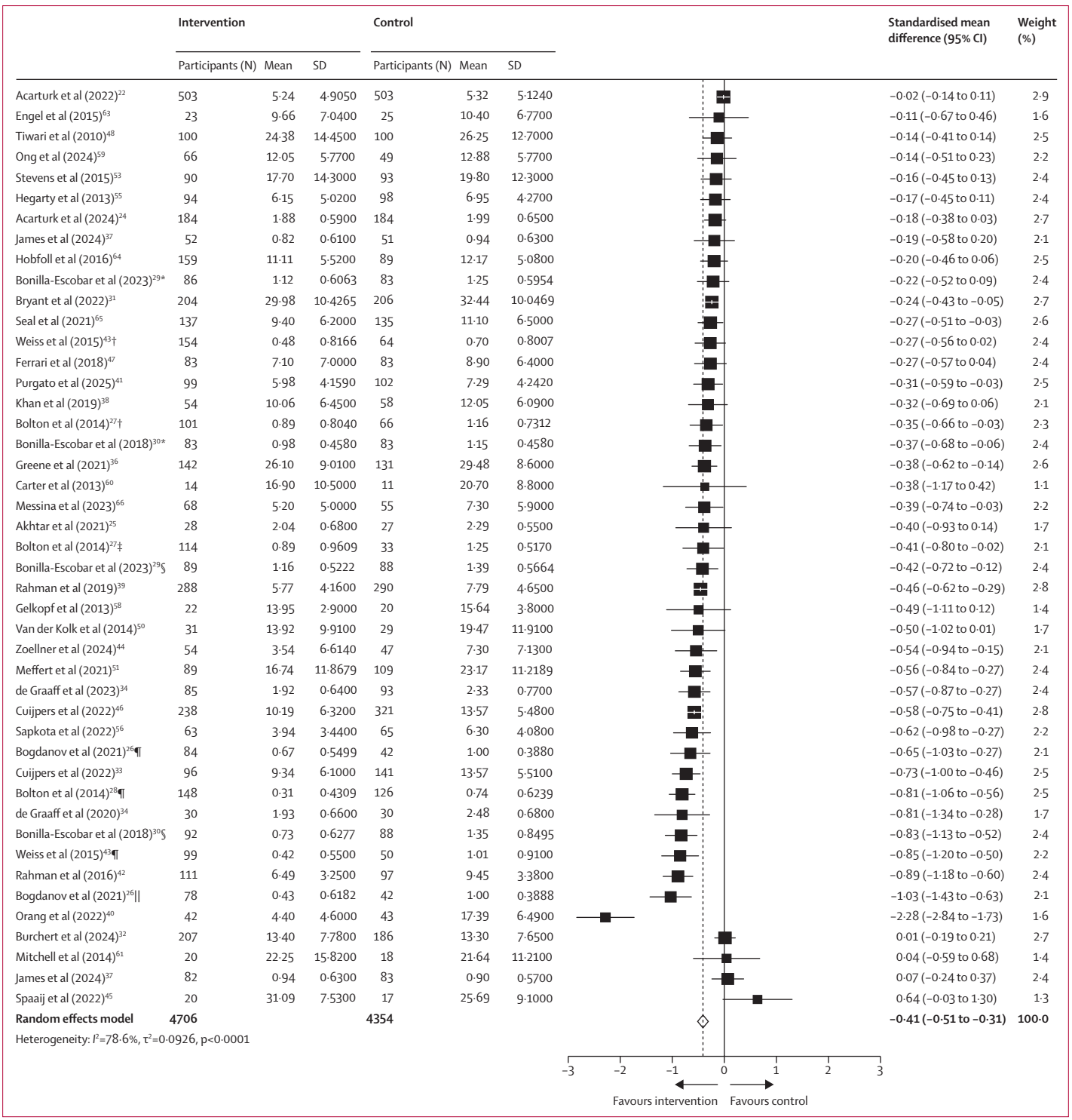
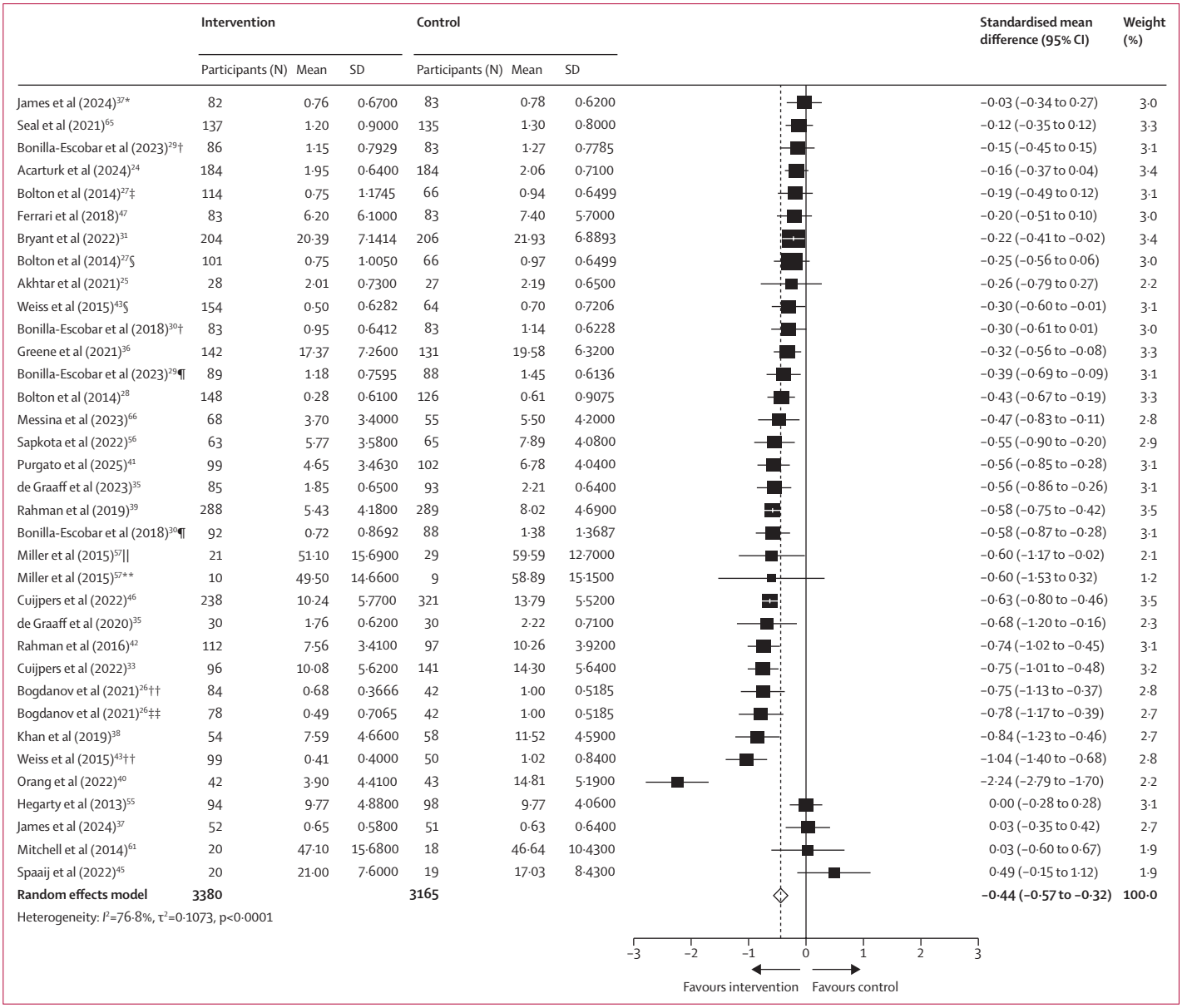


***Figure 2*: Forest plot for depression symptoms at treatment endpoint**

*Quibdó (Colombia) group. †Cognitive processing therapy group. ‡Behavioural activation treatment for depression group. §Buenaventura (Colombia) group. ¶Standard common elements treatment approach group. ||Brief common elements treatment approach group.

overall pooled analyses. By contrast, the SMDs for PTSD and impairment symptoms were lower than in the overall pooled analyses (table).

We examined subgroup differences corresponding to national setting, treatment setting, provider type, violence type, and treatment focus. All intragroup χ^2 test



	Intervention			Control			Standardised mean difference (95% CI)	Weight (%)
	Participants (N)	Mean	SD	Participants (N)	Mean	SD		
James et al (2024)[37]*	82	0·76	0·6700	83	0·78	0·6200	−0·03 (−0·34 to 0·27)	3·0
Seal et al (2021)[65]	137	1·20	0·9000	135	1·30	0·8000	−0·12 (−0·35 to 0·12)	3·3
Bonilla-Escobar et al (2023)[29]†	86	1·15	0·7929	83	1·27	0·7785	−0·15 (−0·45 to 0·15)	3·1
Acarturk et al (2024)[24]	184	1·95	0·6400	184	2·06	0·7100	−0·16 (−0·37 to 0·04)	3·4
Bolton et al (2014)[27]‡	114	0·75	1·1745	66	0·94	0·6499	−0·19 (−0·49 to 0·12)	3·1
Ferrari et al (2018)[47]	83	6·20	6·1000	83	7·40	5·7000	−0·20 (−0·51 to 0·10)	3·0
Bryant et al (2022)[31]	204	20·39	7·1414	206	21·93	6·8893	−0·22 (−0·41 to −0·02)	3·4
Bolton et al (2014)[27]§	101	0·75	1·0050	66	0·97	0·6499	−0·25 (−0·56 to 0·06)	3·0
Akhtar et al (2021)[25]	28	2·01	0·7300	27	2·19	0·6500	−0·26 (−0·79 to 0·27)	2·2
Weiss et al (2015)[43]§	154	0·50	0·6282	64	0·70	0·7206	−0·30 (−0·60 to −0·01)	3·1
Bonilla-Escobar et al (2018)[30]†	83	0·95	0·6412	83	1·14	0·6228	−0·30 (−0·61 to 0·01)	3·0
Greene et al (2021)[36]	142	17·37	7·2600	131	19·58	6·3200	−0·32 (−0·56 to −0·08)	3·3
Bonilla-Escobar et al (2023)[29]¶	89	1·18	0·7595	88	1·45	0·6136	−0·39 (−0·69 to −0·09)	3·1
Bolton et al (2014)[28]	148	0·28	0·6100	126	0·61	0·9075	−0·43 (−0·67 to −0·19)	3·3
Messina et al (2023)[66]	68	3·70	3·4000	55	5·50	4·2000	−0·47 (−0·83 to −0·11)	2·8
Sapkota et al (2022)[56]	63	5·77	3·5800	65	7·89	4·0800	−0·55 (−0·90 to −0·20)	2·9
Purgato et al (2025)[41]	99	4·65	3·4630	102	6·78	4·0400	−0·56 (−0·85 to −0·28)	3·1
de Graaff et al (2023)[35]	85	1·85	0·6500	93	2·21	0·6400	−0·56 (−0·86 to −0·26)	3·1
Rahman et al (2019)[39]	288	5·43	4·1800	289	8·02	4·6900	−0·58 (−0·75 to −0·42)	3·5
Bonilla-Escobar et al (2018)[30]¶	92	0·72	0·8692	88	1·38	1·3687	−0·58 (−0·87 to −0·28)	3·1
Miller et al (2015)[57]‖	21	51·10	15·6900	29	59·59	12·7000	−0·60 (−1·17 to −0·02)	2·1
Miller et al (2015)[57]**	10	49·50	14·6600	9	58·89	15·1500	−0·60 (−1·53 to 0·32)	1·2
Cuijpers et al (2022)[46]	238	10·24	5·7700	321	13·79	5·5200	−0·63 (−0·80 to −0·46)	3·5
de Graaff et al (2020)[35]	30	1·76	0·6200	30	2·22	0·7100	−0·68 (−1·20 to −0·16)	2·3
Rahman et al (2016)[42]	112	7·56	3·4100	97	10·26	3·9200	−0·74 (−1·02 to −0·45)	3·1
Cuijpers et al (2022)[33]	96	10·08	5·6200	141	14·30	5·6400	−0·75 (−1·01 to −0·48)	3·2
Bogdanov et al (2021)[26]††	84	0·68	0·3666	42	1·00	0·5185	−0·75 (−1·13 to −0·37)	2·8
Bogdanov et al (2021)[26]‡‡	78	0·49	0·7065	42	1·00	0·5185	−0·78 (−1·17 to −0·39)	2·7
Khan et al (2019)[38]	54	7·59	4·6600	58	11·52	4·5900	−0·84 (−1·23 to −0·46)	2·7
Weiss et al (2015)[43]††	99	0·41	0·4000	50	1·02	0·8400	−1·04 (−1·40 to −0·68)	2·8
Orang et al (2022)[40]	42	3·90	4·4100	43	14·81	5·1900	−2·24 (−2·79 to −1·70)	2·2
Hegarty et al (2013)[55]	94	9·77	4·8800	98	9·77	4·0600	0·00 (−0·28 to 0·28)	3·1
James et al (2024)[37]	52	0·65	0·5800	51	0·63	0·6400	0·03 (−0·35 to 0·42)	2·7
Mitchell et al (2014)[61]	20	47·10	15·6800	18	46·64	10·4300	0·03 (−0·60 to 0·67)	1·9
Spaaij et al (2022)[45]	20	21·00	7·6000	19	17·03	8·4300	0·49 (−0·15 to 1·12)	1·9
Random effects model	**3380**			**3165**			**−0·44 (−0·57 to −0·32)**	**100·0**

Heterogeneity: I^2=76·8%, τ^2=0·1073, p<0·0001

Figure 3: **Forest plot for anxiety symptoms at treatment endpoint**

*In-person community-based psychosocial support group. †Quibdó (Colombia) group. ‡Behavioural activation treatment for depression group. §Cognitive processing therapy group. ¶Buenaventura (Colombia) group. ‖Previous assault group. **No previous assault group. ††Standard common elements treatment approach group. ‡‡Brief common elements treatment approach group.

effects and corresponding metrics are reported in the appendix (pp 46–48). Although most intragroup differences were not significant, net effects for each subgroup showed some variance. Only one intragroup difference (violence type) was statistically significant for the outcomes of depression and anxiety symptoms. Specifically, depression and anxiety symptom severity decreased significantly more in refugees than in interpersonal violence survivors and veterans. All outcomes were non-significant for veterans (p=0·88 for depression, p=0·98 for PTSD, p=0·90 for anxiety, and p=0·09 for impairment). In the subsequent results, we report other findings about the magnitude of effects between subgroups, which we organise by individual outcomes. Depression symptom reduction was significant in both LMIC and HIC settings (p<0·0001). Community-delivered treatment (SMD –0·39, p<0·0001) and care delivered in medical settings (SMD –0·44, p<0·001) both yielded significant reductions across all outcomes. This finding was replicated for providers, such that symptoms of each disorder type improved significantly when the care was provided by community workers, medical workers, and peer providers (p<0·0001), except for depression when treatment was provided by

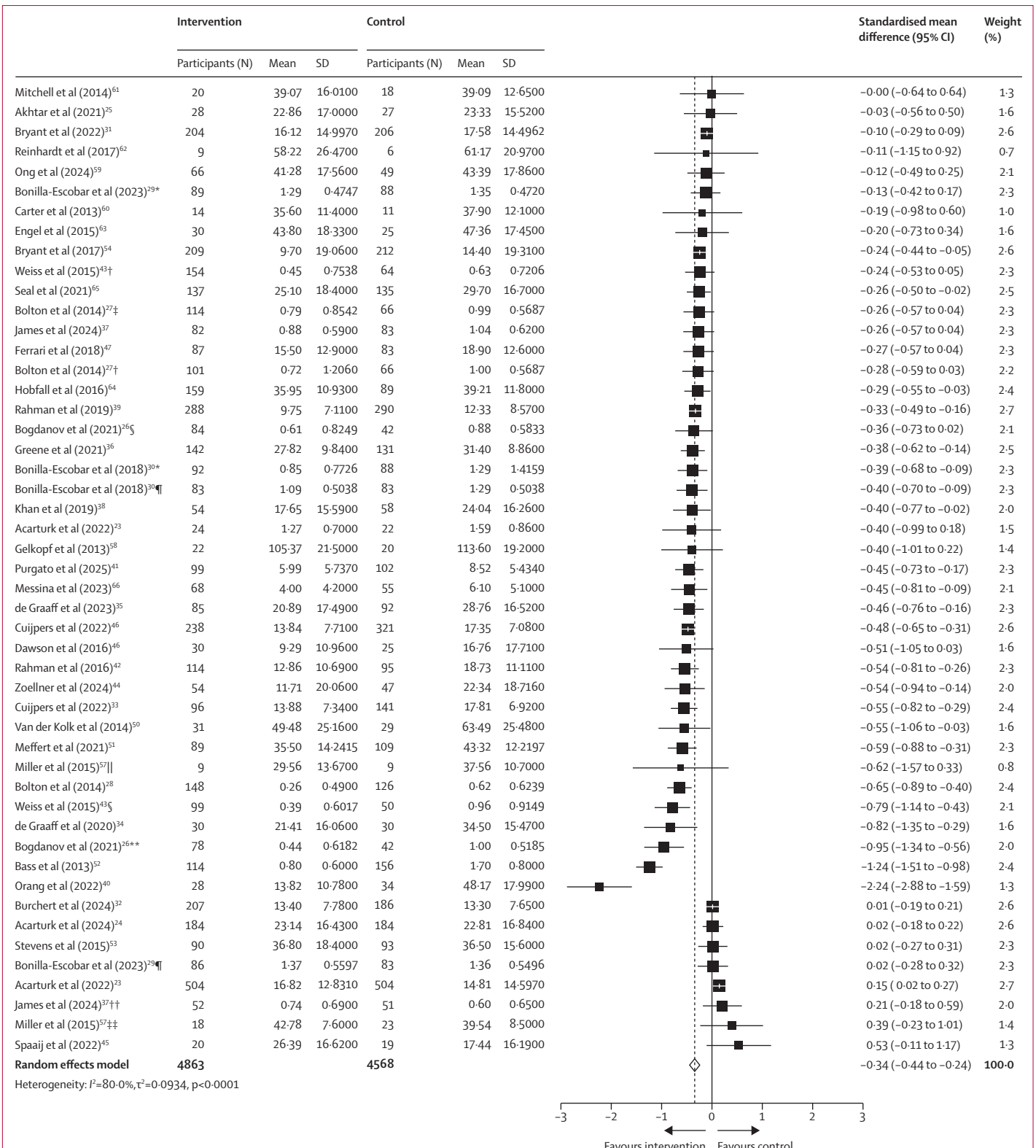


Figure 4: **Forest plot for post-traumatic stress disorder symptoms at treatment endpoint**

*Buenaventura (Colombia) group. †Cognitive processing therapy group. ‡Behavioural activation treatment for depression group. §Standard common elements treatment approach group. ¶Quibdó (Colombia) group. ||No previous assault group. **Brief common elements treatment approach group. ††Virtual community-based psychosocial support group. ‡‡Previous assault group.

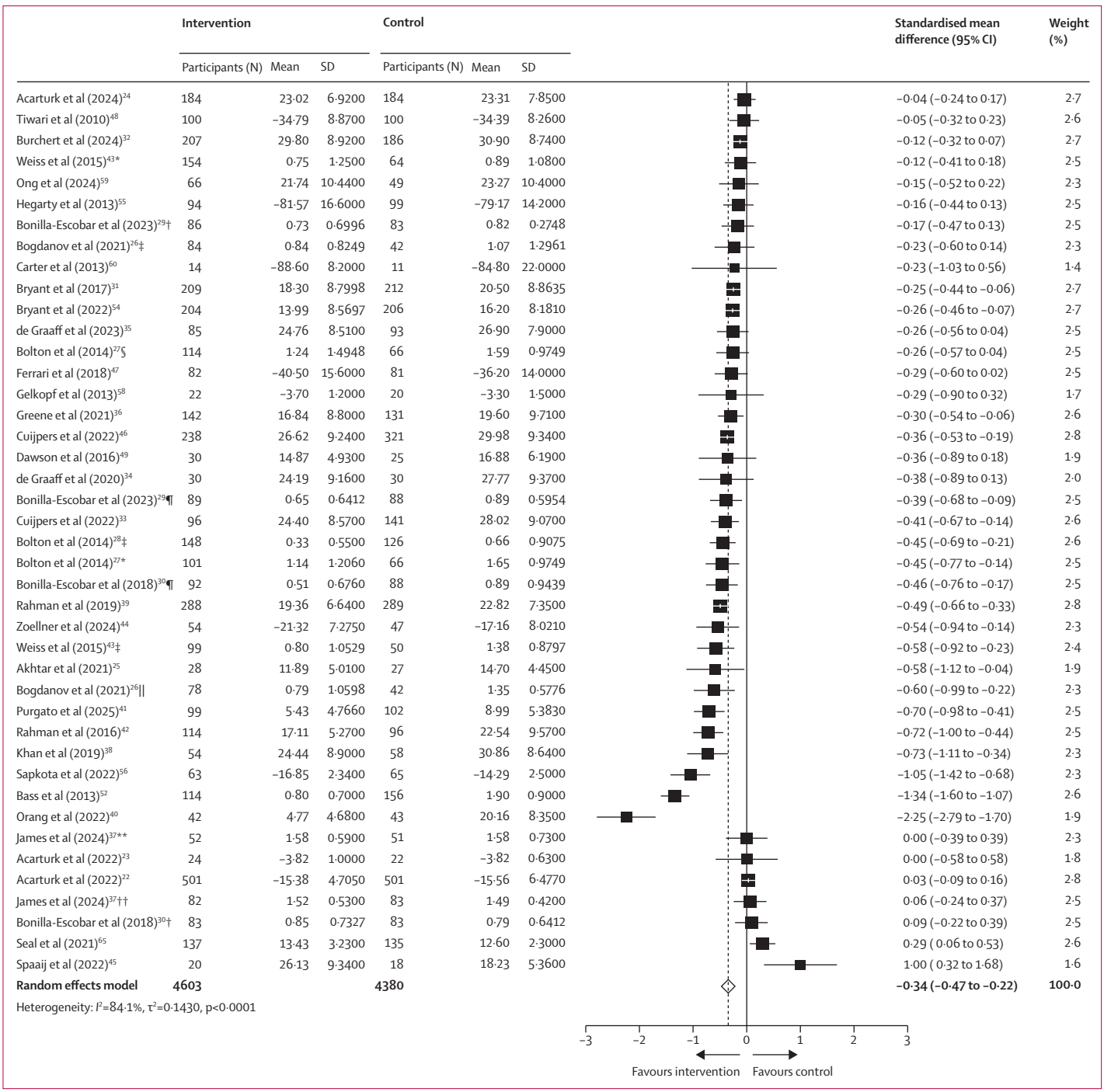


Figure 5: **Forest plot for impairment symptoms at treatment endpoint**
*Cognitive processing therapy group. †Quibdó (Colombia) group. ‡Standard common elements treatment approach group. §Behavioural activation treatment for depression group. ¶Buenaventura (Colombia) group. ||Brief common elements treatment approach group. **Virtual community-based psychosocial support group. ††In-person community-based psychosocial support group.

peers. Depression symptom improvements across treatment types ranged from SMDs of –0·34 to –0·57, but monodiagnostic treatments did not show significant reductions in symptom severity (p=0·21; appendix p 48). Nearly all subgroups showed a significant improvement in anxiety symptoms (p<0·001). However, violence type played an important role, such that anxiety was significantly reduced for refugees (–0·48, 95% CI –0·63 to –0·33, p<0·0001) but not for veterans (p=0·10) and interpersonal violence survivors (p=0·90). See the

appendix for forest plots for each subgroup comparison by all outcomes (pp 51–70).

PTSD symptom reductions were significant in both LMICs and HICs (p<0·01). Treatment delivered in both community (SMD –0·36) and medical settings (–0·31) yielded significant reductions in PTSD symptoms (p<0·01). PTSD symptom severity improved significantly across all providers (p<0·01). Notably, PTSD symptoms improved modestly for refugees (–0·35, –0·48 to –0·22, p<0·0001), but not for veterans (–0·23, –0·37 to –0·09, p=0·98). Treatment type affected PTSD symptoms such that adiagnostic and transdiagnostic treatments yielded significant effects (p<0·0001), but monodiagnostic treatments did not (p=0·50).

Impairment symptoms improved significantly for most subgroups in small to moderate magnitude, except that no significant differences in impairment symptoms were observed among veterans (p=0·09) and monodiagnostic treatments had no significant effect on impairment symptoms (p=0·92).

Only one study met the criteria for low risk of bias; 19 studies met criteria for moderate risk of bias; the remainder (*k*=27) were judged to have a high risk of bias in research design or implementation. Eggers's test did not indicate presence of small study effects (p>0·10 for all outcomes). This was corroborated by visual investigation of each funnel plot (appendix p 78).

Discussion

Our findings support the overall effectiveness of non-specialist provider-delivered psychosocial interventions for violence survivors, drawing from 25 years of scholarship with participation from more than 10 000 survivors worldwide. We combined factors that are exposure specific (ie, types of violence), treatment specific (ie, treatment type and provider type), and implementation related (ie, treatment setting and national setting) for a comprehensive analysis on how non-specialist providers are delivering psychosocial care.

Treatment effects were slightly smaller for PTSD and impairment symptoms compared with depression and anxiety. In a sensitivity analysis of only methodologically rigorous studies, superior treatment outcomes for depression and anxiety symptoms emerged whereas the effects on PTSD and impairment symptoms were slightly decreased. These findings suggest that PTSD and concomitant impairment symptoms could be harder to treat via non-specialist provider-delivered care and reveals a need to optimise psychosocial care in task-sharing paradigms. Although most intragroup effects were not significant, violence type did play a significant role in delineating differences.[1,67]

As the violence exposures of war and interpersonal violence are distinct, it is probable that they are culturally constructed and internalised uniquely, which leads to different outcomes. Even within the context of war, the experiences of a refugee versus a combatant are starkly distinct. According to constructivist self-development theory, meaning making is a central feature that can alter the prognosis of PTSD symptoms following violence exposure.[68] All outcomes were significantly reduced for refugees after non-specialist provider-delivered care. Several mechanisms might be relevant in the settings where refugees live that align with community-based care paradigms.[69] These paradigms include social support, tangible assistance, social processing, and connections with peers for collective healing.[12,70] Refugees typically live communally in post-migration communities,[71] which might contribute to collective healing.

The improvement in refugees' mental health following non-specialist provider-delivered care could also be related to provider type. For refugees, care was more often delivered by peers. The mutuality of experience between providers and recipients of treatment could have fostered better outcomes.[72,73] A 2021 realist review[71] on community-based interventions in LMICs affected by conflict found that three core mechanisms drive change: using community members as delivery agents (which can include peers), applying transdiagnostic approaches to target co-occurring issues, and customising outcome assessments to measure culturally meaningful outcomes (eg, idioms of distress). Similarly, when care was delivered might also play a role; refugees tend to receive unequal support and resources across the migration experience,[74] so it is possible that we included studies delivering care to refugees during a time when they were receiving multiple types of support beyond psychosocial treatment.

Provision of care by non-specialists was no better than control conditions for interpersonal violence survivors and veterans (appendix pp 45–47). These findings align with earlier literature showing that veterans tend to present with clinically complex comorbidity and polypharmacy use.[75,76] Similarly, mixed effects for interpersonal violence survivors have been noted.[18,77,78] However, these subgroups had fewer studies so the results should be interpreted with caution.

We found stable effects of community-based care across all outcomes, which supports the notion that care belongs in the community and is best realised when delivered by community members.[79,80] The strength of community-based care is reinforced by our finding that community providers elicited significant changes in all outcomes. Although we found positive evidence for non-specialist provider-delivered care in medical settings, access to medical settings remains sparse in rural regions worldwide. Community-based and culturally adapted care might be more accessible for violence survivors in areas with a scarcity of or inadequate health facilities.

Surprisngly, monodiagnostic treatments did not produce significant changes in the outcomes of depression, PTSD, and impairment, although summary

effects were small to medium in size. These treatments are included in major clinical guidelines (eg, National Institute for Health and Care Excellence, International Society for Traumatic Stress Studies, and American Psychological Association). However, traditional monodiagnostic PTSD treatments (eg, cognitive processing therapy and prolonged exposure) were not explicitly designed for non-specialist provider delivery, whereas some adiagnostic and transdiagnostic approaches were specially designed for non-specialist provider delivery (eg, Problem-Management Plus[81]). These treatments also differ in their clinical mechanisms. Monodiagnostic approaches often rely on exposure (eg, cognitive or behavioural exposure). Exposure-based approaches might require more intensive training and supervision than adiagnostic and transdiagnostic treatments. Finally, the heterogeneity in the monodiagnostic subgroup was very low (I^2=0–15% across the non-significant outcomes) and we had fewest studies in this category. So, it is possible that our study sampled a restricted range of monodiagnostic treatments and the small sample dampened the effects of strong monodiagnostic treatments (eg, cognitive processing therapy).[82] Transdiagnostic treatments, which intentionally target multiple problems, elicited significant effects across all outcomes and stood out as having a clear overall benefit. These treatments appear to be most adaptable for war and violence survivors.[83,84]

Finally, treatment effects did not differ significantly for any outcome between LMICs and HICs. As task-sharing becomes popular, particularly in areas with a scarcity of or inadequate health facilities, our study contributes to the evidence base that even non-specialist providers can elicit small to moderate effects across a range of trauma reactions across contexts.

The relative dearth of single-session interventions is surprising, given their scalability potential. Many studies were methodologically biased, with more recently published studies having less bias. A key contributor to bias was absence of masking of the assessor, which should be done in all trials. Our work revealed fundamental gaps in reporting of clinical factors. For example, participants were recruited to some of the included studies based on sharing similar violent exposures, but their individual trauma histories were not factored into all of the studies' analyses. Similarly, implementation metrics that are crucial for improved replication were rarely reported (eg, process indicators, cost-effectiveness, and qualitative feedback from providers and patients). Novel paradigms (eg, offering community-based services by peers) could improve methodological rigor by using mixed methods to contextualise the barriers and facilitators to care delivery to enhance replication efforts.

Our study has several important limitations. We did not examine subgroup differences by type of control condition or analyse outcomes at follow-up periods. We did not use individual participant data for analyses, which precludes our ability to control for baseline symptom severity and to classify individual trauma exposures—or polytraumatic exposures—to specific individuals. We used broad grouping categories which undoubtedly mask nuance, including the complexity of polytrauma exposures that affect mental health in a dose–response relationship.[85] The violence type of war is itself a major parent category including a myriad of potentially traumatic exposures; for example, rape as a tool of war, armed conflict, threat and intimidation, torture, forcible removal from one's home or region, migration-related stressors, discrimination and hate-based violence, and sudden losses of loved ones. Similarly, the category of refugee could include internally displaced people, those in an active conflict zone, and asylum seekers or refugees in the post-migration context. We did not have sufficient data for each study to stratify by sex or gender in our analyses. No people with lived experience of mental health conditions were involved in the study. Finally, these effect sizes might not generalise to populations with a diagnosable or severe mental health disorder.

In conclusion, our study shows the effectiveness of non-specialist providers in supporting survivors of violence. Violence type—especially as it intersects with the social context of recovery—is crucial to consider when designing and delivering treatment programmes. Our subgroup analyses suggest studies should explore differences in how non-specialist providers are selected, trained, and retained by setting and provider type. Stratifying various treatment packages—and eventually mechanisms—in component network meta-analyses, as a future step, will enhance clinical nuance in treatment selection. Such fine-grained findings could inform the optimal treatment programming to improve care for different violence-exposed groups and enhance global health equity.

Contributors

ARP led the overall study conceptualisation, design, protocol registration, and supervision of data collection and extraction; contributed to original writing of the manuscript draft, revisions, and edits; and was responsible for submission and resubmission following peer review. AN supervised the overall study, co-conceptualised research questions and study protocol design, consulted on statistical approaches to analyses, and edited and revised the manuscript. DP consulted in statistical approaches, created data visualisations, and helped check data for verification. AB-S, LF, EM, ST, GR, AA, BB, and KED double-screened and double-extracted data. AZ and DW screened and extracted data and conducted analyses to support data visualisation (plots and figures). VHP helped conceptualise the study questions, shape manuscript writing, and edited the manuscript. GR led data entry for all meta-analyses, and ARP and AZ re-checked and verified data. ARP had final responsibility for the decision to submit for publication.

Declaration of interests

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Data sharing
Data from this project will be available on Open Science Framework from September, 2026. Please contact the lead author (apatel132@mgh.harvard.edu) for access to data in the interim period.

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