## **Supplementary Online Content**

Murray LK, Skavenski S, Kane JC, et al. Effectiveness of trauma-focused cognitive behavioral therapy among trauma-affected children in Lusaka, Zambia: a randomized clinical trial. *JAMA Pediatrics*. Published online June 29, 2015. doi:10.1001/jamapediatrics.2015.0580.

eTable 1. Items in the PTSD-RI Symptom Section

**eTable 2.** Predicted Mean Outcome Scores, Mean Change Scores, and Between Treatment Group Effect Sizes, Adjusted for Clustering by Counselor, Site, and Participant Over Time for PTSD-RI 20-Item Outcome and 18-ITEM LOCAL SYMPTOM SCALE OUTCOME (n=257)

**Table 3.** Adjusted Predicted Mean Outcome Scores, Adjusted Mean Change Scores, and Between-Treatment Group Effect Sizes (n=257)

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Items in the PTSD-RI symptom section

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	Original Items (n=20)		Locally Specific Items (n=18)
1.	I watch out for danger or things that I am afraid of.		I cry
2.	When something reminds me of what	2.	I think too much
	happened, I get very upset, afraid or sad.		
3.	I have upsetting thoughts, pictures, or	3.	I have stopped going to school because I
	sounds of what happened come into my		think I will be laughed at or teased
	mind when I do not want them to.		
4.	I feel grouchy, angry or mad.	4.	I feel used
5.	I have dreams about what happened or	5.	I do not look like myself
	other bad dreams.		
6.	I feel like I am back at the time when the bad	6.	I am reserved. I cannot open up.
	thing happened, living through it again.		
7.	I feel like staying by myself and not being	7.	I am damaged psychologically.
	with my friends.		
8.	I feel alone inside and not close to other	8.	I feel rejected, like everyone is against
	people.		me.
9.	I try not to talk about, think about, or have	9.	I feel shy.
	feelings about what happened.		
	I have trouble feeling happiness or love.		I sleep too much.
	I have trouble feeling sadness or anger.		I do not feel at ease.
12.	I feel jumpy or startle easily, like when I hear	12.	I do not feel free.
	a loud noise or when something surprises		
	me.		
13.	I have trouble going to sleep or I wake up	13.	I am surprised.
4.4	often during the night.	4.4	
14.	I think that some part of what happened is	14.	I am ever quiet
15	my fault.	15	Low uphoppy or and
15.	I have trouble remembering important parts	15.	I am unhappy or sad
16	of what happened.  I have trouble concentrating or paying	16	Lam nonvous
10.	attention.	10.	I am nervous.
17	I try to stay away from people, places, or	17	I have an unsettled mind, no peace of
''.	things that make me remember what	''.	mind.
	happened.		ming.
18	When something reminds me of what	18	I run if I see the abuser
10.	happened, I have strong feelings in my body	10.	Trail in 1 000 the abaser
	like my heart beats fast, my head aches, or		
	my stomach aches.		
19.	I think that I will not live a long life.		
	I am afraid that the bad thing will happen		
	again.		
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eTable 2. Predicted mean outcome scores, mean change scores, and between treatment group effect sizes, adjusted for clustering by counselor, site, and participant over time for PTSD-RI 20-item outcome and 18-item local symptom scale outcome (n=257)

	TF-CBT (n=131) <sup>a</sup>					TAU Control					
	Baseline	Post-			Baseline	Post-					
		Assessment				Assessment					
Outcome	Mean <sup>d</sup>	Mean <sup>d</sup>	Change	Mean	Mean <sup>d</sup>	Mean <sup>d</sup>	Change	Mean	Mean	Р	Effect
	(95% CI)	(95% CI)	%	change <sup>d</sup> (95% CI)	(95% CI)	(95% CI)	%	change <sup>d</sup> (95% CI)	change difference <sup>d</sup> (95% CI)	value <sup>e</sup>	size <sup>f</sup>
PTSD-RI <sup>b</sup>	2.07 (1.90 to 2.23)	0.40 (0.23 to 0.57)	-80.7	-1.67 (-1.97 to -1.37)	1.91 (1.70 to 2.11)	1.60 (1.40 to 1.79)	-16.2	-0.31 (-0.50 to -0.12)	-1.36 (-1.67 to -1.05)	<.0001	2.57
Local symptom scale <sup>c</sup>	1.67 (1.50 to 1.85)	0.27 (0.16 to 0.39)	-83.8	-1.40 (-1.66 to -1.14)	1.59 (1.43 to 1.74)	1.15 (0.97 to 1.32)	-27.7	-0.44 (-0.66 to -0.23)	-0.96 (-1.24 to -0.69)	<.0001	1.68

Abbreviations: TF-CBT, Trauma-Focused Cognitive Behavioral Therapy; TAU, Treatment as Usual; 95% CI, 95% Confidence Interval; PTSD-RI, Post-traumatic Stress Disorder Reaction Index

<sup>&</sup>lt;sup>a</sup>All 257 participants were included in the analysis following multiple imputation procedures for loss to follow-up and item-level missing data.

<sup>&</sup>lt;sup>b</sup> PTSD-RI outcome was average score (possible range 0-4) from the original 20 items included in the PTSD-RI. Model was linear mixed effects regression model that included random effects of participant, site, and counselor. The fixed effects included treatment group, time, and an interaction term of treatment group X time.

Local symptom scale outcome was average score (possible range 0-4) from the 18 locally defined trauma symptoms. Model was linear mixed effects regression model that included random effects of participant, site, and counselor. The fixed effects included treatment group, time, and an interaction term of treatment group X time.

<sup>&</sup>lt;sup>d</sup>Estimates for means, change %, mean change, and mean change difference were calculated from the coefficients of the linear mixed effects models as described above.

<sup>&</sup>lt;sup>e</sup>P value is the significance level of the mean change difference from the linear mixed effects model indicating statistical significance of the difference in change of outcome score between the treatment and control groups from baseline to post-assessment.

<sup>&</sup>lt;sup>f</sup>Cohen's d effect size was calculated by dividing difference in mean change predicted from the models (PTSD-RI: -1.36; Local items: -0.96) by the pooled baseline standard deviation (PTSD-RI: 0.53; Local items: 0.57). The absolute value of the effect size is presented.

eTable 3. Adjusted predicted mean outcome scores, adjusted mean change scores, and between treatment group effect sizes (n=257)

		TF-CBT	(n=131) <sup>a</sup>			TAU Contr					
	Baseline	Post-			Baseline	Post-					
		Assess				Assessm					
Outcome	Adjusted Mean <sup>c</sup> (95% CI)	Ment Adjusted Mean <sup>c</sup> (95% CI)	Adjusted Change %	Adjusted mean change <sup>c</sup> (95% CI)	Adjusted Mean <sup>c</sup> (95% CI)	ent Adjusted Mean <sup>c</sup> (95% CI)	Adjusted Change %	Adjusted mean change <sup>c</sup> (95% CI)	Adjusted Mean change difference <sup>c</sup> (95% CI)	<i>P</i> value <sup>d</sup>	Effect size <sup>e</sup>
Trauma symptom <sup>b</sup>	1.80 (1.59 to 2.01)	0.26 (0.09 to 0.42)	-85.6	-1.54 (-1.80 to -1.28)	1.69 (1.49 to 1.89)	1.32 (1.08 to 1.57)	-21.9	-0.37 (-0.55 to -0.19)	-1.18 (-1.46 to -0.89)	<.0001	2.41
Functional impairment <sup>b</sup>	0.99 (0.72 to 1.35)	0.11 (0.07 to 0.15)	-88.9	-0.88 (-1.16 to -0.60)	1.02 (0.68 to 1.54)	032 (0.27 to 0.37)	-68.6	-0.71 (-1.09 to -0.32)	-0.17 (-0.32 to -0.01)	.03	0.26

Abbreviations: TF-CBT, Trauma-Focused Cognitive Behavioral Therapy; TAU, Treatment as Usual; 95% CI, 95% Confidence Interval

<sup>&</sup>lt;sup>a</sup>All 257 participants were included in the analysis following multiple imputation procedures for loss to follow-up and item-level missing data.

The trauma symptoms model was a linear mixed effects model and the functional impairment model was a generalized linear mixed effects model with a log link Both models included random effects of participant, site, and counselor. The fixed effects included treatment group, time, and an interaction term of treatment group X time. They were also adjusted for variables that differed substantially between groups at baseline and variables that significantly predicted outcome change over time. For the trauma symptom model these covariates included length of time between assessments (differed significantly between groups at baseline) and primary caretaker (significant predictor of change in PTSD over time). For the functional impairment model the additional covariates included length of time between assessments (differed significantly between groups at baseline), primary caretaker, and currently in school (both significantly predicted change in functioning over time).

The range for both the trauma symptom and functional impairment outcomes was 0-4 with higher scores reflecting greater symptom severity and greater functional impairment, respectively. Estimates for adjusted means, adjusted change %, adjusted mean change, and adjusted mean change difference were calculated from the coefficients of the adjusted mixed effects models as described above. The coefficients for the functioning model were back-transformed from the log-scale by exponentiation.

<sup>&</sup>lt;sup>d</sup>P value is the significance level of mean change difference from the adjusted mixed effects model indicating statistical significance of the difference in change of outcome score between the treatment and control groups from baseline to post-assessment.

<sup>&</sup>lt;sup>e</sup>Cohen's d effect size was calculated by dividing the mean change difference predicted from the adjusted models (trauma symptom score: -1.18; Functioning: -0.26) by the pooled baseline standard deviation (PTSD: 0.49; Functioning: 0.65). The absolute value of the effect size is presented.