

# Not all trauma is made equal: Exploring whether type, timing and interactions of traumatic events influence the development of PTSD symptoms in Rohingya caregivers



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Distinct childhood

and war traumas

predict PTSD

differently in

Rohingya

caregivers, with

unique moderating

effects of childhood

experiences on

war-related PTSD in

men

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Type & Timing of Trauma Increase

PTSD symptoms & likelihood of

PTSD Diagnosis

**Table 1.** PW and Husband's PTSD symptoms

dependent upon distinct types of war,

displacement, and childhood trauma

Conflict-related

Isolation & loss

R

ConflictTraum

Isolation Los

Violent victimization

Destruction & injury

Witness/victim physical

Sexual abuse & neglect

Community violence

details are not shown for clarity.

Log-Odds of childhood and war trauma on a PTSD diagnosis

Log-Odds

Witness violence

& emotional abuse

The **LEGO** Foundation

**PTSD Symptoms** 

Husbands

 $\beta$  (SE)

.05 (.02)

-.10\*\* (.02)

.37\*\*\*(.03)

-.02 (.03)

.12 (.03)

.28\*\*\*(.02)

.03 (.02)

.15\*\*\*(.02)

PW

 $\beta$  (SE)

-.02 (.02)

.12\*\*\*(.01)

.13\*\*\*(.02)

.09 (.02)

.02 (.01)

.19\*\*\*(.01)

.15\*\*\*(.02)

-.01 (.01)

Log-Odds of childhood and war trauma on a PTSD diagnosis

Take a picture of this QR code to check references, details about

our study, R scripts and R output. Please contact me for

- Current theories of adversity<sup>1,2</sup> and recent insights into war trauma<sup>3</sup> state that timing and dimensions of experiences may influence the development of mental health problems<sup>4,5</sup>.
- Studies have found that childhood trauma may contribute to vulnerability to mental illness in war trauma survivors (stress sensitization)<sup>6</sup>, but might also make them more resilient (stress inoculation)<sup>7</sup>.
- We examined how different dimensions of war and childhood trauma, its timing, and interactions thereof influence post-traumatic stress (PTSD) symptoms in Rohingya caregivers.

## **Participants**

Rohingya pregnant women (PW; N= 2250,  $M_{\rm age}$  21 yrs) and their husbands = 600,  $M_{\rm age}$  26.5 yrs) living in camps in Cox's Bazar, Bangladesh

### Methods

PTSD symptoms: 33 items from the Harvard Trauma Events Questionnaire (HTQ)-4. M = 1.89, SD = 0.53, min=1.00, max =3.79.

PTSD diagnosis (DSM-4): Ratio of 16 items of the HTQ-4. Scores  $\geq 2.5^* = PTSD$ . 26.5% of women and 41.3% of men scored above the cutoff for PTSD. War & Displacement Trauma: 35 items from the HTQ-1 assessing different types of war-related traumatic experiences Sum = 6.75, SD = 3.86, min = 0, max = 27. Adverse Childhood Trauma: ACE-International Questionnaire. 26 items assessing whether participants were exposed to 12 types of trauma in childhood. M =4.39, SD = 0.76, min = 0, max = 11.

Analytic Strategy: (1) SEMs (EFA/CFA/Path analysis) to find (1) distinct dimensions of trauma; (2) how these are related to PTSD symptoms in PW and husbands; and then (3) extracted factors scores to test interactions, adjusting for false discovery rate.

## War & Childhood Trauma Measurement Models

F1: Conflictrelated

3 items. Evacuation, forced to hide, combat situation

**F2: Isolation** & loss

3 items. Enforced isolation/ separation, murder/disappearance of spouse & child

F3: Violent victimization

10 items. Beatings, torture, abuse, brainwashing, forced labor, desecrate bodies, betrayel of self & others.

F4: **Destruction & Injury** 

**5 items**. Destruction of property, extortion, robbery, injury/ murder of other family members/ friends

**F5: Witness** violence

3 items. Witnessing torture, murder, beatings

**CFA model of war trauma.** Fit:  $\chi 2(241) = 868.47$ , p < .001, CFI= 0.965, TLI = 0.960, RMSEA = .032, SRMR = .076

items. Witnessing/ being yelled, slapped, threatened, hit with an object. Bullying & physical fights

F1: Witness & victim of abuse

F2: Neglect &

sexual abuse

9 items. Victim of sexual abuse, emotional & physical neglect due to alcohol consumption

3 items. Witnessing beatings, gun shots, stabbing in your community

F3: Community violence

CFA model of childhood trauma. Fit:  $\chi 2(182) = 1304.74$ , p <.001, CFI= 0.947, TLI = 0.940, RMSEA = .044, SRMR = .092

husbands who reported less physical & emotional abuse. Log-Odds

**Predicting PTSD Symptoms & Diagnosis** 

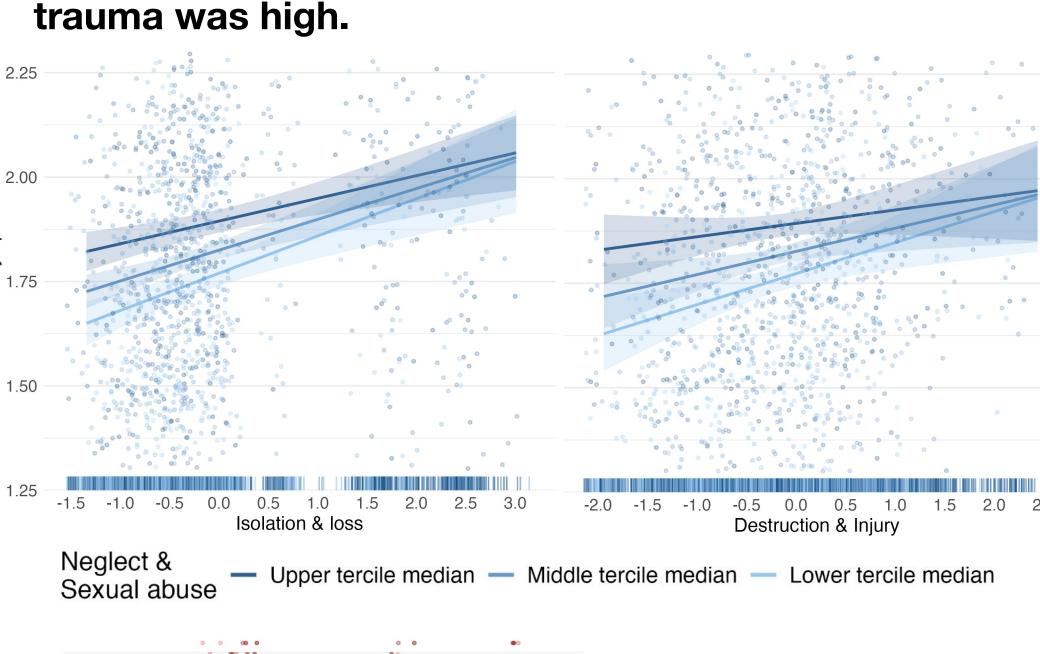
- In pregnant women, war experiences such as isolation and loss and victimization were associated with higher PTSD symptoms. Childhood neglect and abuse also heightened symptoms. Women who experienced these different types of war and childhood trauma were between 1.2 and 1.4 times more likely to qualify for a PTSD diagnosis.
- In husbands, childhood abuse and community violence and victimization were associated with more PTSD. Isolation and loss predicted lower PTSD symptoms. Men who had experienced trauma were between 1.4 & 2.3 times more likely to qualify for a PTSD diagnosis.
- Few aspects of childhood trauma moderated the effects of war on PTSD.
  - o **In women,** there was no evidence of stress sensitization/inoculation based on childhood experiences. Neither neglect or sexual abuse made them more vulnerable/or resilient to war trauma.
  - This was not the case for husbands. Whereas isolation and loss predicted *lower* PTSD symptoms on those who had experienced more community violence (stress inoculation), witnessing violence was associated with *higher* symptoms on those who had elevated levels of childhood exposure to physical and emotional abuse (stress sensitization).

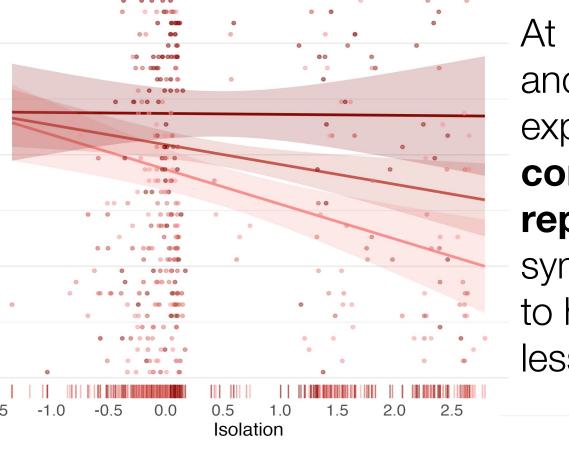
#### CONCLUSION

- Associations among specific traumatic experiences, its timing and PTSD symptoms/diagnosis differed between men and women.
- Whether and the ways in which childhood trauma influences the effects of war on PTSD is still unclear. Replication is recommended.
- A more nuanced conceptualization of trauma (in addition to cumulative exposure) should be considered when assessing and treating PTSD in forcibly displaced caregivers.

## Distinct aspects of childhood trauma moderate the effects of war trauma on PTSD symptoms

At **low levels** of isolation, loss, and destruction & injury, pregnant women who experienced more neglect and sexual abuse reported higher PTSD symptoms in comparison to pregnant women who reported less neglect and abuse. There were no differences when war

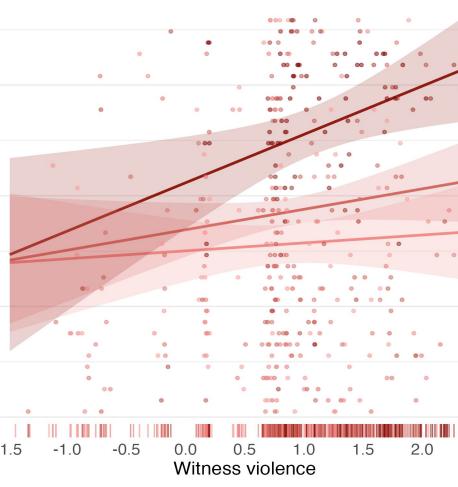




Community violence — Upper tercile median

At **high levels** of witnessing violence, **husbands** who witnessed and experienced more physical & emotional abuse reported higher PTSD symptoms in comparison to

At **high levels** of isolation and loss, **husbands** who experienced more community violence reported lower PTSD symptoms in comparison to husbands who reported less community violence.



Physical & Upper tercile mediar emotional abuse

ViolentVictimization /iolentVictimizatio Destruction Injur Destruction Injur WitnessViolence WitnessViolence ChildAbuse ChildAbuse ChildNeglectSexua ChildNeglectSexua ChildComViolence ChildComViolence

Note. \*\*p <.01. \*\*\*p <.001. Covariates and model fit

Figure 1. Logistic regressions predicting PTSD

ConflictTrauma

**Isolation Loss** 

diagnosis (=> 2.5) in PW & husbands