## Pathways to Refugee Trauma Recovery:

## What does the Psychological and Neurobiological Research Tell Us?



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## The Refugee Experience





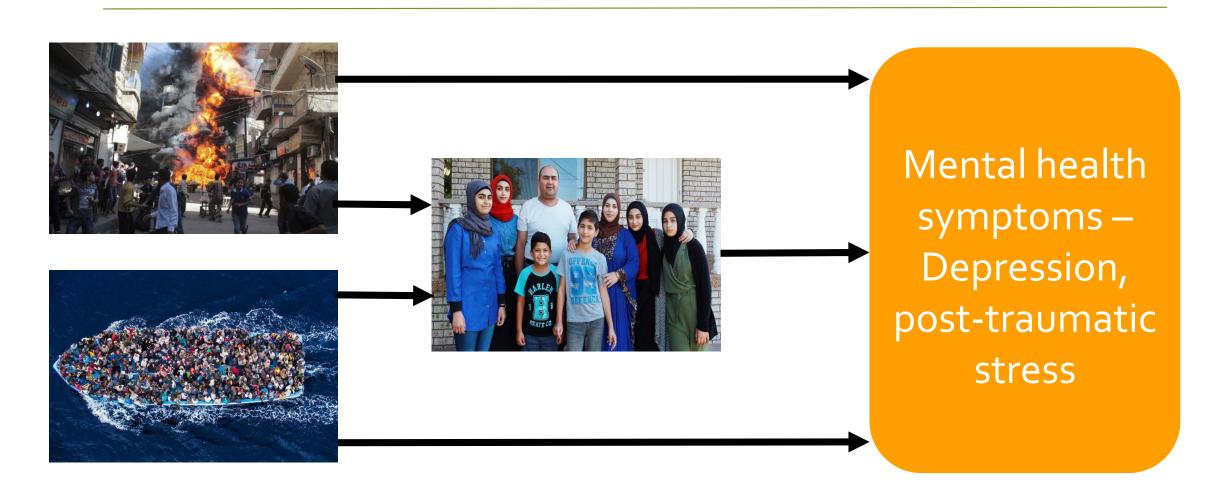


Trauma

Displacement

Settlement

## The Refugee Experience & Mental Health



#### What we don't know

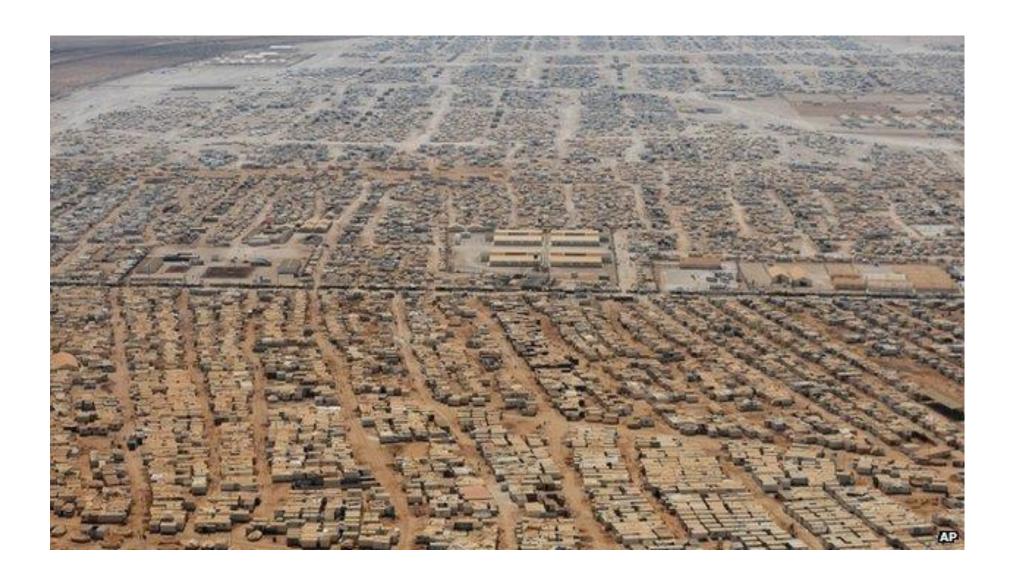
- Evidence-base for mechanisms underlying refugee trauma and recovery lacking
- Refugees and torture survivors do not respond to mainstream treatments for trauma
- What **causes** reduced psychological wellbeing in refugees?
- What specific factors contribute to <u>resilience</u> and strong recovery?
  - → Psychological, social, and and neurobiological research critical

## Global Context



## Improving the Mental Health of Refugees

- Major hurdle in treating refugee mental health is scale of problem
- We have good treatments for most mental disorders
- BUT they expensive, require specialists, are timeconsuming, & not sustainable in low income settings



## Treating Syrian Refugees

- More than half the country is displaced
- Many exposed to war, torture, poverty, detention, uncertain futures, etc
- > How do we upscale evidence-based programs for this setting?
- UNSW partnered with WHO to develop a mental health program that could be trained to local providers and implemented on a large scale
- Proven to be successful across multiple trials

## Treating Syrian Refugees

- UNSW has developed links with agencies in Middle East (UNHCR) to test new programs with adults, adolescents, children building on our recent WHO programs
- EU Horizon 2020 grant (€8 million) to trial different variants of programs across Middle East and Europe
- Using different paradigms (individual, group, webbased)

## Treating Syrian Refugees

- Jordan
- Lebanon
- Turkey
- Germany
- Netherlands
- Switzerland

# How torture impacts the brain

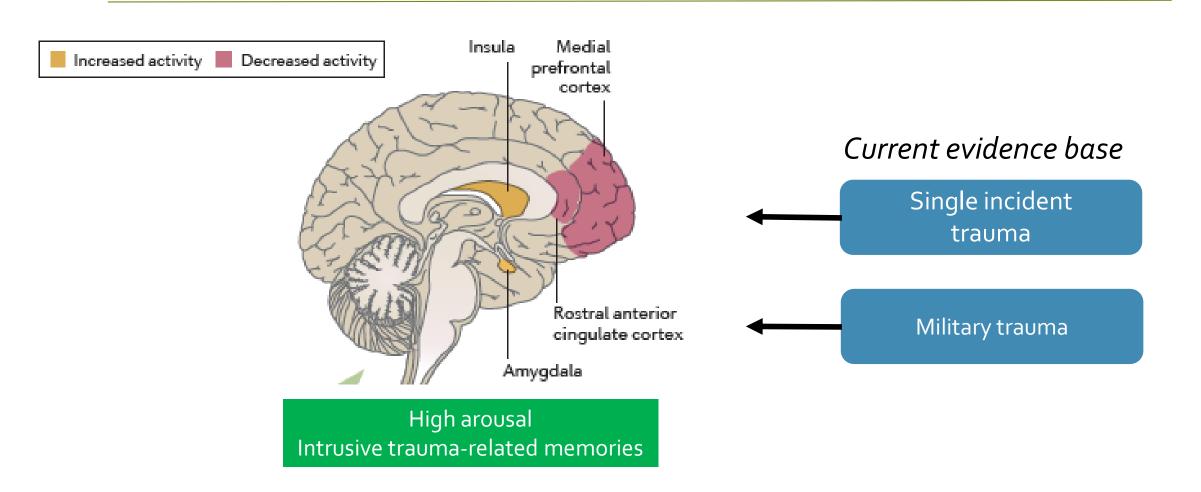
A neuroimaging study

#### Torture and Mental Health

- 1 in 5 resettled refugees are torture survivors (Steel et al., 2009)
- Torture has a significant psychological and physiological impact (Quiroga & Jaranson, 2005; Bradley & Tawiq, 2005; Basoglu, 2009)
  - Torture exposure is the single biggest predictor of PTSD in refugees (Steel et al., 2009)
- Torture survivors have difficulties with:
  - Regulating emotional and stress responses (Nickerson et al., 2015, 2016);
  - Social engagement and trust (Hall et al., 2014; Behnia, 1997);
  - Negative self and world-concept (Cloitre et al., 2013)



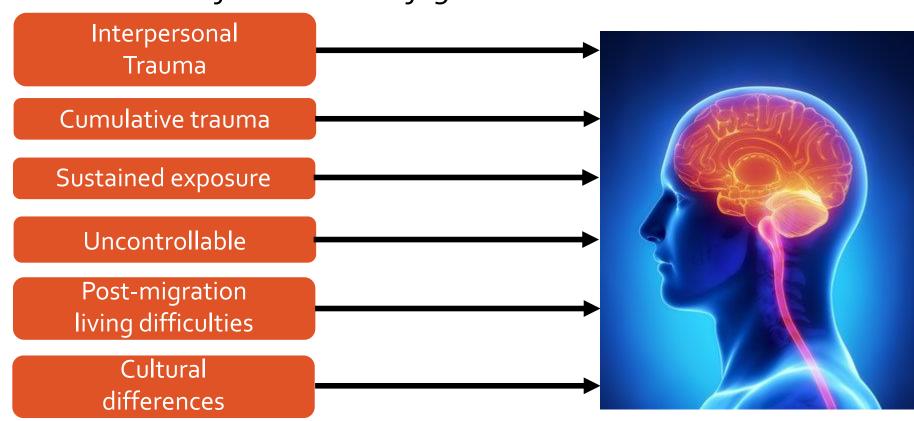
#### Trauma and the Emotional Brain



Yehuda et al., (2015). Nature Neuroscience.

#### Torture and the Brain

Characteristics of torture and refugee trauma



## Participants

8o participants with a refugee background	
Gender	67.5% males
Age	Average 38.2 years old, range 18-70 years
Country-of-origin	Iran (38.8%) Iraq (16.1%) Sri Lanka (7.5%) Afghanistan (5%) Range of other countries – Africa, Asian and South America (32.6%)
Number of trauma types	11.25 event types
% torture survivors	38.75%
Length of time in Aus	3.3 years, range 2 months — 30 years

## Study Procedure



STARTTS; self-referral

Step 2: Interview

Intensive 2 session clinical interview, including trauma & torture history

Step 3: fMRI scan

Emotion and cognitive tasks





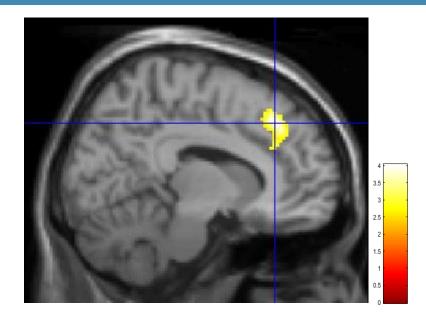


## Task

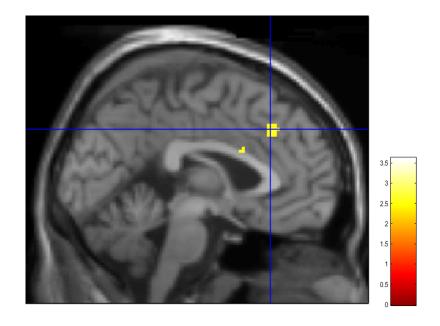


#### Brain Responses to Fear Information

Greater activity in frontal brain area associated with degree of torture severity



Torture Survivor > Non-Torture Survivor Degree of overall trauma exposure



Note: Results are preliminary and not yet final

#### What does this mean?

- Flat arousal
- Emotional withdrawal and numbing
- Difficulties making sense of self in the world

- Torture may have a long term impact on fear systems in the brain
  - This impact is related to the severity of torture exposure
  - This effect is irrespective of current levels of post-traumatic stress symptoms
- Could makes post-trauma adjustment and recovery period very difficult

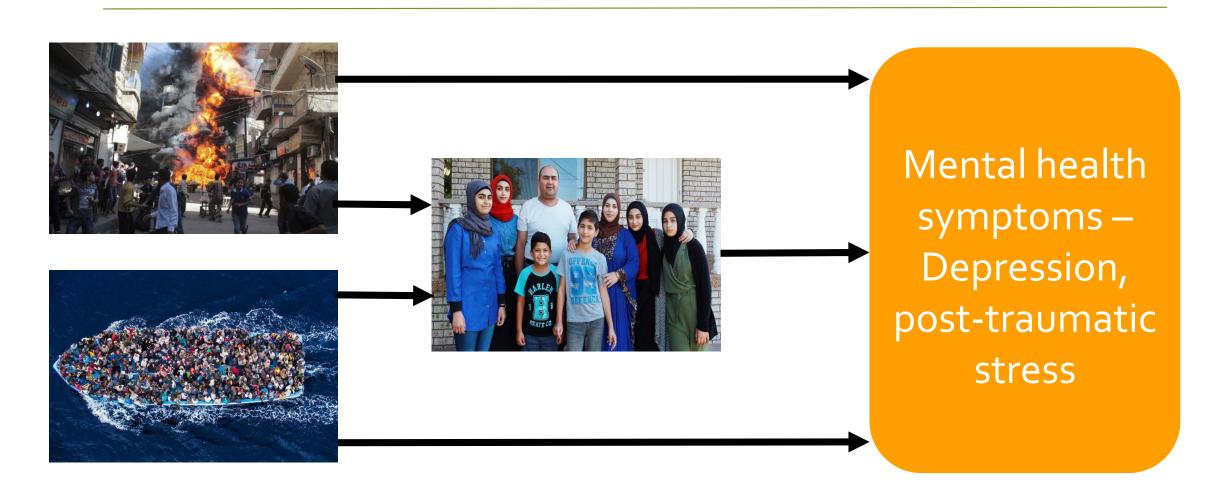
## Refugee adaptation upon settlement



## The Refugee Adjustment Study

- Longitudinal investigation of the psychosocial adaptation of refugees and asylum seekers in Australia
- Partners: Australian Red Cross and Settlement Services International (SSI)
- Aim: To understand the factors that contribute to healthy adaptation and settlement outcomes i.e. resilience, and the factors that contribute to poorer adaptation
  - Factors could include:
    - Situational factors or salient events e.g. visa status change, post-migration living difficulties
    - Mental health & functionality e.g. Posttraumatic stress symptoms
    - Social factors e.g. social capital
    - Psychological factors e.g. self-efficacy
- Method: Track participants over three years
  - Complete online survey 5 times (every 6 months)
  - English, Arabic, Farsi, Tamil-speaking adults (>18 years) who arrived in Australia since January 2011
  - Open nation-wide
- *Outcomes*: To inform and guide service provision and support to refugees

## The Refugee Experience & Mental Health



#### The Future...

- > Develop better treatments for refugees
- >Identify neural pathways to foster resilience
- >Identify mechanisms of resilience in adolescent refugees
- >Map the long-term trajectories of refugee adjustment

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