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# The *STAR-MH* screening tool for identifying mental disorders in asylum seekers and new refugees

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# Background

Prevalence of clinical disorders (% caseness)  
in asylum seekers & refugees

	<b>Depression</b>	<b>PTSD</b>
<b><i>Asylum seekers</i></b>	<b>61.1**</b>	<b>52.1*</b>
<b><i>Refugees</i></b>	<b>30.3</b>	<b>27.3</b>
	<i>*p</i> < 0.01, <i>**</i> <i>p</i> < 0.05	
<b><i>General pop.</i></b> <b><i>(12-mth)</i></b>	<b>4.1</b>	<b>6.4</b>

(Hocking, Kennedy & Sundram, 2012)

(Australian Bureau of Statistics, 2007)

# Inadequacy of extant screening tools for mental disorders in Asylum Seekers

## ❑ Sector consultation

- **Australia** (FASST services, Hotham Mission, AMES, Red Cross)
- **International** (UK, i.e. *Traumatic Stress Service, Maudsley Hospital*; USA i.e., *Program for Torture Victims, CA; Survivors of Torture International, CA; Refugee Mental Health Program, CO*)

## ❑ Literature review

- **K10** – not validated in culturally diverse settings; poor X-cultural predictive validity; no established cut-off for depression/anxiety disorders
- **RHS-15** – not developed for AS populations; detects distress not disorder; no predictive validity
- **DASS** – does not identify PTSD
- **GHQ-12** – does not identify PTSD; measures general distress; poor predictive validity (Ouimette *et al.*, 2008)
- **PHQ-9** – does not identify PTSD; not suitable for low literacy (Ali *et al.*, 2016)
- **SRQ-20** – too long.

# The need for an asylum seeker-specific mental health screening tool

Mental health screening of asylum-seekers is important for 4 reasons:

- a) To facilitate appropriate and timely treatment
- b) To expedite the resolution of refugee status determination and maximise the individual's ability to credibly present their case \*
- c) To replace *ad hoc* and subjective mental health evaluations with a validated tool that can be applied uniformly by a range of workers in the field
- d) To provide an objective measure to advocate for greater support throughout the refugee determination process where relevant.

\* Aron, 1992; Cleveland, 2008; Cummins, 2013; Herlihy & Stuart, 2006; Steel, Frommer & Silove, 2004; Tay et al., 2013

## Aim:

To develop a mental health screening tool for non-health workers

- Brief and easily administered
- Sensitive
- Simple

## **3 phases:**

1. Tool development
2. Pilot process (iterative)
3. Qualitative feedback concerning length, interpretation, fidelity

# Inter-correlation of symptoms

	Depression	Anxiety	PTSD	Demoralisation
Depression	-	<b>.77*</b>	<b>.80*</b>	<b>.72*</b>
Anxiety	-	-	<b>.74*</b>	<b>.61*</b>
PTSD	-	-	-	<b>.68*</b>

# Method: Phase I: Tool Development

## Item derivation

- An initial 12-item STAR-MH was derived from a questionnaire-based study
- All questionnaire items entered into chi-square analyses → sensitivity (SN) and specificity (SP) against MINI PTSD and/or MDD. High SN &/or high predictive accuracy items retained.
- Duplicated items removed
- 'Immediate screen-in' items included on clinical grounds (e.g. previous mental health treatment)
- 12-item version assessed in a test sample of asylum seekers at the ASRC (Asylum Seeker Resource Centre)
- ROC Curve and Classification and Regression Trees (CART) analyses performed
- 10-item version assessed in a validation sample of asylum seekers and new refugees

1<sup>st</sup> version\* 12-item scale (including 3 'screen in' items)

2<sup>nd</sup> version\*\* 10-item scale (including with 2 'screen in' items)

\* *ASRC sample*

\*\* *ASRC & Monash Health Refugee Health Clinic sample*

# Method: Phase II - Pilot process (v.1 & v.2)

## Exclusion criteria:

1. < 18 years old
2. Refugees < 12 months
3. Diagnosed with a mental disorder since being in Australia; currently seeing a psychiatrist.

## Process:

- Screening tool administered by a range of non-health or non-mental health workers
- Diagnostically evaluated (M.I.N.I. 6.0 structured psychiatric interview) subsequently and blind to the participant's STAR-MH screening results.

## Feedback & referral:

- Written feedback from administrators (built into STAR-MH pilot form)
- Onward referral



## Method: Phase II – Administration outcomes (v.2)

- N=28 administrators → caseworkers, GPs, nurses, university students, bicultural workers, interpreters
- Diagnostically evaluated (validation interview) within 5.5 days of screening (IQR 0-9)
- Time taken to administer: Md 6 mins (IQR 5-7 mins) → with or without an interpreter

### Feedback to clients & referral:

- Psychoeducation given
- 84% ( $n=53$ ) of diagnosed accepted referral (uptake unknown)
- 5% ( $n=9$ ) of diagnosed declined treatment.

# Results (1)

## Participant profile – v.2

- ❑ **N=192** from 36 countries; 65% required English language interpreter
- ❑ 70% Male; 60% partnered; 54% arrived by boat
- ❑ 19-82 years (*Md*=33 yrs, *IQR*=28-43)

### Pre-arrival

- 15% refugee camp
- 6% mental disorder

### Post-arrival

- 55% Australian immigration detention
- **RDP stage:** 73% Primary stage; 20% appeal
- **Time since application:** 5–175 weeks (*Md* =113; *IQR*=62-143)
- **Work:** 57% on welfare; 16% work
- **Health:** 16% without Medicare
- 4% diagnosed mental disorder (in Australia)

# Results (2)

## Mental disorder prevalence (v.2)

- MDD: 30%
- PTSD: 20%
- PTSD &/or MDD: 32%
- 54% comorbidity (PTSD & MDD) – those who met criteria for a mental disorder
- Other: suicidality 7%; GAD 3%; panic disorder 2%; SUD 1.5%; psychosis 1%; OCD 0.5%; agoraphobia 0.5%
  - 99% comorbid with either MDD or PTSD ( $n=190$ )
  - ***Only 27% of those with a mental disorder had received treatment in Australia***
  - ***77% of those who met criteria had a GP (family doctor)***

## Results (3)

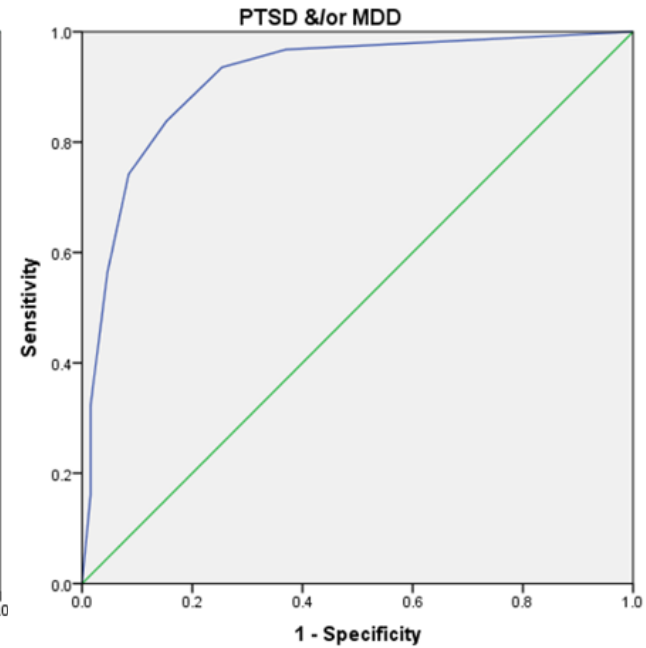
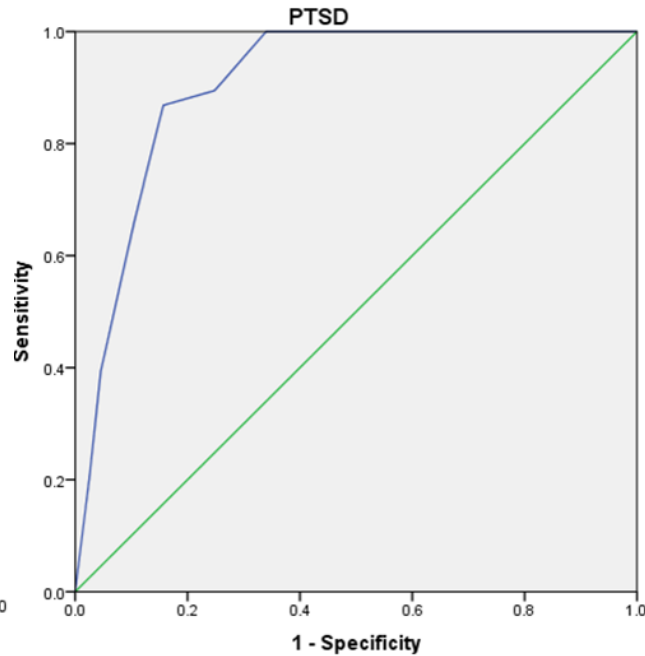
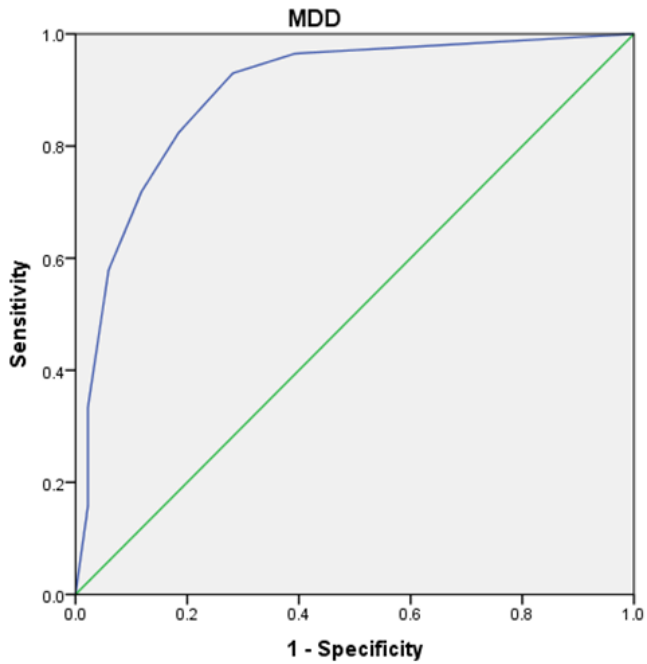
Predictive accuracy; sensitivity & specificity  
(9-item scale version: 7 + 2 'screen in' items)

<b>≥ 2 'Yes'</b>	<b>SN (%)</b>	<b>SP (%)</b>	<b>Area Under Curve</b>	<b>95% C.I.</b>	<b>Predictive accuracy</b>
<b>MDD</b>	<b>93.0</b>	<b>71.9</b>	<b>.90*</b>	<b>.85 – .94</b>	<b>72.9%</b>
<b>PTSD</b>	<b>100</b>	<b>66.7</b>	<b>.91*</b>	<b>.87 – .95</b>	<b>78.1%</b>
<b>MDD &amp;/or PTSD</b>	<b>93.5</b>	<b>74.6</b>	<b>.91*</b>	<b>.87 – .96</b>	<b>80.7%</b>

\*  $p < .0001$

# Results (4)

## Area Under the Curve (ROC curve)



# Conclusions

- High rates of unrecognised MDD & PTSD in asylum-seeker populations
- A final 9-item version of the STAR-MH was derived which demonstrated good predictive validity (PTSD & MDD) to distinguish distress from disorder
- Identifying PTSD &/or major depression will likely capture other co-morbid mental disorders in this population
- The *STAR-MH* is a simple, efficient screening tool to facilitate mental health referrals by non-health workers for asylum-seekers & new refugees at the agency of their first presentation.

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If interested in potentially being involved in the field study roll-out of the *STAR-MH*, contact:

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