

Selecting tools to assist general practitioners in diagnosing and assessing the severity of work-related mental health conditions

Tshepo Rasekaba¹, Jacinta Dermentzis¹, Samantha Chakraborty¹, Bianca Brijnath^{1,2}, Danielle Mazza¹

¹Department of General Practice, School of Primary and Allied Health Care, Faculty of Medicine, Nursing & Health Sciences, Monash University, Australia

²National Ageing Research Institute Ltd, Victoria, Australia

BACKGROUND

- Claims for work-related mental health conditions are increasing.
- In Australia, general practitioners (GPs) see approximately 96% of injured workers, and play a key role in facilitating recovery for people with work-related mental health conditions [1].
- GPs have expressed difficulties with diagnosing and managing work-related mental health conditions [2].
- Our team is currently developing "Clinical guidelines for the diagnosis and management of work-related mental health conditions in general practice".
- One of the key questions to be addressed in the guideline is: "In workers presenting with symptoms of mental health conditions, what **tools** can assist a GP to make an **accurate** (sensitive and specific) **diagnosis** of a mental health disorder and its severity?".

OBJECTIVE

To identify clinical assessment tools that can be used by GPs to facilitate an accurate diagnosis of work-related mental health conditions and their severity.

METHODS

A systematic literature review involved interrogating the following databases: MEDLINE, EMBASE, PsycINFO, and CINAHL

MeSH terms and keywords framed around:

- Depression, anxiety, acute stress, post-traumatic stress disorder, adjustment disorder
- Work-relatedness
- Assessment tools
- Sensitivity and specificity
- General practice

Inclusions:

1. Tool identification - studies using standardised tools to screen or assess severity of mental health conditions of interest
2. Diagnostic accuracy - studies which assessed sensitivity and specificity of tools to screen or assess severity of mental health conditions of interest
3. Publications in English
4. Papers published from database inception onwards

Two independent reviewers conducted the following:

1. Screened titles/abstracts and full text using Covidence [3]
2. Identified studies that described tools and/or sensitivity and specificity assessment
3. Assessed the quality of studies that described diagnostic accuracy using the Quality Assessment Tool for Diagnostic Accuracy Studies 2 (QUADAS) [4]
4. Extracted and summarised the sensitivity and specificity data (range of means where available, otherwise single point measure)
5. A Guideline Development Group reviewed findings of the systematic literature reviews and considered the implementability of their tools in the general practice setting.

RESULTS

- Search results to 30 April 2017 identified 774 unique studies.
- 44 tools for depression, anxiety, stress and post-traumatic stress disorder (PTSD) were identified from 42 studies.
- No tools for assessing adjustment disorders were identified

RESULTS

- A PRISMA describing diagram describing the outcomes of screening is shown in Figure 1.

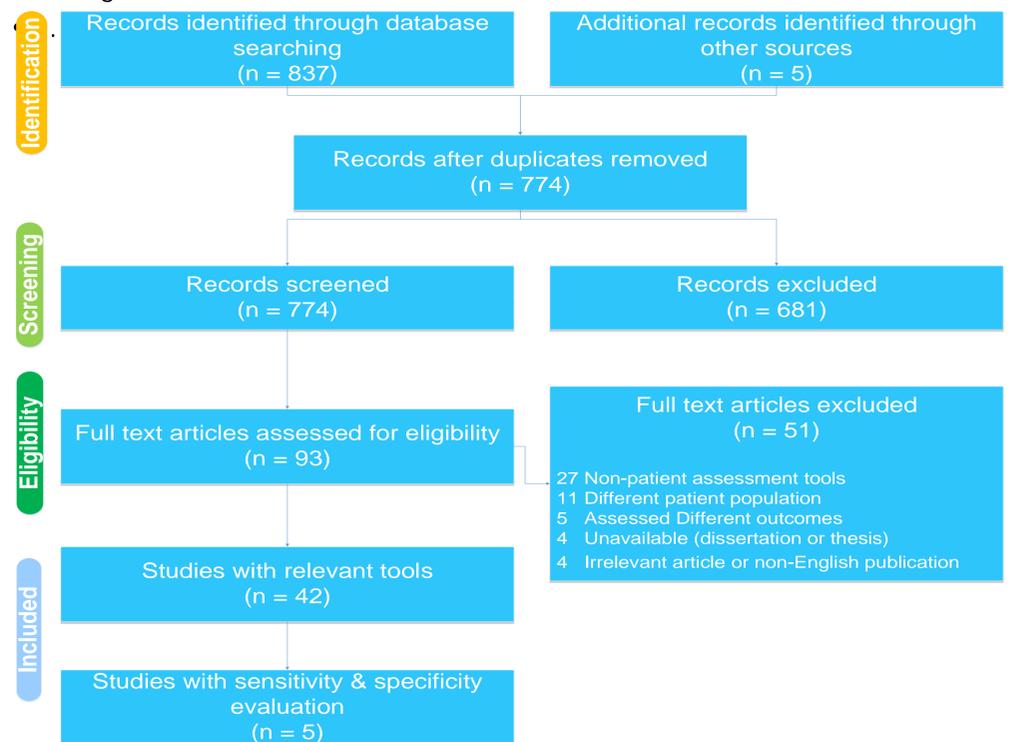


Figure 1. PRISMA of review search results

- Only 4 tools from 5 studies had undergone diagnostic accuracy testing in the work-related context (Table 1).
- Several tools were identified in the review, but only the Patient Health Questionnaire-9 (PHQ-9), Posttraumatic Stress Disorder Checklist Civilian-Version (PCL-C), Depression Anxiety Stress Scales (DASS) and the Four-Dimensional Symptom Questionnaire (4DSQ) have diagnostic accuracy data.
- The PHQ-9 for depression & PCL-C for PTSD have acceptable sensitivity and specificity and are self-completed, short (~10 minutes to complete), and free [5,6]. Thus they are feasible for use in general practice.

Table 1. Four tools with measures of diagnostic accuracy

	Study	Index *	Reference *	Optimum cut-off	Sensitivity (%)	Specificity (%)
Depression	Volker et al. 2016 [5], Cholera et al. 2014 [7]	PHQ-9	MINI	10	64 to 94	71 to 82
	Langerak et al. 2012 [8]	4DSQ	CIDI	3	85	65
	Nieuwenhuijsen et al. 2003 [9]	DASS	CIDI	12	91	46
Anxiety	Nieuwenhuijsen et al. 2003 [9]	DASS	CIDI	5	91	40
	Langerak et al. 2012 [8]	4DSQ	CIDI	7	74	71
PTSD	Gardner et al. 2012 [6]	PCL-C	DSM-IV	50	69 to 90	79 to 97

*Acronyms: 4DSQ: Four-Dimensional Symptom Questionnaire; CIDI: Composite International Diagnostic Interview; DASS: Depression Anxiety Stress Scales; DSM-IV: Diagnostic and Statistical Manual of Mental Disorders, 4th Edition; MINI: MINI-International Neuropsychiatric Interview; PCL-C: Posttraumatic Stress Disorder Checklist-Civilian Version; PHQ-9: Patient health questionnaire 9-Item.

CONCLUSION

- There are few studies that identify clinical assessment tools in the work-related mental health context.
- Two tools, the PHQ-9 for depression and the PCL-C for PTSD, have been assessed for sensitivity and specificity to diagnose mental health conditions in a work-related context and have the potential to assist GPs to diagnose mental health conditions in practice.

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Contact: Dr Samantha Chakraborty: samantha.chakraborty@monash.edu

