

# Management of post-traumatic stress disorder (PTSD)

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## Description of condition and intervention

Occurrence of traumatic events in an individual's life may lead to post-traumatic stress disorder (PTSD). It is a debilitating condition, where recurrent episodes of experiencing the trauma ensue. These could be in the form of nightmares, flashbacks or uncomfortable thoughts and affect the mood and general well-being of the affected individual. Cognitive behaviour therapy (trauma-focussed) is the cornerstone psychosocial treatment that is given, to help individuals come to terms with the trauma and its memories. Source: Bisson 2013

In this evidence brief, we present the effect and cost of the following intervention being analysed in FairChoices:DCP Analytical tool:

*Basic psychosocial treatment, advice, and follow-up for PTSD*

## Intervention attributes

### Type of interventions

Curative

### Delivery platform

This intervention may be delivered as part of routine care services predominantly at health centre level.

## Equity

In addition to considerations like cost-effectiveness and health systems factors, dimensions of equity can be relevant for priority setting. The opportunity for a long and healthy life varies according to the severity of a health condition that individuals might have, so there are inequities in individuals' opportunities for long and healthy lives based on the health conditions they face. Metrics used to estimate the severity of illness at an individual level can be used to help prioritize those with less opportunity for lifetime health. FairChoices: DCP Analytics Tool uses Health adjusted age of death (HAAD), which is a metric that estimates the number of years lived from birth to death, discounting years lived with disability. A high HAAD thus represents a disease less severe in terms of lifetime health loss, while a low HAAD represents a disease that is severe on average, causing early death or a long period of severe disability. It is also possible to estimate the distribution of HAAD across individuals with a health condition. FairChoices shows for each intervention an average HAAD value of the conditions that are affected by respective interventions that have health effects. Additionally, a plot shows HAAD values for around 290 conditions (Johansson KA et al 2020).

## Time dependence

Moderate level of urgency. Treatment outcomes not highly affected by some days of delay.

## Population in need of interventions

Intervention taxonomy	Treated population & treated fraction	Affected population & affected fraction
Basic psychosocial treatment for mild depression	0 to 99 years & 0.18* of prevalent cases	0 to 99 years & 0.18 of prevalent cases

\*The weighted prevalence of common mental disorders and PTSD symptoms was 27.2% and 4.8%, respectively (Iversen, A.C., van Staden, L., Hughes, J.H. et al 2009). Therefore, treated fraction is computed as 0.048/0.27

## Disease state addressed

This intervention targets post-traumatic stress disorder. This will be captured through mental disorders.

## EVIDENCE BRIEF

Basic psychosocial treatment

For PTSD

(DCP4 ID: MENTD07-01)

Cluster: Mental & substance use disorders

**FairChoices**

DCP Analytic Tool

## Intervention effect and safety

Table 1: Effect and safety of basic & intensive psychosocial treatment for PTSD

Effect of intervention		Certainty of evidence
Disability	Impact of the basic psychosocial treatment for mild anxiety disorders from OneHealth tool taken as a proxy effect size for basic psychosocial treatment for PTSD: 7.4% reduction	See appendix

## Model assumptions

Table 2: Summary of model parameters and values used in FairChoices – DCP Analytical Tool

Category	Model parameter	Notes
Interventions	Basic psychosocial treatment for post-traumatic stress disorder	.
<b>Cost parameters</b>		
Treated population	Based on prevalence of post-traumatic stress disorder	Global Burden of Disease study 2019
Gender	Both male & female	
Age	0-99 years	
Treated fraction	0.18	All prevalent cases
<b>Effect parameters</b>		
Affected population	Those with condition	
Affected gender	Both male & female	
Affected fraction age	0 to 99 years	
Affected fraction	0.18	
Comparison	No intervention	
Disability Reduction (RRR)	0.074	Efficacy of basic psychosocial treatment for mild anxiety used as a proxy here

## Intervention cost

Based on the cost of managing depression as a proxy, the cost of management of PTSD is estimated at \$61.3625 per average case in 2008 USD in South Africa (Chisholm et al., 2016).

## References

Bisson 2013: Bisson JI, Roberts NP, Andrew M, Cooper R, Lewis C. Psychological therapies for chronic post-traumatic stress disorder (PTSD) in adults. Cochrane Database Syst Rev. 2013 Dec 13;2013(12):CD003388. doi: 10.1002/14651858.CD003388.pub4. PMID: 24338345; PMCID: PMC6991463.

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Chisholm D, Burman-Roy S, Fekadu A, Kathree T, Kizza D, Luitel NP, Petersen I, Shidhaye R, De Silva M, Lund C. Estimating the cost of implementing district mental healthcare plans in five low- and middle-income countries: the PRIME study. Br J Psychiatry. 2016 Jan;208 Suppl 56(Suppl 56):s71-8. doi: 10.1192/bjp.bp.114.153866. Epub 2015 Oct 7. PMID: 26447170; PMCID: PMC4698559.

## Appendix

### Literature Review for effectiveness & safety

This literature search is an example of Level 1 search for intervention inputs taken from DCP3 or generated in an ad hoc manner (e.g., quick google search found one study of cervical cancer screening cost-effectiveness that was used to create an effectiveness parameter for that intervention).

Level of evidence of efficacy studies:

1. low (expert opinions, case series, reports, low-quality case control studies)
2. moderate (high quality case control studies, low quality cohort studies)
3. high (high quality cohort studies, individual RCTs)
4. very high (multiple RCTs, meta-analysis, systematic review, clinical practice guidelines)