Basic & intensive psychosocial treatment
for depression
(DCP4 ID: MENTD02-01,02,03,04,05)
Cluster: Mental & substance use disorders

FairChoices
DCP Analytic Tool

Management of depression

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Description of condition and intervention

Depression is a leading cause of disability globally and can have long-lasting effects on the affected individual. Estimates indicate that more than 264 million people across the world are affected by this mental health disorder.Treatments exist for this condition in the form of psychotherapy and pharmacotherapy, instituted depending upon the severity of the disorder. There is a stark inequality in provision of treatment care globally, with around 76-85% population suffering from mental disorders in low-and middle-income countries lacking access to required treatment and care for mental health services. Cognizant of this, the World Health Organization (WHO) launched a special initiative for Universal Health Coverage for Mental Health (2019-2023). Source WHO website accessed on August 24,2021

This evidence brief assesses the effects and costs of the below mentioned interventions for management of depression including the target population for psychosocial support for severe peri-natal depression being included among these (intervention 2) being analysed in FairChoices: DCP Analytical tool:

1. *Basic psychosocial treatment for mild depression*
2. *Basic psychosocial treatment and anti-depressant medication of first episode moderate-severe cases*
3. *Intensive psychosocial treatment and anti-depressant medication of first episode moderate-severe cases*

4. *Intensive psychosocial treatment and anti-depressant medication of recurrent moderate-severe cases on an episodic basis*
5. *Intensive psychosocial treatment and anti-depressant medication of recurrent moderate-severe cases on a maintenance basis*

International guidelines

Organization	Indications/recommendations	Applicability in LIC & Lower MIC settings
World Health Organization	mhGAP intervention guide for mental, neurological and substance use disorders in non-specialized health settings: mental health Gap Action Programme (mhGAP)	Yes

Source: WHO 2016

Intervention attributes

Type of interventions

Curative

Delivery platform

This intervention may be delivered as part of routine care services 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

All individuals (prevalent cases) of depressive disorders in the age group of 10 to 99 years and gender are eligible to receive the intervention. We estimated the treated fractions based on the severity split for anxiety disorders provided in the Global Burden of Disease study 2019 supplement. The treated fraction for mild cases was 0.69, moderate as 0.2, and 0.11 for severe cases of depressive disorders.

Table 1: Treated and affected populations for each intervention

Intervention taxonomy	Treated population & treated fraction	Affected population & affected fraction	Epidemiological Indicator
Basic psychosocial treatment for mild depression	10 to 99 years; 0.69	5 to 99 years; 0.69	Prevalence of major depressive disorders
Basic psychosocial treatment and anti-depressant medication of first episode moderate-severe cases	10 to 99 years; 0.2	5 to 99 years; 0.2	Prevalence of major depressive disorders
Intensive psychosocial treatment and anti-depressant medication of first episode moderate-severe cases	10 to 99 years; 0.11	10 to 99 years; 0.11 for depressive disorders	Prevalence of major depressive disorders in treated population. Prevalence of major depressive disorders

		10 to 99 years; 0.02 for self-harm	and self-harm in affected population.
Intensive psychosocial treatment and anti-depressant medication of recurrent moderate-severe cases on an episodic basis	10 to 99 years; 0.0775 (Assuming 50% get an episodic treatment and 50% get maintenance treatment)	10 to 99 years; 0.0775	Prevalence of major depressive disorders in treated and affected population.
Intensive psychosocial treatment and anti-depressant medication of recurrent moderate-severe cases on a maintenance basis	10 to 99 years; 0.0775 (Assuming 50% get an episodic treatment and 50% get maintenance treatment)	10 to 99 years; 0.0775	Prevalence of major depressive disorders in treated population.

Disease state addressed

Primary disease states addressed by this intervention is major depressive disorders.

Intervention effect and safety

Table 2: Effect and safety of interventions for depressive disorders

Effect of intervention		Certainty of evidence
Mortality (due to condition) Intensive psychosocial treatment and anti-depressant medication of first episode moderate-severe cases	Using findings from GBD 2010, 46.1% of suicide DALYs were found to be attributable to depression (Ferrari, 2014). We assume therefore that 46.1% of suicide deaths are attributable to depression. Further, pooled relative risk of suicide/self-harm in those diagnosed	See appendix

	with major depressive disorder is 19.9% (Ferrari,2014). A systematic review of randomized control trials showed significant reduction for primary outcomes of self-harm and suicide attempts (31.3%) for therapeutic intervention vs. treatment as usual. Therefore, we assume efficacy for mortality reduction RRR = 0.31	
Disability* Basic psychosocial treatment for mild depression Basic psychosocial treatment and anti-depressant medication of first episode moderate-severe cases Intensive psychosocial treatment and anti-depressant medication of first episode moderate-severe cases or recurrent moderate-severe cases on an episodic basis or on a maintenance basis	 Impact on function with the intervention: 3.5% reduction Impact on function with the intervention: 5.5% reduction Impact on function with the intervention: 8.7% reduction *Effects on this outcome are from OneHealth Tool	

Model assumptions

Table 3: Summary of model parameters and values used in FairChoices – DCP Analytical Tool

Category	Model parameter	Notes
Interventions	1. to 5.	Listed under title
Cost parameters		

Treated population	Based on prevalence of major depressive disorders	Global Burden of Disease study 2019
Gender	Both male & female	
Age	10-99 years	
Treated fraction	Listed in table 1	
Effect parameters		
Affected population	Those with condition	
Affected gender	Both male & female	
Affected fraction age	10 to 99 years	
Affected fraction for disability reduction	See table 1	Prevalent cases of depressive disorders and estimated affected fraction
Affected fraction for mortality reduction for self-harm/suicide Assumption for suicides/self-harm primarily in moderate and severe cases and those given intensive treatment		Prevalent cases of depressive disorders and self-harm with estimated affected fraction.
Comparison	No intervention	
Mortality Reduction Intensive psychosocial treatment and anti-depressant medication of first episode moderate-severe cases	0.3	Ferrari 2014 & Authors' calculations
Disability Reduction Basic psychosocial treatment for mild depression	0.035	OneHealth Tool
Basic psychosocial treatment and anti-depressant medication of first episode moderate-severe cases	0.055	
Intensive psychosocial treatment and anti-depressant medication	0.087	

of first episode moderate-severe cases or recurrent moderate-severe cases on an episodic basis or on a maintenance basis		

Intervention cost

The unit cost for managing depression with psychological and generic antidepressant therapy is estimated at USD 61.3625 in South Africa in 2008 USD. The cost is based on Chisholm D et al. 2016, which provided estimates for the annual cost per average case receiving non-specialized care. The unit cost was calculated as the weighted sum for the cost of essential advice and follow up for psychosocial treatment for depression (USD 15.45), antidepressant medication (USD 55.92), and Intensive psychosocial intervention for depression (15.89), estimating that around 75% of the patients will require medication as part of the management route and 25% of the patients will require Intensive psychosocial intervention (Mitchell J et al 2013).

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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)