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Annex 2

Table A2 Tools for the assessment of psychological consequences with score classification

Outcomes	Tools	Method description	Score Classification	Studies
1. Suicidal Ideation Assessment	1.1 Beck Depression Inventory (BDI) (item 9)	A 21-item, self-reported rating inventory that measures attitudes and symptoms of depression. Item-9 of the test asked the potential to kill oneself (49).	Score 1-10: Normal Score 11-16: Mild Mood Disturbance Score 17-20: Borderline Clinical Depression Score 21-30: Moderate Depression Score 31-40: Severe Depression Score over 40: Extreme Depression	Kim et al., 2020(44)
2. Depression Assessment	2.1 Patient Health Questionnaire-9 (PHQ-9)	A 9-item assessment that is used to assess the frequency the patients experience depressive symptoms according to DSM-IV depression criteria(50).	Score 0-4: Normal Score 5-9: Mild Score 10-14: Moderate Score 15-19: Moderately Severe Score 20-27: Severe	Niu et al., 2021(50) Yang et al., 2020(51)
	2.2 Patient Health Questionnaire for Depression-8 (PHQ-8)	An 8-item assessment that consists of 8 of the 9 criteria on which the DSM-IV diagnosis of depressive disorders is based (51).	Score 0-4: Normal Score 5-9: Mild Score 10-14: Moderate Score 15-19: Moderately Severe Score 20-24: Severe	Kahlon et al., 2021(39)
	2.3 Patient Health Questionnaire-4 (PHQ-4)	A 4-item questionnaire that aims to allow for brief and accurate measurement of core symptoms or signs of depression and anxiety (52).	Score 0-2: Normal Score 3-5: Mild Score 6-8: Moderate Score 9-12: Severe	Sylvia et al., 2021(42)
	2.4 Depression Anxiety Stress Scale (DASS-21)	A 21-item test, short version of the original self-report questionnaire (DASS-42 item) to evaluate depression, anxiety, and stress symptoms with 7 items per subscale; (1) DASS-21 Depression, (2) DASS-21 Anxiety, and (3) DASS-21 Stress (53).	**Depression** Score 0-9: Normal Score 10-13: Mild Score 14-20: Moderate Score 21-27: Severe Score over 28: Extremely Severe **Anxiety** Score 0-7: Normal Score 8-9: Mild Score 10-14: Moderate Score 15-19: Severe	Riva et al., 2021(36), Wadhen et al., 2021(38), Fiol-DeRoque et al., 2021(33)

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Outcomes	Tools	Method description	Score Classification	Studies
			Score over 20: Extremely Severe **Stress** Score 0-14: Normal Score 15-18: Mild Score 19-25: Moderate Score 26-33: Severe Score over 34: Extremely Severe	
	2.5 Hospital Anxiety and Depression Scale (HADS)	A 14-item assessment used to measure anxiety and depression symptoms in medical patients. The HADS produces two scales with 7 items in each scale; one for anxiety (HADS–A) and one for depression (HADS–D) (54).	**Depression and Anxiety** Score 0-7: Normal Score 8-10: Borderline abnormal (borderline case) Score 11-21: Abnormal	Solianik et al., 2021(37), Smith et al., 2021(41), Matiz et al., 2021(30), Kim et al., 2020 (HADS-D)(44)
	2.6 Self-rating Depression Scale (SDS)	A 20-item assessment to assess the subjective symptoms of depression for up to one week(55).	Score <50: Normal Score 50-59: Mild Depression Score 60-69: Moderate to Marked Major Depression Score >70: Extreme Major Depression	Liu et al., 2021(46), Li et al., 2020(45)
	2.7 Brief Symptom Inventory 18 (BSI-18)	An 18-item questionnaire, taken from the 53-item Brief Symptom Inventory (BSI). The scale includes three subscales (somatization, depression, and anxiety) (56).	The interpretation of the BSI-18 uses Global Severity Index (GSI) of distress represents sum across the 3 subscales range from 0-72. Higher scores indicate higher levels of psychological distress.	Zhang et al., 2021(49)
3. Anxiety assessment	3.1 Spielberger State-Trait Anxiety Inventory (STAI)	A 40-item self-report tool consisting of two parts for measuring state and trait anxiety with 20 questions in each section(57).	Score 20-31: Mild Score 32-42: Mild to Moderate Score 43-53: Moderate to Severe Score 54-64: Relatively Severe Score 65-75: Severe Score ≥ 76: Very Severe	Parizad et al., 2021(27), Khademi et al., 2021(26), González-García et al., 2021(34), Liu et al., 2020(47), Dincer et al., 2021(32), Guan et al., 2021(43)

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Outcomes	Tools	Method description	Score Classification	Studies
	3.2 Anxiety - Generalized Anxiety Disorder scale (GAD-7)	A 7-item questionnaire to detect symptoms of generalized anxiety disorder based on seven core symptoms and assess the frequencies with which respondents experience these symptoms within the prior 2 weeks (58).	Score 0-4: Normal Score 5-9: Mild Score 10-14: Moderate Score >=15: Severe	Kahlon et al., 2021(39), Luo et al., 2021(48), Niu et al., 2021(50), Yang et al., 2020(51)
	3.3 Self- Rating Anxiety Scale (SAS)	A 20-item assessment evaluating a variety of anxiety symptoms, including both psychological and somatic symptoms, that respondents experience within the past month (59).	Score 0-4: Normal Score 5-9: Mild Score 10-14: Moderate Score >=15: Severe	Liu et al., 2021 (46), Guan et al., 2021(43), Li et al., 2020(45)
	3.4 Behavior Assessment Scale for Children-3rd edition, (BASC III)	A test to identify and manage behavioral and emotional strengths and weaknesses of children and adolescents from three perspectives: teacher, parent and self (starting at age 8) (60).	Interpretation using the mean score. Higher scores indicate higher levels of anxiety.	Malboeuf-Hurtubise et al., 2021(40)
	3.5 Patient Health Questionnaire-4 (PHQ-4)	See 2.3		Sylvia et al., 2021 (42)
	3.6 Depression Anxiety Stress Scale (DASS-21)	See 2.4		Riva et al., 2021(36), Fiol-DeRoque et al., 2021(33), Wadhen et al., 2021(38)
	3.7 Hospital Anxiety and Depression Scale (HADS)	See 2.5	Score 20-44: Normal Score 45-59: Mild to Moderate Anxiety Score 60-74: Marked to Severe Anxiety levels	Solianik et al., 2021(37), Smith et al., 2021(41), Matiz et al., 2021(30), Kim et al., 2020 (44)
	3.8 Brief Symptom Inventory 18 (BSI-18)	See 2.7		Zhang et al., 2021 (49)

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Outcomes	Tools	Method description	Score Classification	Studies
4. Psychologi-cal distress and stress assessment	5. The General Health Questionnaire (GHQ-12)	A 12-item test, self-administered to evaluate mental distress and common mental disorders. There were multiple versions of GHQ including GHQ-60, GHQ-30, GHQ-28, and GHQ-12 (61).	The average sum of its items provides a scalar indicator of the degree of mental distress. Score of 11 or 12: typical Score >15: Suggesting evidence of distress Score >20: Severe problems with psychological distress	Gorbeña et al., 2021 (35)
	4.1 Perceived stress 14-item (PSS-14)	A 14-item scale used as a psychological instrument to measure the perception of stress, with seven positive items and seven negative items (62).	Score 0-18: Low Stress Score 19-37: Moderate Stress Score 38-56: High Stress	Wadhen et al., 2021(38), Shaygan et al., 2021 (28)
	4.2 Perceived Stress Scale 10-item (PSS-10)	A 10-item questionnaire about feelings and thoughts during the last month(63) .	Score 0-13: Low Stress Score 14-26: Moderate Stress Score 27-40: High Perceived Stress	Riva et al., 2021(36), Solianik et al., 2021(37), Smith et al., 2021(41), González-García et al., 2021(34)
	4.3 Depression Anxiety Stress Scale (DASS-21)	See 2.4	Score 0-13: Low Stress Score 14-26: Moderate Stress Score 27-40: High Perceived Stress	Fiol-DeRoque et al., 2021(33)
	4.4 Brief Symptom Inventory 18 (BSI-18)	See 2.7		Zhang et al., 2021 (49)
5. Insomnia assessment	5.1 Insomnia Severity Index (ISI)	A 7-item assessment to assess current sleep characteristics(64).	Score 0-7: No clinically significant insomnia Score 8-14: Subthreshold Insomnia Score 15-21: Clinically Significant Insomnia (Moderate) Score 22-28: clinically Significant Insomnia (Severe)	Tunuguntla et al., 2021(25), Philip et al., 2020(31), Fiol-DeRoque et al., 2021(33), Kim, et al., 2020(44)
	5.2 St. Mary's Hospital Sleep Questionnaire (SMH)	A 14-item test asking about patient's sleep experience and comprises items to demonstrable reliability, with some open-ended questions(65).	The test needs to be evaluated by experts.	Luo et al., 2021 (48)

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Outcomes	Tools	Method description	Score Classification	Studies
	5.3 PROMIS (Patient-Reported Outcomes Measurement Information System) Sleep Disturbance Short Form	Items focus on perceptions of sleep quality, sleep depth, and restoration associated with sleep, perceived difficulties with getting to sleep or staying asleep, and perceptions of the adequacy of and satisfaction with sleep (66).	Score <55: None to slight Score 55-59.9: Mild Score 60-69.9: Moderate Score >70: Severe	Smith et al., 2021 (41)
	5.4 Pittsburgh Sleep Quality Index (PSQI)	An 18-item index measuring seven sleep dimensions (67).	The overall PSQI score ranges from 0 to 21, with higher scores reflecting poorer sleep quality. A revised PSQI score of 7 or higher is considered poor sleep quality. If the score of any individual dimension is higher than 1, there is a problem with that specific dimension.	Liu et al., 2021(46), Yang et al., 2020(51)
	5.5 Sleep State Self-Rating Scale (SRSS)	A 10-item assessment used to assess sleep state.	SRSS over or equal to 23 points is considered to have sleep problems.	Liu et al., 2020(47)

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