INTERNATIONAL SPINAL CORD INJURY PSYCHOLOGICAL FUNCTIONING BASIC DATA SET

Version 1.0

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Background

Psychological consequences of spinal cord injury or disorder (SCI/D) include elevated anxiety, depressed mood, and post-traumatic stress. How people with SCI/D experience their condition varies. Psychological factors such as depression and resilience are more predictive of quality of life than biomedical variables such as level or severity of injury. Therefore, psychological assessment and interventions are an essential part of the multidisciplinary rehabilitation program after SCI/D.

The International SCI Data Sets project is an effort by the International Spinal Cord Society (ISCoS) and the American Spinal Injury Association (ASIA) to create internationally recognized and endorsed standard data elements relevant to SCI/D for clinicians and researchers to use in their practice and investigations.[1] Such Data Sets will facilitate evaluation and comparison of results across published studies. Basic Data Sets are designed to cover the minimal number of data elements that should be collected on all patients in clinical practice for a particular topic. In contrast, Extended Data Sets are more comprehensive or detailed and are optional for clinical practice but are recommended for research studies on a specific topic. Several International SCI Data Sets have been published that cover diverse consequences of SCI/D. However, an International SCI Data Set to describe the psychological consequences of SCI/D in clinical settings was not available. Therefore, the goal of this project was to develop an International SCI Psychological Functioning Basic Data Set (PSYCHBDS) for use in adults with SCI/D.

This interdisciplinary working group that developed the PSYCHBDS was assembled based on credentials and expertise in the areas of psychological functioning following SCI/D as well as members' interest in the development of a common Data Set to assess psychological wellbeing and symptoms globally. Members were recruited primarily from the ISCoS Psychosocial Special Interest Group and the ISCoS Quality of Life Special Interest Group and included members with expertise in measure development and validation. They are members of a range of national and international organizations relevant to this Data Set.

Purpose and scope of the PSYCHBDS

The purpose of the PSYCHBDS is to standardize the collection and reporting of a minimal amount of information on psychological functioning in individuals with SCI/D in clinical practice in accordance with the purpose and vision of the International SCI Data Sets.[1] Thus, each variable and response option are defined to promote the collection and reporting of comparable minimal data.

The PSYCHBDS can be used regardless of etiology and time since onset of the SCI/D, including conus medullaris and cauda equina syndrome.

The information collected in PSYCHBDS is anticipated to be used in conjunction with data in the International SCI Core Data Set,[2] which includes information on demographic characteristics, etiology, and neurological status. This PSYCHBDS relates to the International SCI Quality of Life Basic Data Set, which includes a single item on satisfaction with psychological health on a 0-10 Numerical Rating Scale.[3] PSYCHBDS describes psychological functioning in more detail.

PSYCHBDS developers expect that the International SCI Data Sets are reviewed and revised periodically to ensure their ongoing acceptance for use in clinical and research SCI settings.[1]

Development of the PSYCHBDS

The idea for developing a Data Set for evaluating psychological functioning was raised during a regular International Data Sets meeting at the 2018 ISCoS meeting in Sydney, Australia. This working group, co-chaired by Denise Tate and Marcel Post, met for the first time on November 6, 2019, during the ISCoS annual meeting in Nice, France. The group continued to meet online throughout 2020 and 2021.

The work consisted of two parts:

- A review of measures assessing psychological functioning used by SCI/D psychologists and making recommendations for routine use in clinical practice.
- The development of a form to standardize data collection on psychological functioning.

Final agreement among the working group included three areas of assessment for the SCI-PSYCHBDS:

1) Pre-injury psychological functioning including history of mental illness, mood disorders, and substance use;
2) Current psychological functioning focusing on depressive mood and anxiety; and
3) Current psychological interventions.

A total of 9 data elements were selected for the PSYCHBDS. Each data element is described with the rationale for its inclusion in this document. The selection of the measures is described in detail here.

Input on which measures to review was obtained from:

- **A workshop organized in collaboration with the European Spinal Psychologists Association (ESPA) by Tijn van Diemen and Marcel Post on psychological screening during the 2019 ISCoS conference.** According to workshop participants, the domains most screened included: mood (15 replies); self-efficacy (6); suicide (5); appraisals (5); and cognitive functioning (5). The Hospital Anxiety and Depression Scale (HADS)[4] and the Patient Health Questionnaire-9 (PHQ-9)[5] were the two most often used measures of mood symptoms. The HADS and the Generalized Anxiety Disorder-7 (GAD-7)[6] assessment were used frequently to assess anxiety. The SCI-QOL,[7] mainly used in the USA, is a Patient Reported Outcome Measure (PROM) designed to assess quality of life in SCI/D across several domains including depression.
- **An online survey among the ISCoS membership organized by Jennifer Coker.** There were 16 respondents from seven countries (Australia, Denmark, Nepal, the Netherlands, South Africa, the United Kingdom of Great Britain and Northern Ireland, and the USA). Respondents indicated that the primary measures they used were the PHQ-9[5] and PHQ-2 for depression;[8] the GAD-7

for anxiety;[6] the Connor-Davidson Resilience Scale-10 (CD-RISC-10) for resilience;[9] and the Moorong Self-Efficacy Scale (MSES) for self-efficacy.[10]

- **The Paralyzed Veterans of America's (PVA) Clinical Practice Guidelines on management of mental health disorders, substance use disorders, and suicide in adults with SCI (Consortium for Spinal Cord Medicine 2020).[11]** In these guidelines the PHQ-9[5] and the HADS[4] or GAD-7[6] are recommended to screen for depression and anxiety disorders, respectively.
- **Spinal Cord Injury Research Evidence (SCIRE).** SCIRE's Toolkit contains a standardized set of measures for use in SCI/D clinical practice and includes the PHQ-9[5] and Depression Anxiety Stress Scale-21 (DASS-21)[12] as measures of mental health.
- **The National Institute of Neurological Disorders and Stroke (NINDS) SCI-Common Data Elements (CDEs) project.** The NINDS, ASIA and ISCoS, included the international SCI datasets in the NINDS SCI CDEs. A committee reviewed and recommended the psychological and cognitive measures to be part of the CDEs. In addition to original research articles, they also reviewed the Rehabilitation Measures Database.
- Experts' knowledge and experience including the previously mentioned online surveys.

Review of these documents resulted in 17 measures of anxiety, depressed mood, and other psychological aspects such as self-efficacy, appraisals, and cognition (Table 1). The group reached consensus to focus on assessment of depressive mood and anxiety symptoms for the PSYCHBDS. Other aspects of psychological functioning such as resilience, self-efficacy, self-management, and alcohol use, although important, are not included in the PSYCHBDS, but will be considered for an extended dataset.[1]

Table 1. Measures considered by the working group

Depressed mood	Patient Health Questionnaire (PHQ-9; PHQ-2)[5] Depression, Anxiety and Stress scales – Depression subscale (DASS-D)[12] Hospital Anxiety and Depression Scale – Depression subscale (HADS-D)[4] Spinal Cord Injury – Quality of Life (SCI-QOL) Depression[13]
Anxiety	Generalized Anxiety Disorder Scale -7 (GAD-7; GAD-2)[6] DASS – Anxiety Subscale DASS-A[12] HADS – A[4] SCI-QOL Anxiety Scale[14]
Resilience/self-efficacy	Connor-Davidson Resilience Scale CD-RISC[9] SCI-QOL Resilience Scale[15] Moorong Self Efficacy Scale (MSES) SES[10] University of Washington – Self Efficacy Scale (UW-SES)[16] Generalized Self- Efficacy Scale (GSES)[17]
Other Mood measures	SCI-QOL Grief and loss[18] SCI-QOL Psychological trauma[19] SCI-QOL Positive affect[20] SCI-QOL Stigma[21] DASS-S[12]
Appraisals	Appraisals of DisAbility: Primary and Secondary Scale (ADAPSS)[22]

For depressed mood symptoms, the group considered the PHQ,[5] SCI-QOL Depression,[13] HADS-Depression scale[4] and the DASS-Depression scale.[12] For anxiety mood symptoms, the group considered the GAD[6] and the Anxiety scales of the SCI-QOL,[14] HADS-A[4] and DASS-S.[12] The characteristics of these measures were described following a standardized format. This included the concepts measured, length, frequency of use in SCI/D studies, and availability, amongst others. Further, literature reviews were performed to collect the available evidence on psychometric properties of each measure in SCI/D samples.

Based on the reviews and considering the goal and scope of a Basic Data Set,[1] consensus was reached to use the PHQ and GAD for the Psychological Basic Data Set, as detailed below. Both the PHQ and GAD are available for free, brief, efficient, well-validated in SCI/D, show no issues with somatic complaints and are already widely used in SCI/D research and clinical practice; validated versions are available in several languages.

PHQ-9 and PHQ-2

The Patient Health Questionnaire-9 (PHQ-9) assesses various symptoms of major depressive disorder (MDD) in adults, including anhedonia, depressed mood, sleep disturbances, and suicidal ideations.[5] The PHQ-9 closely parallels the diagnostic symptom criteria that define MDD according to the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV)[23] and is recommended for use in individuals ages 12 and older. The format and temporal framework of the items also correspond to the DSM-IV criteria. At only 9 items, the PHQ-9 is substantially shorter than most depression screening measures, and was developed, tested, and refined for use with medical patients. Each item is scored on a scale ranging from 0 (not at all) up to 3 (nearly every day). The items also provide a severity score from 0-27. Scores of 5, 10, 15, and 20 serve as cut-off values to distinguish mild, moderate, moderately severe, and severe depression, respectively (www.phqscreeners.com). The PHQ includes a 10th item about difficulty experienced to do work, take care of things at home, or get along with other people due to depressed mood. This item is not used in calculating any PHQ score or diagnosis, but rather represents the patient's global impression of symptom-related impairment. The PHQ-8 contains 8 questions. It omits the last question of the PHQ-9 that pertains to suicidal and self-injurious thoughts.[24] The PHQ-2, contains the first two items of the PHQ-9, and can also be used as a screener for symptoms of depression.[26]

GAD-7

The Generalized Anxiety Disorder -7 (GAD-7) is designed as a screening tool and severity measure for generalized anxiety disorder.[6] It requires less than 5 minutes to complete. Items reflect symptoms of anxiety and respondents are asked to rate how often they have been "bothered" by these symptoms in the last two weeks on a scale from 0 (never) up to 3 (nearly every day). The items also provide a severity score from 0 - 21. Scores can be grouped as follows: ≤5 = no anxiety; 6-9 = mild anxiety; 10-14 = moderate anxiety, and ≥15 = severe anxiety. The recommended cut point for further evaluation is a score of $\geq$10. The GAD-7 was developed and is well-validated for use in the general population. This measure shows frequent use in SCI/D research. Nevertheless, the only psychometric evidence on the GAD results comes from a study to validate the SCI-QOL Anxiety item bank, which correlated strongly (Pearson correlation of 0.67) with the GAD-7.[14] The Consortium for Spinal Cord Medicine (CSCM) clinical practice guidelines refer to the GAD-7 as one of the measures that can be considered, a

recommendation on the use of the GAD-7 is not included.[11] The GAD-7 is recommended for adults (18+) but considered exploratory for youth ages 12-17. The GAD-2 consists of the first two items of the GAD-7 and scores range from 0 to 6.

Recommendations

The working group recommends including the PHQ-2 and GAD-2 in PSYCHBDS to screen for depressive mood and anxiety in people with SCI/D. This recommendation is in line with the general goal of Basic Data Sets to cover the minimal number of data elements that should be collected on all patients in clinical practice for a particular topic. Administration of the full PHQ-9 and GAD-7 is optional in the PSYCHBDS but is recommended when scores are beyond cut off scores as recommended and if resources are available. This recommendation is based on the evidence supported by the literature reviewed. Recommendations about cut off scores taking into consideration each measure's sensitivity (how well the measure identifies those with the condition) and specificity (how well the measure excludes those who do not have the condition) are less straightforward and reflect diverse opinions from various studies. We summarize these below.

Studies analyzing the use of PHQ-9 in the SCI/D population found internal consistencies of α = 0.87-0.91 and 0.95, respectively.[8,26] The corrected item total correlations ranged from .72 (depressed mood) and .69 (failure) to .45 (psychomotor agitation/retardation) and .48 (suicidal ideation).[26] Data from treatment on people without SCI/D indicate good discrimination among clinically significant response categories (persistent depression, partial response, full remission); and a minimally clinically important difference threshold of 5 or more points to indicate clinically relevant change in people receiving depression treatment.[27] A cutoff score of ≥10 to identify possible major depression was recommended by the developer of this measure and has been used as a standard across most populations. However, the PVA Clinical Practice Guideline [11] suggests a cutoff of ≥11 in SCI/D, as this cut-off showed slightly better predictive value in the only available study of detecting major depression (DSM-IV) during inpatient SCI/D rehabilitation, resulting in 100% sensitivity and 84% specificity, a positive predictive value (PPV) of 0.4 and a negative predictive value (NPV) of 1.0.[11,26] Regardless of which score cutoff is used, a diagnosis of major depressive disorder (MDD) should not be based only on a screening measure, but flags the need for a diagnostic interview.

To reduce participant burden, the PHQ-2 is often used first in primary care, and the remaining items of the PHQ-9 are administered only when the PHQ-2 score is above a specified cut-off. As with the PHQ-9, there are divergent recommendations regarding the PHQ-2 cut-off. The developers of the PHQ recommend a cut-off score of ≥3 (www.phqscreeners.com) for the PHQ-2. However, the PVA Clinical Practice Guideline recommends a cut-off score of ≥1[11] while the Centers for Medicaid and Medicare Services (CMS) recommend administering the full PHQ-9 if at least one PHQ-2 item is scored as 2 or 3[27].

Evidence from SCI/D studies is sparse. Two studies showed that a cut-off of ≥1 for the PHQ-2 had a sensitivity of 100%,[26,28] but with a low specificity of 48% (reference diagnosis MDD)[28] and 80.4% (reference PHQ-9 10 or greater).[8] The cut-off point of >3 showed lower sensitivity, with .57 for MDD,[26] and 83.3% for PHQ≥10.[8] A large meta-analysis in which the 2-step approach was validated against semi-structured diagnostic interviews showed that a PHQ-2 cut-off point of >1 had a sensitivity of 0.98 and

specificity 0.46, a cut-off point of >2 o had a sensitivity of 0.91 and a specificity of 0.67, and a cut-off point of 3 or > had a sensitivity of 0.72 and specificity of 0.85.[29]

A score of ≥3 on the GAD-2 is the recommended cut point for administering the full GAD-7 and further clinical evaluation according to the developers (www.phqscreeners.com). The PVA Clinical Practice Guidelines do not provide a recommendation on the GAD-2 since research in SCI/D was unavailable at the time. Research using diagnostic interviews among primary care patients showed that the GAD-2 is a useful screener for generalized anxiety disorder (AUC 0.91, 95% CI 0.88-0.94) and the presence of any anxiety disorder (AUC 0.85; 95% CI 0.82-0.88).[27] However, a review showed that a lower cut-off point of ≥2 has greater sensitivity to detect anxiety disorders.[30] One study in a large mixed inpatient/community sample (N=909) showed that, using a total score of ≥8 on the GAD-7 as reference, that a cut-off of ≥2 had better sensitivity (94.6% and good specificity (79.8%) compared to the recommended ≥3.[31]

Conclusions:

The working group recommends using the PHQ-2 and GAD-2 to screen for depressive mood and anxiety symptoms in people with SCI/D. Administration of the full PHQ-9 and GAD-7 is optional in the PSYCHBDS but is recommended when scores exceed cut-off scores and if resources are available. After extensive discussion, the working group decided not to recommend a specific cut-off point to administer the full PHQ-9 or GAD-7 based on the PHQ-2 and GAD-2. Divergent recommendations are available in the literature and SCI/D-specific evidence is insufficient and likely to change as new information becomes available. Therefore, users are advised to choose a cut-off value based on their reading of the literature and established guidelines.

The PSYCHBDS should be reviewed and evaluated for pediatric use.[32]

The working group considered including pre-injury psychological disorders, previous post-onset psychological disorders, and psychological interventions in PSYCHBDS, and developed a comprehensive classification of these domains. However, the group decided that these domains require further study are more appropriate to include in a future extended data set. The group recommends including information on 'the presence of psychological disorders pre-injury' and 'current psychological treatment' in this basic Data Set.

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International Spinal Cord Injury Psychological Functioning Basic Data Set Variable Definitions and Comments (Version 1.0)

VARIABLE NAME:	**Date of data collection**
DESCRIPTION:	This variable documents the date of data collection.
CODES:	YYYY/MM/DD
COMMENTS:	The collection of psychological functioning data may be carried out at any time after the spinal cord injury. The date of data collection variable is necessary to identify when the data were collected. This variable provides a way to relate the collected data to other data collected on the same individual at various time points. If this data set is completed over multiple days, the date of completion of the Patient Health Questionnaire-9 (PHQ-9) and Generalized Anxiety Disorder-7 (GAD-7) is the date of data collection.

VARIABLE NAME	**Professional discipline of data collector**
DESCRIPTION	This variable documents the professional role in the rehabilitation team of the person who collects the data.
CODES	1 Nurse 2 Physician 3 Psychiatrist 4 Psychologist 5 Social worker 6 Researcher/assistant 8 Other , namely……. 9 Unknown
COMMENTS	This variable is optional. It is included to make sure that users can document the position of the person who collected the data, if desired.

VARIABLE NAME	**Presence of psychological disorders at any time before the onset of SCI**
DESCRIPTION	This variable documents the presence of psychological disorders occurring at any time before the onset of SCI, if applicable.
CODES	0 No 1 Yes 2 Unknown
COMMENTS	The presence of pre-existing depressive mood disorders is a strong predictor of depressive and anxiety after onset of SCI, also in the chronic phase.

To assess these problems, use all sources of data including self, family and peer report, medical chart reviews, letters from primary physician / referring hospital and reports from previous treating professionals such as psychologist / psychiatrist / substance abuse counsellor etc.

Included are problems sufficiently severe to:

- Require treatment (counseling, use of anti-depressant medication, etc.) pre-SCI;
- seriously hamper performance in paid work or other occupational roles; and
- are expected to impact the current rehabilitation trajectory.

An official diagnosis might not always be available, the following examples from the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM V)[29] are given as guidance:

- Depressive mood disorders: anhedonia, depressed mood, and suicidal ideations.
- Anxiety disorders: separation anxiety disorder, specific phobia, social anxiety disorder and panic disorder.
- Trauma and stress-related disorders: post-traumatic stress disorder, acute stress disorder, reactive attachment disorder and disinhibited social engagement disorder.
- Substance use disorders: the persistent use of drugs despite substantial harmful consequences, including alcohol, tobacco, and other substances.
- Personality disorders: ways of thinking, feeling and behaving that deviate from the expectations of the culture, cause distress or problems functioning, and last over time, including antisocial, borderline, paranoid and schizoid personality disorders.
- Cognitive disorders: including memory, attention, concentration, linguistic, and other deficits. Etiologies can be either developmental (such as learning disability) or acquired later in life (such as traumatic brain injury or dementia).

VARIABLE NAME	**Administration mode**
DESCRIPTION	Administration mode of the PHQ-2/9 and GAD-2/7
CODES	1 Oral interview
	2 Self-report with assistance
	3 Self-report without assistance

COMMENTS	The setting in which these measures are administered, with or without the presence of another person, or as part of an interview versus self-report, may have impact on the scores.

VARIABLE NAME	**PHQ-2**
DESCRIPTION	Total score on the PHQ-2
CODES	Number, range 0-6 If information is missing, enter 99
COMMENTS	The PHQ-2 comprises the first two items of the PHQ-9. These items address the frequency of certain depressive symptoms in the past two weeks. The items are: 1. Little interest or pleasure in doing things (range 0-3). 2. Feeling down, depressed, or hopeless (range 0-3).

VARIABLE NAME	**PHQ-9 (optional item)**
DESCRIPTION	Total score on the PHQ-9
CODES	Number, range 0-27 If information is missing, enter 99
COMMENTS	For the PSYCHBDS, this variable is optional, but it is recommended to also complete the remaining items of the PHQ-9 if resources are available, or if the PHQ-2 score exceeds a certain cut-off point. Cut-off points recommended in the literature are ≥1,[11] at least one PHQ-2 item is scored as 2 or 3,[27] to ≥3.[26] The seven remaining items of the PHQ-9, all rated on the same 0-3 scale, are: 3. Trouble falling or staying asleep, or sleeping too much 4. Feeling tired or having little energy 5. Poor appetite or overeating 6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down 7. Trouble concentrating on things, such as reading the newspaper or watching television 8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual 9. Thoughts that you would be better off dead, or of hurting yourself in some

	way The total PHQ-9 score ranges from 0 up to 27. A higher score reflects the presence of more frequent depressive symptoms. Scores can be grouped as follows: 0-4 = none/minimal; 5-9 = mild; 10-14 = moderate; 15-19 = moderate/severe; and 20-27 = severe depressive symptoms (www.phqscreeners.com). A cut-off point of ≥10 is commonly used to advise a clinical interview to determine whether a mental disorder is present. However, the PVA SCI Clinical Practice Guidelines suggest a cutoff of 11 to use in SCI/D, as this cut-off showed slightly better predictive value in the only available study of detecting major depression (DSM-IV) during inpatient SCI rehabilitation.[11] Regardless of which score cutoff is used, it should be noted that a diagnosis of major depression disorder should not be based on only a score on a screening measure, but merely flags the need for a diagnostic interview. The final patient-rated difficulty item is not used in calculating any PHQ score or diagnosis but rather represents the patient's global impression of symptom-related impairment. It may be useful in decisions regarding initiation of or adjustments to treatment since it is strongly associated with both psychiatric symptom severity and health-related quality of life. The PHQ-9 is recommended for individuals 12 years and older.
VARIABLE NAME	**GAD-2**
DESCRIPTION	Total score on the GAD-2
CODES	Number, range 0-6 If information is missing, enter 99
COMMENTS	The GAD-2 comprises the first two items of the GAD-7. These items address the frequency of certain symptoms of anxiety in the past two weeks. The items are: 1. Feeling nervous, anxious or on edge (range 0-3) 2. Not being able to stop or control worrying (range 0-3)
VARIABLE NAME	**GAD-7 (optional item)**
DESCRIPTION	Total score on the GAD-7
CODES	Number, range 0-21 If information is missing enter 99
COMMENTS	For the PSYCHBDS this variable is optional. but it is recommended to also complete the remaining items of the PHQ-9 if resources are available, or if the PHQ-2 score exceeds a certain cut-off point. The developers of the GAD-2 advise

a cut-off score of ≥3 to administer the full GAD-7. Research in SCI/D populations is unavailable.

The five remaining items of the GAD-7, all rated on the same 0-3 scale, are:
3. Worrying too much about different things
4. Trouble relaxing
5. Being so restless that it is hard to sit still
6. Becoming easily annoyed or irritable
7. Feeling afraid as if something awful might happen

It is recommended to complete the remaining items of the GAD-7 if any GAD-2 item is endorsed at any level (score ≥1).
The GAD-7 items provide a severity score from 0 - 21. Scores can be grouped as follows: <5 = no anxiety; 6-9 = mild anxiety; 10-14 = moderate anxiety, and >15 = severe anxiety. The recommended cut point for further evaluation is a score of 10 or greater.

The final patient-rated difficulty item is not used in calculating any GAD score or diagnosis but rather represents the patient's global impression of symptom-related impairment. It may be useful in decisions regarding initiation of or adjustments to treatment since it is strongly associated with both psychiatric symptom severity and health-related quality of life.

The GAD-7 is recommended for adults (18+) but considered exploratory for youth ages 12-17.

VARIABLE NAME **Therapy for current psychological disorders**

DESCRIPTION This set of variables documents the therapy the individual with SCI received during the current treatment episode.

CODES
1. Psychotropic medication
2. Individual Professional Counseling
3. Group Therapy
4. Peer Counseling
5. Other
6. None
8. Not applicable
9. Unknown

COMMENTS More than one type of therapy can be recorded.
Psychotropic medications: Psychoactive drugs taken to effect the chemical makeup of the brain and nervous system with the aim of treating mental conditions such as depression, anxiety, etc. Exclusions: Psychoactive drugs primarily prescribed to influence neuropathic pain, sleep medication, etc.

Individual psychological therapy / counseling: Involves applying psychosocial or psychotherapeutic strategies or a combination of such strategies (such as cognitive behavioral therapy), that promotes adjustment and psychological wellness in an individual. This includes psychological treatment, therapy or counselling sessions provided individually (in-person session, phone or on-line) by a trained professional, possibly including a partner or other significant other. Exclusions: Peer counseling.

Group Therapy: A form of psychotherapy in which one or more therapists treat a group of clients together as an interactive group, irrespective of the therapeutic approach, in-person or online. Exclusion: peer support groups.

Peer counseling: this is a helping process that involves individual or group interaction among people who have shared life experiences and/or equal status. It involves peer support by a trained person with SCI who provides knowledge, experience, emotional, social or practical help to others.

Other: Any other therapy for psychological disorders.

None: Tick this box if none of the above

Not applicable: Tick this box if the person with SCI shows no symptoms of anxiety or depressed mood.

Unknown: Tick this box if no information on treatment for psychological disorders could be identified from the available information, such as medical record, self-report, etc.