

Table 19. Cognitive Behavioural Interventions

Author Year Country Research Design PEDro Score Total Sample Size	Methods	Outcome
<b>CBT</b>		
<a href="#">Burke et al.</a> (2019) Ireland RCT PEDro =6 NInitial=69 NFinal=68	<p><b>Population:</b> <i>Intervention Group</i> (Internet delivered cognitive behavioural pain management program (CBT-PMP); n=35): Mean age=50±12.3yr; Gender: males=25, females=10; Mean time post injury=16±11.8yr; Level of injury: cervical=10, thoracic=13, lumbar=7, unknown=8; Severity of injury: AIS A=1, AIS C=2, AIS D=3, unknown=29; Anxiety status=normal as assessed by the HADS.</p> <p><i>Control group</i> (usual care; n=34): Mean age=52±13.8yr; Gender: males=27, females=7; Mean time post injury=16±12.6yr; Level of injury: cervical=7, thoracic=17, lumbar=7, unknown=3; Severity of injury: AIS A=3, AIS B=2, AIS C=1, AIS D=2, Unknown=26; Anxiety status=borderline abnormal as by the HADS.</p> <p><b>Intervention:</b> Participants were randomized to receive internet delivered cognitive behavioural therapy pain management program (CBT-PMP) SPIRE (1 module and assignment/wk for 6wk) or the control group (continued to manage pain as per usual). Outcomes measures were assessed at baseline, post-intervention 6wk, and 3mo post-program completion.</p> <p><b>Outcome Measures:</b> The World Health Organization Quality of Life BREF (WHOQOL- BREF), The international spinal cord injury quality of life basic data set, The</p>	<ol style="list-style-type: none"> <li>1. No significant difference between intervention and control groups for WHOQOL-BREF and ISCI- QOLBDS (p&gt;.05).</li> <li>2. No significant group X time interaction for the HADS questionnaire, PSQI for sleep or CPAQ for pain acceptance (p&gt;.05 for all).</li> <li>3. Post-intervention there was a moderate linear relationship observed between number of module where users engaged with 80% or more of the content and reductions in measures of NRS (p=.05), ISCI-PBDS (p=0.08), LSF domain (p=.04), BPI (p=0.10) and HADS depression subscale (p=.10).</li> <li>4. 3mo follow-up revealed a</li> </ol>

	<p>International Spinal Cord Injury Pain Basic Data Set (ISCIPBDS), The Douleur Neuropathique en 4 Questions (DN4) interview, The Chronic Pain Acceptance Questionnaire-8 (CPAQ-8), The Brief Pain Inventory (BPI) Interference subscale, The Hospital Anxiety and Depression Scale (HADS), The Pittsburgh</p> <p>Sleep Quality Index (PSQI), Adverse events.</p>	<p>moderate linear relationship between module engagement and improvements in sleep quality (<math>p=.06</math>), AMS subcategory of ISCIPBDS (<math>p=0.0</math>), and the depression (<math>p=.03</math>) and anxiety (<math>p=.05</math>) subscales of HADS</p>
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<p><a href="#">Coker et al.</a> (2019) USA RCT PEDro =8 N=81</p>	<p><b>Population:</b> Control Group (<math>n=40</math>): Mean age=<math>52\pm15.3</math> yr; Gender: males=32, females=8; Time since injury=81.5 mo; Level of injury: complete=16, incomplete=24; Severity of injury: AIS A=16, B=3, C=8, D=13.</p> <p>Intervention Group (<math>n=41</math>): Mean age=<math>48\pm12.8</math>; Gender: males=34, females=7; Time since injury=95 mo; Level of injury: complete=19, incomplete=22; Severity of injury: AIS A=19, B=2, C=7, D=13.</p> <p><b>Intervention:</b> Participants were randomized to either a control group in which they continued their normal rehabilitation or an intervention group in which they took part in an interactive cognitive behaviour therapy- based learning program for one session per wk, 2 hrs per session for 6 wk with assessments at baseline, post intervention and at 8-wk intervals post intervention.</p> <p><b>Outcome Measures:</b> Moorong Self-Efficacy Scale (MSES), Generalized Self-Efficacy Scale (GSES), Diener Satisfaction with Life Scale (SWLS), Participation Assessment with Recombined Tools – Objective</p>	<ol style="list-style-type: none"> <li>1. Non-significantly greater increase in MSES for the treatment group compared to the control group from baseline to 6-wk and neither group showed significant difference from baseline to the 30-wk follow-up (<math>p=0.15</math>).</li> <li>2. The treatment group showed significant improvements for the GSES, PHQ-9 and GAD-7 from baseline to 6-wk whereas the control group did not. Neither group showed significant changes in SWLS or PART-O from baseline to 6-wk.</li> <li>3. Despite the significant differences for the treatment group</li> </ol>
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	(PART-O), Patient Health Questionnaire – 9 (PHQ-9), and General Anxiety Disorder 7-Item (GAD-7	from baseline to 6-wk or from baseline to 30-wk follow-up, there are no significant differences in results between treatment and control
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<p><a href="#">Migliorini et al., (2016)</a></p> <p>Australia</p> <p>RCT</p> <p>PEDro=8</p> <p>NInitial=59</p> <p>NFinal=48</p>	<p><b>Population:</b> Intervention group (n=34): Mean age=47.5±12.2 yr; Gender: males=25, females=9; Time since injury=11.4±11.9 yr; Level of injury: complete paraplegia=5, incomplete paraplegia=8, complete tetraplegia=1, incomplete tetraplegia=18, unknown=2. Waitlist control group (n=25): Mean age=52.8±12.9 yr; Gender: males=17, females=8; Time since injury=19.8±14.0 yr; Level of injury: complete paraplegia=7, incomplete paraplegia=13, complete tetraplegia=2, incomplete tetraplegia=2, unknown=1.</p> <p><b>Intervention:</b> Participants were randomized to either an Electronic Personal Administration of Cognitive Therapy (ePACT) group in which the participants completed 10-module skills or a Waitlist Control group with assessments at baseline, 3 mo follow-up and 6 mo follow-up.</p> <p><b>Outcome Measures:</b> Depression, anxiety, and stress scale-short (DASS21), personal well-being index, helplessness subscale and score above normative threshold of the depression, anxiety and stress scale-short form (DASS21).</p>	<ol style="list-style-type: none"> <li>1. 71 individuals accepted the option to try the ePACT, but 12 did not complete the intake process and those that completed the intake process and those that did not only differed significantly with regards to stress scores (p=0.05).</li> <li>2. No significant differences between groups at baseline besides for time since injury (p=0.02) and level of injury distribution.</li> <li>3. Dropouts from the intervention group did not differ significantly from those that did not drop out in any outcome measure.</li> <li>4. At post-intervention, the ePACT group showed a significant reduction in depression, anxiety and stress and satisfaction with life</li> </ol>
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		<p>significantly improved (<math>p &lt; 0.05</math> for all) while the waitlist control group improved significantly with a reduction in depression (<math>p = 0.01</math>).</p> <p>5. Significant reductions in depression, anxiety and stress were maintained from post-intervention to 6 mo follow-up, and even reduced even more, albeit insignificantly.</p>
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<p><a href="#">Dorstyn et al.</a> (2012) Australia RCT PEDro =6 NInitial=40 NFinal=39</p>	<p><b>Population:</b> Age=53.5yr; Gender: males=28, females=12; Level of injury: paraplegia=24, quadriplegia=16; Anxiety status=symptoms.</p> <p><b>Intervention:</b> Individuals were randomly assigned to receive biweekly tele-counselling for 20min over 12wk (n=20, treatment) or standard inpatient care (n=20, control).</p> <p><b>Outcome Measures:</b> Depression Anxiety Stress Scale-21 (DASS-21).</p>	<ol style="list-style-type: none"> <li>1. Small improvements in DASS-21 depression (<math>d = 0.32</math>), anxiety (<math>d = 0.24</math>) and stress levels (<math>d = 0.27</math>) were found in the treatment group compared to the control group post intervention.</li> <li>2. Of the 8 individuals in the treatment group that reported mild, moderate, or severe levels of depression and/or anxiety, 4 reported no symptoms post intervention.</li> <li>3. Individuals in the control group reported increases in clinically significant symptoms of depression and/or</li> </ol>
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		anxiety over time.
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<p><a href="#">Heutink et al.</a> (2012) Netherlands RCT PEDro =6 NInitial=61 NFinal=59</p>	<p><b>Population:</b> Mean age=58.8yr; Gender: males=39, females=22; Level of injury: paraplegia=42, quadriplegia=19; Severity of injury: incomplete=39, complete=22; Anxiety status=symptoms. <b>Intervention:</b> Individuals with chronic neuropathic pain were randomly assigned to receive a multidisciplinary Cognitive Behavioural Therapy (CBT, n=31) program or waitlist group (n=30). The intervention consisted of 10 sessions over 10wk and a follow-up session 3wk later. <b>Outcome Measures:</b> Hospital Anxiety and Depression Scale (HADS).</p>	<p>1. Individuals in the CBT group found significant improvement in HADS- anxiety (<math>p&lt;0.027</math>) and participation (<math>p&lt;0.008</math>) compared to the waitlist group.</p>
<p><a href="#">Duchnick et al.</a> (2009) RCT PEDro=4 NInitial=41 NFinal=35</p>	<p><b>Population:</b> Mean age=52.6yr; Gender: males=40, females=1; Level of injury: paraplegia=19, quadriplegia=22; Severity of injury: incomplete=31, complete=10; Mean time post injury=53.2d; Anxiety status=symptoms. <b>Intervention:</b> Participants were randomly allocated to either coping effectiveness training (CET, n=20) or supportive group therapy (SGT, n=20). CET focused on stress appraisal, problem solving, communication skills, behavioral strategies, cognitive strategies, and social support. SGT emphasized sharing experiences and information related to SCI, emotional and cognitive reactions, and support from peers and therapist. Each inpatient group met 1x/wk for 60min. Outcomes were assessed pre and post treatment, and at 3mo follow- up. <b>Outcome Measures:</b> Center for Epidemiologic Studies Depression Scale (CES-D), State Trait Anxiety Inventory (STAI).</p>	<p>1. Significant decreases in STAI scores were seen at discharge in both groups (<math>p&lt;0.05</math>). 2. STAI (<math>p&lt;0.001</math>) scores increased significantly between discharge and follow-up in both groups. 3. STAI was not affected by group.</p>
<p><a href="#">Zhao et al.</a> (2021) China</p>	<p><b>Population:</b> <i>Intervention Group</i> (psychological intervention; n=36): Mean age=49.39±13.88yr; Gender: males=26,</p>	<p>1. There were significant differences in the SAS and SDS scores</p>

<p>RCT PEDro =4 Level 2 N=72</p>	<p>females=10; Mean time post injury=not reported; Level of injury: Tetraplegia=100%; Severity of injury: AIS A=7, AIS B=23, AIS C=6; Anxiety status=mild-moderate as assessed by the Zung Self Rating Anxiety Scale.</p> <p><i>Control group</i> (conventional systemic treatment; n=36): Mean age=45.03±14.04yr; Gender: males=29, females=7; Mean time post injury=not reported; Level of injury: Tetraplegia 100%; Severity of injury: AIS A=8, AIS B=20, AIS C=8; Anxiety status=mild- moderate as assessed by the Zung Self Rating Anxiety Scale.</p> <p><b>Intervention:</b> Participants were randomly divided into psychological intervention or Conventional systemic treatment group. Psychological intervention group: received a mix of cognitive behavioural psychotherapy, supportive psychotherapy, and medication in addition to conventional treatment. Conventional systemic treatment group: received general symptomatic treatment, surgical treatment, routine postoperative nursing, routine postoperative neurological exercise, postoperative respiratory exercise and the company of family members or nursing workers. Outcome measures were assessed presurgery, 3mo after surgery, 6mo after surgery, 1yr after surgery and 2yr after surgery.</p> <p><b>Outcome Measures:</b> Zung Self-Rating Anxiety Scale (SAS), Zung Self-Rating Depression Scale (SDS), Medical Outcomes Study 36-item Short Form Health Survey (SF-36), American Spinal Injury Association (ASIA), Japanese</p>	<p>between the intervention group (psychological intervention group) and the control group (conventional systemic treatment group) at 3 months (p&lt;.01), 6 months (p&lt;.01), 1yr (p&lt;.01), and 2yr (p&lt;.01) post-surgery.</p>
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	Orthopedic Assessment (JOA).	
<a href="#">Mehta et al.</a> (2020) Canada Pre-Post Level 4 NInitial=20 NFinal=18	<p><b>Population:</b> <i>Intervention group</i> (ICBT; n=20): Mean age=54.7±16.2yr; Gender: males=11, females=9; Mean time post injury=12.1±15.9yr; Level of injury: paraplegia=8, tetraplegia=12; Severity of injury: incomplete=14, complete=6; Anxiety status=mild to moderate anxiety assessed by the GAD-7.</p> <p><b>Intervention:</b> A group of participants was given internet-based Cognitive behavioural therapy (ICBT), based on chronic conditions course for SCI and case studies or vignettes.</p> <p>The Chronic Conditions Course consisted of five lessons delivered over 8wk. Outcomes were measured at baseline, at post treatment, and at 3mo follow-up.</p> <p><b>Outcome Measures:</b> Feasibility, treatment satisfaction questionnaire (TSQ), patient health questionnaire (PHQ-9), generalized anxiety disorder-7 (GAD-7), Spinal Cord Injury Quality of Life (SCI-QOL), International Spinal Cord Injury Basic Pain Data Set (ISCIBPD).</p>	1. 2. Depression (p <.001) and anxiety (p=.002) scores decreased significantly after ICBT therapy. 2. Significant improvements were found on SCIQoL subscales of Grief (p<.001), Self-Esteem (p=.04), Resilience (p<.002), and Positive Affect (p<.001) from baseline to post-intervention and follow-up.



<p><a href="#">Dear et al., (2018)</a></p> <p>Australia</p> <p>Pre- Post</p> <p>N=68</p>	<p><b>Population:</b> Mean age=48.0±13.0 yr; Gender: males=34, females=34; Time since injury=8.0±10.0 yr; Severity of injury: complete=15, incomplete=44, unsure=9.</p> <p><b>Intervention:</b> Participants completed five online lessons and homework tasks for pain management with weekly support from a clinical psychologist.</p> <p><b>Outcome Measures:</b> Pain disability index (PDI), patient health questionnaire 9-item (PHQ-9), generalized anxiety disorder scale 7-item), Wisconsin brief pain questionnaire (WBPQ), pain self-efficacy questionnaire (PSEQ), pain catastrophizing scale (PCS), satisfaction with life scale (SWLS).</p>	<ol style="list-style-type: none"> <li>1. Significant overall effect observed for pain- related disability (<math>p&lt;0.001</math>), anxiety (<math>p&lt;0.001</math>) and depression (<math>p&lt;0.001</math>), as well as improvements in all three from baseline to post-treatment (<math>p&lt;0.001</math>) and even further improvements at 3-mo follow-up (<math>p&lt;0.015</math>).</li> <li>2. Significant overall time effect observed for pain self-efficacy (<math>p&lt;0.001</math>), pain catastrophizing (<math>p&lt;0.001</math>) and life satisfaction (<math>p&lt;0.001</math>).</li> <li>3. Significant improvements from baseline to post-treatment for pain catastrophizing and life satisfaction (<math>p&lt;0.001</math>) with life satisfaction improving from post- treatment to follow-up (<math>p=0.006</math>) but not pain catastrophizing (<math>p=0.062</math>).</li> </ol>
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<p><a href="#">Heutink et al.</a> (2014) Netherlands Follow-Up N=29</p>	<p><b>Population:</b> Mean age=56.5yr; Gender: males=21, females=8; Level of injury: paraplegia=18, quadriplegia=11; Severity of injury: incomplete=14, complete=15; Mean time post injury=5.4yr; Anxiety status=symptoms. <b>Intervention:</b> Participants who received treatment in Heutink et al., (2012) were assessed at 6, 9, and 12mo follow-up. <b>Outcome Measures:</b> Hospital Anxiety &amp; Depression Scale (HADS).</p>	<p>1. HADS-anxiety scores significantly decreased across from pre- to post-treatment, to 6mo, and to 12mo (p&lt;0.05).</p>
<p><a href="#">Dorstyn et al.</a> (2011) Australia PCT NInitial=24 NFinal=19</p>	<p><b>Population:</b> Mean age=48.5yr; Gender: males=20, females=4; Level of injury: paraplegia=14, quadriplegia=10; Severity of injury: incomplete=5, complete=19; Anxiety status=symptoms. <b>Intervention:</b> Participants with moderate to severe DASS-21 scores received Cognitive Behavioural Therapy (CBT, treatment, n=11) and those with subclinical scores received standard care (control, n=13). CBT was delivered via 7-22 sessions, each for 30- 60mins. The treatment group was also prescribed low dose amitriptyline. Outcomes were assessed pre and post treatment, and at 3mo follow-up. <b>Outcome Measures:</b> Depression Anxiety Stress Scale-21 (DASS-21).</p>	<p>1. DASS-21 total scores did not change significantly over time in the treatment group. 2. DASS-21 total scores, anxiety sub scores and stress sub scores decreased post treatment and increased at follow-up. 3. DASS-21 scores did not change significantly over time in the control group.</p>
<p><a href="#">Migliorini et al.</a> (2011) Australia Pre- Post N=3</p>	<p><b>Population:</b> Age range=41-65yr; males=2, females=1; Severity of injury: incomplete=2, complete=1; Anxiety status=symptoms. <b>Intervention:</b> Participants were offered a computer-based Cognitive Behavioural Therapy (CBT) intervention involving 10 modules.</p>	<p>1. DASS-21 anxiety score decreased in all 3 individuals.</p>

	<b>Outcome Measures:</b> Depression Anxiety Stress Scale-21 (DASS-21), Symptoms Checklist-90 (SCL-90), Personal Wellbeing Index (PWI), Emotional Wellbeing Questionnaire (EWQ).	
<a href="#">Perry et al.</a> (2010) Australia PCT NInitial=36 NFinal=30	<b>Population:</b> Mean age=44yr; Gender: males=28, females=8; Level of injury: paraplegia=20, quadriplegia=13, Severity of injury: incomplete=23, complete=13; Mean time post injury=70.5mo; Anxiety status=symptoms. <b>Intervention:</b> Individuals with chronic neuropathic pain received either a multidisciplinary cognitive behavioural pain management program (treatment, n=19) or standard care (control, n=17). Treatment involved 10 sessions and pharmacotherapy over 6mo. Outcomes were assessed pre and post treatment, and at 1mo and 9mo follow- up. <b>Outcome Measures:</b> Hospital Anxiety and Depression Scale (HADS).	1. HADS-anxiety scores significantly improved over time in the treatment group when compared to the control group (p=0.007).

<p><a href="#">Norrbrink Budh et al.</a> (2006) PCT N=3 8</p>	<p><b>Population:</b> Mean age=52yr; Gender: males=14, females=24; Level of injury: paraplegic=19, quadriplegic=19; Severity of injury: incomplete=28, complete=10; Mean time post injury=12yr; Anxiety status=symptoms.</p> <p><b>Intervention:</b> Individuals with neuropathic pain received cognitive behavioural therapy, education, relaxation, and body awareness training (treatment, n=27) while matched controls received no treatment for neuropathic pain (n=11). Treatment was delivered 5hr/wk for 10wk. Outcomes were assessed pre and post treatment, and at 3mo, 6mo, and 12mo follow-up.</p> <p><b>Outcome Measures:</b> Hospital Anxiety and Depression Scale (HADS).</p>	<ol style="list-style-type: none"> <li>1. At 12mo, there was no significant change in anxiety scores on the HADS in the treatment group from baseline.</li> <li>2. However, the treatment group showed systematic decrease in anxiety on the HADS as measured by relative change in position (95% CI) at 12mo.</li> </ol>
<p><a href="#">Kennedy et al.</a> (2003) United Kingdom PCT N=8 5</p>	<p><b>Population:</b> Mean age=38.4yr; Gender: males=69, females=16; Level of injury: paraplegia=39, quadriplegia=46; Severity of injury: incomplete=36, complete=49; Mean time post injury=20wk; Anxiety status=symptoms.</p> <p><b>Intervention:</b> Participants received coping effectiveness training (CET, treatment, n=45) or no treatment (control, n=40). CET was delivered in 60-75min sessions for 2x/wk over 3.5wk and involved problem solving, mindfulness, coping, and improving social supports. Outcomes were assessed pre and post treatment, and at a 6wk follow-up.</p> <p><b>Outcome Measures:</b> Beck Depression Inventory (BDI), State Trait Anxiety Inventory (STAI), Coping Strategies Scale (CSS), Self-Perception Scale (SPS).</p>	<ol style="list-style-type: none"> <li>1. Post CET, the treatment group showed a significant reduction in STAI scores (<math>p=0.001</math>) compared to controls.</li> </ol>

<p><a href="#">King &amp; Kennedy</a> (1999) United Kingdom PCT N=38</p>	<p><b>Population:</b> Mean age=33yr; Gender: males=29, females=9; Level of injury: paraplegia=19, quadriplegia=19; Severity of injury: incomplete=11, complete=27; Mean time post injury=19yr; Anxiety status=symptoms.</p> <p><b>Intervention:</b> Participants received coping effectiveness training (treatment, n=19), while matched controls received standard care (n=19). Treatment was delivered in 60- 75min sessions 2x/wk with 6-9 other participants. Sessions included a mixture of didactic presentations, practical exercises, and group discussions. Outcomes were assessed pre and post treatment, and at 6wk follow-up.</p> <p><b>Outcome Measures:</b> Beck Depression Inventory (BDI), State Trait Anxiety Inventory (STAI), COPE Inventory.</p>	<p>1. There were significantly greater reductions in HADS- anxiety (p&lt;0.05) in the treatment group than in controls.</p>
<p><a href="#">Craig et al.</a> (1997) Australia PCT N=6 9</p>	<p><b>Population:</b> Mean age=31yr; Gender: males=57, females=12; Level of injury: paraplegia=34, quadriplegia=35; Severity of injury: incomplete=21, complete=48; Time post injury=acute; Anxiety status=symptoms.</p> <p><b>Intervention:</b> Participants received standard care (control, n=41) or small group cognitive behavioural therapy (CBT, treatment, n=28). CBT was provided for 1.5hr/wk over 10wk and included muscle relaxation, visualization techniques, self-hypnosis, cognitive restructuring, social skills training, and sexuality sessions. Outcomes were assessed pre and post treatment, and at 1yr follow-up.</p> <p><b>Outcome Measures:</b> Beck Depression Inventory (BDI), State Trait Anxiety Inventory (STAI), Rosenberg Self-Esteem scale (RSES).</p>	<p>1. STAI and RSES scores did not improve significantly at 1yr.</p>

<a href="#">Craig et al.</a> (1998) Australia Follow-Up N=58	<p><b>Population:</b> Mean age=31yr; Gender: males=57, females=12; Level of injury: paraplegia=34, quadriplegia=35; Severity of injury: incomplete=21, complete=48; Time post injury=acute; Anxiety status=symptoms. <b>Intervention:</b> Participants from Craig et al., (1997) were assessed at 2yr follow-up.</p> <p><b>Outcome Measures:</b> Beck Depression Inventory (BDI, State Trait Anxiety Inventory (STAI),</p>	1. Those with high STAI scores showed a significant improvement on STAI over time ( $p<0.01$ ).
<b>Coping Oriented Supportive Program</b>		
<a href="#">Li et al.</a> (2020) Hong Kong PCT Level 2 PEDro =5 NInitial=99 NFinal=88	<p><b>Population:</b> <i>Intervention group</i> (Coping- Oriented Supportive Programme (COSP); n=50): Mean age=39±11.7yr; Gender: males=43, females=7; Mean time post injury=6.9±4.2mo; Level of injury: tetraplegia=13, paraplegia=37; Severity of injury: complete=24, incomplete=26; Anxiety status=mild according to mean HADS-A</p> <p><i>Control group</i> (Attention group; n=49) Mean age=43±10.7yr; Gender: males=44, females=5; Mean time post injury=8.6±4.2mo; Level of injury: tetraplegia=13, paraplegia=36; Severity of injury: complete=26, incomplete=23; Anxiety status=mild according to mean HADS-A.</p> <p><b>Intervention:</b> Two different wards of SCI patients were given either Coping-oriented Supportive Programme (COSP) or attention control training for 1-1.5hr/session, 1x/wk for 8wk. COSP is a psychosocial intervention which is delivered by a registered nurse who has SCI training in both SCI wards, while</p>	1. Depressive symptoms and adaptive coping were significantly improved in intervention group ( $p=.001$ ) compared with the control group at post intervention, but not at follow-ups. 2. Anxiety, maladaptive coping, and social and life satisfaction were improved in intervention group compared to the control group ( $p<.05$ ) at post-intervention, 4wk follow-up, and 12wk follow-up. 3. Self-efficacy was improved in the intervention group compared with the

	<p>attention control group were given brief education on personal care. Outcome measures were assessed at baseline, immediately post-intervention, 4wk follow- up, and 12wk follow-up.</p> <p><b>Outcome Measures:</b> Brief-COPE scale, Moorong Self-efficacy Scale (MSES), Hospital anxiety and depression scale (HADS), Numerical rating scale for pain, Six-item social support questionnaire (SSQ6), Quality of life enjoyment and satisfaction questionnaire- short form (Q-LES-Q-SF).</p>	<p>control group at post- intervention (p=.001) and 4wk follow-up (p=.02).</p>
<p><a href="#">Li et al.</a> (2019)</p> <p>Hong Kong</p> <p>RCT</p> <p>PEDro</p> <p>=4</p> <p>Level 2</p>	<p><b>Population:</b> <i>Intervention group</i> (Coping oriented supportive program n=9): Mean age=41.67±11yr; Gender: males=100%; Mean time post injury=8.1±4.1mo; Level of injury: tetraplegia=4, paraplegia=5; Severity of injury: complete=5, incomplete=4; Anxiety status=very mild anxiety symptoms according to mean HADS-A</p> <p><i>Control group</i> (Usual care group; n=11): Mean age=43±15.7yr; Gender: males=100%; Mean time post injury=8.2±4.1mo; Level of injury: tetraplegia=4, paraplegia=7; Severity of injury: complete=5, incomplete=6; Anxiety status=very mild according to the HADS-A.</p> <p><b>Intervention:</b> Two wards in a</p>	<ol style="list-style-type: none"> <li>1. Within- group analyses showed an improvement in depression HADS-D scoring post intervention in the COSP group (p=.007), but not in the control group. However, the difference was not significant between groups (p=1.16).</li> <li>2. There was no within and between group differences in the anxiety HADS scores at any time point (p&gt;.5).</li> </ol>

<p>NInitial=22 NFinal=20</p>	<p>hospital were compared, where one received an intervention and the other one was used as a control group with conventional care. The intervention involved culturally sensitive psychosocial care program and Coping- Oriented Supportive Program (COSP), 1- 1.5hr/session, 1x/wk for 8wk. Outcome measures were assessed at baseline and post intervention.</p> <p><b>Outcome Measures:</b> Brief Coping Orientations to Problems Experienced Inventory, Moorong Self-Efficacy Scale, Hospital Anxiety and Depression Scale</p>	<p>3. Between group comparison showed greater self-efficacy (<math>p=.04</math>), and life (<math>p=.005</math>) and social satisfaction (<math>p=0.22</math>) in the COSP group compared with the control group post intervention.</p>
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	(HADS), Quality of Life Enjoyment and Satisfaction Questionnaire-Short Form, Six-Item Social Support Questionnaire.	
<b>Acceptance and Commitment Therapy</b>		
<a href="#">Han et al. (2022)</a> United States Pre-Post Level 4 NInitial=10 NFinal=10	<p><b>Population:</b> Mean age=51.2±9.5yr; Gender: males=2, females=8; Mean time post injury= 20.1±15.3yr; Level of injury: cervical=3, thoracic=6, lumbar=1; Severity of injury: not reported; Anxiety status=moderate as measured by DASS.</p> <p><b>Intervention:</b> Participants received 8 individual sessions (1h per session) delivered by trained coaches through Zoom videoconferencing, involving 6x1/wk acceptance and commitment therapy (ACT) sessions and 2 psychoeducation sessions over a 1wk period. Outcome measures were assessed at baseline and post-intervention.</p> <p><b>Outcome Measures:</b> Depression, Anxiety and Stress Scales (DASS-21), World Health Organization Quality of Life Instruments (WHOQOL-BREF), Spinal Cord Injury Quality of Life (SCI-QOL), Self-Compassion Scale- Short Form (SCS SF) Engagement in Meaningful Activities Survey (EMAS), ACT process measures (Acceptance and Action Questionnaire-II (AAQ-II), Cognitive Fusion Questionnaire (CFQ-7), Mindful Attention Awareness Scale (MAAS), System Usability Scale (SUS)</p>	<ol style="list-style-type: none"> <li>1. Participants showed significant reductions in depression (p=.021), anxiety (p=.032) and stress (p=.036), measured by the DASS- 21.</li> <li>2. SCI-QOL Grief showed significant reductions (p=.028), and significant increases in SCS-SF (p=.028).</li> <li>3. EMAS scores improved significantly from pre- to post-intervention (p=.049)</li> <li>4. The WHOQOL-BREF, SCI-QOL Resilience, MAAS, CFQ-7, AAQ-II measures showed no significant changes after the intervention.</li> </ol>