Table 27. Mobile Health Interventions for Anxiety following SCI

Author Year **Country** **Research Design** **PEDro Score** **Total Sample Size**	**Methods**	**Outcome**
Multidisciplinary Telehealth Consultation		
Dhakal et al. (2022) United Kingdom Pre-Post Level 4 N=97 SCI=82	**Population:** Mean age=38.4±12.2yr; Gender: males=77, females=20; Mean time post injury=not reported; Level of injury: paraplegia=64, tetraplegia=18; Severity of injury: not reported; Anxiety status=mixed. **Intervention**: Consultations with a multidisciplinary team (MDT) completed via a tele- rehabilitation system (1-2x/wk) until goal achievement. The MDT discussed the ongoing physical, cognitive, psychological, and vocational problems encountered by assessed by the Self-rating Anxiety Scale. **Intervention:** Participants were randomized to receive Bone Marrow Mesenchymal Stem Cells (BMSCs) transplantation or standard occupational therapy. The BMSCs transplantation therapy group received 2x Bone Marrow Mesenchymal Stem Cells transplant 10d apart in addition to rehabilitation services for	1. The scores for severity of depression, anxiety, and stress for participants with SCI or ABI significantly decreased after intervention (p<.01). 2. The EQ-5D index score significantly increased post- intervention (p<.001). 3. There was a significant mean difference (P<.001) between the pre-and post- intervention MBI, and the visual analogue scale included as an item of the EQ-5D-5L with effect sizes -0.4 and -0.7 respectively

	1mo. The standard occupational therapy group received both physiotherapy and occupational therapy services for 1mo. Outcome measures were assessed before and after treatment. **Outcome Measures:** American Spinal Injury Association (ASIA) scores, Motor and sensory function using the muscle strength grading standard and sense of pain and tactile sense, Self-rating Anxiety Scale (SAS), Self-rating Depression Scale (SDS).	

Multidisciplinary self-Management Interventions

Li & Fu (2020) Canad a PCT Level 2 N=124	**Population:** *Intervention group* (health management + aerobic exercise, n=68)*:* Mean age=45.36±6.33yr; Gender: males=37, females=31; Mean time post injury=<5yr (n=15), 5+yr (n=53); Level of injury: not reported; Severity of injury: incomplete=57, complete=11; Anxiety status=moderate to severe as assessed by HAM-A scores. *Control group* (aerobic exercise, n=56): Mean age=43.87±5.92yr; Gender: males=29, females=27; Mean time post injury=<5yr (n=14), 5+yr (n=42); Level of injury: not reported; Severity of injury: incomplete=43, complete=13; Depression status=moderate depression as assessed by Beck Depression Inventory (BDI). **Intervention:** A management plan was developed based on the patient's condition and self- care ability publicized to family and patients. It was also combined with aerobic exercise program mainly containing upper limb tension training, weights, and wheelchair exercises 30min/d, 5x/wk for 4wk. The control group	1. The WHOQOL-BREF outcome scores were significantly improved in intervention groups compared with the control group in physiological domain, psychological domain, and total QOL (p<.05). However, no statistical differences were observed in social relationship and environmental domains (p>.05) between groups. 2. Anxiety and depression scores reduced notably in both groups (p<.05), and the scores in the intervention group were significantly lower than the control after treatment (p<.05).

	underwent routine aerobic exercise only. Outcomes measures were assessed at baseline, and post intervention. **Outcome Measures:** Barthel Index (BI), World Health Organization Quality of Life (WHOQOL-BREF), Hamilton Anxiety Scale (HAMA), Beck Depression Inventory (BDI), Rehabilitation assessment indicators, Cardiopulmonary indicators.	
Systematic Nursing Interventions		

Xia et al. (2022) China PCT Level 2 N=90	**Population:** *Intervention group* (Systematic nursing; n=45): Mean age=36.75±3.32yr; Gender: males=23, females=22; Mean time post injury=not reported; Level of injury: not reported; Severity of injury: not reported; Anxiety status= Severe according to mean total HADS *Control group* (Rehabilitation training plan; n=45): Mean age=36.69±3.29yr; Gender: males=21, females=24; Mean time post injury=not reported; Level of injury: not reported; Severity of injury: not reported; Anxiety status= severe according to mean total HADS. **Intervention:** Two groups of patients were given either usual care with a diet plan as control, or the systematic care model as the intervention. The systematic care model involved a nurse educating the patient and family about the SCI and recovery, doing psychological interventions to ease patient discomfort, and creating care	1. HADS scores significantly decreased in both groups after the intervention ($p<.05$), and the scores were markedly lower in the intervention group than the control group ($p<.05$). 2. QOL scores significantly increased in both groups after the intervention ($p<.05$), and the scores were markedly higher in the intervention group than the control group ($p<.05$). 3. The intervention group showed better self-efficacy levels (GSES) than the control group after intervention ($p<.05$).

	plans and diet instruction pre and post operation. **Outcome Measures**: Generic quality of life inventory (GQOLI- 74), and Hospital anxiety and depression scale (HADS), Incidence of complications, Rehabilitation outcomes including Functional Independence Measure (FIM), General Self-efficacy Scale (GSES), and Modified Barthel Index (MBI).	