

ONLINE APPENDIX 1

Note: This is Online Appendix 1 of James, B., Mashola, M.K. & Mothabeng, D.J., 2022, 'Determining the management of pain in people with spinal cord injury by physiotherapists in South Africa', *South African Journal of Physiotherapy* 78(1), a1767. <https://doi.org/10.4102/sajp.v78i1.1767>

TABLE 1-A1: Search strategy for MEDLINE (PubMed). Search conducted on May 20, 2022.

Search number	Query	Results
8	#7 AND Humans [species]	21
7	#5 AND #6	25
6	#3 AND #4	751
5	#1 AND #2	13,112
4	"south africa"[Text Word] AND ("south africa"[MeSH Terms] OR ("South"[All Fields] AND "Africa"[All Fields]) OR "south africa"[All Fields])	61,321
3	"physical therapy modalities"[MeSH Terms] OR "physical therapy modalities"[MeSH Terms] OR ("physical therapy modalities"[MeSH Terms] OR ("physical"[All Fields] AND "therapy"[All Fields] AND "modalities"[All Fields]) OR "physical therapy modalities"[All Fields] OR "physiotherapies"[All Fields] OR "physiotherapy"[All Fields]) OR ("physical therapy modalities"[MeSH Terms] OR ("physical"[All Fields] AND "therapy"[All Fields] AND "modalities"[All Fields]) OR "physical therapy modalities"[All Fields] OR ("physical"[All Fields] AND "therapy"[All Fields]) OR "physical therapy"[All Fields]) OR ("physiotherapeutic"[All Fields] OR "physiotherapeutical"[All Fields] OR "physiotherapeutics"[All Fields]) OR ("therapeutical"[All Fields] OR "therapeutically"[All Fields] OR "therapeuticals"[All Fields] OR "therapeutics"[MeSH Terms] OR "therapeutics"[All Fields] OR "therapeutic"[All Fields]) OR "physio"[All Fields] OR ("therapeutics"[MeSH Terms] OR "therapeutics"[All Fields] OR "therapies"[All Fields] OR "therapy"[MeSH Subheading] OR "therapy"[All Fields] OR "therapys"[All Fields] OR "therapys"[All Fields])	11,236,989
2	"Spinal Cord Injuries"[MeSH Terms] OR "Spinal Injuries"[MeSH Terms] OR "Spinal Cord Injuries"[All Fields] OR "spinal cord injury"[All Fields] OR "spinal injury"[All Fields] OR "Spinal Injuries"[All Fields] OR "sci"[Text Word]	112,678
1	"pain management"[MeSH Terms] OR "pain"[MeSH Terms] OR "pain"[All Fields] OR "pain management"[All Fields] OR "pain intervention"[All Fields] OR "pain interventions"[All Fields] OR "pain treatment"[All Fields] OR "pain treatments"[All Fields]	946,268

Online survey

Q1 Age

Q2 Gender

Male

Female

Q3 Please select your most appropriate job description as a Physiotherapist.

Clinician

Academic

Other

Q4 Please select your current province of practice.

Limpopo

Mpumalanga

Gauteng

North-West

Kwazulu-Natal

Free State

Northern Cape

Eastern Cape

Western Cape

Q5 Please select your current area of employment.

Public tertiary/academic hospital

Public specialised rehabilitation hospital

Public Secondary/District hospital

Public Primary hospital /clinic

Private hospital

Private specialized rehabilitation hospital

Private practice

University

Other

Q6 Please specify the number of years of experience as a qualified physiotherapist.

Q7 Please specify the number of years of experience in the field of spinal cord injury.

Q8 Please specify your post graduate qualification and field of practice.

(Write n/a if not applicable)

Q9 Roughly how many spinal cord injury patients with pain do you treat in a month?

Q10 Do you have any special interest in pain management in people with spinal cord injury?

Yes

No

Q11a Please specify your most-used treatment modality to treat pain in People With Spinal Cord Injury (Write the modality name in full)

Q11b Do you select the treatment modality according to any of the following criteria?

	Yes	No
Type of pain (neuropathic / nociceptive)	<input type="radio"/>	<input type="radio"/>
Onset of pain (sudden / gradual)	<input type="radio"/>	<input type="radio"/>
Duration of pain (acute / chronic)	<input type="radio"/>	<input type="radio"/>
Location of pain (above the level of injury / below the level of injury)	<input type="radio"/>	<input type="radio"/>
Intensity of the pain (mild / severe)	<input type="radio"/>	<input type="radio"/>
Pain interference with daily activities	<input type="radio"/>	<input type="radio"/>
Pain interference with overall mood	<input type="radio"/>	<input type="radio"/>
Pain interference with sleep	<input type="radio"/>	<input type="radio"/>
Cost of treatment modality	<input type="radio"/>	<input type="radio"/>
Duration of treatment modality	<input type="radio"/>	<input type="radio"/>

	Yes	No
Patients' preference	<input type="radio"/>	<input type="radio"/>
Other treatments the patients receive, including the past medical history	<input type="radio"/>	<input type="radio"/>
Do you consider various psychosocial factors while deciding the treatment. (e.g. cultural considerations, depression, lifestyle factors)	<input type="radio"/>	<input type="radio"/>

12a. Please specify your second most-used treatment modality to treat pain in People With Spinal Cord Injury (Write the modality name in full)

Q12b Do you select the treatment modality according to any of the following criteria?

	Yes	No
Type of pain (neuropathic/nociceptive)	<input type="radio"/>	<input type="radio"/>
Onset of pain (sudden/gradual)	<input type="radio"/>	<input type="radio"/>
Duration of pain (acute/chronic)	<input type="radio"/>	<input type="radio"/>
Location of pain (above the level of injury/below the level)	<input type="radio"/>	<input type="radio"/>
Intensity of pain(mild/severe)	<input type="radio"/>	<input type="radio"/>
Pain interference with daily activities	<input type="radio"/>	<input type="radio"/>
Pain interference with overall mood	<input type="radio"/>	<input type="radio"/>
Pain interference with sleep	<input type="radio"/>	<input type="radio"/>
Cost of treatment modality	<input type="radio"/>	<input type="radio"/>
Duration of treatment modality	<input type="radio"/>	<input type="radio"/>
Patient's preference	<input type="radio"/>	<input type="radio"/>
Other treatments the patients receive, including the past medical history	<input type="radio"/>	<input type="radio"/>
Do you consider various psychosocial factors while deciding the treatment. (e.g. cultural considerations ,depression, life style factors)	<input type="radio"/>	<input type="radio"/>

Q13a Please specify your third most-used treatment modality to treat pain in People With Spinal Cord Injury (Write the modality name in full)

Q 13b Do you select the treatment modality according to any of the following criteria?

	Yes	No
Type of pain (neuropathic / nociceptive)	<input type="radio"/>	<input type="radio"/>
Onset of pain (sudden / gradual)	<input type="radio"/>	<input type="radio"/>
Duration of pain (acute / chronic)	<input type="radio"/>	<input type="radio"/>
Location of pain (above the level of injury / below the level of injury)	<input type="radio"/>	<input type="radio"/>
Intensity of the pain (mild / severe)	<input type="radio"/>	<input type="radio"/>
Pain interference with daily activities	<input type="radio"/>	<input type="radio"/>
Pain interference with overall mood	<input type="radio"/>	<input type="radio"/>
Pain interference with sleep	<input type="radio"/>	<input type="radio"/>
Cost of treatment modality	<input type="radio"/>	<input type="radio"/>
Duration of treatment modality	<input type="radio"/>	<input type="radio"/>
Patients' preference	<input type="radio"/>	<input type="radio"/>
Other treatments the patients receive including the past medical history	<input type="radio"/>	<input type="radio"/>
Do you consider various psychosocial factors while deciding the treatment? (e.g., cultural considerations, depression, lifestyle factors)	<input type="radio"/>	<input type="radio"/>

Q14 Please specify any other modalities that you use that you have not mentioned above. Kindly use full form of the modality. (Write n/a if not applicable)

Q15 What is your estimated duration (in minutes) of each pain treatment session when treating People with Spinal Cord Injury?

Q16 Is your pain management dictated by a protocol? If yes please specify.

Q17 Please recommend treatment(s) that may be used to treat the following pain conditions patients with spinal cord injury.

(Write the modality name in full)

- Acute nociceptive pain
- Chronic nociceptive pain
- Acute neuropathic pain
- Chronic neuropathic pain

Q18 Might you consider using or recommending any other conservative treatment(s) (e.g. patient education, postural correction, etc) for managing pain in people with spinal cord injury?

Please specify.

Q 19 Please specify the outcome measures (e.g. VAS) that you use to assess the effectiveness of the pain treatment.

Treatments suggested per treatment type by the physiotherapists

Type of pain	Suggested treatment	
Acute Nociceptive pain	Craniosacral therapy	
	Cryotherapy (specific five minutes on and five minutes off)	
	Dry needling	
	Education	
	Electrotherapy Pulsed Ultrasound TENS	
	Ergonomics Positioning Equipment	
	Exercises Stretching exercises stabilizing exercises active and passive movements active functional exercises movement impairment corrective exercises (such as muscle length correction and joint mobility facilitation)	
	Heat Therapy (hot packs)	
	Joint mobilisations	
	Massage	
	Medication Analgesics	
	Myofascial release	
	Neural tissue mobilisation Neural tissue mobilisation Soft tissue mobilisation	
	Chronic Nociceptive Pain	Aqua/hydrotherapy
		Breathing and relaxation exercises
Cognitive behavioural therapy		
Craniosacral therapy		
Deformity correction		
Electrotherapy TENS monotherapy TENS combination treatment [†] Interferential therapy Shockwave therapy		
Exercises Stretching exercises Cardiovascular exercises Passive movements movement impairment corrective exercises (such as muscle length correction and joint mobility facilitation)		
Graded activity		
Joint mobilisation		
Massage		
Medication Anti-depressants		
Myofascial release		
Neural tissue mobilisation Neural tissue mobilisation Soft tissue mobilisation		
Neurodynamics		
Pain neuroscience education		
Thermotherapy		

Acute neuropathic pain	Cryotherapy	
	Desensitization and sensory stimulation techniques	
	Electrotherapy TENS Interferential therapy Laser therapy	
	Exercises Stretching exercises stabilizing exercises active and passive movements active functional exercises movement impairment corrective exercises (such as muscle length correction and joint mobility facilitation)	
	Interface release	
	Joint mobilisations	
	Medication	
	Myofascial release	
	Neural tissue mobilisation Neural tissue mobilisation Soft tissue mobilisation	
	Pain education	
	Spinal manipulation	
	Thermotherapy	
	Chronic neuropathic pain	Acutouch
		Breathing exercises
Cognitive behavioural therapy		
Deformity/ postural correction		
Desensitization		
Dry needling		
Electrotherapy TENS Interferential therapy		
Exercises Stretching exercises movement impairment corrective exercises Postural correction		
Graded activity		
Hydrotherapy		
Myofascial release		
Joint mobilisation		
Pain education		
Medication		
Psychology referral		
Self-management strategies Self-efficacy Pain management programs (unspecified)		
Thermotherapy		
Tissue mobilisation Neural tissue mobilisation Soft tissue mobilisation		