

Best Evidence Summaries of Topics in Mental Healthcare

BEST in MH *clinical question-answering service*

Question

In adults with Functional Neurological Disorders, which methods of physiotherapy are most effective in improving patient outcomes?"

Clarification of question using *PICO* structure

Patients: Adults with Functional Neurological disorders (Post-concussion syndrome/
Conversion disorder)

Intervention: Physiotherapy

Comparator: Any other form of physiotherapy

Outcome: Improvement in any patient outcomes

Clinical and research implications

No relevant systematic reviews or randomised controlled trials could be found for this question.

What does the evidence say?

Number of included studies/reviews (number of participants)

N/A

Main findings

N/A

Authors conclusions

N/A

Reliability of conclusions/Strength of evidence

N/A

What do guidelines say?

No Guidelines could be found discussing Physiotherapy for Conversion Disorder or Post-Concussion Syndrome, however one guideline was found that did talk about the effectiveness of physical therapy/exercise on patient outcomes after a stroke.

8.2.9 Physical Therapy

A systematic review of the impact of physical therapy on functional outcomes after stroke included studies with diverse interventions and flawed methodology. Insufficient evidence was identified in terms of functional outcome for traditional neurological treatment approaches.

12.9 Exercise

A systematic review of physical fitness training after stroke identified 12 trials (289 patients) with an intervention to improve either muscle strength with or without cardiorespiratory fitness.²⁷⁶

Many of the trials had participants who volunteered and were ambulatory. Trial quality was varied and outcome measures were very diverse. The benefits of physical fitness training appeared to be short term only. Consequently, few conclusions can be drawn about the impact of physical fitness training. A second systematic review of the same data showed no evidence of effect rather than evidence of no effect.²⁷⁷ Individual studies showed an increase in quality of life and reduction in the level of impairment. Secondary prevention was not an outcome but positive effects from cardiovascular training on gait speed, stair climbing, human activity profile, motor function, workload and exercise time were reported. A study comparing three 40 minute sessions of treadmill training a week for six months with a programme of common components of conventional rehabilitation showed that treadmill training was superior at improving cardiovascular fitness.

In a small study (13 participants) patients in a water-based programme of three one hour sessions per week for eight weeks showed significant improvement in cardiovascular fitness over the control group at least one year post stroke.

An observational study of 25 patients one to 12 years post stroke taking part in an exercise group demonstrated that improvement in balance and functional activity could be acquired well after the initial stroke episode and improvement was retained at least one month after the programme stopped. The benefits of physical exercise, in terms of function and quality of life, tend to be lost after the formal programme of exercise stops.

Date question confirmed: 16/11/15
Date searches conducted: 17/11/15
Date answer completed: 18/11/15

Guidelines

The Scottish Intercollegiate Guidelines Network (2008). Management of patients with stroke or TIA: assessment, investigation, immediate management and secondary prevention. A national clinical guideline [SIGN108] <http://www.sign.ac.uk/pdf/sign108.pdf>

Search details

Source	Search Strategy	Number of hits	Relevant evidence identified
Guidelines			
NICE	Conversion disorder	22	0
	Post-concussion	3	0
	Functional Neurological disorder	67	1
Systematic Reviews & Primary Studies			
MEDLINE	1 "physiotherap*".ab,ti. 17455	60	0
	2 exp Conversion Disorder/ 2022		
	3 post concussion syndrome.ab,ti. 204		
	4 (Functional adj neurologic* adj (disorder* or Diseas* or Illness*)).ab,ti. 47		
	5 FND.ab,ti. 198		
	6 exp Exercise Therapy/ or exp Physical Therapy Modalities/ 135910		
	7 exp Post-Concussion Syndrome/ 531		
	8 1 or 6 145728		
	9 2 or 3 or 4 or 5 or 7 2934		
	10 8 and 9 60		
EMBASE	1 "physiotherap*".ab,ti. 29430	107	0
	2 exp Conversion Disorder/ 1835		
	3 post concussion syndrome.ab,ti. 293		

	4 (Functional adj neurologic* adj (disorder* or Diseas* or Illness*)).ab,ti. 72		
	5 FND.ab,ti. 450		
	6 exp Exercise Therapy/ or exp Physical Therapy Modalities/ 112329		
	7 exp Post-Concussion Syndrome/ 1016		
	8 1 or 6 123439		
	9 2 or 3 or 4 or 5 or 7 3466		
	10 8 and 9 107		
PsycINFO/CINAHL	1 "physiotherap*".ab,ti. 2065	4	0
	2 exp Conversion Disorder/ 809		
	3 post concussion syndrome.ab,ti. 97		
	4 (Functional adj neurologic* adj (disorder* or Diseas* or Illness*)).ab,ti. 18		
	5 FND.ab,ti. 7		
	6 exp Physical Therapy/ 1929		
	7 "functional neurological disorder*".ab,ti. 16		
	8 1 or 6 3384		
	9 2 or 3 or 4 921		
	10 8 and 9 4		
CENTRAL	#1 MeSH descriptor: [Physical Therapy Modalities] explode all trees 16577	1	
	#2 MeSH descriptor: [Exercise Therapy] explode all trees 7523		
	#3 physiotherapy 7380		
	#4 functional adj neurologic* adj (disorder* or illness or disease*) 357		

	#5	FND	29		
	#6	MeSH descriptor: [Conversion Disorder]	explode all trees	20	
	#7	MeSH descriptor: [Post-Concussion Syndrome]	explode all trees	12	
	#8	#1 or #2 or #3	21931		
	#9	#4 or #5 or #6 or #7	418		
	#10	#8 and #9 in Trials	1		

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