

## The APA Valuing Skills Series

# Value of manual therapy in physiotherapy



# Manual therapy skills are important examination and treatment skills commonly used by physiotherapists

Manual therapy describes a wide variety of hands-on techniques to assist in diagnosis and assessment of function to help alleviate pain, improve mobility and function.

Manual therapy such as passive joint mobilisation and manipulation, is an effective intervention in the management of pain and restoration of function. In combination with prescribed exercise and education it forms part of a comprehensive plan to maximise recovery and prevent further injuries to ease the burden of musculoskeletal disease in the Australian population and ensure return to activity, function and work. Hands on therapies are an integral and valued component of physiotherapy practice when selected for appropriate patient conditions.

### Basic facts about manual therapy

Hands-on therapies and principally manual/manipulative therapy have been core practices within physiotherapy since the profession's origins and are regularly referenced in clinical practice guidelines around the world.1

29% of Australians live with chronic musculoskeletal conditions.2

Manual therapy is a recommended practice for managing neck and back pain. 3,4,5,6,7,8,9

Manual therapy is a key component of multimodal management programs. 10,11,12

Successfully used as part of managing various upper and lower limb disorders.12

**Manual** therapy is a cost-effective intervention.13,14

# Who can benefit from manual therapy?

Manual therapy is a safe and effective treatment option with potential benefits for a wide range of musculoskeletal disorders. Individuals with acute injuries, chronic conditions, and those in recovery post-surgery can benefit from skilled manual therapy. It's also useful in managing occupational injuries and conditions related to age or lifestyle.

### Pain relief is a major benefit

Research has shown that this likely occurs through several mechanisms:

- "Pain Gating" explains some of the immediate pain-relieving effects from mechanoreceptor stimulation
- Activating the brain's descending inhibition mechanisms
- Autonomic responses. 15,16

**PAIN RELIEF** 



### Manual therapy + active movement = Empowered

movement

Manual therapy is combined with active movement strategies which can enhance the patient's confidence to move and thus help overcome any fear avoidance behaviour.

MOVEMENT



# with health

The hands on physical examination provides diagnostic information, and fosters communication with the patient, therapeutic alliances and shared goal setting.





# **Physiotherapists: Skilled Practitioners of manual therapy** for Lifelong Musculoskeletal Health

Physiotherapists are Ahpra regulated, highly skilled health professionals with in-depth knowledge of musculoskeletal conditions. Following a detailed examination, they prescribe safe, progressive and appropriate interventions for individuals across the lifespan whilst considering the presenting injury and any co-existing pathology.

All manual therapy interventions used to treat patients are based on the individual assessment, patient alliance, patient comfort, safety, efficiency, communication, consent, context and person-centred care.<sup>17</sup> In manual therapy, physiotherapists passively move the joints and tissues to obtain the therapeutic effects, but it is not a passive therapy. Manual therapy reduces pain and restores movement, and physiotherapists capitalise on these benefits to facilitate better quality active movement, muscle activation and exercise.

Safety in manual therapy is paramount and is considered at all stages of the assessment and treatment approach, ensuring that relevant and meaningful safety screenings have been undertaken. Every individual's situation is unique, the appropriateness and effectiveness of any therapy depends on a thorough assessment by a qualified physiotherapist.

### **Theoretical Model Initiation of**

### **Neurophysiological** Responses

A mechanical force from manual therapy triggers a cascade of neurophysiological responses.



#### Changes in Neurotransmitters

This leads to an increase in B-endorphins and orexin-A, and a decrease in neurotensin and non-GABA neurotransmitters.18

### **Outcomes**

#### **Mechanistic and Clinical Outcomes**

These changes in the peripheral and central nervous system are responsible for both mechanistic and clinical outcomes.19





The impact of manual therapy on neurophysiological responses





### **Multimodal Management Program**

### Manual Therapy as Part of a Multimodal Management Program

Manual therapy, which reduces pain and facilitates exercise performance and return to function. It is always used in conjunction with patient education and exercise.10



### **Effectiveness** Effectiveness of **Combined Interventions**

The combination of manual therapy, patient education, and exercise has been shown to be more effective than any single intervention alone.11



# Spotlight on manual therapy skills

### Cervicogenic headache

Cervicogenic headache is a term used to describe a headache that is caused by the neck. People typically feel pain originating in the upper part of their neck, which then develops into a headache. It must be noted that neck pain is present in many common headaches as migraine and tension type headache, but this can be part of the headache and not because of a neck disorder.20

Research by physiotherapists has shown that the musculoskeletal dysfunction which typifies cervicogenic headache and the presence of a neck disorder are skillfully diagnosed by physiotherapists using manual therapy skills. This includes the presence of painful joints in the upper neck region, associated with some reduced neck mobility and poor muscle function, particularly of the deep neck muscles. 21,22 High quality evidence has shown that multimodal treatment offered by the physiotherapist including manual therapy, specific therapeutic exercises for the deep muscles and education about the disorder with work and lifestyle advice is a highly effective treatment providing long term relief.23



#### References: