

Table 1: Review questions PICOS Model and search terms

<b>PICO</b>	<b>POPULATION</b>	<b>INTERVENTION</b>	<b>OUTCOME</b>	<b>STUDY</b>
<b>Definition</b>	Adult amputees with PLP.	Conservative treatments.	Pain, physical function, psychological function, social function, adverse effects.	RCTs.
<b>Key words</b>	Adult, amputee, amputation, PLP, pain.	Physical, psychological, and behavioural interventions.	Pain, Quality of Life, function, psycho-social.	RCT's.
<b>Synonyms</b>	PLP, phantom pain, limb pain			

*Legend: PLP = phantom limb pain. RCTs = randomised controlled trials.*

Table 2: Grading the Quality of Evidence [GRADE]

<b>Grading Level</b>	<b>Rating Criteria</b>
STRONG	Consistent findings from multiple high quality RCTs.
MODERATE	Consistent findings among multiple moderate quality RCTs and/or one high quality RCT.
LIMITED	One Moderate quality RCT
CONFLICTING	Inconsistent findings among multiple RCTs
NO EVIDENCE	No RCTs were identified

*Legend: This table was adapted from Van Tulder et al (2003).*

Table 3: Methodological quality assessment.

	<b>A</b>	<b>B</b>	<b>C</b>			<b>D</b>		<b>E</b>	<b>F</b>				<b>Scoring</b>	<b>Quality</b>
<b>Author</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>		
Hsiao et al (2012)	-	+	+	+	+	+	+	+	+	-	+	+	10	High
Conine et al (1993)	-	-	+	-	+	-	+	-	+	+	-	+	6	Moderate
Moseley (2006)	+	+	-	-	+	+	+	+	-	+	+	+	9	Moderate*
Brodie et al (2007)	+	-	-	-	-	+	+	+	-	+	IR	+	6	Moderate*
Rickard (2004)	+	-	-	-	-	-	+	+	+	+	+	+	7	Moderate
Ahmed et al (2011)	-	-	+	-	+	-	-	+	+	-	-	+	5	Low
Bokkon et al (2011)	-	-	+	-	-	-	-	-	-	+	-	+	3	Low
Ulger et al (2009)	-	-	-	-	-	-	-	+	+	+	-	+	4	Low
Chan et al (2007)	-	-	-	-	-	+	+	-	-	-	-	+	3	Low
Kern et al (2006)	-	-	+	+	+	-	-	+	-	-	-	+	5	Low
Flor et al (2001)	-	-	-	-	-	+	-	+	+	-	-	+	4	Low
Finsen et al (1988)	-	-	-	-	-	-	-	-	-	+	-	+	2	Low

Table 4: Characteristics of included studies

AUTHOR/ METHOD	POPULATION	SAMPLE SIZE	INTERVENTION	COMPARISON	OUTCOME MEASURES	ASSESSMENT TIMING	MEASUREMENT TOOL
<b>Limb Liner</b>							
Hsiao et al, (2012)	Age of >18 years, upper limb or lower limb amputation with healed residual limb, and 3 or more episodes of PLP during the previous 6 wks. Mean age 64 yrs.	n=57; 56 male, 1 female.	Participants received 2 Farabloc covers to wear over the prosthesis and residual limbs 24 hours per day, 7 days per week for 12 weeks.	Participants received 2 sham noninvasive covers to wear over the prosthesis and residual limbs 24 hours per day, 7 days per week for 12 wks.	Severity of PLP and overall body pain.  Secondary outcomes; PLP frequency per week, PLP frequency per month, physical and psychological function	Baseline, 6 week and 12 week outcomes.	Pain numerical rating scale with 0 (no pain) and 10 (worst pain possible)  Veterans RAND 12-Item Health Survey
Conine et al, (1993)	Adults with upper limb or lower limb amputations and healed stumps, experiencing episodes of PLP. Mean age 45 years. Referred to the study by physicians, prosthetists, or rehabilitation therapists.	n=34; 28 male, 6 female.	Farabloc stocking worn over the stump for 4 or more hours as soon as pain began. Covering a duration of 3-5 consecutive episodes of pain.	Placebo stocking worn over the stump for 4 or more hours as soon as pain began. Covering a duration of 3-5 consecutive episodes of pain.	Degree of pain relief experienced after each episode of PLP.  Time, date and duration of each pain episode and the use of garment provided.	Pain relief immediately after using garment and episode of phantom limb pain.	Pain relief visual analogue scale with 0 (no pain relief) and 10 (complete pain relief)

<b>Graded Motor Imagery</b>							
Moseley, (2006)	Eligible participants were drawn from 3 patient groups: 1) patients with PLP after amputation of one limb. 2) PLP after brachial plexus avulsion injury of one arm, 3) patients with complex regional pain syndrome 1.	n=51.  9 of which have PLP	Graded motor imagery program; first 2 weeks limb laterality recognition phase, next 2 weeks imagined movement phase, last 2 weeks mirror movements phase	Standard medical and physiotherapy care; 6 week physiotherapy treatment program, at least one treatment per week and home program.	Functional tasks and pain.	6 weeks and 6 months.	Physical function - Specific task-related numerical rating scale with 0 (completely unable to perform) and 10 (able to perform normally)  The McGill Pain Questionnaire  Pain visual analogue scale (anchor statements not reported)
<b>Mirror Therapy</b>							
Brodie, Whyte and Niven, (2007).	LL amputees with PLP attending artificial limb and appliance centre.  Mean age 55yrs.  Reason for amputation; congenital, cancer, accident, medical.	n=80; 63 males, 17 females.  15 of which have PLP.	Mirror therapy; subject placed intact limb in mirror box and directed their gaze onto the mirror image to align intact limb image and phantom limb.  Participants instructed to carry out 10 repetitions of 10 movements, with	Participants aligned intact limb and phantom limb to either side of an obscured mirror.  Participants instructed to carry out 10 repetitions of 10 movements, with both phantom and intact limb.	Phantom limb awareness, phantom limb sensations, PLP.	Immediately Post-intervention.	The McGill Pain Questionnaire  Pain visual analogue scale (anchor statements not reported)

			both phantom and intact limb.				
<b>Hypnosis</b>							
Rickard (2004)	<p>Amputees with phantom limb pain mostly lower limb and mostly army veterans' recruited from support groups</p> <p>Mean age 52yrs</p> <p>Reason for amputation; Diabetes, cancer, accidents, illness.</p>	n=20; 18 males, 2 females	<p>Participants received three sessions of individualised hypnosis. Each session lasted approximately 45mins it began with progressive muscle relaxation then involved participant specific suggestion related to the patients fears, likes and things that brought them comfort</p>	Waiting list control	PLP	<p>McGill Pain Questionnaire was assessed pretreatment and post treatment (approximately 1 month apart)</p> <p>Daily pain ratings were taken daily over a one month period.</p> <p>Pre and posthypnotic pain ratings were taken immediately before and after each hypnosis session.</p>	<p>The McGill Pain Questionnaire</p> <p>Pain numerical rating scale with 0 (no pain at all) and 100 (worst pain imaginable) measured daily and Immediately pre and post hypnosis)</p>