REVIEW ARTICLE

A Review of Clinical Practice Guidelines for Physiotherapy Management of Patients with Non-Specific Low Back Pain

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ABSTRACT

Background: Despite the availability of various clinical practice guidelines (CPGs) offering evidence-based recommendations, there exists a global diversity in physiotherapy practices for managing patients with non-specific low back pain (NSLBP). In this review, we aim to critically appraise and map the current evidence regarding physiotherapy management for patients with NSLBP.

Methods: A search strategy was formulated and searched in MEDLINE, Scopus, EBSCOhost, PEDro and Google Scholar between 2013 and 2023 in English. Critical appraisal was performed using International Centre for Allied Health Evidence (iCAHE) guideline checklist.

Results: A total of 12 CPGs met the selection criteria were synthesised. Exercise therapy, physical activity and manual therapy were consistently recommended for patients with NSLBP across most guidelines, irrespective of symptom duration. Cognitive-behavioural therapy was frequently advised for those with chronic NSLBP. However, notable absences of recommendations for electrotherapy, mechanical traction, bed rest, and lumbar corsets in NSLBP management. Moreover, emerging treatments such as shock wave therapy and cognitive-functional therapy were not extensively addressed in the guidelines.

Conclusion: Multimodal and active forms of physiotherapy management were predominantly recommended in most of the guidelines. However, there is a clear necessity for updated CPG that effectively integrate biopsychosocial approaches into the management of patients with NSLBP.

Keywords: Non-specific low back pain, Clinical practice guidelines, Physiotherapy, Cognitive behavioural therapy, Biopsychosocial

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INTRODUCTION

Low back pain (LBP) is a highly prevalent musculoskeletal condition, affecting an estimated 560 million people globally.[1] LBP stands as a major contributor to years lived with disability worldwide.[2] Non-specific low back pain (NSLBP) is a common type not caused by an identifiable disease,[3] prevalent among both older adults[4] and the younger population.[5] LBP imposes a significant economic burden on healthcare, emphasizing the need for effective strategies to reduce its impact.[6]

Clinical practice guidelines (CPGs) provide evidence-based recommendations to enhance client care,[7] aiding clinicians in accessing research evidence efficiently.[8] The application of CPGs improves consistency and the appropriate adoption of interventions in clinical practice.[9] While the quality of CPGs for NSLBP has improved,[10] end-users often struggle to appraise, interpret, and select among them.[11]

A recent systematic review covered medical and non-medical management for NSLBP between 2009 and 2019, with no specific focus on physiotherapy management,[12] despite its significant role. New physiotherapy approaches like cognitive functional therapy[13] and Extracorporeal Shock Wave Therapy[14] have emerged, while evidence for traditional methods such as electrotherapy and traction remains limited or conflicting.[12,15,16] This dynamic landscape necessitates a review of existing guidelines to update the evidence on physiotherapy management for NSLBP, aligning with the changing recommendations for LBP management.[6]

The objective of this study was to map, compare, appraise, and synthesize findings from recent, evidence-based, and high-quality CPGs for NSLBP.

METHODOLOGY

The search strategy was performed through the five search engines: MEDLINE (thru PubMed), Scopus, EBSCOhost, PEDro and Google Scholar. A Manual search was conducted for cross references. This study included articles in English. Since it is a search for recent evidence the studies published in the last 10 years (2013 -2023) were included. Initially, the keywords and their synonyms were identified, and it was combined using the Boolean phrases "AND" and "OR". The search strategies based on the Population Intervention Comparator Outcome and Studies (PICOS) model[17] were tabulated in Table 1.

Literature search: The literature search was conducted on 14/01/2024. The literature search in the search engines with the search words and identified number of titles are tabulated in Table 2. The PRISMA flow chart [18] of the studies selection is illustrated in Figure 1.

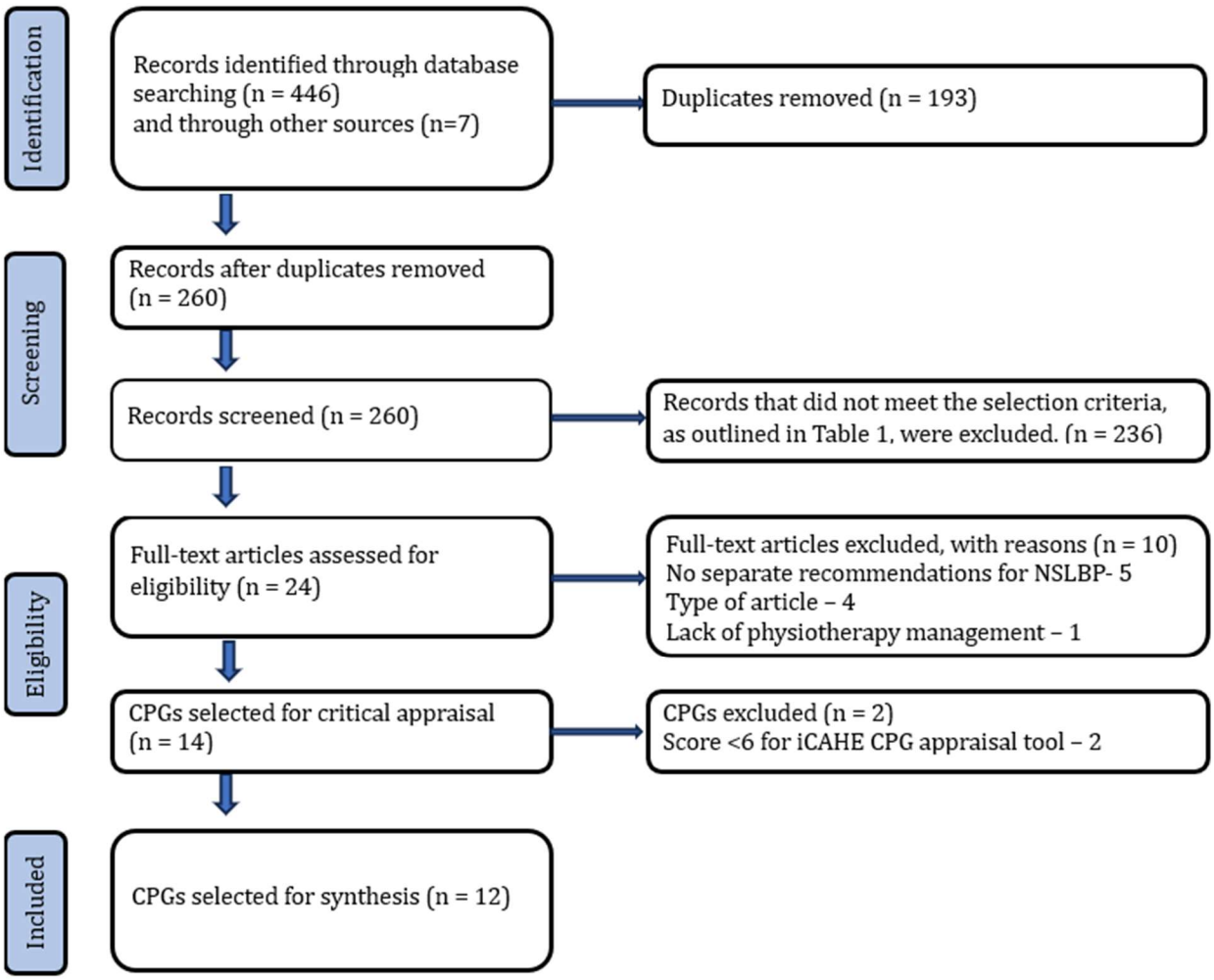
Table 1: Overview of inclusion and exclusion criteria for participants, intervention, comparator, outcome and studies

Construct	Summary	Inclusion	Exclusion	Search terms
Population	Patients with NSLBP	Patients with acute, sub-acute, chronic NSLBP.	The low back pain with specific spinal pathologies or due to any progressive or any congenital conditions.	"Low back" AND "pain" OR "ache"
Intervention	Physiotherapy management for NSLBP	All Physiotherapy measures are included. The other adjunct measures such as patient education, cognitive therapy, prescription of lumbar corset, and foot orthotics were considered.	Pharmacological, surgical, measures.	
Comparator	Not applicable because it is a review of guidelines.			
Outcome	The recommendations for various physiotherapy management for NSLBP	All the recommendations including positive and negative recommendations were included.	Non-evidence-based recommendations.	
Studies	CPGs	CPGs published between 2013 - 2023	Non-evidence based.	Guideline* OR protocol

CPG: Clinical Practice Guideline; NSLBP: Non-specific low back pain

Table 2: Literature search

Search engine	Search words	Titles found	Title selected
PubMed	"Low back" AND "pain" OR "ache" AND "clinical practice guideline*"	45	5
Scopus	"Low back" AND "pain" OR "ache" AND "clinical practice guideline*"	51	1
EBSCOhost	"Low back" AND "pain" OR "ache" AND "clinical practice guideline*"	275	10
PEDro	Low back AND Clinical practice guideline	20	3
Google Scholar	Clinical practice guidelines AND "low back"	55	0



CPGs-Clinical Practice Guidelines; n-number; iCAHE - The International Centre for Allied Health Evidence

Figure 1: Flow chart of studies selection

RESULTS

Study selection: The literature search generated 453 articles. We removed 193 duplicates and screened 260 article titles. A total of 236 records were excluded because they did not meet the selection criteria (Table 1). Next, 24 articles full text were assessed for eligibility and 14 CPGs were finally selected for critical appraisal. We excluded 10 CPGs/articles for reasons including duplicates, articles and not CPG lack of physiotherapy management for patients with NSLBP, and not providing specific recommendations for the management of patients with NSLBP.

Critical Appraisal: Finally, 14 CPGs which satisfied the selection criteria were selected in this study. Tags were assigned for all guidelines to refer to the guidelines (Table 3). Throughout this article, the TAG provided in Table 3 was used to refer to the particular CPG. The International Centre for Allied Health Evidence (iCAHE) guideline checklist was used to evaluate the methodological quality of selected clinical guidelines. iCAHE was utilized in this study since it is simple and comprises of binary form of scoring system which can be readily summed and reported as a total raw score (or percentage) of 14. Moreover, iCAHE was reported to have promising psychometric properties.[19] iCAHE scores of all the CPGs are as listed in Table 3. The detailed scores of each guideline are listed in Appendix. A CPG with more than a score of 6/14 (i.e. >50% of the total score) was accepted for further synthesis. The iCAHE scores of the selected CPGs for further synthesis study range from seven to thirteen. Two CPGs (KAISER; ACSQHC) were excluded for further synthesis as the iCAHE scores was <6.

Data synthesis: The data were synthesized based on the guidelines provided in the 12 clinical guidelines. Except for one guideline (PARM), 11 guidelines were from Western countries, with the majority originating from the United States of America (Table 3). The most recent guidelines selected for synthesis was from the year 2023. Four CPGs (IHE, PARM, NASS, ICSI) provided separate recommendations for patients with acute, subacute, and chronic NSLBP. In three CPGs (NCGDG, NICE, KNGF), recommendations irrespective of the duration of symptoms were offered. In the DHA CPG, recommendations for patients

with recent onset of NSLBP (<12 weeks) were provided, which was categorized as acute and subacute NSLBP for this review. In the SIGN & WHO CPGs, recommendations only for patients with chronic NSLBP were outlined. While in the KCE & APTA CPGs, recommendations for patients with acute and chronic NSLBP were provided. There is variation in the definition of acute and subacute NSLBP among the reviewed CPGs, as shown in Table 4. Most CPGs provided recommendations for clients with NSLBP aged 16 and above. In some CPGs (NCGDG, PARM, SIGN, WHO), the age of the target population was not specified.

Table 3: iCAHE scores of the clinical practice guidelines (CPGs) and the assigned tags

Citation	CPG title/ Developer/ Country	Target population of NSLBP	iCAHE Score	TAG
Selected CPGs for synthesis				
StaalI, HendriksII[20]	KNGF Clinical Practice Guideline for Physical Therapy in patients with low back pain/Netherland.	Not specified	7	KNGF
Scottish Intercollegiate Guidelines Network[21]	Management of chronic pain -A national clinical guideline/Scotland	Chronic	9	SIGN
National Guideline Centre[22]	Low Back Pain and Sciatica in over 16s: assessment and management: Assessment and non-invasive treatments/United Kingdom	Not specified	13	NICE
Wambeke, Anja[23]	Low Back Pain and Radicular Pain: Assessment and Management/ Belgium	Acute &chronic	8	KCE
Institute of Health Economics[24]	Low Back Pain Evidence-Informed Primary Care Management of Clinical Practice Guideline/ Canada	Acute, sub-acute & chronic	9	IHE
Chenot, Greitemann[25]	Clinical Practice Guideline Non-Specific Low Back Pain/ Germany	Not specified	10	NCGDG
Stochkendahl, Kjaer[26]	National Clinical Guidelines for nonsurgical treatment of patients with recent onset low back pain or lumbar radiculopathy /Danish	Acute& subacute	12	DHA
Philippine Academy of Rehabilitation Medicine[27]	Clinical Practice Guidelines on the Diagnosis and Management of Low Back Pain/Philippine	Acute, sub-acute & chronic	12	PARM
Institute for Clinical Systems Improvement[28]	Health Care Guideline: Adult Acute and Subacute Low Back Pain/United States of America	Acute, sub-acute & chronic	13	ICSI
North American Spine Society[29]	Evidence-Based Clinical Guideline for Multidisciplinary Spinal Care: Diagnosis & Treatment of Low Back Pain/ United States of America	Acute, sub-acute & chronic	11	NASS
George, Fritz[30]	Interventions for the Management of Acute and Chronic Low Back Pain: Revision 2021/United States of America	Acute & chronic	13	APTA
World Health Organisation[31]	WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings/Geneva	Chronic	12	WHO
Excluded CPGs for synthesis				
Kaiser Foundation[32]	Non-specific Back Pain Guideline/ United States of America		**4**	KAISER
Australian Commission on Safety and Quality in Health Care[33]	Low Back Pain Clinical Care Standard. / Australia		**3**	ACSQHC

Table 4: Definition of acute, sub-acute & chronic NSLBP in Clinical Practice Guidelines (CPGs)

CPG	Acute	Sub-Acute	Chronic
IHE*	< 12 weeks	<12 weeks	>12 Weeks
PARM, ICSI	<4 weeks	4-12weeks	>12 Weeks
SIGN, WHO			>12weeks
NASS	<6weeks	6-12weeks	>12weeks
APTA	≤ 6weeks		>6weeks

<Less than; ≤ Less than equal to; > Greater than - to
CPG: Clinical Practice Guideline
*Please refer to Table 3 for the expansion and details of the CPG

Physiotherapy interventions: The recommendations are as presented in Table 5 with the layout in line with a previous similar study.[6] In many CPGs (ICSI, SIGN, WHO, NICE), shared decision-making in the management of NSLBP was highlighted, with patient-centred care being highlighted in the KCE guidelines.

Exercise therapy: Exercise therapy for the management of NSLBP was supported in almost all (11/12) the CPGs, except in one CPG (ICSI). Most of the guidelines do not provide conclusive recommendations for specific exercise regimes over others. General guidelines included exercises that have to be individually tailored (PARM, NICE, NCGDG). In none of the CPGs functional training, motor control exercises, trunk strengthening and endurance exercises for patients with acute NSLBP were recommended. Moreover, stretching exercises were not supported in any of the CPGs for the management of NSLBP.

Spinal Manual Therapy: In majority of (10/12) CPGs, spinal manual therapy regardless of the duration of NSLBP symptoms was recommended. Some guidelines, such as those from NICE and KCE, advocate for combining manual therapy with exercise therapy. However, the KNGF guidelines suggest providing manual therapy only, when necessary, without specifying a particular approach.

Electrotherapy: APTA and ICSI guidelines do not provide recommendations for electrotherapy, and short-wave diathermy is not endorsed in any CPG. Most guidelines do not support the use of Transcutaneous Electrical Nerve Stimulation (TENS), Interferential Therapy, Shock Wave Therapy, Therapeutic Ultrasound, or Laser Therapy for NSLBP. Only the SIGN and PARM guidelines support the use of TENS and Laser Therapy.

Others: Some CPGs, such as NCGDG, PARM, ICSI, and NASS, recommend heat therapy, while cold therapy is supported only in PARM guidelines. Mechanical traction lacks support across all guidelines. Massage or soft tissue mobilization (5/12) and cognitive-behavioral therapy (6/12) are generally endorsed. Except in PARM guidelines, none of the CPGs reported the support for lumbar corsets for patients with NSLBP. Yoga is advocated in IHE, NASS, and APTA guidelines, although specific forms beneficial for NSLBP are not specified.

Patient Education/Advice: In (8/12) of the synthesized CPGs, continuing physical activity was recommended. IHE guidelines advise against physical activity resulting in symptom peripheralization. Several guidelines do not affirm bed rest, while others suggest considering it for no more than two days for patients with NSLBP. Educational measures include pain neuroscience education for chronic NSLBP and biopsychosocial contributors of pain and self-management strategies for acute NSLBP, as outlined in APTA guidelines. Common advice for patients with NSLBP includes staying active, continuing activities of daily living within symptom limits, and addressing fear avoidance.

DISCUSSION

The aim of this review was to map, compare, appraise, and synthesize recent, evidence-based, and high-quality Clinical Practice Guidelines (CPGs) for patients with Non-Specific Low Back Pain (NSLBP). Generally, in most CPGs, the biological aspects of NSLBP management are emphasised, with the exception of Cognitive Behavioural Therapy (CBT).

This finding aligns with a recent rapid review on informed care for chronic NSLBP utilizing a biopsychosocial approach, which found that only 53% (8 out of 15) of the guidelines addressed all three domains of the biopsychosocial approach.[34] In future CPGs for the management of patients with NSLBP, it is anticipated that greater emphasis should be placed on psychological and social aspects alongside biological factors to enhance the biopsychosocial approach. This assertion is supported by a recent meta-analysis, which concluded that biopsychosocial interventions yielded superior outcomes compared to solely engaging in active physiotherapy management for patients with chronic NSLBP.[35]

The guidelines recommend exercise therapy, spinal manipulative therapy, and advising patients with NSLBP to maintain physical activity, all of which received more than 50% consensus regardless of the duration of NSLBP. Additionally, CBT with chronic NSLBP was endorsed in most of the CPGs. Physiotherapists with appropriate training could effectively deliver CBT for patients with NSLBP, leading to long-term improvements in pain, disability, and quality of life[36]. This highlights the potential role of physiotherapists in implementing psychology-based interventions such as CBT for patients with NSLBP.

Exercise therapy for patients with NSLBP was recommended in most of the CPGs, although there is less consensus on specific exercise forms, with many types of exercise suggested. This consistency aligns with previous reviews of CPGs on NSLBP, covering the period from 2008 to 2017[8], indicating no significant changes in recommendations favouring a particular form of exercise over the past five years. However, it has been advised to tailor exercise programs according to the client's needs, capabilities, and preferences (NICE, PARM, NCGDG, KCE)

Table 5: Recommendations of Clinical practice guidelines (CPGs) for the treatment of patients with non-specific low back pain

Recommendations for physiotherapy intervention	KNGF* -2013	SIGN -2013	NICE -2016	KCE -2017	IHE -2017	NCGDG -2017	DHA -2017	PARM -2017	ICSI -2018	NASS -2020	APTA -2021	WHO -2023
A. Exercise therapy												
i. Progressive & graded exercises												
Acute & Sub-acute NSLBP				-	✓		✓	-	-	-	-	
Chronic NSLBP				-				-	-	-	✓	-
Not specified	✓	-	-			-						
ii. Functional training												
Sub-acute NSLBP					✓		-	-	-	-		
Not specified	-	-	-			✓						
iii. Aerobic												
Acute & Sub-acute NSLBP				-	-		✓	✓				
Chronic NSLBP				-	-			✓		✓	✓	-
Not Specified	-					-						
iv. McKenzie exercises/ Centralization/ Direction preference exercises												
Acute & Sub-acute NSLBP				-	-		-	✓	-	-	-	
Chronic NSLBP				-	-			✓	-	✓	-	-
v. Motor/Movement control exercises												
Sub-acute NSLBP							-	✓	-	-		
Chronic NSLBP		-		-				✓	-	-	✓	-
vi. Trunk strengthening and endurance exercise												
Sub-acute NSLBP					-		-	✓	-	-		
Chronic NSLBP		-		-	-			✓	-	-	✓	-
vii. Stretching												
Chronic NSLBP without any ROM limitation		-		-	-			**X**	-	-		-
B. Spinal Manipulative therapy												
Acute NSLBP				**✓+Ex**	-		✓	✓	✓	-	✓	
Sub-acute NSLBP					-		✓	✓	✓	-		
Chronic NSLBP		✓		**✓+Ex**	-			✓	-	-	✓	✓
Not specified	✓		**✓+Ex**	**✓+PT**		✓						
C. Electrotherapy												
i. TENS												
Acute NSLBP				-	-		-	**X**	-	-	-	
Sub-acute NSLBP					-		-	✓	-	-		
Chronic NSLBP		✓		-	-			**X**	-	-	-	**X**
ii. Therapeutic Ultrasound												
Acute & Sub-acute NSLBP				-	-		-	**X**	-	-	-	
Chronic NSLBP		-		-	-			✓	-	-	-	**X**
iii. Short wave diathermy												
Acute, Sub-acute& chronic NSLBP	-	-	-	-	-	-	-	**X**	-	-	-	-
iv. Shock wave therapy												
Acute, Sub-acute& chronic NSLBP	-	-	-	-	-	-	-	✓	-	-	-	-

Recommendations for physiotherapy intervention	KNGF* -2013	SIGN -2013	NICE -2016	KCE -2017	IHE -2017	NCGDG -2017	DHA -2017	PARM -2017	ICSI -2018	NASS -2020	APTA -2021	WHO -2023
v. Inferential therapy												
Chronic NSLBP		-		-				✓			-	-
vi. Laser therapy												
Acute NSLBP				-	-		-	✓	-	-	-	
Chronic NSLBP		✓		-	-			✓	-	-	-	-
D. Others												
i. Heat therapy												
Acute NSLBP				-	-		-	✓	✓	✓	-	
Sub-acute NSLBP					-		-	✓	✓			
Chronic NSLBP		-		-	-			✓			-	-
Not Specified	-		-			✓						
ii. Cold therapy												
Acute, Sub-acute& chronic NSLBP	-	-	-	-	-	-	-	✓	-	-	-	-
iii. Mechanical Lumbar Traction												
Acute NSLBP				-	-		-	**X**	-	-	-	
Sub-acute NSLBP					-		-	**X**	-	**X**		
Chronic NSLBP		-		-	-			**X**	-	**X**	**X**	**X**
iv. Lumbar braces/supports												
Acute & Sub-acute NSLBP				-	-		-	✓	-	-	-	
Chronic NSLBP		-		-	-			**X**	-	-	-	**X**
v. Massage/Soft tissue mobilization												
Acute NSLBP				-	-		-	✓	-	-	✓	
Sub-acute NSLBP					-		-	✓	-	-		
Chronic NSLBP		-		-	-			✓	-	-	✓	✓
Not Specified	✓		✓			-						
vi. CBT												
Sub-acute NSLBP					✓		-	-	-	-		
Chronic NSLBP		✓	✓**+EX**	-	✓			-	-	✓**+PT**	-	✓
Not Specified	-			✓		-						
E. Patient Education/ Advice												
i. Bed rest												
Acute, Sub-acute & chronic NSLBP	**X**	-	-	-	**X**	-	-	**X**	-	-	-	-
ii. Remain active												
Acute NSLBP				-			-	✓	✓	✓	✓	
Sub-acute NSLBP							-		✓	-		
Chronic NSLBP		✓		-				✓		-	✓	✓
Not Specified	✓		-			✓						

*=Please refer Table 3 for the expansion and details of the CPG
ROM: Range of motion
"- "=No recommendation regarding this management or measures for patients with NSLBP was provided in the CPG
"✓ "=Recommendation this management or measures for patients with NSLBP was provided in the CPG
"x "=This management or measures for patients with NSLBP was not supported in the CPG
+ EXs=With exercise therapy
+PT=With other physiotherapy management

Multimodal forms of physiotherapy management for patients with NSLBP, particularly the combination of exercise therapy with other interventions such as massage (NICE), client education based on behavioural-therapeutic principles (NCGDG), manual therapy (NICE & KCE), and CBT were recommended. This suggests that exercise therapy is a primary management strategy for patients with NSLBP. Furthermore, the rationale behind multimodal treatment recommendations is to provide holistic care, enhance effectiveness[37], and achieve benefits in terms of pain and disability reduction[38].

Physiotherapy management approaches focusing on various forms of exercises in combination with other adjunctive interventions, and the lack of support for electrotherapy, are consistent with another study that systematically reviewed CPGs for NSLBP between 2009 and 2019.[12] This also implies that key recommendations provided in CPGs have remained unchanged over the past five years. Similarly, the absence of support for electrotherapy, mechanical traction, and lumbar corsets, alongside the greater emphasis on exercise therapy in the CPGs, suggests that active forms of physiotherapy management are more recommended than passive approaches. Moreover, some forms of active therapy for patients with chronic NSLBP were vividly recommended in APTA guidelines rather than standalone educational interventions. The probable reason is that active forms of physiotherapy, such as exercise therapy, aid in reducing functional disability, fear avoidance belief and increases self-efficacy.[39] Moreover, there is a significant correlation between functional disability and lumbar kinematics. A recent narrative review concluded that providing electrotherapy on its' own has minimal to no significant effect on chronic musculoskeletal conditions.[41] This may explain the lack of support for passive treatment options such as electrotherapy in recent CPGs.

The limited recommendations for postural education in recent CPGs (2018-2023) may stem from insufficient evidence supporting the effectiveness of specific postures in alleviating or preventing disability and pain in patients with NSLBP.[42] Despite our efforts to include the most recent CPGs up to 2023, we found no recommendations for newer treatment options like cognitive functional therapy in the CPGs. Shock wave therapy for NSLBP management was recommended in only one CPG. Our findings align closely with a systematic review covering CPGs from 2009 to 2019.[12] The lack of significant changes in recent CPG recommendations and the absence of newer physiotherapy approaches may be attributed to a scarcity of robust research evidence. This points the need for high-quality evidence to support these treatment options.[30] Another possible factor is time lag of approximately one (APTA, IHE, SIGN, DHA) to two (WHO, IHE, NCGDG) years between the search for research evidence and publication in many CPGs.

There is considerable variability in the specific recommendations provided across different CPGs, which could be attributed to methodological differences and the timeframe of literature searches. Notably, the PARM guideline stand out for endorsing many physiotherapy treatment options compared to other CPGs, possibly because it was formulated based on a review of previously published guidelines. Interestingly, there have been few changes in recommendations over time. For instance, functional training is not recommended in recent CPGs (2018-2023), whereas aerobic exercises, McKenzie exercises, and motor control exercises were not advocated in CPGs from 2013 to 2016. Similarly, recent CPGs (2017-2023) emphasize the importance of physical activity for NSLBP patients more than earlier guidelines (2013-2016), likely reflecting the availability or lack of research evidence during those periods and evolving management approaches.

Furthermore, recommendations in recent CPGs such as shared decision-making, education measures, encouraging physical activity, and early return to work signify a shift in the management of LBP towards focusing on functioning rather than solely managing pain.[12] This shift aligns with consistent recommendations from high-quality CPGs[43] regarding best practice care for musculoskeletal pain. At the same time returning to activities play an imperative role in the management of chronic NSLBP.[44] Additionally, the emphasis on a multimodal approach in managing chronic NSLBP in many CPGs suggests a move towards rehabilitation based on multimodal care rather than simply pain and symptom management.

There is also variability in the quality of CPGs, as noted in a previous systematic review of LBP guidelines.[8] Most CPGs were multidisciplinary based, except for APTA and KNGF, which focused solely on physiotherapy management. This highlights the need for more updated physiotherapy-specific CPGs for NSLBP to comprehensively cover all aspects of physiotherapy management based on recent evidence to serve as quick reference materials for physiotherapists.

In our present review, a majority of CPGs were identified from cross-references or grey literature, indicating the necessity for a universal database for CPGs to facilitate easy access and updates.[8] End users should appraise CPGs cautiously and verify whether they are updated or not. Additionally, the classification of NSLBP based on symptom duration varies across CPGs, potentially causing confusion among clinicians. A universal classification system proposed by the World Health Organization could help address this issue.

The strengths of this study include the inclusion of recent CPGs, critical appraisal using iCAHE, grey literature search, and a specific focus on physiotherapy management of NSLBP. However, limitations include the review being limited to English-language CPGs, potentially missing CPGs and additional recommendations published in other languages. Additionally, the study protocol was not registered in PROSPERO,

classifying it as a review rather than a systematic review.

Conclusion

In this review, we summarized the recommendations for NSLBP physiotherapy management, highlighting client education, exercise, and manual therapy as commonly recommended interventions. Passive therapies like electrotherapy, traction, and corsets were not endorsed. Updating CPGs to incorporate evidence-based and biopsychosocial approaches is warranted. Additionally, more monodisciplinary CPGs focusing on comprehensive physiotherapy management are needed.

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APPENDIX

iCAHE scores for each clinical practice guideline

Critical appraisal tool/ CPGs	KCE	IHE	NCGDG	DHA	PARM	NICE	KNGF	ICSI	SIGN	NASS	APTA	WHO	ACSQHC	KAISER
Availability														
Is the guideline readily available in full text?	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Does the guideline provide a complete reference list?	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Does the guideline provide a summary of its recommendations?	0	1	1	1	1	1	1	1	0	1	1	1	0	1
Dates														
Is there a date of completion available?	0	0	0	1	0	1	0	0	0	0	1	1	0	0
Does the guideline provide an anticipated review date?	0	0	0	0	0	1	0	1	1	1	0	0	0	0
Does the guideline provide dates for when literature was included?	1	1	0	1	1	1	0	1	1	0	1	1	0	0
Underlying evidence														
Does the guideline provide an outline of the strategy they used to find underlying evidence?	0	1	1	1	1	1	0	1	0	1	1	1	0	0
Does the guideline use a hierarchy to rank the quality of the underlying evidence?	1	1	1	1	1	1	0	1	1	1	1	1	0	0
Does the guideline appraise the quality of the evidence which underpins its recommendations?	1	0	1	1	1	1	0	1	1	1	1	1	0	0
Does the guideline link the hierarchy and quality of underlying evidence to each recommendation?	1	0	0	1	1	0	0	1	1	1	1	1	0	0
Guideline developers														
Are the developers of the guideline clearly stated?	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Does the qualifications and expertise of the guideline developer(s) link with the purpose of the guideline and its end users?	0	0	1	0	1	1	1	1	0	1	1	0	0	1
Guideline purpose and users														
Are the purpose and target users of the guideline stated?	1	1	1	1	1	1	1	1	1	1	1	1	0	0
Ease of use														
Is the guideline readable and easy to navigate?	0	1	1	1	1	1	1	1	0	0	1	1	0	0
SCORE	**8**	**9**	**10**	**12**	**12**	**13**	**7**	**13**	**9**	**11**	**13**	**12**	**3**	**4**