Self-Management Interventions for Patients with Refractory Angina: A Rapid Review

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Abstract

Background: *Self-management interventions for patients with refractory angina (RA) are minimally implemented in clinical practice.*

Purpose: *This paper reviews the literature on self-management interventions for RA, focusing on their components and structure.*

Methods: *A rapid review.*

Results: *The search yielded 137 records. Ten relevant studies were identified by combining the current search results with those from a notable 2014 meta-analysis. Eight unique interventions were analyzed, comparing their efficacy, components, and structure.*

Conclusion: *The review highlights essential components and structural features of self-management interventions for individuals with RA, aiming to improve patient engagement and treatment outcomes.*

Implications for Practice: *Findings highlight the importance of interventions that reduce uncertainty, boost self-efficacy, and incorporate personalized elements and peer support. These features are essential for addressing the evolving needs of patients with RA, with nurses playing a key role in continuous support, education, and personalized care that empowers patients to manage their condition.*

Keywords: refractory angina, self-management interventions, quality of life, rapid review

Key Highlights

- Existing self-management interventions for refractory angina face accessibility barriers and often lack a personalized approach.
- This rapid review describes the components and structure of existing self-management interventions for refractory angina.
- Acting planning, feedback, problem-solving, relaxation techniques, and pacing are critical components of successful self-management interventions for refractory angina.

Background

Refractory angina (RA) is a chronic condition characterized by chest pain with minimal exertion or at rest (Gallone et al., 2020). The diagnosis requires the presence of chest pain for more than three months despite optimal medical treatment, bypass grafting, or stenting (Davies et al., 2020). Prevalence estimates in the United States range from 35,000 to 50,000 (Povsic et al., 2021) to 662,000 to 1.3 million (Benck & Henry, 2019). Lower prevalence estimates occur when a narrower definition of RA is applied, one that includes only patients with more than seven episodes of angina per week, compared to the broader definition used by the European Society of Cardiology's working group (Mannheimer et al., 2002). Although the annual mortality rate is relatively low (i.e., less than 4% per year; Henry et al., 2013), half of the patients with RA will be hospitalized, require coronary revascularization, or suffer a myocardial infarction within three years following coronary angioplasty (Povsic et al., 2015).

Patients with RA live with constant uncertainty, unaware of how to manage their symptoms and fearing that chest pain will lead to myocardial infarction and death (Spoletini et al., 2020). This fear can cause patients to become less active, cease working, limit social interactions, and avoid everyday tasks (Wu et al., 2021).

Patients often struggle with self-management tasks like monitoring symptoms or using short-acting nitroglycerin properly (Spoletini et al., 2020). Additionally, many patients hold misconceptions about angina, such as viewing chest pain as a "mini heart attack" or believing that exercise is unsafe. These beliefs hinder their optimal functioning and are associated with high anxiety and depression levels (Spoletini et al., 2020).

The primary objectives in caring for patients with RA are pain relief and quality of life (Davies et al., 2020). Self-management training is recommended to mitigate symptoms, enrich quality of life, and reduce hospital readmissions

(Kardos, 2020). Such interventions offer educational resources to clarify misconceptions about angina alongside cognitive and behavioural strategies for symptom and limitation management (Kardos, 2020).

A meta-analysis by McGillion et al. (2014) revealed a marked reduction in both the frequency of angina episodes and physical limitations following self-management programs. This meta-analysis included data from nine randomized controlled trials (1994-2012) involving 1,282 adult outpatients with coronary insufficiency and Canadian Cardiovascular Society (CCS) Class 1–4 angina, all of whom had stable symptoms for at least three months, to assess the effectiveness of various self-management interventions on angina symptom profiles, health-related quality of life, and psychological well-being. These interventions, delivered individually or in small groups and facilitated by peers or healthcare professionals, varied in frequency from one to 16 sessions, with some occurring weekly and others spread over several weeks (Bundy et al., 1994; Furze et al., 2012; Gallacher et al., 1997; Lewin et al., 1995; Lewin et al., 2002; Ma & Teng, 2005; McGillion et al., 2008; Payne et al., 1994; Zetta et al., 2011). Despite their differences, the interventions had commonalities, such as a blend of educational content and cognitive-behavioural strategies aimed at behavioural and knowledge changes. Techniques taught included relaxation, energy conservation, problem-solving, and action planning. Moreover, the interventions emphasized safe physical exercises tailored for patients with RA (McGillion et al., 2014).

Despite the effectiveness of these interventions, implementation in clinical practice has been minimal (McGillion et al., 2022). Patients report participation barriers, including scheduling conflicts, transportation difficulties, and mobility-restricting physical symptoms (Merius & Rohan, 2017). Furthermore, many interventions lack customization to accommodate each patient's unique needs. Self-management programs are lengthy (Lorig, 2015), demand effort and training from healthcare professionals (Furze et al., 2012), and incur costs for organizations (Morsch et al., 2021). In addition, some self-management interventions carry licensing costs, which further complicate their integration into the care trajectories (Ory et al., 2015).

Given the variability in RA self-management interventions and the challenges inherent in their implementation, it is crucial to describe them thoroughly. Clear articulation of the materials, schedules, activities, and delivery methods will enhance self-management programs' development and adaptation to local contexts. Such detailed articulation can offer invaluable guidance, ensuring these interventions are more effectively tailored to meet the needs of patients. Tailoring programs in this way will likely enhance patient engagement and facilitate adoption and implementation by cardiovascular nurses. Addressing this need will help bridge the gap between intervention design and practical application, ensuring that patient care is effective and efficient.

Aim and Methods

This rapid review aimed to describe the components and structure of RA self-management interventions reported in the literature. Expanding upon the foundational work by McGillion et al. (2014), which synthesized evidence on self-management interventions for patients with stable RA symptoms for at least 3 months up to 2012, we conducted a rapid review (Dobbins, 2017). This review thus focused on the studies included in the prior meta-analysis (before 2012) and added research published afterwards (2012 onwards). We aimed to identify all relevant self-management interventions and provide a detailed description, focusing on their key components and delivery structure. The rapid review method aims to identify the most relevant and high-quality evidence to inform recommendations and facilitate decision-making. Reporting is based on the PRISMA 2020 Statement (Page et al., 2021).

Eligibility Criteria

The literature search focused on randomized controlled trials published after 2012 reporting the efficacy of RA self-management interventions, defined as persistent chest pain for more than three months despite optimal treatment (McGillion et al., 2009). We included studies with patients older than 18 with a functional angina class ranging from 1 (at intense or prolonged physical activity) to 4 (at rest or with any light physical activity; Campeau, 2002).

The primary endpoint in eligible studies was angina symptoms—including chest discomfort, arm, jaw, or back pain—or dyspnea (Jolicoeur & Henry, 2018). These symptoms were measured using tools, such as the angina frequency subscale of the Seattle Angina Questionnaire (Spertus et al., 1995), or angina diaries. The secondary endpoint was quality of life, assessed through the perception of the impact on an individual's physical, psychological, social, and spiritual states (Bowling, 2005). Measurements included the composite five dimensions of the Seattle Angina Questionnaire (Spertus et al., 1995) or other health-related quality-of-life questionnaires.

Eligible interventions combined educational materials with cognitive and behavioural strategies, such as stress management, energy conservation, and safe exercise (McGillion et al., 2012). Control conditions included usual care without exposure to the intervention or other self-management interventions. We considered articles in English or French published in peer-reviewed journals between 2012 and 2024. Grey literature, conference proceedings, opinion papers, best practice guidelines, theses, and dissertations were excluded.

Study Identification

On April 4, 2024, two electronic databases (i.e., Cumulative Index of Nursing and Allied Health Literature [CINAHL; EBSCOhost] and MEDLINE [Ovid]) were

searched using descriptors and keywords related to RA and self-management interventions. The search strategy was developed in collaboration with a certified science librarian and is available on request.

Study Selection and Risk of Bias Assessment

Using Covidence (Covidence, Melbourne, Australia), retrieved records were sorted based on their titles and abstracts. Subsequently, two independent reviewers (MGL, PL) reviewed the full texts to confirm compliance with the eligibility criteria. Under the guidance of the second author (PL), the first author (MGL) used the second version of the Cochrane risk of bias tool for randomized trials (Sterne et al., 2019) to evaluate the risk of bias in the included studies.

Data Extraction and Analysis

Interventions were characterized using the Template for Intervention Description and Replication (TIDieR) checklist and guide (Hoffmann et al., 2014). Data extracted encompassed: 1) country, 2) name of the intervention, 3) theoretical basis, 4) study population, 5) materials and information provided to participants, 6) materials used by providers, 7) description of the teaching/learning activities, 8) who delivered the intervention, 9) mode of administration, 10) setting, 11) number, duration, and schedule of sessions, and 12) degree of personalization.

We evaluated the degree of personalization for each intervention by examining the extent to which they were standardized versus customized to meet individual patient needs. The efficacy of these interventions is discussed narratively, complemented by findings from the meta-analysis conducted by McGillion et al. (2014). It is important to note that the unit of analysis was the intervention itself; therefore, some interventions were assessed across multiple studies.

Stakeholder Consultation

In alignment with the final step of the rapid review method (Dobbins, 2017), we aimed to evaluate the applicability and transferability of existing RA self-management interventions. The first author consulted two experienced facilitators from the Chronic Disease Self-Management and Chronic Pain Self-Management programs (LeFort et al., 1998; Lorig et al., 1999). In a one-hour meeting, they distilled the essence of self-management programs, identifying key themes from their dual perspectives as facilitators and chronic disease patients.

Additionally, we consulted with two patient partners with RA (a 51-year-old woman and a 70-year-old man) to gather their insights on the essential components, preferred providers, and optimal structure for a self-management intervention. Each participated in two one-hour meetings. In the first, they were briefed on the pathophysiology of RA and a synthesis of interventions identified from the review. In the second meeting, they provided feedback on the intervention components and discussed the best structure to meet their

needs. A summary of the discussions was sent to the patient partners to validate their preferences.

Results

The search identified 137 records (see Figure 1), from which three articles were selected for inclusion (Kimble, 2018; Moattari et al., 2014; Tylee et al., 2016). The risk of bias in the three additional studies ranged from moderate to high (see Table 1). Additionally, we included the eight articles that McGillion et al. (2014) reviewed in their meta-analysis (Bundy et al., 1994; Furze et al., 2012; Gallacher et al., 1997; Lewin et al., 1995; Lewin et al., 2002; McGillion et al., 2008; Payne et al., 1994; Zetta et al., 2011).
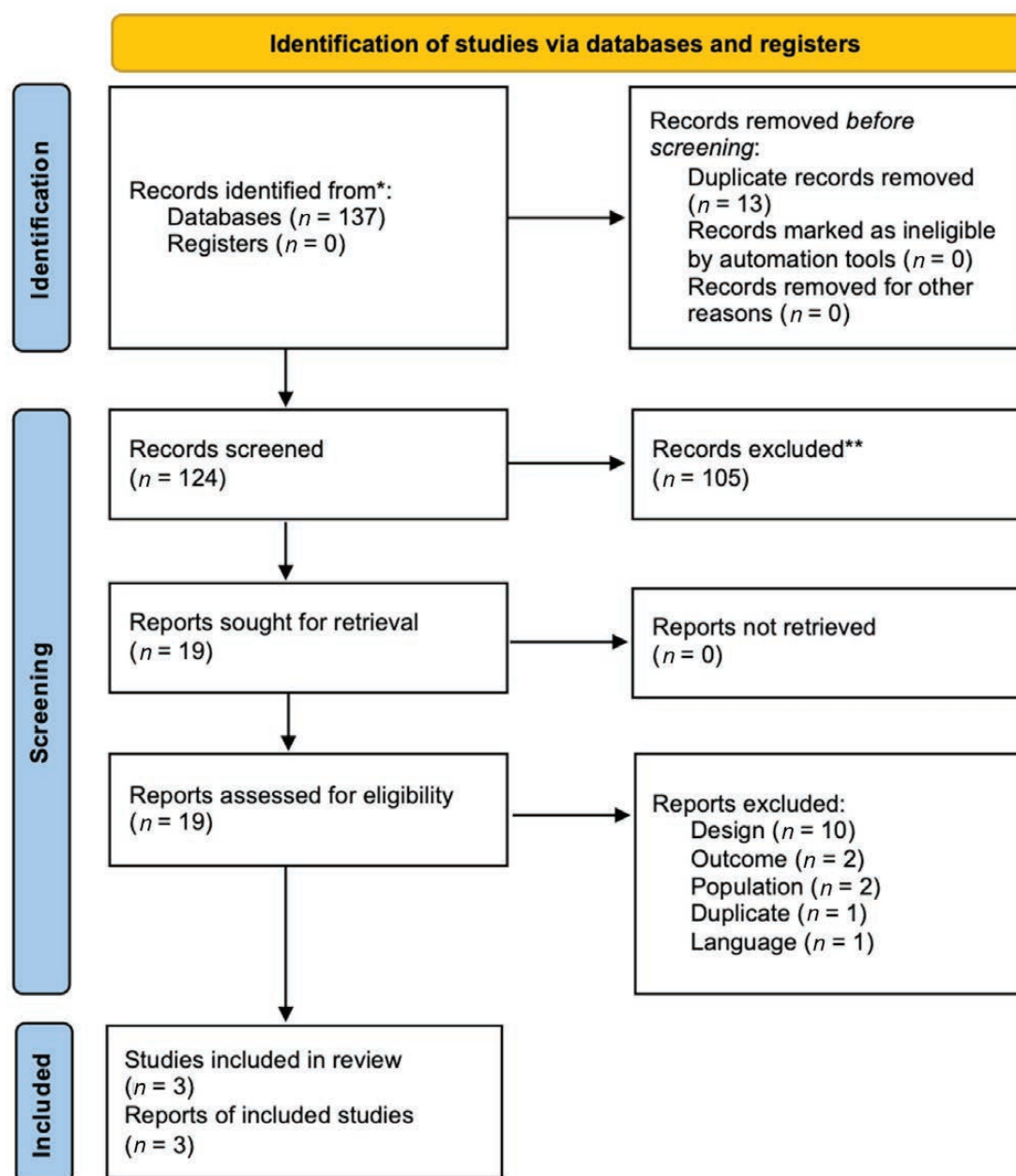
We identified eight unique interventions (see Table 2): the Angina Self-Management Intervention (Kimble, 2018), the Nurse-Personalized Care Intervention (Tylee et al., 2016), the Angina Plan Intervention (Furze et al., 2012; Lewin et al., 2002; Moattari et al., 2014; Zetta et al., 2011), the Chronic Angina Self-Management Intervention (CASMP; McGillion et al., 2008), the Stress Management Program Intervention (Gallacher et al., 1997), the Angina Management Program Intervention (Lewin et al., 1995), the Pain Management Intervention (Payne et al., 1994) and the Cognitive-Behavioural Stress Management Intervention (Bundy et al., 1994).

Target Population

The target populations shared similar angina symptoms but differed in demographic and other characteristics. Kimble (2018) and Moattari et al. (2014) focused on patients who had recently undergone angiography or percutaneous coronary intervention (PCI), while the other studies examined those without recent PCI. Lewin et al. (2002) studied patients with RA for less than 12 months, whereas Bundy et al. (1994), Lewin et al. (1995), and McGillion et al. (2008) included those with RA for at least 6 months ($n = 236$). The mean patient age ranged from 54 to 66 years, with some studies limiting participation to adults less than 65 years (Payne et al., 1994) or 70 years (Gallacher et al., 1997; Lewin et al., 1995; Moattari et al., 2014). While most studies included men and women, Gallacher et al. (1997) and Payne et al. (1994) focused exclusively on male participants. Screening for depressive symptoms also varied, with Tylee et al. (2016) including patients scoring ≥8 on the Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983), whereas Moattari et al. (2014) including those scoring <7.

Intervention Components

The delivery of interventions varied, with the Angina Self-Management (Kimble, 2018), Nurse-Personalized Care (Tylee et al., 2016), and Angina Plan (Furze et al., 2012; Lewin et al., 2002; Moattari et al., 2014; Zetta et al., 2011) provided individually. Other interventions were conducted in small groups, ranging from three to eight participants (Bundy et al., 1994; Gallacher et al., 1997; Payne et

Figure 1

PRISMA Flow Diagram

Identification of studies via databases and registers

Identification

Records identified from*:
Databases (n = 137)
Registers (n = 0)

→ Records removed *before screening*:
Duplicate records removed (n = 13)
Records marked as ineligible by automation tools (n = 0)
Records removed for other reasons (n = 0)

Screening

Records screened (n = 124)

→ Records excluded** (n = 105)

Reports sought for retrieval (n = 19)

→ Reports not retrieved (n = 0)

Reports assessed for eligibility (n = 19)

→ Reports excluded:
Design (n = 10)
Outcome (n = 2)
Population (n = 2)
Duplicate (n = 1)
Language (n = 1)

Included

Studies included in review (n = 3)
Reports of included studies (n = 3)

Table 1

Risk of Bias Assessment

References	1	2	3	4	5	Global
Kimble (2018)	Moderate	Moderate	Low	Low	Moderate	Moderate
Tylee et al. (2016)	Low	Moderate	Low	Moderate	Low	Moderate
Moattari et al. (2014)	Moderate	Moderate	Low	High	Moderate	High

Note. 1. Randomization process; 2. Deviations from intended interventions; 3. Missing outcome data; 4. Measurement of the outcome; 5. Selection of the reported results.

Table 2

Components of the Self-Management Interventions for Patients with Refractory Angina

Authors; country	Intervention; theoretical basis	Population	Material provided to participants; providers	Provider; schedule and mode of administration	Activities
Kimble (2018) USA	Angina Self-Management Psychoeducation (Colivicchi et al., 2016)	Post-angiography or angioplasty; CCS 1–4; no infarction before admission; no bypasses in the last six months	NR Standardized telephone script	Nurses One 30-minute telephone session, individual	Information to promote self-management of symptoms (5 topics)
Tylee et al. (2016) UK	Nurse-Personalized Care Self-efficacy (Bandura, 1977)	Outpatient; CCS 1–4; presence of depressive symptoms ≥ 8 on HADS (Zigmond & Snaith, 1983)	Brochure on self-management and action plans; personalized health plan Health Assessment Form; Behaviour Change Toolkit	Nurses One 60-min individual meeting at the clinic or home, followed by 15-minute weekly phone calls as needed for six months	Information according to patient needs (4 topics or more)
Moattari et al. (2014) [a] Furze et al. (2012) [b] Zetta et al. (2011) [c] Lewin et al. (2002) [d] UK, Iran	Angina Plan Cognitive behavioural therapy (Beck, 1979)	Outpatient[b, d]; post-admission for angina[c]; post-angioplasty[a] CCS 1–4[a, c, d]; CCS 1–3[b] Diagnosis of RA > 12 months[d] Coronary heart disease (1–2 vessels); 40–70 years old; no bypasses; < 11 points on HADS[a]	Information guide; relaxation program on CD Manual describing the intervention protocol	NR[a]; Nurses[c, d]; Peers[b] Individual meeting (40 min) at the hospital, followed by four phone calls (10–15 min.) over the next 12 weeks	Discussions and readings (10 topics)
McGillion et al. (2008) Canada	Chronic Angina Self-Management Program (CASMP) Self-efficacy (Bandura, 1977)	Outpatient; CCS 1–3; diagnosis ≥ 6 months; No heart attack in the last 6 months	Information Guide Manual describing the intervention protocol	Nurses Group meeting (2 hours.) of 8-15 participants in a classroom setting; One session per week for six weeks	Information, discussions, and exercise to promote self-efficacy and pain management (20 topics)
Gallacher et al. (1997) UK	Stress Management Program Standard principles of stress management	Outpatient; CCS 1–4; Male only; < 70 years old	Information guide; relaxation program on tape NR	NR Group meeting of 3–8 participants at the clinic; 3 sessions at 4- and 6-week intervals	Information, discussion, and exercise to manage stress (10 topics)
Lewin et al. (1995) UK	Angina Management Program Cognitive behavioural therapy (Beck, 1979)	Outpatient; CCS 1–4; diagnosis ≥ 6 months; ≥ 1 episode of angina/week; Coronary artery stenosis > 50%; ≤ 69 years old NR	NR	Physiotherapists; psychologists Group meeting (4 hours) of 16 participants at the hospital; individual meeting at each session; Two sessions per week for eight weeks	Information and exercise to manage stress and negative emotions; physical activity program (11 topics)
Payne et al. (1994) USA	Pain Management Program Cognitive behavioural therapy (Beck, 1979)	Outpatient; male only; CCS 1–4; ≥ 4 episodes of angina in the last month; ≤ 65 years old; no hospitalization in the last 30 days	Homework to practice relaxation exercises and self-management strategies NR	Group meeting of 3–8 participants; 1 session per week for three weeks	Information and exercise to manage negative emotions and thoughts (6 topics)
Bundy et al. (1994) UK	Cognitive-behavioural stress management training Stress management education (Lazarus, 1966)	Outpatient; CCS 1–4; diagnosis ≥ 6 months; No infarction in the last 6 months; ≤ 69 years old	CD of relaxation exercises; homework between sessions to generate discussion in the next session NR	Psychologists Group meeting (1h30 min.) of 6–8 participants; 1 session per week for seven weeks	Presentation, discussions, and relaxation exercises (11 topics)

Note. CCS = Canadian Cardiovascular Society Angina Grade; CD = Compact Disc; HADS= Hospital Anxiety and Depression Scale; NR = Not Reported; RA= Refractory Angina.

al., 1994), eight to 15 (McGillion et al., 2008), or up to 16 participants (Lewin et al., 1995). Interventions were administered by nurses (Kimble, 2018; Lewin et al., 2002; Tylee et al., 2016; Zetta et al., 2011), psychologists or physiotherapists (Bundy et al., 1994; Lewin et al., 1995), or peers (Furze et al., 2012). Additional peer involvement was a distinctive feature in the CASMP (McGillion et al., 2008) and the Angina Plan (Furze et al., 2012). In the CASMP, participants were encouraged to call a peer between sessions, fostering motivation and problem-solving. In the Angina Plan, peers trained by healthcare professionals delivered the program and conducted follow-up calls.

Regarding format, the Angina Self-Management program (Kimble, 2018) consisted of a 30-minute telephone session. The Angina Plan (Furze et al., 2012; Lewin et al., 2002; Moattari et al., 2014; Zetta et al., 2011) and the Nurse-Personalized Care (Tylee et al., 2016) involved ongoing support through 15-minute phone calls by a nurse

or a peer, with a single longer session lasting 40 and 60 minutes, respectively. The total duration also varied across programs: 3 hours for the Stress Management Program Intervention (Gallacher et al., 1997), 12 hours for the CASMP (McGillion et al., 2008), and 64 hours for the Angina Management Program Intervention (Lewin et al., 1995). Payne et al. (1994) did not report the duration of their intervention.

Activities across the interventions typically included information presentations, discussions, and practical exercises focused on managing stress, negative emotions, and angina symptoms. The topics covered by at least two interventions are presented in Table 3. The degree of personalization varied significantly. For example, the Angina Plan (Furze et al., 2012; Lewin et al., 2002; Moattari et al., 2014; Zetta et al., 2011) and the Nurse-Personalized Care (Tylee et al., 2016) offered high personalization, tailoring content and number of sessions to individual misconceptions, risk

Table 3

Topics Covered in at Least Two Self-Management Interventions for Refractory Angina

Components	1	2	3	4	5	6	7	8
Overview of chronic angina and secondary prevention			X	X		X		X
Overview of self-management and the role of cognition in pain management			X	X			X	
Misconceptions about angina			X			X		
Making an action plan		X	X	X	X	X		
Feedback on the implementation of the action plan		X	X	X	X	X		
Problem-solving		X		X	X		X	X
Responses to stress (fight or flight) and consequences on physical and psychological health					X			X
Relaxation techniques ± yoga			X	X	X	X	X	X
Link between thoughts, emotions and behaviours								X
Recognition and management of negative thoughts, emotions, and attitudes			X	X	X	X	X	X
Cardiac pain and depression				X	X			
Staying active or getting in shape	X		X	X		X		
Energy conservation (pacing)			X	X	X	X	X	
Use of short-acting nitroglycerin	X						X	
Medication for angina			X	X				
Monitoring angina symptoms and deciding when to call an ambulance	X			X				

Note. 1. *Angina Self-Management (Kimble, 2018)*; 2. *Nurse-Personalised Care* (Tylee et al., 2016); 3. *Angina Plan* (Furze et al., 2012; Lewin et al., 2002; Moattari et al., 2014; Zetta et al., 2011); 4. *Chronic Angina Self-Management Program (McGillion et al., 2008)*; 5. *Stress Management Program* (Gallacher et al., 1997); 6. *Angina Management* (Lewin et al., 1995); 7. Pain Management (Payne et al., 1994) ; 8. Cognitive-Behavioural Stress Management (Bundy et al., 1994).

factors, and priorities, whereas the CASMP (McGillion et al., 2008) and the Pain Management Program (Payne et al., 1994) were completely standardized.

Intervention Efficacy

The meta-analysis by McGillion et al. (2014) identified a significant reduction in the frequency of angina symptoms and physical limitations 6 months after intervention. However, results from our rapid review presented a more nuanced picture. The Angina Self-Management study (Kimble, 2018) reported no significant difference in angina frequency, though it did note a decrease in physical limitations and anxiety in men, with an opposite trend observed in women. The Nurse-Personalized Care study (Tylee et al., 2016) found that 37% of participants were free of angina symptoms at six months, a substantial improvement over the 18% in the control group, though caution is warranted given the study's pilot nature. Conversely, Moattari et al. (2014) observed no significant changes in angina frequency or physical limitations, but documented a significant reduction in anxiety among the experimental group compared to controls.

Stakeholder Consultation

The two experienced facilitators from self-management programs highlighted the importance of making an action plan, engaging in peer feedback, problem-solving, and practicing relaxation techniques. They emphasized that these components promote interactive learning and enhance group dynamics, increasing participants' self-efficacy for behaviour changes. They also noted the psychological benefits of relaxation techniques, but pointed out the constraints of standardized programs, particularly the insufficient time allocated.

The two patient partners underscored the necessity of tailored interventions. They expressed a strong need to understand their condition, differentiate chronic angina pain from myocardial infarction, and monitor symptoms to recognize patterns. They favoured managing stress with simple relaxation methods (e.g., nature-themed breathing exercises) over complex yoga poses, which they found stressful and potentially harmful. They emphasized the importance of energy conservation, sleep management, physical rehabilitation, and short-acting nitroglycerin to maintain an active lifestyle. Communication with loved ones about their limitations was also deemed crucial, while they preferred to avoid overly paternalistic interactions with professionals. Nutrition and communication with health professionals were not considered essential themes.

As articulated by the patient partners, the optimal intervention structure involves a nurse with a deep understanding of RA and strong interpersonal skills, supported by a kinesiologist and a psychologist. They advocated for a highly personalized approach, valuing peer support and the option for regular phone calls with peers experiencing similar challenges. They also wished for initial support from a patient

who had long managed their condition to normalize their feelings and provide a perspective on living a fulfilling life despite their disease. To aid in learning, they suggested providing visual aids such as an informational guide, homework, and a compact disk for relaxation exercises and self-management strategies.

Discussion

This rapid review sought to gather high-quality evidence on the features and efficacy of self-management interventions for RA. Combining the results from a prior meta-analysis by McGillion et al. (2014) and a literature search from 2012 to April 4, 2024, we identified eight unique interventions. Our review revealed that effective interventions (Gallacher et al., 1997; Lewin et al., 1995; McGillion et al., 2008; Payne et al., 1994; Tylee et al., 2016) consistently incorporate action planning, feedback, problem-solving, relaxation techniques, and pacing strategies. These components align with the needs expressed by patient partners and are pivotal in enhancing self-management. Focusing on increasing patient self-efficacy through active mastery, role modelling, and verbal persuasion can improve patients' confidence and motivation, which are vital for managing chronic conditions like RA (Bandura, 1977; Marks & Allegrante, 2005).

Effective self-management interventions for RA must address the pervasive issue of uncertainty (Mishel, 1990), which can amplify pain by activating brain regions linked to affective response, attention, and pain anticipation (Johnson Wright et al., 2009). Education is essential, as a lack of knowledge intensifies uncertainty (Ferreira et al., 2023), decreasing self-management behaviours (Kao et al., 2023). Providing clear information helps dispel misconceptions, such as the belief that angina is a minor heart attack or that exercise is detrimental (McGillion et al., 2007).

Personalization and peer support can impact psychological well-being by reducing depression and anxiety, thereby enhancing the effectiveness of self-management interventions (Furze et al., 2012; Lewin et al., 2002; Moattari et al., 2014). Personalized programs have been associated with better outcomes in managing symptoms and fostering positive health behaviours (Rees & Williams, 2009). Additionally, integrating peer support normalizes patient experiences, provides motivation, and offers practical strategies, thus improving the management of RA.

A strength of this review is the use of the TIDieR checklist (Hoffmann et al., 2014) to describe and compare the intervention components. This approach standardizes the description of intervention components, ensuring they can be reproduced and implemented. In addition, incorporating feedback from patient partners has significantly enhanced the relevance and applicability of our findings, ensuring that the interventions align with patient needs and preferences.

However, the small sample of patient partners may restrict the applicability of our findings across a more diverse

population. This highlights the need for future research to involve a more varied cohort of patient partners. Additionally, while thorough, the foundational meta-analysis by McGillion et al. (2014) is now more than 10 years old, underscoring the necessity for up-to-date research in this field. Moving forward, it is crucial to address these limitations by conducting additional research on self-management and expanding the diversity of patient input. As highlighted by Kimble (2018), it would be essential to explore gender differences in relation to physical limitations and anxiety. These steps will help refine the effectiveness and applicability of self-management interventions for RA, ensuring they are evidence based and patient centred.

Implications for Practice

In this collaborative effort with experienced facilitators and patient partners, we identified essential features for an optimal self-management intervention for patients with RA. The intervention must include robust action planning and feedback mechanisms. The patient partners emphasized a high need for personalization, reflecting individual patient experiences and needs. They also expressed the importance of peer support from fellow patients experiencing similar challenges, which can provide emotional support and practical advice.

Critical to the intervention's design are communication tools that enable patients to express their physical limitations to loved ones and differentiate symptoms of chronic angina from those of myocardial infarction. Physical rehabilitation and short-acting nitroglycerin are also foundational, enhancing patients' ability to engage in physical activity safely.

The intervention would ideally combine group sessions with supportive phone calls to maximize self-efficacy and facilitate mutual learning among participants. This approach addresses the need for personal interaction and the convenience of remote support, potentially increasing participation by reducing travel. Spreading sessions over time could also lighten the workload on professionals and reduce costs by minimizing the frequency of in-person gatherings. The program requires a nurse with in-depth knowledge of RA and strong interpersonal skills to guide and support patients throughout their self-management journey.

Conclusion

The findings from this review underscore the necessity of self-management interventions that reduce uncertainty, enhance self-efficacy, and incorporate personalized components and peer support. This multifaceted approach highlights the critical components and structural preferences necessary for designing effective interventions tailored to individuals with RA to enhance patient engagement and efficacy. Customizing these interventions is essential for fostering patient engagement and ensuring seamless integration into clinical practice. Such strategies are crucial in helping patients manage the complexities of RA, leading to better health outcomes and an improved quality of life. Future research should continue to refine these components, ensuring they adapt to the evolving needs of patients with RA.

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